NetBackup™ OpsCenter Reporting Guide

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VERITAS™

Veritas NetBackup™ OpsCenter Reporting Guide

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Veritas Services and Operations Readiness Tools (SORT) is a website that provides information and tools to automate and simplify certain time-consuming administrative tasks. Depending on the product, SORT helps you prepare for installations and upgrades, identify risks in your datacenters, and improve operational efficiency. To see what services and tools SORT provides for your product, see the data sheet:

https://sort.veritas.com/data/support/SORT_Data_Sheet.pdf

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Chapter 1

Reporting in OpsCenter

This chapter includes the following topics:

- About OpsCenter reports
- About managing reports in OpsCenter
- About managing My Reports
- About managing My Dashboard
- About managing reports folders in OpsCenter
- About managing report schedules in OpsCenter
- About managing time schedules in OpsCenter

About OpsCenter reports

OpsCenter is a web-based software application that helps organizations by providing visibility into their data protection environment. By using OpsCenter, you can track the effectiveness of data backup and archive operations by generating comprehensive business-level reports.

OpsCenter displays customizable, multi-level views of backup and archive resources and customizable reports for tracking service usage and expenditures. It also contains tools for defining cost metrics and chargeback formulas or handling alerts. A wide range of audiences benefit from the reporting and the management capabilities of OpsCenter. The audiences include IT (Information Technology) managers, application owners, IT finance teams, external compliance auditors, legal teams, line-of-business managers, external customers, IT architects, and capacity planning teams.

OpsCenter reporting user interface

The OpsCenter reporting user interface consists of the following components:

Report Templates tab	This tab lists all **Report Templates** (or standard or canned reports) that are available in OpsCenter. You can modify the default parameter values of a **Report Template** as required and generate a new report of that kind. For example, use the existing **Backup > Job Activity > Client Count Report Template**, change the relative timeframe to four weeks (default timeframe is two weeks) and generate a new Client Count report. You can see all clients that are backed up over the last four weeks.
My Reports tab	You can save generated reports for your future use. These saved reports are stored in the **My Reports** tab. Use this section to view the saved reports or modify the parameters of the saved reports and generate new reports out of them. You can also delete the saved reports using the **My Reports** tab. See "About managing My Reports" on page 19. See "Saving an OpsCenter report" on page 13.
My Dashboard tab	Your saved reports are preserved in **My Reports** tab, which you can select and publish on **My Dashboard** tab. You can select multiple reports and add them in the same dashboard section. Thus, you can create multiple dashboard section containing a number of reports. See "About managing My Dashboard" on page 22.
Schedules tab	This tab contains all report schedules. You can create, edit, or delete schedules using this tab. See "Using report schedules in OpsCenter" on page 29.
Manage Folders tab	Use this tab to manage folders where you have saved your reports. See "About managing reports folders in OpsCenter" on page 25.

Report creation wizards in OpsCenter

OpsCenter provides wizards, which guide you through the entire report creation procedure.

To create a report, in the OpsCenter console on the **Reports** tab, click **Create New Report**. The following report creation options are available on the **Select Report Creation Option** panel:

- Create a report using an existing Report Template .
  See "Creating an OpsCenter report using a Report Template" on page 40.
- Create a custom report.
  See "Creating a custom report in OpsCenter" on page 333.
- Create a report using SQL Query.
  See "Creating an OpsCenter report using SQL query" on page 346.

Reports > Report Templates

This section provides details of the Report Templates that are available in OpsCenter.

OpsCenter provides a number of Report Templates (or standard or canned reports) that you can modify and generate a new report of that kind.

In the OpsCenter console, when you click the **Reports** tab, the **Report Templates** home page is displayed.

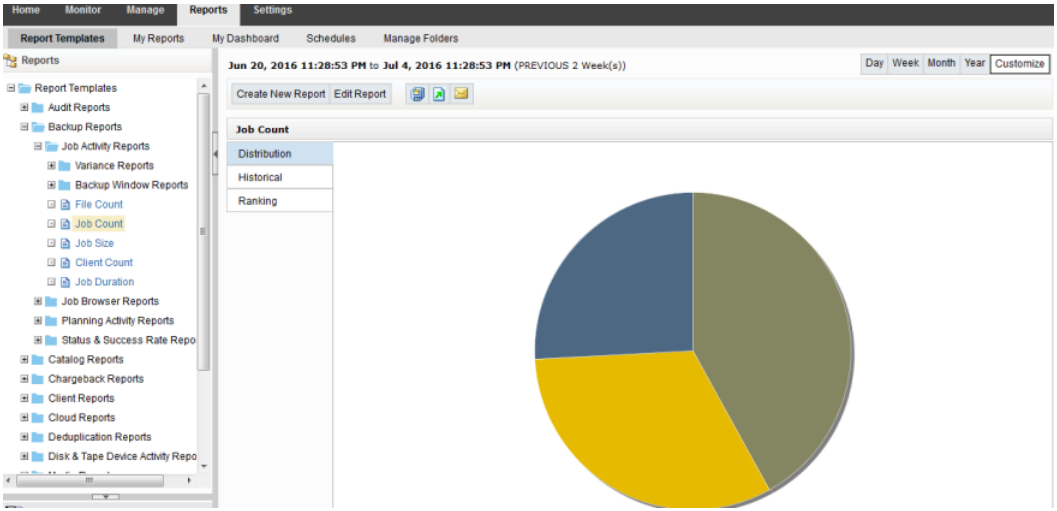
From the Reports > Report Templates page, you can click any of the **Report Templates** to view the respective report with default parameter values.

You can also click the following options on the **Reports > Report Templates** page:

Create New Report	Click **Create New Report** to create a standard report, custom report, or run an SQL query.
Edit Report	If you do not want to run a report template with default parameter values, you can directly edit it from **Reports > Report Templates** page. To edit a report template, first select the report template by selecting the checkbox on the extreme left of the report template. Click **Edit Report** to edit and save the report without executing it.

Figure 1-1 shows various components of a report that is generated using a template.

Figure 1-1 Report Template



Report Templates tree	This tree lists all Report Templates that are available in OpsCenter.
Manage report toolbar	Use this toolbar to save, export, or email the generated report.
Time filters	Use these time filters to view the data for a specific period of time:
Report area	OpsCenter reports are displayed here.
Report views	Reports can be viewed in different forms or views, **Distribution**, **Historical**, or **Ranking**. Use these options to change the current report view. These options are available only for chart-based reports.

About custom reports in OpsCenter Analytics

Apart from generating reports using the existing templates, you can also create custom reports in OpsCenter by changing the report parameters as required.

See “Creating a custom report in OpsCenter” on page 333.

About custom SQL query in OpsCenter Analytics

In OpsCenter, you can create reports by directly running SQL queries. Using this report creation option, you do not need to go through multiple parameter selections.

OpsCenter provides detailed information about the OpsCenter database schema that you may want to know before running any SQL query to generate reports. On the Report Wizard > SQL Query page, click the OpsCenter Schema Document link to open the PDF that contains all relevant information.

Note: You can create only tabular reports by running SQL queries. You can also run stored procedures using this feature.

See "About supporting OpsCenter custom reports and custom SQL queries" on page 11.

See "Creating an OpsCenter report using SQL query" on page 346.

About supporting OpsCenter custom reports and custom SQL queries

OpsCenter is committed to provide the accuracy and validity of the data collected and stored in its database and the documentation of its database schema. However, no Technical Support will be provided on the actual creation of custom reports, custom SQL queries for specific reports, or for 3rd party reporting applications (for example, Microsoft Excel, Access, or Crystal Reports).

See "About custom reports in OpsCenter Analytics" on page 10.

See "About custom SQL query in OpsCenter Analytics" on page 11.

About managing reports in OpsCenter

This section provides information on the operations that you can carry out on the standard reports that you generate in OpsCenter.

You can carry out the following operations:

- Saving a report
  See "Saving an OpsCenter report" on page 13.
- Exporting a report
  See "Exporting an OpsCenter report" on page 14.
- Emailing a report
  See "Emailing a report in OpsCenter" on page 16.

Save report and email report dialog boxes

A description of the **Save report** and **Email report** dialog box options follows in the table.

Table 1-1 Save report dialog box options

Option	Description
Report name	Enter the report name. For example, if you generated the Job Count standard report with the group by option that is selected as **Policy Type** and report view as **Historical**, you can name this report NumberofJobsbyPolicies. When you select this report on the **Saved Reports** tab, the report is displayed with the saved filters and in the report view that were selected when the reports were saved, with respect to the current time. Review the following points about report names: ■ The report name must be unique in the folder where you create it. For example, if you create a report in the **Private Reports** folder under **My Reports**, the report name that you specify must be unique in the Private Reports folder. The same user can have two reports with the same name - like one in **Public Reports** and one in **Private Reports** folder. ■ The report name must not contain any special characters like (/ \ * ? | ") ■ The report name must not be more than 220 characters.
Description	Enter the short description for the report.
Folder	Select **Public** or **Private** folder. If you save the report in a public folder, all other OpsCenter users can view it. If you save the report in a private folder, only you can view it. Expand the **Public** or **Private** folder and select a folder where you want to save the report. Depending on the folder type that you have selected - public or private - the folders displayed for selection vary.
Create New	Click this option to create a new public or private folder. Clicking this option changes the view of Folder. Enter the folder name and click **OK**. This folder is made available in the Folder tree for selection. Select this newly created folder where you want to save the report.

Table 1-1 Save report dialog box options *(continued)*

Option	Description
Overwrite if report already exists in the selected folder	Select this check box if you want to overwrite the existing report with the same name in the same folder. If you do not select this check box and save a report with a name identical to any of the existing reports in the selected folder, a confirmation message is displayed before you overwrite the existing report.

Table 1-2 Email report dialog box options

Option	Description
Select Format	Select one of the following formats: ■ PDF ■ HTML ■ CSV ■ TSV ■ XML **Note:** Some of these formats may not be available for specific reports. For example, the Drive Throughput and Drive Utilization reports can be exported and emailed only in the HTML format.
Select Content	Select one of the following report formats: ■ Distribution ■ Historical ■ Ranking ■ Tabular Distribution, Historical, and Ranking formats are available only for chart-based reports.
Email	Enter appropriate email details like address, subject, and message.

Saving an OpsCenter report

You can save a standard report. This action saves the filters that you have selected while generating a report. You can use this set of filters to regenerate the reports with the current time selections.

These reports are saved in the OpsCenter database, which you can view using the **My Reports** tab.

You cannot save a report whose name contains any special characters like (/ \ * ? | ").

See "About managing My Reports" on page 19.

To save a report

1. In the OpsCenter console, click **Reports > Report Templates**.
2. From the **Reports** tree, select the report template that you want to save.
3. In the right-hand report view area, click the **Save As Report** icon. The **Save Report** pop-up screen opens.
4. On the **Save Report** screen, enter the required details.

   See "Save report and email report dialog boxes" on page 12.
5. Click **OK**.

   After a successful save, **My Reports** tab is displayed with this report selected.

Note: You cannot save a report name that contains special characters like (/ \ * ? | ")

Exporting an OpsCenter report

Using OpsCenter, you can preserve report data in files or print the data.

See " File formats available in OpsCenter" on page 15.

You can open the exported file using other applications, such as a spreadsheet program or a text editor.

To export a report

1. In the OpsCenter console, click **Reports > Report Templates**.

   You can also export reports that you may have created from **Reports > My Reports**.
2. From the **Reports** tree, select the report template or report that you want to export.
3. In the report view area at the right-hand side, click the **Export Report** icon. The **Export Report** pop-up screen opens.

4 On the **Export Report** pop-up screen, select the export options that you want to export the report with: File format, such as PDF, HTML, CSV, TSV, or XML and content or report view, such as **Tabular**, **Distribution**, **Historical**, or **Ranking**.

Note that only the applicable formats and report views appear for specific reports.

See "Save report and email report dialog boxes" on page 12.

5 Click **OK**. The system displays the export options pertaining to the file format you have selected. Select those options and export the report.

File formats available in OpsCenter

You can export or email OpsCenter reports in the following file formats:

PDF (Portable Document Format)	Can be viewed using a PDF reader, such as Adobe Reader
CSV (comma-separated values)	Use with spreadsheet programs, such as Microsoft Excel.
TSV (tab-separated values)	Compatible with word-processing applications and text editors
HTML (hypertext markup language)	Can be opened using with Web browsers
XML (Extensible Markup Language)	Can be imported (using user-written scripts) by other programs like databases or billing applications.

The following is the XML format:

```
<Report>
 <ReportView>
  <Name> {nameValue} </Name>
  <Description> {descriptionForReportView} </Description>
  <TimeDuration> {timeValue} </TimeDuration>

  <ViewName> {viewNameValue} </ViewName>
  <ViewSelections>
   <SelectedItem value="{selectedNodeNameValue1}">
    <ExcludedItem> {excludedNodeName1} </ExcludedItem>
    <ExcludedItem> {excludedNodeName2} </ExcludedItem>
    ...
```

```
  </SelectedItem>

  <SelectedItem value="{selectedNodeNameValue2}">
   <ExcludedItem> {excludedNodeName3} </ExcludedItem>
   <ExcludedItem> {excludedNodeName4} </ExcludedItem>
   ...
  </SelectedItem>
 </ViewSelections>
 <Table>
  <Header>
         <Row>…</Row>
       </Header>
       <Rows>
         <Row>…</Row> …
       </Rows>
  </Table>
</ReportView>

 <ReportView>

</Report>
```

In the new format <Table> has been moved under a new tag called <ReportView>. If multiple views (distribution, historical, ranking) are selected for export or email, each of the views will have one <ReportView> tag corresponding to it. Name, Description and TimeDuration tags inside ReportView tag will always be present for each view. However, ViewName, GroupBy, and ViewSelections tags will be present only if applicable. If report is edited and view selections are changed, these tags will be added in export.

Emailing a report in OpsCenter

Using OpsCenter, you can email report data to the selected recipients. You can email a report in a number of different file formats.

See “ File formats available in OpsCenter” on page 15.

To email a report

1. In the OpsCenter console, click **Reports > Report Templates**.

   You can also export reports that you may have created from **Reports > My Reports**.

2. From the **Reports** tree, select the report template or the report that you want to email.

3 In the report view area at the right-hand side, click the **Email Report** icon. The **Email Report** pop-up screen opens.

See "Save report and email report dialog boxes" on page 12.

4 On the **Email Report** pop-up screen, select the email options: File format, such as PDF, HTML, CSV, TSV, or XML and content or report view, such as **Tabular**, **Distribution**, **Historical**, or **Ranking**

Note that only the applicable formats and report views appear for specific reports.

5 Enter email IDs in **To**, **Cc**, and **Bcc** text boxes, to which you want to send emails.

If these email IDs do not already exist, they are automatically added to the database.

Alternatively, you can add existing email recipients.

See "Adding email recipients to an OpsCenter report mailing" on page 18.

6 Enter the subject of the email.

7 Enter the message that may be a short description regarding the report data that you want to email.

8 Click **OK**.

Configuring number of rows in a tabular report for email or export

When you export, email, or schedule a tabular report, 4000 rows are exported by default.

You can configure the maximum number of rows in a tabular report that you can export or email.

To configure the maximum number of rows for export

1 Log on to the OpsCenter Server.

2 Stop all the OpsCenter Server services or processes by using the following commands on Windows and UNIX:

Windows	INSTALL_PATH\OpsCenter\server\bin\opsadmin.bat stop
UNIX	<INSTALL_PATH>/SYMCOpsCenterServer/bin/opsadmin.sh stop

3 Navigate to the following location:

Windows	C:\Program Files\Symantec\OpsCenter\server\config
UNIX	<INSTALL_PATH>/SYMCOpsCenterServer/config

4 Open the `report.conf` file.

5 You may want to export all the rows or you may want to increase or decrease the maximum value. Note that if you export all rows or increase the number of rows, exporting a report may take time when there are a large number of rows.

- To export all the rows, you can either comment out `report.schedule.max.tabular.rows` parameter or specify any value less than or equal to -1 for `report.schedule.max.tabular.rows` parameter.
  To comment out `report.schedule.max.tabular.rows` parameter, add two forward slashes before the parameter in this manner:
  `//report.schedule.max.tabular.rows=4000`
  or
  Edit the value 4000 in `report.schedule.max.tabular.rows=4000` to -1.
  `report.schedule.max.tabular.rows=-1`
- To change the maximum number of rows to say 5000, you can set the value of `report.schedule.max.tabular.rows` as 5000.
  Configure report.schedule.max.tabular.rows=5000

6 Start all OpsCenter Server services or processes by using the following command for Windows and UNIX:

Windows	INSTALL_PATH\OpsCenter\server\bin\opsadmin.bat start
UNIX	<INSTALL_PATH>/SYMCOpsCenterServer/bin/opsadmin.sh start

Adding email recipients to an OpsCenter report mailing

This section provides information on how to add email recipients to whom you want to send emails. This procedure assumes you've already started the email report procedure. More information is available about this procedure.

See "Emailing a report in OpsCenter" on page 16.

To add email recipients

1 On the **Add Email Recipients** screen, select the check boxes in front of the email recipients to whom you want to send emails.

See “Add email recipients dialog box options” on page 19.

Click **To..**, **Cc..**, or **Bcc..** depending on where you want to add the selected recipients.

2 Click **OK**.

Add email recipients dialog box options

Table 1-3 Add email recipients dialog box options

Option	Description
Recipient Name/Email Address	Select the check boxes in front of the email recipients to whom you want to send emails.
To.../Cc.../Bcc...	Click **To..**, **Cc..**, or **Bcc..** depending on where you want to add the selected recipients.

About managing My Reports

You can save generated reports for your future use. These saved reports are stored in the **My Reports** tab. Use this section to view the saved reports or modify the parameters of the saved reports and generate new reports out of them. You can also delete the saved reports using the **My Reports** tab.

The following topics provide more information about managing reports.

See “ Creating a report using the My Reports tab” on page 19.

See “Deleting a saved report using the My Reports tab” on page 20.

See “Viewing a saved report using the My Reports tab” on page 20.

See “Editing a saved report using the My Reports tab” on page 20.

See “Exporting a saved report” on page 21.

See “Emailing a saved report” on page 21.

Creating a report using the My Reports tab

This section provides the procedure to create a report using **My Reports** tab.

To create a report using the My Reports tab

1. In the OpsCenter console, click **Reports > My Reports**.
2. On the **My Reports** tab, click **Create New Report**.

   You can create a report in any of the following ways:

   See "Creating an OpsCenter report using a Report Template" on page 40.

   See "Creating a custom report in OpsCenter" on page 333.

   See "Creating an OpsCenter report using SQL query" on page 346.

Deleting a saved report using the My Reports tab

This section provides the procedure to delete a saved report.

To delete a saved report

1. In the OpsCenter console, click **Reports > My Reports**.
2. On the **My Reports** tab, in the **Reports** list, expand a report folder to view the reports that are saved within it.
3. Select the check box in front of the report name.
4. Click **Delete**.

Viewing a saved report using the My Reports tab

You can view the saved reports using the **My Reports** tab.

To view a saved report

1. In the OpsCenter console, click **Reports > My Reports**.
2. On the **My Reports** tab, in the **Reports** list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to view.

Editing a saved report using the My Reports tab

You can edit a saved report. You can edit the report details, such as the report name or the folder where you want to save the edited report.

To edit a saved report

1. In the OpsCenter console, click **Reports > My Reports**.
2. On the **My Reports** tab, in the **Reports** list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to edit.
3. In the report view area at the right-hand side, click the **Save As Report** icon. The **Save Report** pop-up screen opens.

4 On the **Save Report** screen, enter the required information.

See “Save report and email report dialog boxes” on page 12.

5 Click **OK**.

Exporting a saved report

Using OpsCenter, you can preserve saved report data in files or print the data. You can email a report in a number of different file formats.

See “ File formats available in OpsCenter” on page 15.

You can open the exported file using other applications, such as a spreadsheet program or a text editor.

To export a saved report

1 In the OpsCenter console, click **Reports > My Reports**.

2 On the **My Reports** tab, in the **Reports** list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to export.

3 In the report view area at the right-hand side, click the **Export Report** icon. The **Export Report** pop-up screen opens.

4 On the **Export Report** pop-up screen, select the export options that you want to export the report with. Select file format, such as PDF, CSV, or XML and content or report view, such as Distribution, Historical, or Ranking.

5 Click **OK**. The system displays the export options pertaining to the file format you have selected. Select those options and export the saved report.

Emailing a saved report

Using OpsCenter, you can email the saved report data to the selected recipients. You can email the report in the following file formats:

PDF (Portable Document Format)	Can be viewed using a PDF reader, such as Adobe Reader
CSV (comma-separated values)	Use with spreadsheet programs, such as Microsoft Excel.
TSV (tab-separated values)	Compatible with word-processing applications and text editors
HTML (hypertext markup language)	Can be opened using with Web browsers

XML (Extensible Markup Language)	Can be imported (using user-written scripts) by other programs like databases or billing applications

To email a report

1. In the OpsCenter console, click **Reports > Saved Reports**.
2. On the **My Reports** tab, in the **Reports** list, expand a report folder to view the reports that are saved within it. Select the saved report that you want to email.
3. In the report view area at the right-hand side, click the **Email Report** icon. The **Email Report** pop-up screen opens.
4. On the **Email Report** pop-up screen, select the email options: File format, such as PDF, CSV, or XML and content or report view, such as Distribution, Historical, or Ranking.
5. Enter email IDs in To, Cc, and Bcc text boxes, to which you want to send emails.
6. Enter the subject of the email.
7. Enter the message that may be a short description regarding the report data that you want to email.
8. Click **OK**.

About managing My Dashboard

Your saved reports are preserved in **My Reports** tab, which you can select and publish on **My Dashboard** tab. You can select multiple reports and add them in the same dashboard section. Thus, you can create multiple dashboard sections containing a number of reports.

You can add only 10 reports in a dashboard.

See “Adding reports to a dashboard” on page 23.

See “Modifying a dashboard section” on page 23.

See “Deleting a dashboard section” on page 24.

See “Emailing dashboard sections” on page 24.

See “Refreshing My Dashboard” on page 25.

Reports > My Dashboard options

Select and publish reports on **My Dashboard** tab. You can select multiple reports and add them in the same dashboard section. Thus, you can create multiple dashboard sections containing a number of reports.

You can add only 10 reports in a dashboard.

Table 1-4 Reports > My Dashboard options

Option	Description
Add/Edit/Delete	You can add multiple Dashboards on this page and one or more reports from My Reports to each of the dashboards. Use Add, Edit, Delete tasks to add, edit, or remove dashboard
Email Dashboard	Select this option if you want to email all the dashboard reports. In the **Email Dashboard** dialog box that opens, you can specify the format in which you want to email the dashboard reports.along with the other email details. Click **OK**.
Refresh Dashboard	Select this option to update the reports in the dashboard.

Adding reports to a dashboard

This section provides the procedure to add reports to a dashboard.

To add reports to a dashboard

1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click **Add**.
3. On the **Add Dashboard Section** pop-up screen, enter the section name.
4. Expand the Private or Public Reports folder to view existing reports.
5. Select the check boxes in front of the report names, which you want to publish on the dashboard.
6. Click **OK**.

Modifying a dashboard section

This section provides the procedure to modify dashboard section.

To modify a dashboard

1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click **Edit**.
3. On the **Edit Dashboard Section** pop-up screen, select the dashboard section from the drop-down list, that you want to modify.
4. Modify the section name.
5. Expand the Private or Public Reports folder to view existing reports.
6. Select or clear the check boxes in front of the report names, which you want to publish on or remove from this dashboard section.
7. Click **OK**.

Deleting a dashboard section

This section provides the procedure to delete a dashboard section.

To delete a dashboard section

1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click **Delete**.
3. On the **Delete Dashboard Section** pop-up screen, select the dashboard section from the drop-down list, that you want to delete.
4. Click **OK**.

Emailing dashboard sections

You can email your dashboards.

To email a dashboard

1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click the **Email Dashboard** icon.
3. On the **Email Dashboard** pop-up screen, select the format in which you want to send the email.
4. Select email recipients from the To.., Cc.., and Bcc.. as appropriate.

   Alternatively, enter new email recipients, which are added into the database.
5. Enter the email subject and message.
6. Click **OK**.

Refreshing My Dashboard

This section provides the procedure to refresh **My Dashboard**.

To refresh My Dashboard

1. In the OpsCenter console, click **Reports > My Dashboard**.
2. Click the **Refresh** icon.

About managing reports folders in OpsCenter

OpsCenter provides a way to manage folders where you have saved your reports. They can be both private reports and public reports.

Using the **Manage Folders** tab in the **Reports** section, you can add new report folders, edit names of the existing folders, or delete them.

You can also select reports in a particular folder and delete them using this tab.

See "Adding a reports folder in OpsCenter" on page 25.

See "Editing a reports folder in OpsCenter" on page 26.

See "Deleting reports folders in OpsCenter" on page 26.

See "Deleting reports from a folder in OpsCenter" on page 26.

Reports > Manage Folders options

Using the **Manage Folders** tab in the **Reports** section, you can add new report folders, edit names of the existing folders, or delete them.

Adding a reports folder in OpsCenter

This section provides a procedure to add a report folder.

To add a folder

1. In the OpsCenter console, click **Reports > Manage Folders**.
2. On the **Reports** tree, select a check box in front of a private folder node or public folder node in which you want to create a new folder.
3. Click **Add**.
4. In the **Create new folder** pop-up window, make sure that you have selected only one folder. If multiple folders are selected, the **Add** option is disabled.

5 Enter the folder name.

6 Click **OK**.

This folder is added in the selected node.

Editing a reports folder in OpsCenter

This section provides a procedure to edit a report folder.

To edit a folder

1 In the OpsCenter console, click **Reports > Manage Folders**.

2 On the **Reports** tree, select a check box in front of a private folder or public folder that you want to edit.

3 Click **Edit**.

4 In the **Edit folder name** pop-up window, make sure that you have selected only one folder. If multiple folders are selected, the **Edit** option is disabled.

5 Edit the folder name.

6 Click **OK**.

Deleting reports folders in OpsCenter

This section provides a procedure to delete a report folder. If you delete a report folder, all reports that are saved in that folder are deleted.

To delete folders

1 In the OpsCenter console, click **Reports > Manage Folders**.

2 On the **Reports** tree, select a check boxes in front of the private folders or public folders that you want to delete.

3 Click **Delete**.

Deleting reports from a folder in OpsCenter

This section provides a procedure for deleting the reports that are saved in a public folder or private folder.

To delete reports from a folder

1 In the OpsCenter console, click **Reports > Manage Folders**.

2 On the **Reports** tree, select a private folder or public folder from which you want to delete the reports. A list of reports that are saved in the selected folder displays at the right-hand side of the page.

3 From the list of reports, select the check boxes in front of the reports that you want to delete.

4 Click **Delete**.

About managing report schedules in OpsCenter

NetBackup OpsCenter provides a way to export or email a report on a specific schedule. For this task you need to create a report schedule that is associated with a time schedule on which the specified reports are exported or emailed.

Each report schedule can be associated with a single time schedule. A single time schedule can be associated with multiple report schedules.

See "About managing time schedules in OpsCenter" on page 34.

The following topics describe how to create and manage report schedules.

See "Viewing report schedule details in OpsCenter" on page 28.

See "Creating a report schedule in OpsCenter" on page 32.

See "Editing a report schedule in OpsCenter" on page 33.

See " Deleting a report schedule in OpsCenter" on page 33.

See "Enabling or disabling a report schedule" on page 34.

Reports > Schedules options

Using report schedules, you can email or export reports at a scheduled time. Each report schedule is associated with a time schedule at which it emails or sends the specified reports.

Table 1-5 Report Schedules tab options

Option	Description
Add/Edit	Select **Add** or **Edit** to start the Report Schedule Wizard.
Delete	Select **Delete** to remove the selected report schedules.
Enable/Disable	Select **Enable** or **Disable** to enable or disable the selected report schedules.
Name	Name of a report schedule.
Time Schedule Name	Name of a time schedule that is associated with this report schedule.
Enabled	Specifies whether the report schedule is enabled or not.

Table 1-5 Report Schedules tab options *(continued)*

Option	Description
Start Date	Date on which this schedule runs.
End Date	Date on which this schedule stops.
Export	Specifies whether you have exported the associated reports.
Email	Specifies whether you have emailed the associated reports.
Reports	Number of the reports that are exported or emailed when this schedule runs.

Table 1-6 Time Schedules tab options

Option	Description
Add/Edit	Select **Add** or **Edit** to go to the Time Schedule page.
Delete	Select **Delete** to delete the selected time schedules.
Name	Name of the time schedule.
Schedule Time	Time when the associated reports are exported or emailed.
Recurrence Pattern	A pattern with which this schedule runs.
Start Date	Date when the schedule starts.
End Date	Date when the schedule stops.

Viewing report schedule details in OpsCenter

This section provides information on viewing the list of report schedules.

If you have applied conditions for the selected report, the list of applicable conditions is shown on the last page of the wizard. You can select the appropriate conditions. An email notification is sent to the relevant recipients if the selected condition is satisfied.

To view report schedule details

1. In the OpsCenter console, click **Reports > Schedules**.

   By default, the **Report Schedules** tab is selected.

2. On the **Report Schedules** tab, view the report schedule details.

   See "Reports > Schedules options" on page 27.

Using report schedules in OpsCenter

Using report schedules, you can email or export reports at a scheduled time. Each report schedule is associated with a time schedule at which it emails or sends the specified reports.

OpsCenter provides a wizard to create a report schedule.

See "Creating a report schedule in OpsCenter" on page 32.

The following table describes the steps that you need to carry out to email or export a report on a specific schedule.

See "About managing time schedules in OpsCenter" on page 34.

Table 1-7 Creating a report schedule

Step Number	Step and reference topic
1	Create a time schedule. See "Creating a time schedule" on page 35.
2	Create a report schedule. OpsCenter provides a wizard to create a report schedule. This wizard lets you specify the following details: ■ Report schedule name ■ File format in which you want to email or export reports ■ Select a time schedule. You can either select an existing time schedule that you have created in the first step or create a new schedule from here to associate it with this report schedule. ■ Specify details of export or email options. ■ Select the reports that you want to export or email on a specific schedule. **Note:** You can select only saved reports in a schedule. See "Creating a report schedule in OpsCenter" on page 32.

Table 1-8

Steps	Reference topic
◆ Create a time schedule. Create a time schedule.	See "Creating a time schedule" on page 35.

Table 1-8 *(continued)*

Steps	Reference topic
◆ Create a report schedule. Create a report schedule. OpsCenter provides a wizard to create a report schedule. This wizard lets you specify the following details: ■ Report schedule name ■ File format in which you want to email or export reports ■ Select a time schedule. You can either select an existing time schedule that you have created in the first step or create a new schedule from here to associate it with this report schedule. ■ Specify details of export or email options. ■ Select the reports that you want to export or email on a specific schedule. **Note:** You can select only saved reports in a schedule.	See "Creating a report schedule in OpsCenter" on page 32.

Report Schedule Wizard

The Report Schedule Wizards contains five panels to help you create a schedule.

Table 1-9 Enter Report Schedule Details panel options

Option	Description
Report Schedule Name	Enter a report schedule name. This field must be filled.
Select Format	Select a file format in which you want to export or email report the associated reports. See " File formats available in OpsCenter" on page 15.

Table 1-10 Select Time Schedule panel options

Option	Description
Create new Time Schedule	Select this option if you want a new time schedule to be associated with the report schedule.

Table 1-10 Select Time Schedule panel options *(continued)*

Option	Description
Use existing Schedule	Select this option if you want the report schedule to be associated with an existing time schedule

Table 1-11 Select Export/Email Report Options panel options

Option	Description
Export	Select this check box if you want to export the reports that are associated with this schedule. See " File formats available in OpsCenter" on page 15.
Location	Enter a directory path where you want to save the exported report or click **Browse** to select the desired location.
Overwrite if file exists	Select this check box if you want to overwrite a file that already exists at the specified location.
Email	Select this check box if you want to email the reports that are associated with this schedule.
To	Select email IDs to which you want to email reports.
Cc	Select email IDs to add in the **Cc** list of email.
Bcc	Select email IDs to add in the **Bcc** list email.
Subject	Type the email subject. For example: Daily Job Count Report
Message	Type any other related information.

Table 1-12 Select Reports panel options

Option	Description
Private Reports	Select private reports from the list that you want to schedule. You can select both public reports and private reports.
Public Reports	Select public reports from the list that you want to schedule. You can select both public reports and private reports.

Table 1-13 Select a report condition to be applied panel options

Option	Description
Send email only if the report meets one or more selected conditions	Check this option if you want the report to be emailed only if it meets one or more of the selected conditions. You can create conditions for custom reports while editing the report.
Report Name	The custom reports that have conditions and are selected to be scheduled are displayed.
Condition	The condition that is associated with the custom report is displayed. You can create a condition only for custom reports.

Creating a report schedule in OpsCenter

To create a report schedule

1. In the OpsCenter console, click **Reports > Schedules**.
2. On the **Report Schedules** tab, click **Add**. OpsCenter provides a Report Schedule Wizard that guides you through the procedure of creating a report schedule.

   The **Enter Report Schedule Details** panel appears.

   Enter the report schedule details.

   See "Report Schedule Wizard" on page 30.
3. Click **Next**.

   The **Select Time Schedule** panel appears:

   Select the **Use existing schedule** option if you want to run this schedule on any existing time schedule. If you want to create a new time schedule for this report schedule, select **Create new time schedule**.

   See "Creating a time schedule" on page 35.

   If you have selected **Create new time schedule**, the system takes you to the Time Schedule Wizard. After creating a time schedule you can select the export and the email report options.
4. Click **Next**.
5. If you have selected the **Use existing schedule option** in the previous step, in the **Configure Export/Email Report Settings** panel, specify the following details:

   You can select either **Export**, **Email**, or both options.

   See "Report Schedule Wizard" on page 30.

6 Click **Next**.

7 In the **Select Reports** panel, select the public reports or private reports that you want to export or email on this schedule.

These reports should be saved.

Click **Back** if you want to change the previous selections.

8 In the **Select a report condition to be applied** panel, select a report and report condition to be applied. You can apply report conditions to custom reports.

You can also select the option **Send email only if the report meets one or more of the selected conditions** if you want the report to be emailed only when the report meets one or more of the selected conditions.

9 Click **Save**.

Editing a report schedule in OpsCenter

This section describes how to edit report schedule details.

To edit a report schedule

1 In the OpsCenter console, click **Reports > Schedules**.

By default, the **Report Schedules** tab is selected.

2 On the **Report Schedules** tab, select a report schedule from the list that you want to edit.

3 Click **Edit**.

4 Edit the report schedule details using the wizard.

5 Click **Save**.

Deleting a report schedule in OpsCenter

This section describes how to delete a report schedule.

To delete a report schedule

1 In the OpsCenter console, click **Reports > Schedules**.

By default, the **Report Schedules** tab is selected.

2 On the **Report Schedules** tab, select one or more report schedules from the list that you want to delete.

3 Click **Delete**.

Enabling or disabling a report schedule

This section describes how to enable or disable a report schedule.

To enable or disable a report schedule

1. In the OpsCenter console, click **Reports > Schedules**.

   By default, the **Report Schedules** tab is selected.

2. On the **Report Schedules** tab, select one or more report schedules from the list that you want to enable or disable.

3. Click **Enable** or **Disable**.

About managing time schedules in OpsCenter

This section provides procedures to create and manage a report schedule.

Each report schedule can be associated with only a single time schedule. A single time schedule can be associated with multiple report schedules.

See "About managing report schedules in OpsCenter" on page 27.

The following topics provide more information about managing time schedules.

See "Viewing time schedule details" on page 35.

See "Creating a time schedule" on page 35.

See "Editing a time schedule" on page 35.

See "Deleting a time schedule" on page 36.

Reports > Schedules > Create or Edit Time Schedule options

Use the page to create or edit a time schedule.

Table 1-14 Create or Edit Time Schedule options

Option	Description
Schedule Name	Enter name of the time schedule.
Schedule Time	Enter the time when the schedule runs and the associated reports are exported or emailed.

Table 1-14 Create or Edit Time Schedule options *(continued)*

Option	Description
Schedule Pattern	Select a pattern with which you want this schedule to be run. The following schedule patterns are available: ■ One Time ■ Daily ■ Weekly ■ Monthly ■ Quarterly ■ Yearly Depending on the pattern-selected , options change.

Viewing time schedule details

This section provides a procedure to view the details of time schedules.

To view a time schedule

1. In the OpsCenter console, click **Reports > Schedules**.
2. Click **Time Schedules**.

   The time schedule details appear:

   See "Reports > Schedules options" on page 27.

Creating a time schedule

Use the following procedure to create a time schedule.

To create a time schedule

1. In the OpsCenter console, click **Reports > Schedules**.
2. Click **Time Schedules**.
3. On the **Time Schedules** tab, click **Create**.
4. On the **Create Time Schedule** page, specify the necessary details.

   See "Reports > Schedules > Create or Edit Time Schedule options" on page 34.

5. Click **OK**.

Editing a time schedule

Use the following procedure to edit a time schedule.

To edit a time schedule

1. In the OpsCenter console, click **Reports > Schedules**.
2. Click **Time Schedules**.
3. On the **Time Schedules** tab, in the table, select the time schedule that you want to edit.
4. Click **Edit**.
5. Edit the time schedule details.
6. Click **OK**.

Deleting a time schedule

Use the following procedure to delete a time schedule.

To delete a time schedule

1. In the OpsCenter console, click **Reports > Schedules**.
2. Click **Time Schedules**.
3. On the **Time Schedules** tab, in the table, select the time schedules that you want to delete.
4. Click **Delete**.

Chapter 2

OpsCenter reports

This chapter includes the following topics:

- Report Templates in OpsCenter
- About Report Templates descriptions

Report Templates in OpsCenter

OpsCenter provides a set of Report Templates or standard or canned reports that have parameters set to default values. You can modify the default parameters and generate reports to view the required data. OpsCenter reports help you to have a good visibility into your data protection environment.

See "Reports > Report Templates" on page 9.

Report Templates are categorized as follows:

Backup Reports	The backup reports show the information that is related to backups, such as success rate, job status, and protected bytes. This category also includes recovery reports. **Note:** If you select **Reports > Activity Planning > Job Size** in the OpsCenter user interface, the report that appears displays the wrong client name. Instead of showing the client names, a list of backed up VM images is displayed in this report. In addition, the list of VM images may not be accurate.
Catalog Reports	These reports provide details about the catalogs.

Chargeback Reports	The chargeback reports provide details of the backup services expenditures. Using these reports you can track the backup and the recovery usage and the associated cost. You can calculate the cost of data protection management and chargeback to customers and business units.
Client Reports	These reports provide details about clients such as backup status, restore job details, or summary dashboard.
Cloud Reports	These reports provide details about NetBackup cloud storage servers. The following cloud providers are supported by OpsCenter: **Note:** Among all Amazon S3-compatible cloud providers that NetBackup supports, OpsCenter supports monitoring and reporting of Amazon (S3) and Amazon GovCloud (S3) providers only. If you have configured cloud storage servers for AT&T or Rackspace providers and upgraded to 8.1.2, stale information is displayed in cloud reports for AT&T and Rackspace providers.
Disk & Tape Device Activity Reports	Disk-based data protection (DBDP) reports show disk pool capacity and its usage, performance of clients on LAN or SAN, NetBackup storage lifecycle Map
Media Reports	These reports provide media data, such as tape count or usage.
Performance Reports	These reports provide details of throughput.
Policy Reports	These reports show all details about the backup job policies in NetBackup.
Restore Reports	These reports provide details about restore operation.

Storage Lifecycle Policy	The SLP reports in OpsCenter show an end-to-end view of the SLP process that includes backup to import of duplicated image into different NetBackup domains. The SLP reports help you to verify if each step in the SLP is executed and identify the possible bottlenecks.
Workload Analyzer	The Workload Analyzer report gives information about the activities that are done across a period of seven days. The activities are number of jobs running at a given period of time and the amount of data that is transferred during this period. The report contains 168 data points of analysis in terms of the activities that are done for each hour for a period of seven days.

About report filters in OpsCenter

There can be hundreds of records or thousands of MB of the data that you may not be concerned about. For example, you want to view only those jobs that were successful. To view this specific data, you need to use the 'status' filter. By setting this filter to **Successful** while generating the Job Count report, you can view all jobs that were successful.

OpsCenter provides a number of filters that you can use to view the required data. For each report category there is a different set of filters.

Note the following considerations with respect to using the report filters:

- If you edit certain standard reports and select **Backup from Snapshot** Job type from the **Filters** section, incorrect data is shown if data for Backup from Snapshot jobs exists. This also happens when you create image-related reports via custom reporting and apply **Backup from Snapshot** job type filter.
  The following standard reports display incorrect data when you select **Backup from Snapshot** job type from the **Filters** section:
  - Backup > Planning Activity > Stored Backup Images > Duplicate copies
  - Backup > Planning Activity > Stored Backup Images > Stored Backup Images on Media
  - Backup > Planning Activity > Stored Backup Images > Valid Backup Images
  - Backup > Planning Activity > Capacity Planning > Forecasted Size
  - Backup > Planning Activity > Capacity Planning > Historical Size

- The Backup Media Role filter when applied to the Tapes Expiring In Future and Tapes Expiring Now reports does not return any data as data is miscalculated in OpsCenter.

Creating an OpsCenter report using a Report Template

This section provides the procedure to create a report using an existing Report Template .

To create a report using an existing Report Template

1. In the OpsCenter console, click **Reports**.
2. On the **Report Template** tab, click **Create New Report**.

   To view a report output of a template, select a template in the reports tree. The report output is as per the default parameter values. You cannot modify any of the report parameters.

   By clicking the **Create New Report** option, you can launch the report creation wizard that guides you through the entire report creation procedure. Here you can modify the report parameters and view the required data.
3. In the Report Wizard, retain the default selection **Create a report using an existing Report Template** and click **Next**.
4. On the **Report Templates** list, expand a report category to see the Report Templates within it. Select the Report Template that you want to create a report from.

   Click **Next**.
5. Select time frame and other filters as required and click **Next**.
6. Modify display options and click **Next**.

Using report formats

The following formats are available for standard reports in OpsCenter.

About report formats

Report formats are described as follows:

Rankings reports	Display a horizontal bar graph showing all the data for each view level object, from greatest to least, within the selected time frame.
Distribution reports	Display a pie chart showing all the data for each view level object within the selected time frame.

Historical reports	Display a stacked (segmented) bar graph with a trend line superimposed over it, showing the average upward and downward trends of the data over time. For example the total size of each day's backup jobs broken out by geography. Some backup reports use a different bar chart format, displaying clustered columns for easy comparison between two classes of objects or events
Tabular reports	Display backup data in a table

About viewing data in a graphical report

Graphical reports present data in a convenient, 'at a glance' fashion. However, some precision may be lost when you use this format. When you are viewing a graphical report, tool tips are available to provide the precise numerical data. To view the numerical data on which a graphical report is based, move your mouse pointer over an area of the graph.

You can also click **Show Chart as Table** at the bottom of the report to view the data in a tabular format.

When you are viewing a backup report, you can easily view lower-level reports. On a graphical report, when you click an area within a graph, the report refreshes to display data for the next lowest object level.

For example, in a Geography view, you can click a bar labeled Canada to display a bar chart showing data for Toronto and Vancouver. You can select the bar for a host to display data for the host's file systems.

About Report Templates descriptions

This section provides descriptions of all Report Templates available in OpsCenter.

A few important notes on the OpsCenter Report Templates :

- The Drive Throughput, and Drive Utilization reports can be exported and emailed only in the HTML format.

  The Drive Throughput and Drive Utilization reports display data only till 1 A.M. and not till the time when you run the report. This is because OpsCenter collects data for Drive Throughput and Drive Utilization report once per day at 1 A.M. everyday after midnight.

  Therefore the Drive Throughput or Drive Utilization reports are only able to report on data up until 1 AM on that day, even when run with a relative timeframe of Previous 24 hours. Similarly if you run Drive Throughput and Drive Utilization reports at 2 P.M. in the afternoon, the reports display data collected till 1 A.M. only.

- It is recommended that you configure the retention period of error logs in NetBackup as more than 1 day. If the retention period of error logs is less than 24 hours, it may result in data loss for some reports like Drive Throughput.
- A tabular report that is scheduled for emailing has up to 4000 rows by default. Similarly, exporting a tabular report in the available formats displays data for a maximum of 4000 rows by default. The maximum number of rows can be configured.
  See "Configuring number of rows in a tabular report for email or export" on page 17.
- Reports in the PDF, TSV, XML, or CSV formats are sent as email attachments.
- A report in the HTML format is sent as an inline message in email.
- Sorting for HTML-based reports (for example, Drive Utilization) is not supported.
- The default view that is selected is **All My Views**. All standard reports by default show the data based on what you select for **Report Template Default View**. The **Report Template Default View** can be specified in **Settings > User Preferences**. The default value of **Report Template Default View** is **All My Views**.

See "About Audit reports" on page 42.

See "About Backup reports in OpsCenter" on page 43.

See "About Catalog reports in OpsCenter" on page 186.

See "About Chargeback reports in OpsCenter" on page 186.

See "About Client reports in OpsCenter" on page 195.

See "About Disk and Tape Device Activity reports in OpsCenter" on page 238.

See "About Media reports in OpsCenter" on page 250.

See "About Performance reports in OpsCenter" on page 259.

See "About Policy reports in OpsCenter" on page 265.

See "About Restore reports in OpsCenter" on page 280.

See "About Storage Lifecycle Policy reports" on page 289.

See "Workload Analyzer report" on page 326.

About Audit reports

This section provides the reports for the NetBackup Audit Trails feature which provide a record of all user-initiated actions for auditing NetBackup operational changes.

Audit Reports > Audit Trails Report

This section provides descriptions on the Audit Report Template available in OpsCenter.

Audit trails is a record of all the user initiated activities. An audit trail consists of the changes that are made in the NetBackup environment. For example, changes such as creating a policy, deactivating a policy, or modifying a policy.

You can generate the Audit trails report through the reports tab. You can also create a custom SQL. For example, enter a query: SELECT * FROM audit_record on SQL query page.

See "Creating an OpsCenter report using a Report Template" on page 40.

See "Creating an OpsCenter report using SQL query" on page 346.

About Backup reports in OpsCenter

This section provides descriptions on all backup Report Templates available in OpsCenter.

You can view the reports for all NetBackup backup operations including job activity, deduplication rates, and overall backup status and success rates.

Deduplication > Deduplication Rates by Primary Server	See "Deduplication > Deduplication Rates by Primary Server" on page 46.
Deduplication > Deduplication Rates by Policy Type	See "Deduplication > Deduplication Rates by Policy Type" on page 48.
Deduplication > Deduplication Size Factor	See "Deduplication > Deduplication Size Factor" on page 50.
Deduplication > Pre vs. Post Deduplication Size	See "Deduplication > Pre vs. Post Deduplication Size report" on page 55.
Deduplication > Deduplication Size Savings	See "Deduplication > Deduplication Size Savings" on page 59.
Job Activity > Variance > About Throughput Variance report	See "Variance > Throughput Variance" on page 64.
Job Activity > Variance > About File Count Variance report	See "Job Activity > Variance > File Count Variance report" on page 66.
Job Activity > Variance > About Backup Duration Variance report	See "Job Activity > Variance > Backup Duration Variance report" on page 67.

Job Activity > Variance > About Backup Job Size Variance report	See "Job Activity > Variance > Backup Job Size Variance report" on page 67.
Job Activity > Backup Window > Job Count	See "Job Activity > Backup Window > Job Count report" on page 71.
Job Activity > Backup Window > Job Size	See "Job Activity > Backup Window > Job Size report" on page 74.
Job Activity > Backup Window > File Count	See "Job Activity > Backup Window > File Count report" on page 74.
Job Activity > Job Count	See "Job Activity > Backup Window > Job Count report" on page 71.
Job Activity > Job Size	See "Job Activity > Job Size" on page 80.
Job Activity > Client Count > Historical	See "Job Activity > Client Count" on page 85.
Job Activity > Job Duration > Ranking	See "Job Activity > Job Duration" on page 91.
Job Activity > File Count	See "Job Activity > File Count" on page 95.
Job Browser > Tabular Backup Report	See "Job Browser > Tabular Backup Report" on page 100.
Planning Activity > Capacity Planning > Forecasted Size	See "Planning Activity > Capacity Planning > Forecasted Size report " on page 105.
Planning Activity > Capacity Planning > Historical Size	See " Planning Activity > Capacity Planning > Historical Size report " on page 106.
Planning Activity > Forecast > Job Count	See "Planning Activity > Forecast > Job Count report " on page 106.
Planning Activity > Forecast > Job Size	See "Planning Activity > Forecast > Job Size" on page 107.
Planning Activity > Scheduled Job > Scheduled Job	See "Planning Activity > Scheduled Job > Scheduled Job report" on page 111.
Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual	See "Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report" on page 112.
Planning Activity > Scheduled Job > Job Count within Backup Window	See "Planning Activity > Scheduled Job > Job Count within Backup Window report" on page 115.

Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual	See "Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report" on page 117.
Planning Activity > Scheduled Job > All Jobs	See " Planning Activity > Scheduled Job > All Jobs report" on page 120.
Planning Activity > Stored Backup Images > Valid Backup Images	See "Planning Activity > Stored Backup Images > Valid Backup Images report " on page 121.
Planning Activity > Stored Backup Images > Duplicate Copies	See "Planning Activity > Stored Backup Images > Duplicate Copies report" on page 123.
Planning Activity > Stored Backup Images > Stored Backup Images > Historical	See "Planning Activity > Stored Backup Images > Stored Backup Images > Stored Backup Images on Media" on page 124.
Status & Success Rate > Status > Failed Job Count	See "Status & Success Rate > Status > Failed Job Count report " on page 130.
Status & Success Rate > Status > Partially Successful Job Count	See "Status & Success Rate > Status > Partially Successful Job Count report " on page 134.
Status & Success Rate > Status > Successful Job Count	See "Status & Success Rate > Status > Successful Job Count report " on page 138.
Status & Success Rate > Status > All Failed Backups	See "Status & Success Rate > Status > All Failed Backups report" on page 142.
Status & Success Rate > Status > Consecutive Failures	See "Status > Consecutive Failures" on page 142.
Status & Success Rate > Status > Week At A Glance	See "Status & Success Rate > Status > Week At A Glance report " on page 147.
Status & Success Rate > Status > Backup Window Failures	See "Status & Success Rate > Status > Backup Window Failures report" on page 155.
Status & Success Rate > Status > Partially Successful Job Details	See "Status & Success Rate > Status > Partially Successful Job Details report" on page 155.
Status & Success Rate > Status > Skipped Files Summary	See "Status & Success Rate > Status > Skipped Files Summary report" on page 155.
Status & Success Rate > Status > Job Exit Status Detail	See "Status & Success Rate > Status > Job Attempt Status Detail report" on page 156.

Status & Success Rate > Status > Job Details	See "Status & Success Rate > Status > Job Details report" on page 160.
Status & Success Rate > Status > Job Summary by Status	See "Status & Success Rate > Status > Job Summary by Status report" on page 160.
Status & Success Rate > Status > Job Status > Historical	See "Status & Success Rate > Status > Job Status > Historical report" on page 160.
Status & Success Rate > Status > Job Status > Distribution	See "Status & Success Rate > Status > Job Status > Distribution report" on page 164.
Status & Success Rate > Success Rate > Success Rate – All Jobs	See "Status & Success Rate > Success Rate > Success Rate – All Jobs report " on page 168.
Status & Success Rate > Success Rate > Advanced Success Rate	See "Status & Success Rate > Success Rate > Advanced Success Rate report" on page 171.
Status & Success Rate > Success Rate > Success Rate All Attempts	See "Status & Success Rate > Success Rate > Success Rate - All Attempts report" on page 174.
Status & Success Rate > Success Rate > Success Rate - First Attempt	See "Status & Success Rate > Success Rate > Success Rate - First Attempt report" on page 178.
Status & Success Rate > Success Rate > Success Rate - Line	See "Status & Success Rate > Success Rate > Success Rate - Line report" on page 182.

Deduplication > Deduplication Rates by Primary Server

This report provides the deduplication rates for each NetBackup primary server.

You can view the reports for NetBackup deduplication storage including deduplication rates and storage space saved.

The following are the details that are associated with the `Deduplication Rates by Primary Server` report:

Report Name	Deduplication Rates by Primary Server
Report Category	Deduplication
Where to Locate	Report > Report Templates > Backup > Deduplication > `Deduplication Rates by Primary Server`.

Report Purpose	Tabular report that shows deduplication rates for each NetBackup primary server.
Supported products	NetBackup, and Appliances
Applicable View	Primary Server, Media Server
Report Display	Tabular
Drill down report	Yes.
Can be scheduled	Yes.
Supported formats	PDF, CSV, HTML, XML, TSV

You can edit the `Deduplication Rates by Primary Server` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Deduplication Rates by Primary Server` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client	Client Name Client OS	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.

Filter	Column	Description
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Deduplication > Deduplication Rates by Policy Type

This report provides the deduplication rates by NetBackup policy type.

The following are the details that are associated with the `Deduplication Rates by Policy Type` report:

Report Name	Deduplication Rates by Policy Type
Report Category	Deduplication
Where to Locate	Report > Report Templates > Backup > Deduplication > `Deduplication Rates by Policy Type`.
Report Purpose	Tabular report that shows deduplication rates for each NetBackup primary server.
Supported products	NetBackup, and Appliances

Applicable View	Primary Server, Media Server
Report Display	Tabular
Drill down report	Yes.
Can be scheduled	Yes.
Supported formats	PDF, CSV, HTML, XML, TSV

You can edit the `Deduplication Rates by Policy Type` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Deduplication Rates by Policy Type` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.

Filter	Column	Description
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

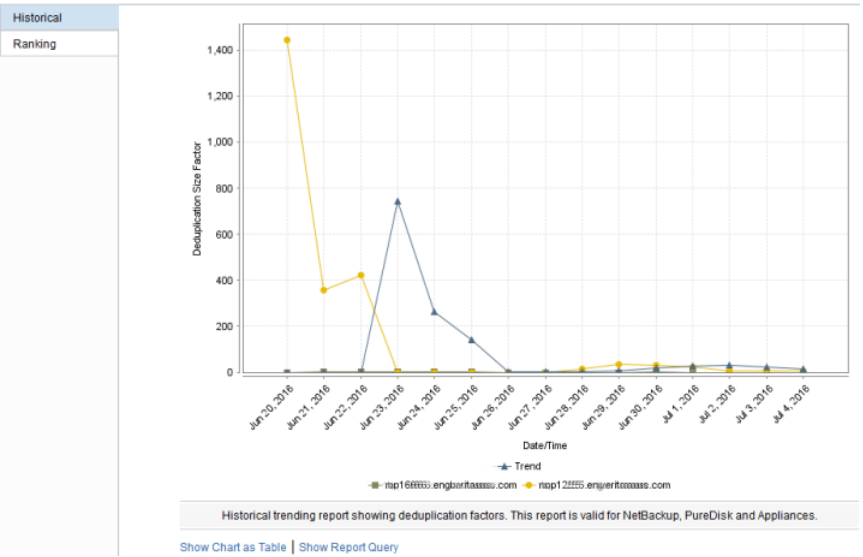
Deduplication > Deduplication Size Factor

This report is usually the most talked about when it comes to deduplication since it shows what the deduplication ratio is for each day over the last two weeks (the time frame is modifiable). The deduplication ratio is calculated by taking the total number of bytes that would normally be backed up and dividing it by the number of bytes that have changed and were backed up. So if 100TB exists on all the backups taking place but only 10TB were changed and therefore transferred, you have a rate of 10. This report shows only deduplication jobs. The default Report On parameter for this report is Primary Server. This report is available in a line-chart format.

This report is available in historical and ranking views. The ranking report ranks the top hosts in terms of which ones have the best deduplication ratio in bytes. These hosts have the least amount of change and therefore you get the best benefit from deduplication.

Figure 2-1 shows a sample view of Deduplication Size Factor Report.

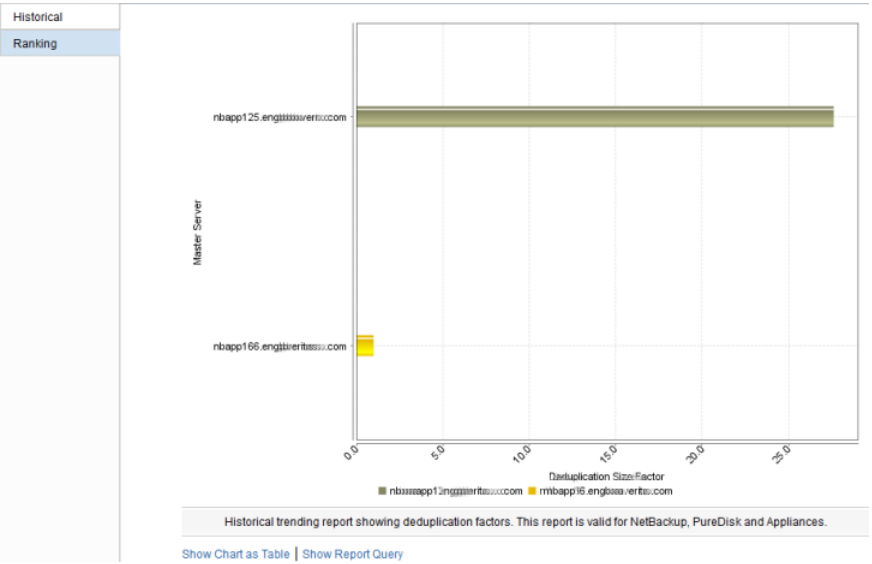
Figure 2-1 Deduplication Size Factor Report (Historical)



This deduplication report ranks the top hosts in terms of which ones have the best deduplication ratio in bytes. These hosts have the least amount of change and therefore you get the best benefit from deduplication.

Figure 2-2 shows a sample view of Deduplication Size Factor Report.

Figure 2-2 Deduplication Size Factor Report (Ranking)



The following are the details that are associated with the `Deduplication Size Factor` report:

Report Name	Deduplication Size Factor
Report Category	Deduplication
Where to Locate	Report > Report Templates > Backup > Deduplication > `Deduplication Size Factor`.
Report Purpose	Historical trending report showing savings deduplication factors.
Supported products	NetBackup, and Appliances
Applicable View	Primary Server, Client
Report Display	Historical, Ranking
Drill down report	Yes. Drill down reports can be viewed at following four levels depending on the selected parameter value. Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name
Can be scheduled	Yes.
Supported formats	PDF, CSV, HTML, XML, TSV

You can edit the `Deduplication Size Factor` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Deduplication Size Factor` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.

Filter	Column	Description
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the Duplication Size Factor report for a specific client to view details for the specific clients.

Report Enhancements:

The following report enhancements have been made for the Duplication Size Factor report:

- Drill down reports for following four levels have been added.
  - Level 1: Client Name
  - Level 2: Job Type
  - Level 3: Schedule/Level Type
  - Level 4: Policy Name
- The report now shows trendlines with customized average periods with option: Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total

- Minutes
- Month of year Average
- Month of year total
- Quarter of year Average
- Quarter of year total

The following filter enhancements have been made for the Duplication Size Factor report:

- New columns Job Status (Complete Only) and Job Status(Complete and Partial Only) are added to the Report On parameter.
- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.
- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Catalog Backup, Backup from Snapshot, Snapshot, Duplicate, and Replication.
- The default selected value for Job Type column is changed to Backup.
- The default unit for Y1 axis is now GB.
- Value SAN is removed from the Job Transport Type filter.

Known Issues:

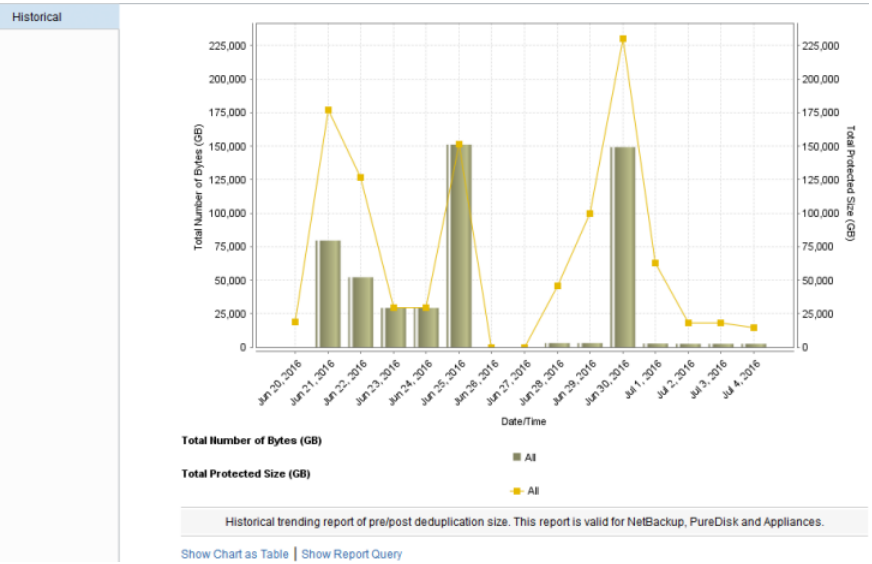
- The unit of data for Y axis/Y1 axis is one unit lower.

Deduplication > Pre vs. Post Deduplication Size report

The Pre vs. Post Deduplication Size report gives the comparison between the total number of bytes that exist on all the backups as if they were normal full backups and the number of bytes that have changed and therefore needed to be transferred. This report shows only deduplication jobs. The default Report On parameter for this report is All Primary Servers. This report is available in a line-chart format.

Figure 2-3 shows a sample view of Pre vs. Post Deduplication Size Report.

Figure 2-3 Pre vs. Post Deduplication Size Report



The following are the details that are associated with the `Deduplication Size Factor` report:

Report Name	Pre vs. Post Deduplication Size report
Report Category	Deduplication
Where to Locate	Report > Report Templates > Backup > Deduplication > `Pre vs. Post Deduplication Size` report.
Report Purpose	Historical trending report of pre vs. post deduplication size.
Supported products	NetBackup, and Appliances
Applicable View	Primary Server, Client
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, HTML, XML, TSV

You can edit the `Pre vs. Post Deduplication Size` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table

shows the filters for `Pre vs. Post Deduplication Size` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classsiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.

Filter	Column	Description
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the Pre vs. Post Deduplication Size report for a specific client to view details for the specific clients.

The following report enhancements have been made for the Pre vs. Post Deduplication Size report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report
- Drill down reports for following four levels have been added in OpsCenter.
  - Level 1: Client Name
  - Level 2: Job Type
  - Level 3: Schedule/Level Type
  - Level 4: Policy Name
- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter of year Average

- Quarter of year total

The following filter enhancements have been made for the Pre vs. Post Duplication Size report:

- New columns Job Status (Complete Only) and Job Status(Complete and Partial Only) are added to the Report On parameter.
- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.
- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Catalog Backup, Backup from Snapshot, Snapshot, Duplicate, and Replication.
- The default selected value for Job Type column is changed to Backup.
- The default value of Report On is **None**.
- Value SAN is removed from the Job Transport Type filter.

Known Issues:

- The unit of data for Y axis/Y1 axis is one unit lower.

Deduplication > Deduplication Size Savings

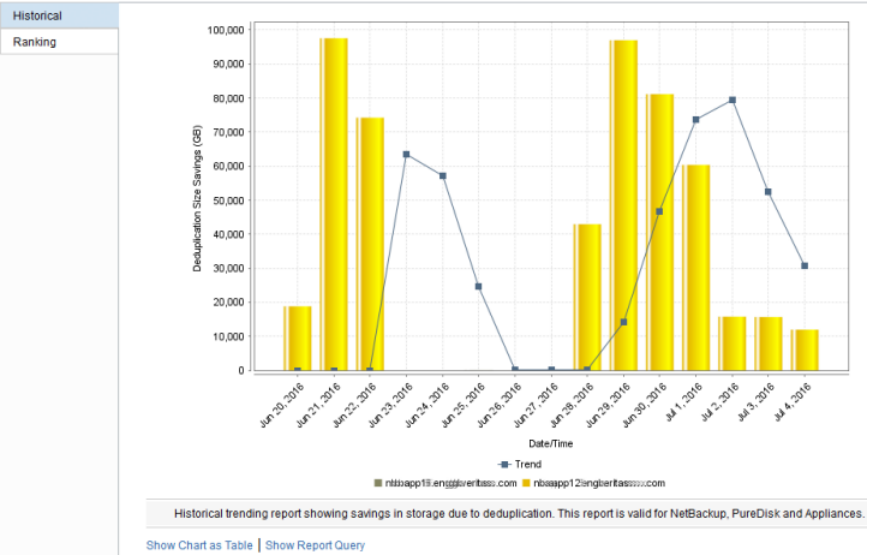
Most NetBackup customers have either implemented some sort of deduplication or plan to in the near future. This is the current trend as customers try to get control of infrastructure and the amount of time backups take. Add to this the need for many customers to protect remote offices across smaller WAN links and deduplication becomes critical since only so much data can be pushed through a small pipe and many times there is no one at the remote site who is capable of managing hardware. In the data center, deduplication reporting helps to determine what the actual deduplication rate is occurring at each PureDisk storage unit. Reporting can be abstracted to view the protected size or stored size across all PureDisk environments or drilled down in to one specific area. Common file or data types can then be identified and matched with their ability to be deduplicated. The report below is a simple dedupe report created using a Media Server Deduplication Pool. It is a very basic report and shows how much data would have been backed up without deduplication enabled. In large environments this would show the number of GB or TB that is NOT being used due to deduplication. The other reports can contrast the dedupe data savings vs. the actual deduped information however in this very small test environment this report shows better information. OpsCenter and OpsCenter Analytics provide the ability to report on the various forms of deduplication available with NetBackup. It can provide reports that show things such as how much deduplication is being done at a remote site before the data hits the WAN pipe. Using the trending feature of OpsCenter Analytics can also help to understand if

the data is growing faster than the hardware or when the WAN bandwidth can be expected to max out. This allows the company to make educated decisions on when to add infrastructure proactively instead of waiting for things to fail. This report shows the total number of bytes that do not need to be backed up because of deduplication. There is no calculation or ratio in this number. It is the number of bytes (MB, GB, TB etc.) that have not changed since the last backup and therefore do not need to be backed up. This report shows only deduplication jobs. The default Report On parameter for this report is Primary Server. This report is available in Historical, and Ranking views. The ranking report groups the total number of bytes saved per host being backed up to show the top five hosts in terms of deduplication savings.

The historical report shows the total number of bytes that do not need to be backed up because of deduplication. There is no calculation or ratio in this number. It is the number of bytes (MB, GB, TB etc.) that have not changed since the last backup and therefore do not need to be backed up. This report shows only deduplication jobs. The default Report On parameter for this report is Primary Server

Figure 2-4 shows a sample view of Deduplication Size Savings Report.

Figure 2-4 Deduplication Size Savings Report (Historical)

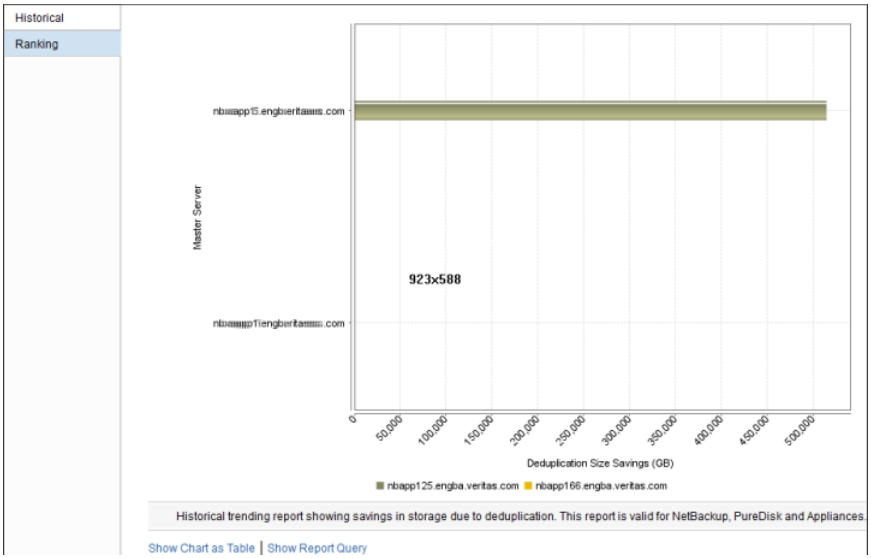


The ranking report shows the number of bytes that have not changed within the time frame and therefore do not have to be backed up due to deduplication. The report groups the total number of bytes saved per host being backed up to show the top five hosts in terms of deduplication savings. This report shows only

deduplication jobs. The default Report On parameter for this report is Primary Server.

Figure 2-5 shows a sample view of Deduplication Size Savings Report.

Figure 2-5 Deduplication Size Savings Report (Ranking)



The following are the details that are associated with the `Deduplication Size Savings` report:

Report Name	Deduplication Size Savings
Report Category	Deduplication
Where to Locate	Report > Report Templates > Backup > Deduplication > `Deduplication Size Savings`.
Report Purpose	Historical trending report showing savings in storage due to deduplication.
Supported products	NetBackup, and Appliances
Applicable View	Primary Server, Client
Report Display	Historical, Ranking

Drill down report	Yes. Drill down reports can be viewed at following four levels depending on the selected parameter value. Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name
Can be scheduled	Yes
Supported formats	PDF, CSV, HTML, XML, TSV

You can edit the `Deduplication Size Savings` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Deduplication Size Savings` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.

Filter	Column	Description
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the Duplication Size Savings report for a specific client to view details for the specific clients

The following report enhancements have been made for the Duplication Size Savings report:

- Drill down reports for following four levels have been added.
  - Level 1: Client Name
  - Level 2: Job Type
  - Level 3: Schedule/Level Type
  - Level 4: Policy Name
- The report now shows trendlines with customized average periods with option: Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average

- Days of week total
- Hours of day Average
- Hours of day Total
- Minutes
- Month of year Average
- Month of year total
- Quarter of year Average
- Quarter of year total

The following filter enhancements have been made for the Duplication Size Savings report:

- New columns Job Status (Complete Only) and Job Status (Complete and Partial Only) are added to the Report On parameter.
- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.
- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Catalog Backup, Backup from Snapshot, Snapshot, Duplicate, and Replication.
- The default selected value for Job Type column is changed to Backup.
- The default unit for Y1 axis is now GB.
- Value SAN is removed from the Job Transport Type filter.

Known Issues:

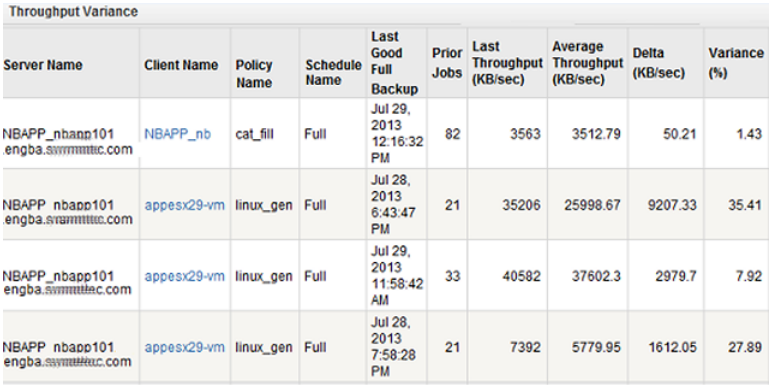
- The unit of data for Y axis/Y1 axis is one unit lower.

Variance > Throughput Variance

This report shows client or policy level details on backup job throughput variations between last full backup and recent averages.

Figure 2-6 shows a sample view of Throughput Variance Report.

Figure 2-6 Throughput Variance Report



Throughput Variance

Server Name	Client Name	Policy Name	Schedule Name	Last Good Full Backup	Prior Jobs	Last Throughput (KB/sec)	Average Throughput (KB/sec)	Delta (KB/sec)	Variance (%)
NBAPP_nbapp101 engba.symantec.com	NBAPP_nb	cat_fill	Full	Jul 29, 2013 12:16:32 PM	82	3563	3512.79	50.21	1.43
NBAPP_nbapp101 engba.symantec.com	appesx29-vm	linux_gen	Full	Jul 28, 2013 6:43:47 PM	21	35206	25998.67	9207.33	35.41
NBAPP_nbapp101 engba.symantec.com	appesx29-vm	linux_gen	Full	Jul 29, 2013 11:58:42 AM	33	40582	37602.3	2979.7	7.92
NBAPP_nbapp101 engba.symantec.com	appesx29-vm	linux_gen	Full	Jul 28, 2013 7:58:28 PM	21	7392	5779.95	1612.05	27.89

The following are the details that are associated with the `Throughput Variance` report:

Report Name	Throughput Variance
Report Category	Backup
Where to Locate	All Reports > Report Templates > Backup > Job Activity > Variance > `Throughput Variance` report.
Report Purpose	Client/Policy level detail on backup job throughput variations between last full backup and recent averages.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	Yes. See Client Backup Details.
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Jobs > `Throughput Variance`

You can edit the `Throughput Variance` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Throughput Variance` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Percentage	Percentage	Select an appropriate value of variance percentage. By default, all the variance percentages that are greater than 1 are displayed in the Variance (%) column in the report.

Example of filter usage: You may run the Throughput Variance report for a specific primary server to view details only for the specific primary server.

The following report enhancements have been made for the Job Duration report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The default **Relative Timeframe** for this report was 28 days now it is changes to Previous 14 days.

Job Activity > Variance > File Count Variance report

You can view the detailed reports for NetBackup job activity statistics including file, job, size, Clients, and job duration.

From Job Activity > Varience you can view the reports on NetBackup operational ranges to identify statistical variances in backup sizes, throughputs, duration, and file counts.

The Job Activity > Variance > File Count Variance report lets you investigate why a particular full backup is different than usual. For example, a file server backup is successful, but contains fewer files than usual for a full backup.

The report shows NetBackup jobs with significant differences in file counts from the average count for a primary server, policy, and schedule.

If any variation calculation is greater than the selected value of variance when the report is run, the server, client, policy, and schedule type combination is shown with the actual file count variation. The table provides the percent variance (in file counts) for each good job from the average for that server, policy, and schedule.

The **Client Name** column of the report provides a drilldown link to back up job details for the specified time frame.

Job Activity > Variance > Backup Duration Variance report

This report provides an indication of how backup time varies from the average backup time. You can detect any anomalies if the variation is too high.

This report calculates the backup time variation of the last good backup with the average backup time per client, policy, and schedule type. If any variation calculation is greater than the selected value of variance when the report is run, the client, policy, and schedule type combination is shown with the actual variation.

About client jobs for selected time frame report

This drilldown report from the Client Name column provides detailed job information for the client for the selected time frame.

This drilldown report uses the run time parameters that are passed from the main report.

Job Activity > Variance > Backup Job Size Variance report

This report provides an indication of how a backup size varies from the average size. You can detect any anomalies if the variation is too high.

This report calculates the backup size variation of the last good backup with the average backup size per a client, policy, and schedule type. If any variation calculation is greater than the selected value of variance when the report is run, the client, policy and schedule type combination is shown with the actual variation.

Size variance is calculated using the following formula: (the last backup size - the average backup size) / the average backup size x 100.

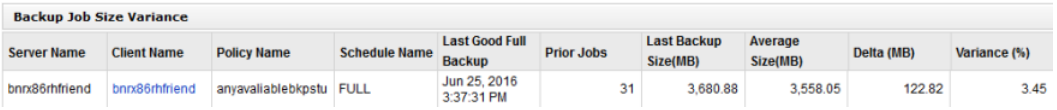
Consider the following points before running a Backup Job Size Variance report:

- This report considers only full schedules.
- This report does not consider deduplication jobs.
- This report does not consider failed jobs. The report considers jobs with status code like 0, 1 etc.
- If you ran multiple jobs for the same client in the given time frame like 10 jobs per the primary server, client, policy, and schedule combination then the report calculates the difference between the last job and the average of the remaining 9 jobs.
- In case of multi-stream jobs, the report considers each stream as a different job.

The **Client Name** column of the report provides a drilldown link to back up job details for the specified time frame.

Figure 2-7 shows a sample view of the `Backup Job Size Variance` report.

Figure 2-7 Backup Job Size Variance report



Backup Job Size Variance

Server Name	Client Name	Policy Name	Schedule Name	Last Good Full Backup	Prior Jobs	Last Backup Size(MB)	Average Size(MB)	Delta (MB)	Variance (%)
bnrx86rhfriend	bnrx86rhfriend	anyavaliablebkpstu	FULL	Jun 25, 2016 3:37:31 PM	31	3,680.88	3,558.05	122.82	3.45

The following are the details that are associated with the `Backup Job Size Variance` report:

Report Name	`Backup Job Size Variance`
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Job Activity > Variance > `Backup Job Size Variance`
Report Purpose	This report shows job size variance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	Yes See "Client backup jobs" on page 69.
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	Reporting > All Reports > Standard Reports > Jobs > `Backup Job Size Variance`

The following table lists the filters for `Backup Job Size Variance` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Filter	Column	Description
Percentage	Percentage	Select an appropriate value of variance percentage. By default, all the variance percentages that are greater than 1 are displayed in the **Variance (%)** column in the report.

Example of filter usage: You may run the `Backup Job Size Variance` report for a specific primary server to view details only for the specific primary server.

The following report enhancements have been made for the `Backup Job Size Variance` report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

Client backup jobs

The `Client Backup Jobs` report shows details of the jobs run for a selected client. This tabular report shows information like Job ID, Policy Name, Schedule Name, Status Code, Number of files, Throughput (KB/Sec) etc.

Figure 2-8 shows a sample view of the `Client Backup Jobs` report.

Figure 2-8 Client backup jobs report

Client backup jobs

Job ID	Server Name	Job Type	Status Code	Policy Name	Schedule Name	Start Time	End Time	Volume(KB)	Number of Files	Throughput (KB/sec)
82	bnrx86rhfriend	Backup	0	normalbkponHRAWnbu80	FULL	Jun 24, 2016 3:47:24 PM	Jun 24, 2016 3:48:53 PM	3,212,224	10	54,080
83	bnrx86rhfriend	Backup	0	normalbkponHitCryptnbu80	FULL	Jun 24, 2016 3:47:25 PM	Jun 24, 2016 3:49:15 PM	3,212,224	10	46,898
84	bnrx86rhfriend	Backup	0	ACCbkponHitCryptnbu80	FULL	Jun 24, 2016 3:47:26 PM	Jun 24, 2016 3:48:43 PM	3,212,224	10	319,497
85	bnrx86rhfriend	Backup	0	anyavaliablebkpstu	FULL	Jun 24, 2016 4:29:52 PM	Jun 24, 2016 4:31:39 PM	3,212,224	10	50,747
87	bnrx86rhfriend	Backup	0	anyavaliablebkpstu	FULL	Jun 24, 2016 4:31:55 PM	Jun 24, 2016 4:33:03 PM	3,212,224	10	390,117

The following are the details that are associated with the `Client Backup Jobs` report:

Report Name	Client backup jobs
Report Category	Backup

Where to Locate	Report > Report Templates > Backup > Job Activity > Variance > `Backup Job Size Variance` (drill down on Client Name) > Client backup jobs
Report Purpose	This report shows details of the jobs run for a selected client.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	Reporting > All Reports > Standard Reports > Jobs > `Backup Job Size Variance` > `Client Backup Job`

The following table shows the filters for `Client Backup Jobs` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Client	Client is Active	Select **Yes** to view only Active Clients or **No** to view all the clients in the report. By default, only Active Clients are shown in the report.
	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.

Example of filter usage: You may run the `Client Backup Jobs` report for more than one primary server. Select Primary Server and then select specific primary servers to view details for all the clients.

The following report enhancements have been made for the Backup Job Size Variance report:

- The unit **Years** has been added for Relative Timeframe selection.

You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

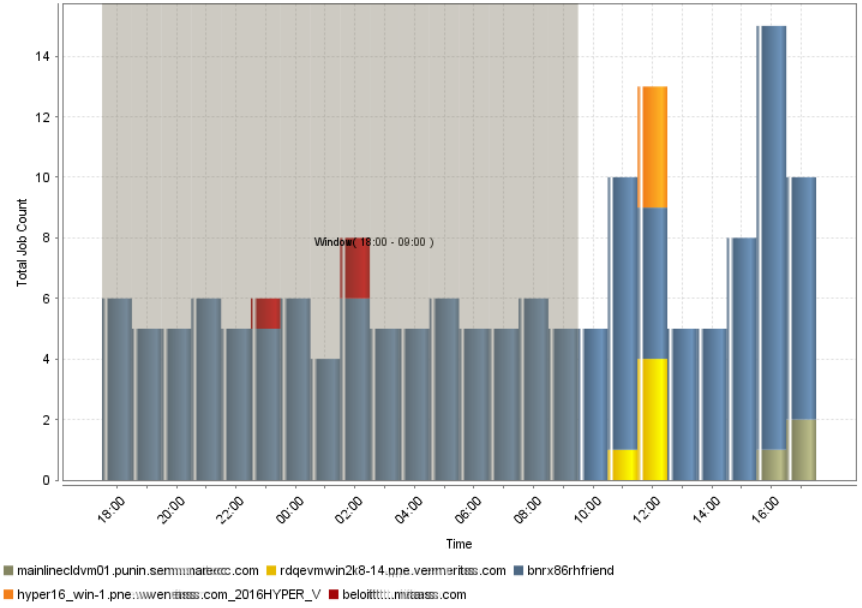
Job Activity > Backup Window > Job Count report

The Job Activity > Backup Window provides the reports on NetBackup backup window statistics including the number of jobs, job size, and file counts.

The Job Activity > `Backup Window` > Job Count report shows the total number backup jobs in the last two weeks shown by the hour of the day in which each job ends. It also renders a configurable backup window to help quickly identify if a lot of jobs end in or outside of what your backup window is or should be. The report can help you see if there are any hours within the backup window that are under used and whether any load balancing is appropriate.

Figure 2-9 shows a sample view of the Job Count report.

Figure 2-9 Job Count report



The following are the details that are associated with the Job Count report:

Report Name	Job Count

Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Job Activity > `Backup Window` > Job Count
Report Purpose	This report shows job count by hour of day in which job ends.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical (Chart)
Drill down report	No
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML

The following table shows the filters for Job Count report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media server	Media server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list ..
Client	Client Name Client OS	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.

Filter	Column	Description
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
Attempt	Attempt Status	The **Attempt Status** column can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if **Attempt** is selected. By default, **Job** is selected. Number of attempts are not considered when **Job** is selected.

Example of filter usage: You may run the Job Count report for a specific policy to view job counts for the specific policy.

The following report enhancements have been made for the Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following **Report On** options have been added under `Backup Job Attributes:`

- Job Status (Complete and Partial only)
- Job Status (Complete only)

- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.
- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, or policy type are shown as **UNKNOWN**.

Job Activity > Backup Window > Job Size report

This report shows the total gigabytes backed up in the last two weeks shown by the hour of the day in which each job ends. It also renders a configurable backup window to help quickly identify if a lot of jobs end in or outside of what your backup window is or should be. The report can help you see if there are any hours within the backup window that are under used and whether any load balancing is appropriate.

Job Activity > Backup Window > File Count report

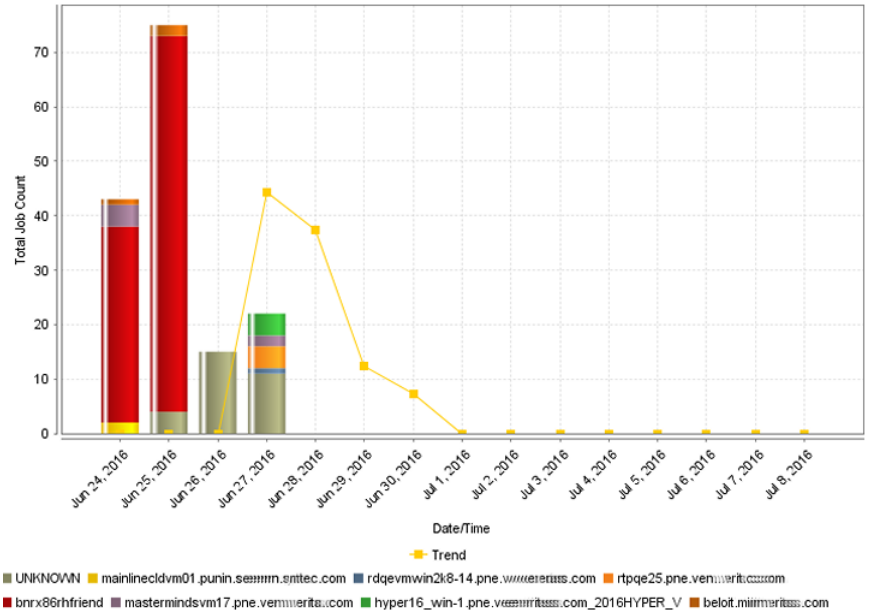
This report shows the number of files that were backed up for each hour of the day. The height of each bar on the graph represents the total number of files that are backed up for that hour across the entire date range selected. A user defined backup window is drawn in yellow for example to compare with what hours the files should have been backed up in. Bars outside of the yellow window represent the activity that occurred outside of the backup window. The report can also be used to see what hours may have capacity to add more backups while still remaining in the backup window.

Job Activity > Job Count

This report provides as a summary of backup job counts across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total amount of time spent while doing backups each day for the past two weeks.

Figure 2-10 shows a sample view of Job Count Report.

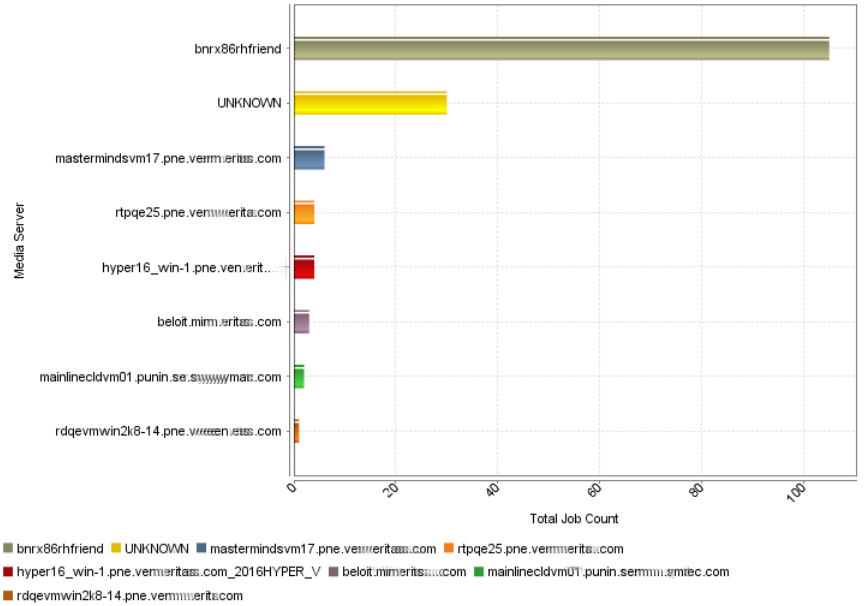
Figure 2-10 Job Count Report (Historical)



Ranking view shows the top ten environments by ranking total number of jobs performed by each media server during the last two weeks.

Figure 2-11 shows a sample view of Job Count Report.

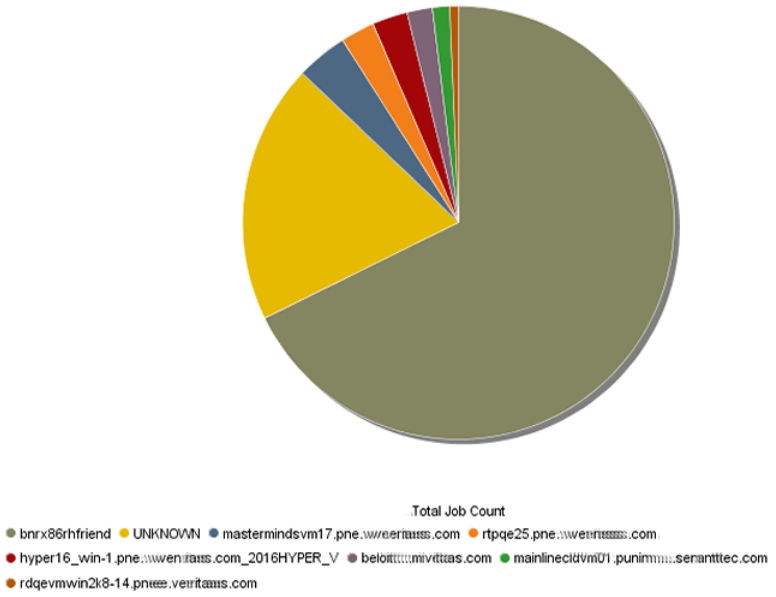
Figure 2-11 Job Count Report (Ranking)



Distribution view gives a breakdown of number of jobs performed by each media server and provides information if any type of load balancing is beneficial.

Figure 2-12 shows a sample view of Job Count Report.

Figure 2-12 Job Count Report (Distribution)



You can view historical, ranking and distribution report types in tabular format.

Figure 2-13 shows a sample view of Job Count Report.

Figure 2-13 Job Count Report (Tabular)

Media Server	Total Job Count	Percentage
nbpp[redacted]44	35,873	91.95%
nbpp[redacted]25engb[redacted]com	2,998	7.68%
nbpp[redacted]61	116	0.3%
UNKNOWN	27	0.07%

Total 4 Rows , 1 Page(s)

The following are the details that are associated with the `Job Count` report:

Report Name	Job Count
Report Category	Backup
Where to Locate	All Reports > Report Templates > Backup > Job Activity > `Job Count` report.
Report Purpose	Customizable report that shows total number of unique clients backed up per day for the last two weeks, by each primary server.

Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical, Ranking, Distribution
Drill down report	Yes You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance. Example: For ranking type of report, you can view four levels of drill down reports: Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	All Reports > Standard Reports > Backup > Activity Planning > `Job Count`

You can edit the `Job Count` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Job Count` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client	Client Name Client OS	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.

Filter	Column	Description
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.
Attempt	Attempt Status	The Attempt Status filter can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if Attempt is selected.

Example of filter usage: To view a count of all job attempts in the Job Count report, select Attempt Status as Attempt.

The following report enhancements have been made for the Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Job Count report:

- **UNKNOWN** has been added as a value for **Policy Type**column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In

earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.

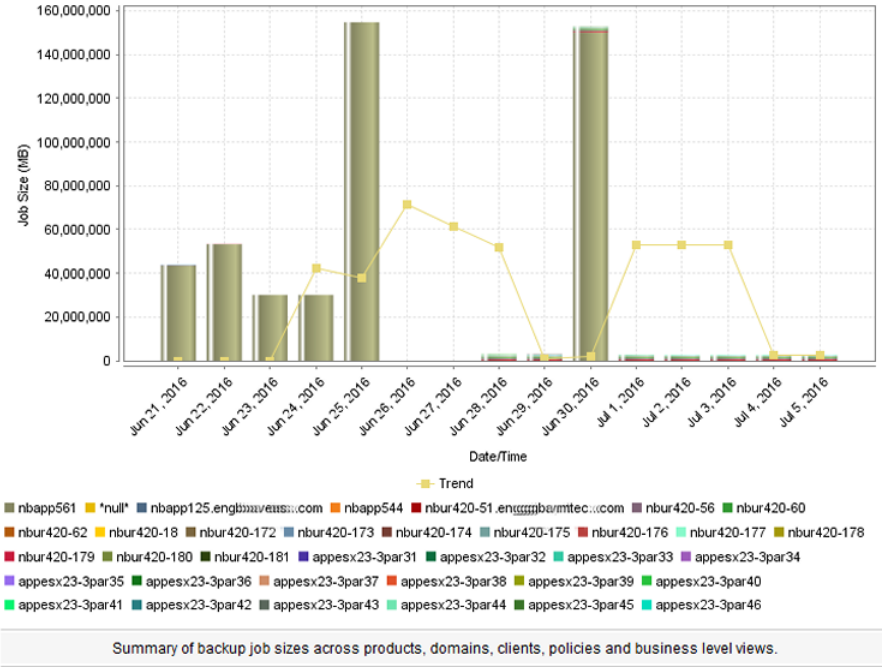
- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.

Job Activity > Job Size

This report provides as a summary of backup job sizes across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total megabytes backed up each day during the last two weeks.

Figure 2-14 shows a sample view of Job Size Report.

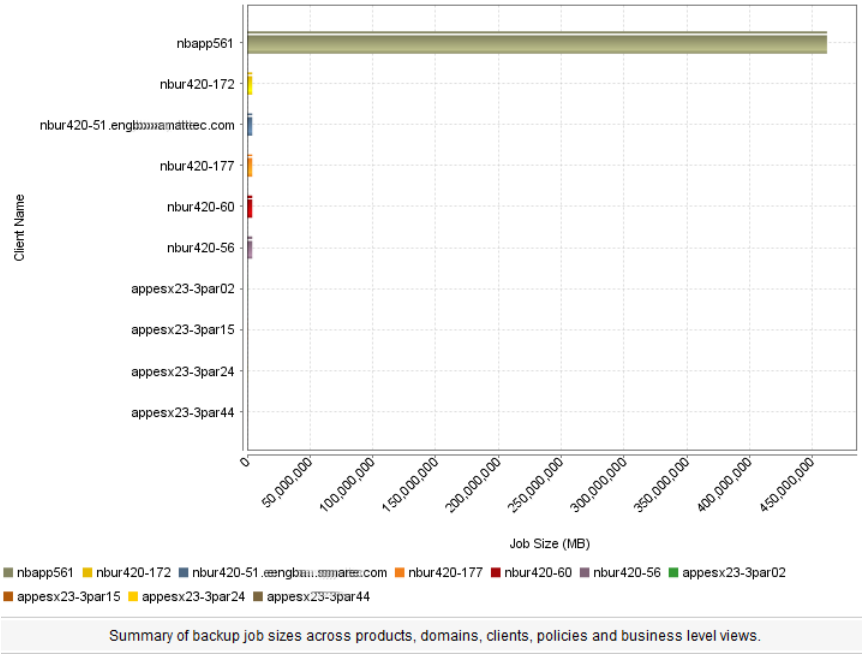
Figure 2-14 Job Size Report (Historical)



Ranking view shows the top 10 backup client ranking them on total megabytes backed up for that client for last two weeks. The report provides an overview of top consumers and whether those consumers are the expected ones.

Figure 2-15 shows a sample view of Job Size Report.

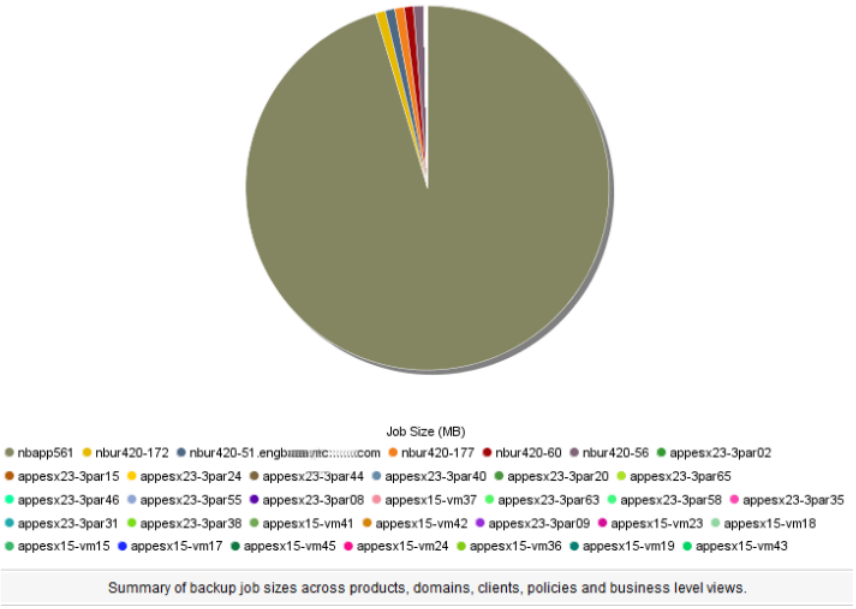
Figure 2-15 Job Size Report (Ranking)



Distribution view gives a breakdown view about total megabytes they have been backed up in the last two week, for each media server. It shows a clear distribution of amount of data going to all the media servers and provides inputs if any type of load balancing is beneficial.

Figure 2-16 shows a sample view of Job SizeReport.

Figure 2-16 Job Size Report (Distribution)



You can view historical, ranking and distribution report types in tabular format.

Figure 2-17 shows a sample view of Job Size Report.

Figure 2-17 Job Size Report (Tabular)

Client Name	Job Size (MB)	Percentage
nbapp561	461,528,579.87	95.39%
nbur420-172	4,116,417.18	0.85%
nbur420-51.engb[redacted]com	4,113,808.26	0.85%
nbur420-177	4,113,107.94	0.85%
nbur420-60	4,112,007.4	0.85%
nbur420-56	4,110,906.87	0.85%
appesx23-3par02	81,412.31	0.02%
appesx23-3par15	74,399.94	0.02%
appesx23-3par24	69,730.43	0.01%
appesx23-3par44	64,094.34	0.01%
appesx23-3par40	60,571.8	0.01%

The following are the details that are associated with the `Job Size` report:

Report Name Job Size

Report Category	Backup
Where to Locate	All Reports > Report Templates> Backup > Job Activity >`Job Size` report
Report Purpose	Customizable report about the total megabytes backed up for each day during the last two weeks.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical, Ranking, Distribution
Drill down report	Yes. You can view drill down report for the selected parameter value. These drill down reports are available for NetBackup and NetBackup appliance. Example: For ranking type of report, you can view three levels of drill down reports: Level 1: Job Type, Level 2: Schedule/Level Type, Level 3: Policy Name
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	All Reports > Standard Reports > Backup > Activity Planning > `Job Size`

You can edit the `Job Size` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Job Size` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.

Filter	Column	Description
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the `Job Size` report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the Job Size report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Job Size report:

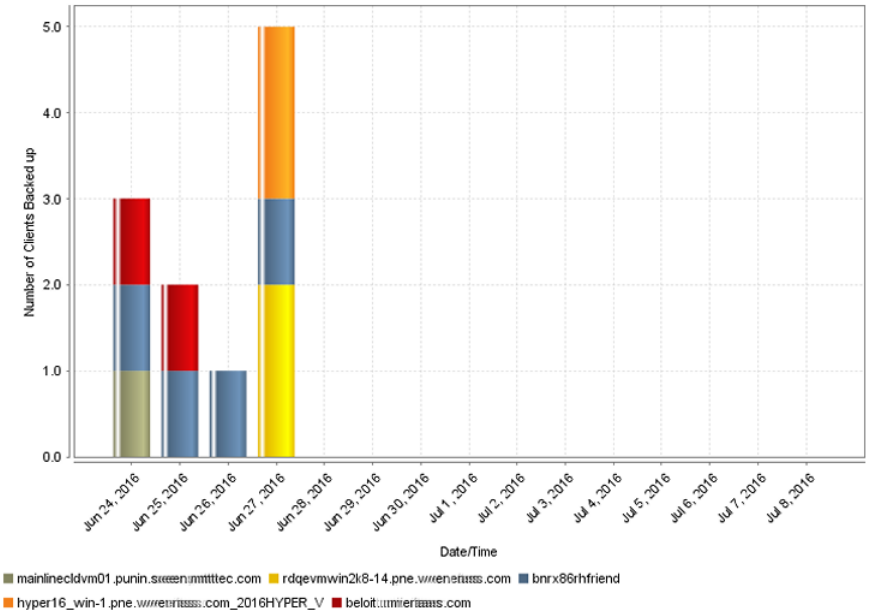
- **UNKNOWN** has been added as a value for **Policy Type**column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.
- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.
- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week Total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year Total
  - Quarter of year Average
  - Quarter of year Total

Job Activity > Client Count

This report provides a summary of backup client counts across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total number of unique clients backed up per day for the last two weeks, for each primary server. It can help in highlighting potential problems by showing any variations in the number of clients that needs to be backed up and how many are actually getting backed up.

Figure 2-18 shows a sample view of Client Count Report.

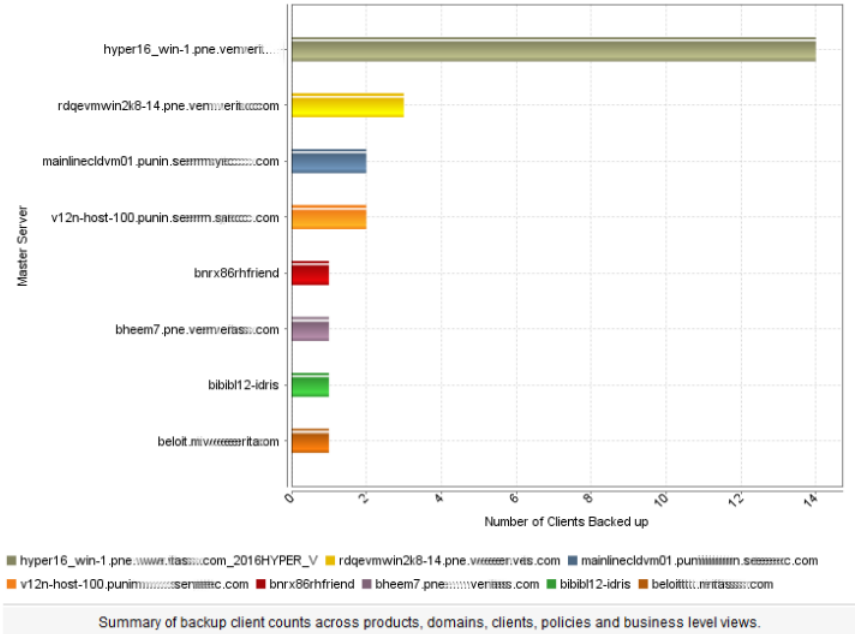
Figure 2-18 Client Count Report (Historical)



Ranking view shows the top ten environments by listing the number of unique clients that got backed up per each media server during the last two weeks.

Figure 2-19 shows a sample view of Client Count Report.

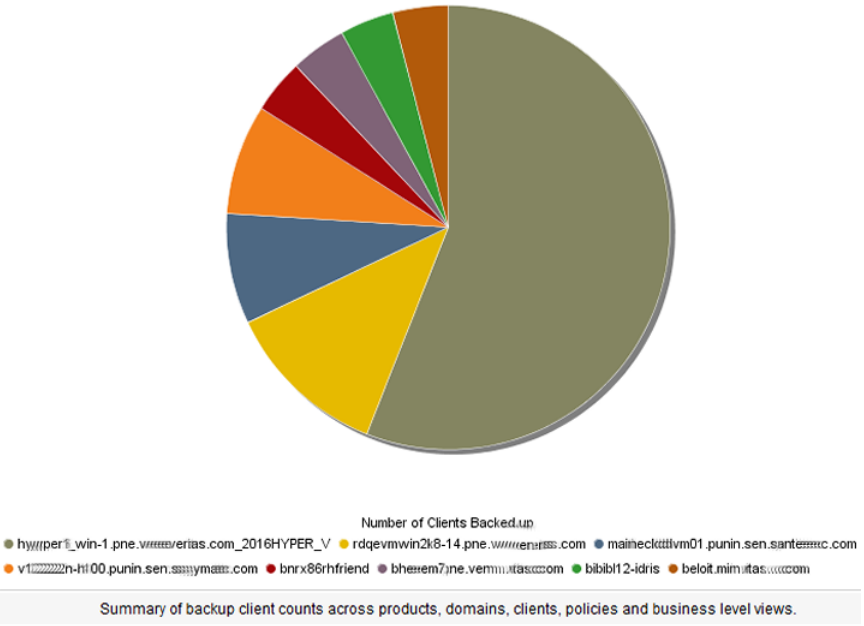
Figure 2-19 Client Count Report (Ranking)



Distribution view gives you breakdown by each primary server of the number of unique clients that got backed up in the last two weeks.

Figure 2-20 shows a sample view of Client Count Report.

Figure 2-20 Client Count Report (Distribution)



You can view historical, ranking and distribution report types in tabular format. Figure 2-21 shows a sample view of Client Count Report.

Figure 2-21 Client Count Report (Tabular)

Master Server	Number of Clients Backed up	Percentage
hyper1_win-1.pne.veritas.com_2016HYPER_V	13	54.17%
rdqevmwin2k8-14.pne.veritas.com	3	12.5%
maineckctlvm01.punin.sen.santeec.com	2	8.33%
v12n-h100.punin.sen.santeec.com	2	8.33%
bnrx86rhfriend	1	4.17%
bheem7pne.vem.vitas.com	1	4.17%
bibibl12-idris	1	4.17%
beloit.mim.vitas.com	1	4.17%

Total 8 Rows , 1 Page(s)

The following are the details that are associated with the `Client Count` report:

Report Name	Client Count
Report Category	Backup

Where to Locate	All Reports > Report Templates > Backup > Job Activity > `Client Count` report.
Report Purpose	Customizable report that shows total number of unique clients backed up per day during last two weeks, by each primary server.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical, Ranking, Distribution
Drill down report	Yes You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance. Example: For ranking type of report, you can view four levels of drill down reports: Level 1: Client Name, Level 2: Job Type, Level 3: Schedule/Level Type, Level 4: Policy Name
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	All Reports > Standard Reports > Backup > Activity Planning > `Client Count`

You can edit the `Client Count` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Client Count` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.

Filter	Column	Description
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the `Client Count` report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the Client Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Client Count report:

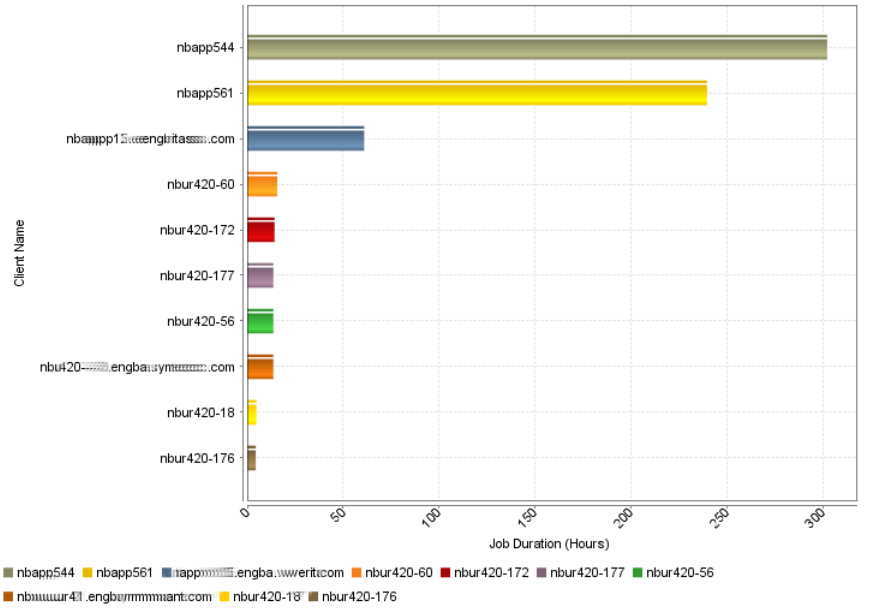
- **UNKNOWN** has been added as a value for **Policy Type**column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.
- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week Total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year Total
  - Quarter of year Average
  - Quarter of year Total

Job Activity > Job Duration

This report provides a summary of backup job durations across products, domains, clients, policies and business level views. It shows you the top ten clients ranked by the total amount of time consumed for the backup during last two weeks.

Figure 2-22 shows a sample view of Job Duration Report.

Figure 2-22 Job Duration Report



Summary of backup job durations across products, domains, clients, policies and business level views.

In addition, you can view the report in tabular format.

Figure 2-23 shows a sample view of Job Duration Report.

Figure 2-23 Job Duration Report (Tabular)

Client Name	Job Duration (Hours)
nbapp544	302.27
nbapp561	239.66
nba[illegible]pp15.engb[illegible].ve[illegible].com	60.96
nbur420-60	15.62
nbur420-172	14.23
nbur420-177	13.63
nbur420-56	13.62
nbur[illegible]4205[illegible]1.engb[illegible].s[illegible]c.com	13.6
nbur420-18	4.76
nbur420-176	4.46

Total 10 Rows , 1 Page(s)

The following are the details that are associated with the `Job Duration` report:

Report Name Job Duration

Report Category	Backup
Where to Locate	All Reports > Report Templates > Backup > Job Activity > `Job Duration` report.
Report Purpose	Customizable report that shows top ten clients ranked by the total amount of time for the backup during the last two weeks.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Ranking
Drill down report	Yes. You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance. Example: For ranking type of report, you can view four levels of drill down reports: Level 1: Job Type, Level 2: Schedule/Level Type, Level 3: Policy Name
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	All Reports > Standard Reports > Backup > Activity Planning > `Job Duration`

You can edit the `Job Duration` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Job Duration` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.

Filter	Column	Description
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the Job Duration report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the Job Duration report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Job Duration report:

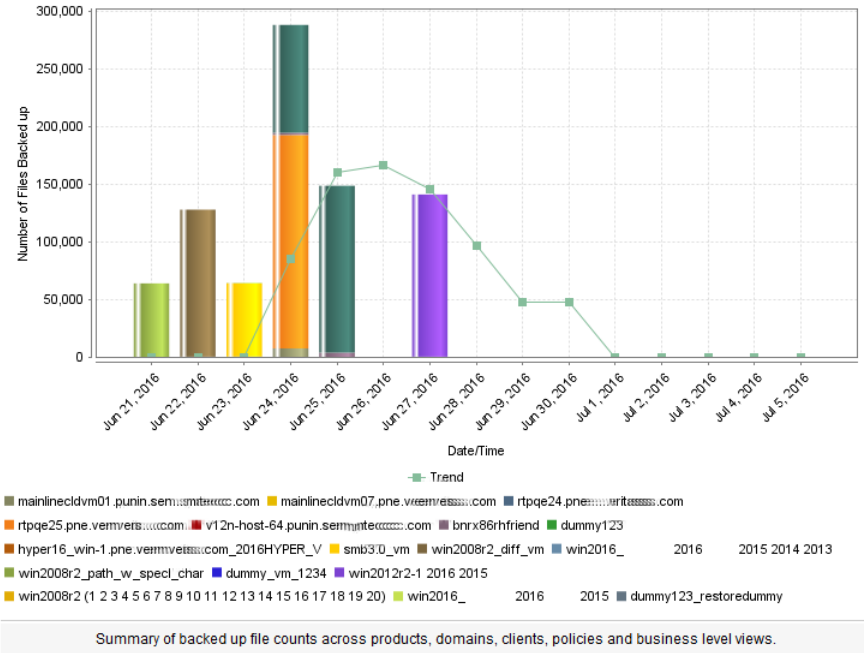
- **UNKNOWN** has been added as a value for **Policy Type**column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.
- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.

Job Activity > File Count

This report provides the summary of backed up file counts across products, domains, clients, policies and business level views. There are three display options to see this report. Historical report view shows the total number of files that got backed up for each day during the last two weeks for each primary server.

Figure 2-24 shows a sample view of File Count Report.

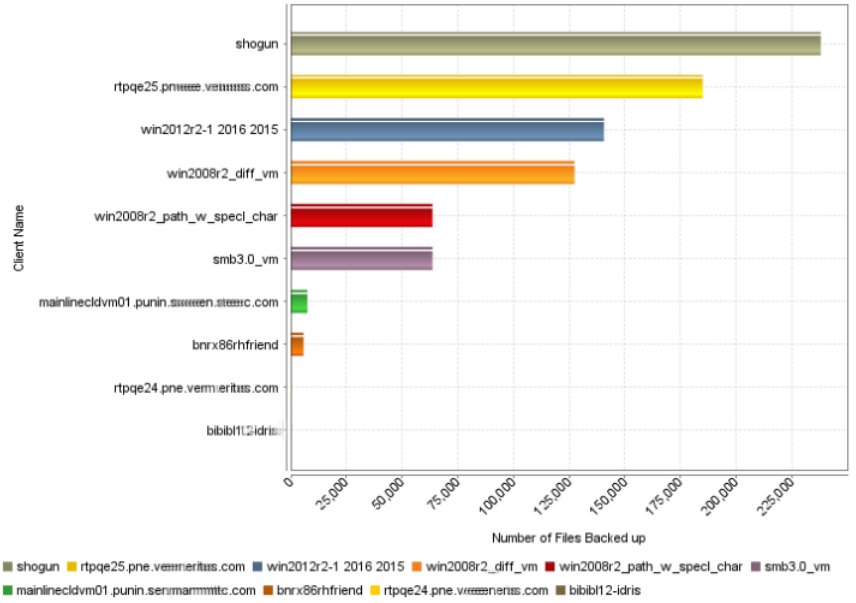
Figure 2-24 File Count Report (Historical)



Ranking view shows the top ten backup clients ranking them on total numbers of files that were backed up for them during the last two weeks.

Figure 2-25 shows a sample view of File Count Report.

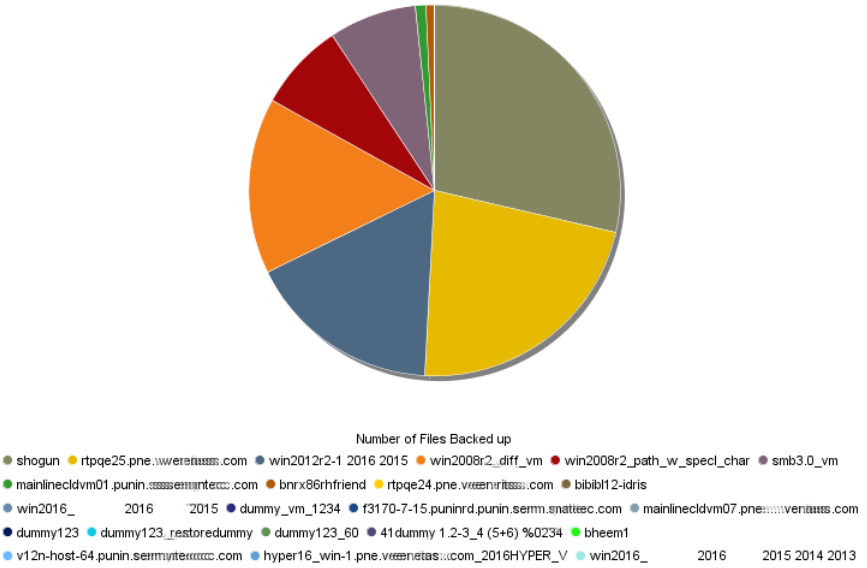
Figure 2-25 File Count Report (Ranking)



Distribution view gives a breakdown for the number of files that got backed up in the last two weeks, for each primary server.

Figure 2-26 shows a sample view of File Count Report.

Figure 2-26 File Count Report (Distribution)



You can view historical, ranking and distribution report types in tabular format.

Figure 2-27 shows a sample view of File Count Report.

Figure 2-27 File Count Report (Tabular)

Client Name	Number of Files Backed up	Percentage
shogun	238,061	62.06%
win2012r2-1 2016 2015	140,689	36.68%
bnrx86rhfriend	4,827	1.26%
f3170-7-15.puninrd.puni...n.sm...c.com	6	0%
rtpqe24.pne.v...com	4	0%
hyper16_win-1.pne.ven.veritas.com_2016HYPER_V	0	0%

Total 6 Rows , 1 Page(s)

The following are the details that are associated with the `File Count` report:

Report Name	File Count
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Job Activity > `File Count`

Report Purpose	Customizable report showing the total number of files that are backed up each day during the last two weeks.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical, Ranking, Distribution
Drill down report	Yes You can view drill down reports for the selected parameter value. These reports are available for NetBackup and NetBackup appliance. Example: For ranking type of report, you can view three levels of drill down reports: Level 1: Job Type, Level 2: Schedule/Level Type, Level 3: Policy Name
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	All Reports > Standard Reports> Backup >Activity Planning > `File Count`

You can edit the `File Count` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `File Count` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.

Filter	Column	Description
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the `File Count` report for specific policy data classification names to view details only for the specific policy classifications.

The following report enhancements have been made for the File Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the File Count report:

- **UNKNOWN** has been added as a value for **Policy Type**column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN as in VBR.
- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.
- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week Total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year Total
  - Quarter of year Average
  - Quarter of year Total

Job Browser > Tabular Backup Report

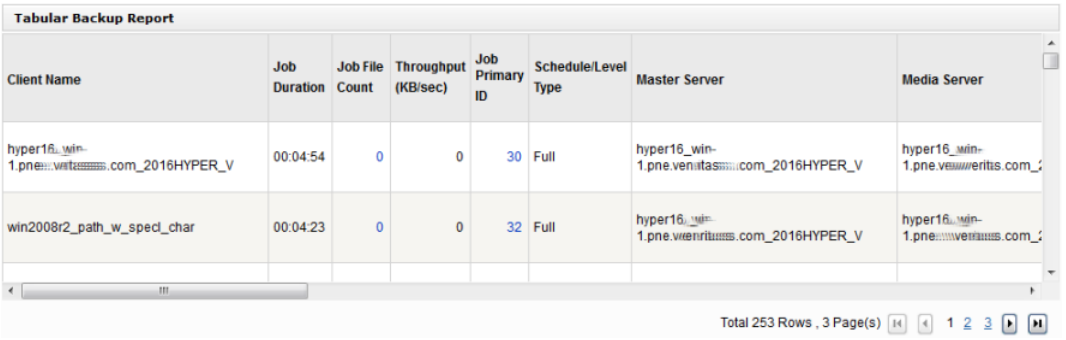
This section provides the reports on NetBackup job activity similar to the NetBackup Activity Monitor.

You can view a detailed listing of all the backup activity performed for the specified timeframe. The default timeframe is last two weeks. This report lets you view the status for multiple job attempts (from **Job Attempt Count** and **Status Code** columns). This report also lets you know the time it takes for backup or restore operations to complete (from the **Job Duration** column). It thus helps you to quickly identify details about the backup or restore jobs that take the maximum time.

You can also drill down from the **Job Primary ID** column in the report to know the skip file details that are associated with the job. Only some jobs may have skipped files associated with them. For jobs that do not have any skipped files, the drill-down report is either blank or shows hyphens.

Figure 2-28 shows a sample view of the Tabular Backup Report.

Figure 2-28 Tabular Backup Report



The following are details associated with the Tabular Backup Report:

Report Name	Tabular Backup Report
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Job Browser > Tabular Backup Report
Report Purpose	Customizable tabular report of all backup data (size, start time, status code etc.) by client.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	Skip File Details See "Skip File Details" on page 104.
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Job Browser > Scheduled Jobs > Tabular Backup Report

You can edit the Tabular Backup Report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show activity for a limited sample set, such as one or more policies, primary servers, clients, views, product types, job status etc.

The following table shows the filters for Tabular Backup report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media server	Media server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list ..
Client	Client Name Client OS	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name Policy Type	Select one or more policy names to view data for the selected policies. Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Status Job Transport Type Product Type	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report. Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type. Select one or more products to view data for the selected products.

Example of filter usage: You may run the Tabular Backup report for a specific primary server to view backup details only for the selected primary server. The sample report view that is shown above shows data for a specific primary server.

Report Enhancements

The following report enhancements have been made:

- Each Job primary ID is now a link. You can drill down from the **Job Primary ID** column to know the skipped file details for a job.
- The report now displays the seconds in **Job End Time**, **Job Start Time**, and **Expiration Time** columns like 9:40:37 A.M. Earlier the report used to display the time in hours and minutes only like 9:40 A.M.
- The report now shows data for all your views by default. **All My Views** is the default view when you edit the report.
- Fixed issues of data correctness and parity with VBR.

Additional Columns

The following additional columns are shown in the report. These columns are not displayed by default on the report. You need to edit the report to manually add these columns and rerun the report.

- **Attempt Status**
  This column lets you know the status of the attempt; whether it was successful or failed.
- **Product**
  This column shows the product that is associated with the job like NetBackup, NetBackup Primary Appliance.
- **Job Directory**
  Path that is backed up by a job.
- **Policy Keyword**
  Policy keyword that is associated with the job
- **Storage Unit Name**
  Name of the storage unit that is associated with the job
- **Attempt Start Time**
  Shows the start date and time for the specific job attempt. A job may require multiple attempts or retries due to resources not being available etc. Ensure that the report always shows the **Attempt Start Time** column. In case you remove **Attempt Start Time** column, the report may show duplicate records.

Filter Enhancements

The following filter enhancements are listed:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Years** tab on top-right corner of the Tabular Backup Report.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.
- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are **unknown**. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as unknown like in VBR.
- **Job Transport Type** column has been added to the **Job** filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.

Skip File Details

In the Tabular Backup report, you can drill down from the **Job Primary ID** column to know the skip file details that are associated with the job. Only some jobs may have the skipped files that are associated with them. For the jobs that do not have any skipped files, the drill-down report is either blank or shows hyphens.

Note: The Skip File Details report is also available when you click a Job Primary ID in the Week at a Glance Details report .

Figure 2-29 shows a sample view of the skip file details report that is obtained by clicking the **Job Primary ID** column in Tabular Backup Report.

Figure 2-29 Skip file details

Skip File Details

Job Primary ID	Skipped File Name	Skipped File Reason	Skipped File Code	Skipped File Source Host	Product	Skipped File Time
14,733,863,602,525,857,000,000,000,000,000,000,000,000	C:\Program Files\Symantec\OpsCenter\server\db\data\opsscratchdb.db	File is being used by another process or not present	-	ccs-win-qe-12	Symantec Backup Exec	Aug 12, 2011 1:14:48 PM
14,733,863,602,525,857,000,000,000,000,000,000,000,000	C:\Program Files\Symantec\OpsCenter\server\db\data\searchdb.db	File is being used by another process or not present	-	ccs-win-qe-12	Symantec Backup Exec	Aug 12, 2011 1:14:48 PM
14,733,863,602,525,857,000,000,000,000,000,000,000,000	C:\Program Files\Symantec\OpsCenter\server\db\data\syncOpscache.db	File is being used by another process or not present	-	ccs-win-qe-12	Symantec Backup Exec	Aug 12, 2011 1:14:48 PM
14,733,863,602,525,857,000,000,000,000,000,000,000,000	C:\Program Files\Symantec\OpsCenter\server\db\data\vxpmdb.db	File is being used by another process or not present	-	ccs-win-qe-12	Symantec Backup Exec	Aug 12, 2011 1:14:48 PM
14,733,863,602,525,857,000,000,000,000,000,000,000,000	C:\Program Files\Symantec\OpsCenter\server\db\data\vxpmdb.log	File is being used by another process or not present	-	ccs-win-qe-12	Symantec Backup Exec	Aug 12, 2011 1:14:48 PM

The following are details associated with the Skip File Details report:

Report Name Skip File Details

Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Job Browser > Tabular Backup Report (click the Job Primary ID link)
Report Purpose	Lists the skip file details for the selected job.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Job Browser > Scheduled Jobs > Tabular Backup Report > Skip File Details

You can edit the report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show skipped files for a specific job primary ID.

The following table shows the filter for Skip File Details report and how you can use the filter to view specific data in the report.

Filter	Column	Description
Primary Job	Job Primary ID	Select a job primary ID to view skipped file details for the selected job primary ID.

Planning Activity > Capacity Planning > Forecasted Size report

Planning Activity provides reports on future NetBackup projected trends for storage capacity needs, media consumption, job sizes, schedules, and counts.

Capacity Planning provides reports on historical NetBackup storage consumption and projected future NetBackup storage needs.

The Planning Activity > Capacity Planning > Forecasted Size report shows the supply vs. demand historically but also adds a forecast line for both supply and demand that can show when in the future they may meet. The point that these two lines intersect would be the date that new capacity (more disk or more backup tapes) needs to be added. In the above example the supply is by far outgrowing

the demand, which would suggest that more capacity does not need to be purchased.

The default first view of this report shows the entire backup environment but for actual use it should be filtered to a specific tape library since some libraries may be closer to full capacity than others.

The **EMM Server** column has been removed from the **Media** filter. The **Primary Server** filter can be used to view data for specific servers instead of the **EMM Server** column.

Planning Activity > Capacity Planning > Historical Size report

This report shows the historical supply vs. demand. Supply is defined as all available free space on all the tape media in the backup application. This number is calculated by taking the average size of all full media of the same tape type. That average is then used for the predicted size of all other tapes that are not full of the same type. Use of the average is necessary since tapes do not have an exact capacity and are written to until the end of tape mark. On the demand side this is a calculation of all backup jobs for the time period. The idea for this report is that the difference between the two lines is the extra capacity that was not needed. In an ideal environment these lines match the blue line, for example, being slightly under the line showing that all the space for backups is used. This report can sometimes be referred to as the “just in time inventory” report after the business theory by the same name.

The default is to show the total environment but for operational use it would need to be filtered down to individual storage locations since some can be closer to 100% capacity than others. This change is easily made by clicking **Edit Report** at the top of the report.

The **EMM Server** column has been removed from the **Media** filter. The **Primary Server** filter can be used to view data for specific servers instead of the **EMM Server** column.

Planning Activity > Forecast > Job Count report

The Forecast reports provide information on the future projected NetBackup job sizes and job counts.

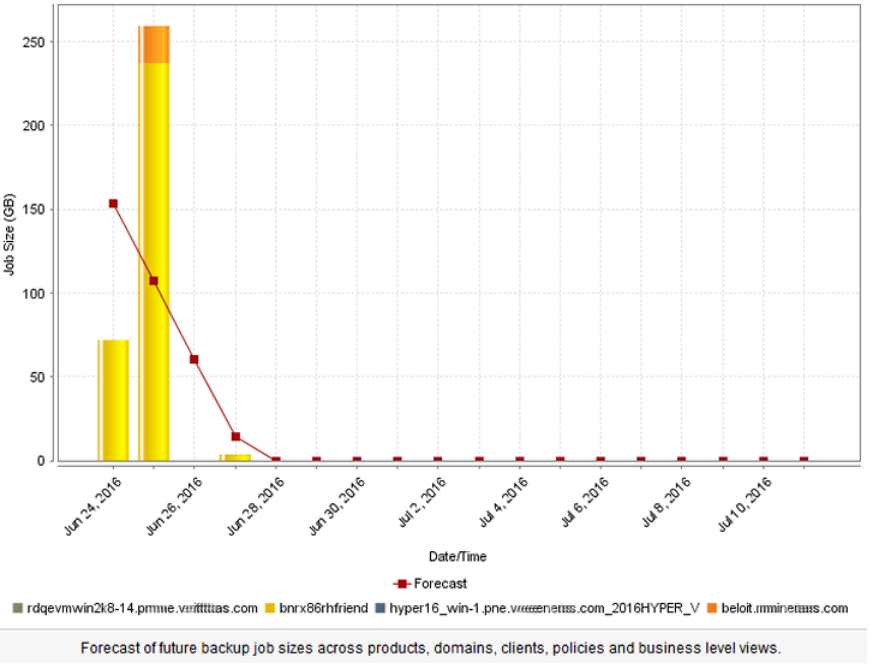
The Planning Activity > Forecast > Job Count report displays the total number of backup jobs for each day in specified time frame. A linear regression forecast is also performed to show you how many backups you can expect for the next three days based on the current data.

Planning Activity > Forecast > Job Size

This report shows you the total number of backup jobs for each day in specified time frame. A linear regression forecast is also performed to show you how many backups you can expect for the next three days based on the current data.

Figure 2-30 shows a sample view of Job Size – Forecast Report.

Figure 2-30 Job Size – Forecast Report (Historical)



This report is also available in tabular format.

Figure 2-31 shows a sample view of Job Size – Forecast Report.

Figure 2-31 Job Size – Forecast Report (Tabular)

Date/Time	Job Size (GB) - rdqevmwin28-14[illegible].pne.[illegible]ver[illegible]as.com	Job Size (GB) - bnrx86rhfriend	Job Size (GB) - hyper16_win-1.pne.[illegible]wen.[illegible]ta[illegible].com_2016HY
Jun 24, 2016	0	71.89	
Jun 25, 2016	0	237.24	
Jun 26, 2016	0	0	
Jun 27, 2016	0.01	3.59	
Jun 28, 2016	0	0	
Jun 29, 2016	0	0	
Jun 30, 2016	0	0	
Jul 1, 2016	0	0	

The following are the details that are associated with the `Job Size - Forecast` report:

Report Name	Job Size – Forecast report
Report Category	Planning Activity
Where to Locate	Report > Report Templates > Backup > Planning Activity > Forecast > `Job Size - Forecast` report.
Report Purpose	Provides forecast of future backup job sizes across products, domains, clients, policies and business level views.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical
Drill down report	Yes. Drill down reports can be viewed at following five levels for the selected parameter value. Level 1: Primary Server, Level 2: Client Name, Level 3: Job Type, Level 4: Schedule/Level Type, Level 5: Policy Name
Can be scheduled	Yes
Supported formats	PDF, CSV, HTML, XML, TSV
Mapping with VBR report	All Reports > Standard Report > Backup > Activity Planning > Forecast > `Job Size - Forecast`

You can edit the `Job Size - Forecast` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Job Size - Forecast` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the selected media servers in the report. All media servers that are added to the OpsCenter console are shown in the Value dropdown list.
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.

Filter	Column	Description
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.

Example of filter usage: You may run the Job Size – Forecast report for a specific client to view details for the specific clients.

The following report enhancements have been made for the Job Size – Forecast report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report.
- Drill down reports for following five levels have been added in OpsCenter.
  - Level 1: Primary Server
  - Level 2: Client Name
  - Level 3: Job Type
  - Level 4: Schedule/Level Type
  - Level 5: Policy Name
- The following options have been removed from **TimeFrameGroupBy** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total

- Quarter of year Average
- Quarter of year total

The following filter enhancements have been made for the Job Size – Forecast report:

- New columns Job Status (Complete Only) and Job Status(Complete and Partial Only) are added to the Report On parameter.
- **UNKNOWN** has been added as a value for Policy Type column in the Policy filter. You can now filter report data for policy types that are UNKNOWN.
- The default unit for Y1 axis is now GB.
- Value SAN is removed from the Job Transport Type filter.

Planning Activity > Scheduled Job > Scheduled Job report

Scheduled job provides reports on all future NetBackup scheduled operations to plan workload capacity, backup windows, and compare against completed operations.

The Planning Activity > Scheduled Job > Scheduled Job report is available in **Ranking Report** view, which depicts how many jobs have been scheduled to run in future. You can view the Scheduled Jobs per schedule, policy, primary server, or client.

Note: By default, the Scheduled Jobs report shows job count per policy. If you want to view the job count for clients, schedules, or primary servers, change the report parameters.

There is more information available about how to change this report's parameters.

See "Changing the Planning Activity > Scheduled Job > Scheduled Job report parameters" on page 111.

Changing the Planning Activity > Scheduled Job > Scheduled Job report parameters

To change the report parameters

1. On the Scheduled Jobs report, click the **Edit** link.
2. On the Report Wizard, from the **Report On** drop-down list, select a **Scheduled Job** attribute. For example: **Client**, **Primary Server**, **Policy**, or **Schedule Name**.
3. Click **Run**.

Note: To view job count for a specific client, policy, primary server, or schedule, click **Show Advanced Filters** and select name of the client, policy, primary server, or schedule, for which you want to view job count.

There is more information about the Planning Activity > Scheduled Job > Scheduled Job report.

See "Planning Activity > Scheduled Job > Scheduled Job report" on page 111.

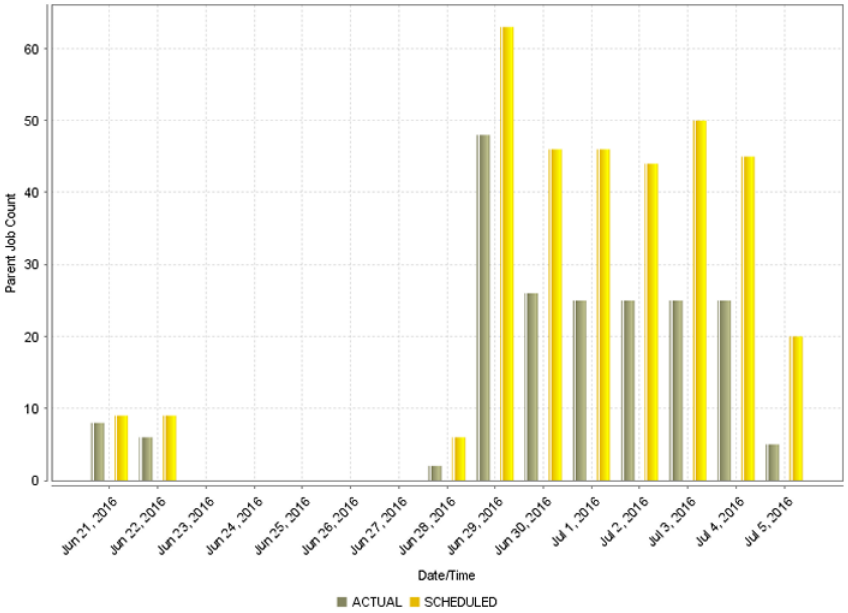
Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report

This historical report depicts how many jobs were scheduled to run in future and how many jobs are run. The report essentially shows the comparison between Scheduled (Future) Job Count and Actual Job Count.

Using this report you can determine whether the jobs that were scheduled to run in future have been run on schedule.

Figure 2-32 shows a sample view of the Job Count Scheduled Vs Actual report.

Figure 2-32 Job Count Scheduled Vs Actual report



The following are details associated with the Job Count Scheduled Vs Actual report:

Report Name	Job Count Scheduled Vs Actual report
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual
Report Purpose	This historical report compares actual and scheduled job counts. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	Backups > Activity Planning > Scheduled Jobs > Job Count - Scheduled Vs Actual

You can view comparison between actual and scheduled job count for a specific client, policy, primary server, or schedule by using filters. The following table shows the filters for Job Count Scheduled Vs Actual report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Schedule	Schedule Name	Select one or more schedule names to view data for the selected schedule names.

Filter	Column	Description
Scheduled Job	Exclude Manual Jobs	By default the Actual Job Count includes manual jobs, which were initiated manually. You can exclude manual jobs from the actual job count, and view only the jobs that are of execution type Scheduled. To exclude manual jobs in the report, select **Yes**.

Example of filter usage: By default the Actual Job Count includes manual jobs, which were initiated manually by the NetBackup admin. There is more information available about how to exclude manual jobs from the actual job count.

See "Excluding manual jobs from the actual jobs in the Job Count Scheduled Vs Actual report" on page 115.

The following enhancements have been made for this report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Year** tab on top-right corner of the report.
- The following units for Time Frame Grouping have been removed:
  - Day of week Average
  - Day of Week total
  - Hour of day Average
  - Hour of day total
  - Minutes
  - Month of year Average
  - Month of year Total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The default value for **Exclude Manual Jobs** column in **Scheduled Job** filter is now changed to **No**. Earlier the default value for **Exclude Manual Jobs** was **Yes**.

Excluding manual jobs from the actual jobs in the Job Count Scheduled Vs Actual report

By default the Actual Job Count includes manual jobs, which were initiated manually by NetBackup admin. To exclude manual jobs from the Actual Job count, and view only those jobs that have execution type as **Scheduled**, do the following:

To exclude manual jobs from the actual jobs

1. On the Job Count-Scheduled Vs Actual report, click the **Edit** link.
2. On the Report Wizard, in the **Filter Options** section, select **Yes** from the **Exclude Manual Jobs** drop-down list.
3. Click **Run**.

More information is available about the Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report.

See “Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report” on page 112.

Planning Activity > Scheduled Job > Job Count within Backup Window report

This historical report depicts how many jobs were scheduled and how many jobs have been run within the specified backup window. The report essentially shows the comparison between Scheduled (Future) Job Count and Actual Job Count, during the backup window.

Use this report to determine whether your backup windows are appropriate and are properly used. Click **Show Chart as Table** link below the report to display report details in a tabular format.

The Job Count within Backup Window report can show if jobs are finishing within a specified backup window. This report is complemented with a graphical drawing of the backup window for a quick analysis. You can quickly determine if all backup activity is occurring within the defined window.

Furthermore, looking at window performance across broad timelines using intelligent averaging is also necessary. Missing a window once or twice doesn’t necessarily point to broader systematic problems and thus the averaging context needs to be examined alongside the actual daily context.

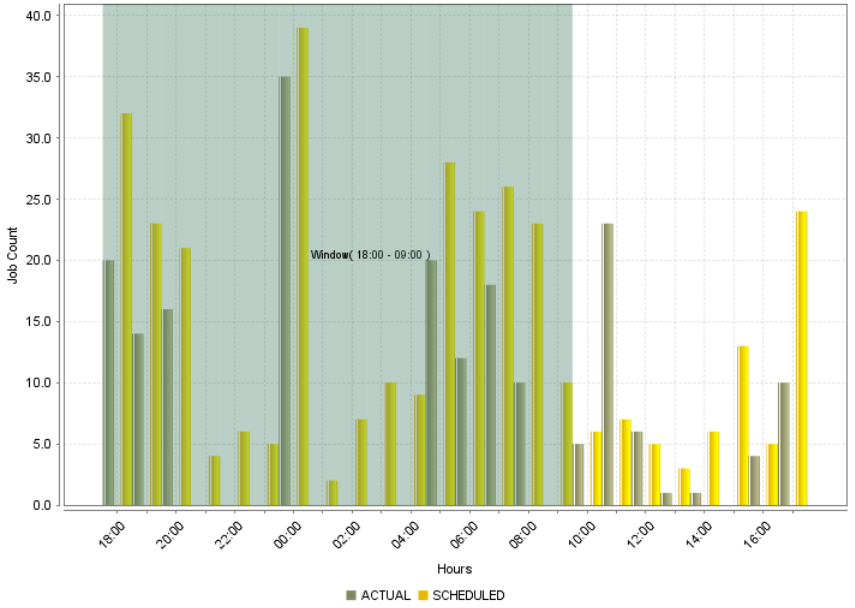
The following are details associated with the **Job Count within Backup Window** report:

Report Name	Job Count within Backup Window
Report Category	Backup

Where to Locate	Report > Report Templates > Backup > Planning Activity > Scheduled Job > Job Count within Backup Window
Report Purpose	Comparison of actual vs scheduled NetBackup jobs across a user-defined backup window against a 24-hour timeline.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	Backups > Activity Planning > Scheduled Jobs > Job Count within Backup Window

Figure 2-33 shows a sample view of Job Count within Backup Window report.

Figure 2-33 Job Count within Backup Window report



This report shows that backups occurred outside of the window shown in green (18:00 - 09:00).

The following table shows the filters for Job Count within Backup Window report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Schedule	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Scheduled Job	Exclude Manual Jobs	Select if you want to exclude manual jobs in the report. You can select Yes or No.

Example of filter usage: You may run the Job Count Window report for a specific primary server to view job count details only for the selected primary server.

The following enhancements have been made for this report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Years** tab on top-right corner of the report.
- The default value for **Exclude Manual Jobs** column in **Scheduled Job** filter is now changed to **No**. Earlier the default value for **Exclude Manual Jobs** was **Yes**.

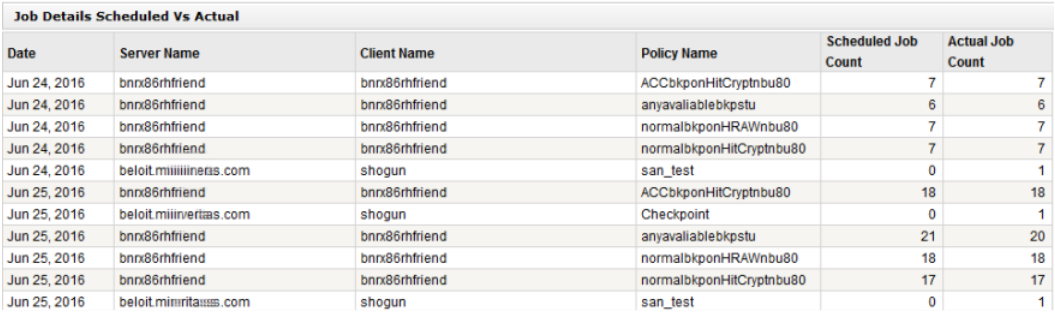
Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report

This tabular report shows the comparison between Scheduled Job count and Actual Job count for each of the combinations of clients, policies, and schedules, for each day.

Note: By default, the Job Count Details-Scheduled Vs Actual report shows job count per policy. If you want to view the job count per client or primary server, change the filter parameters.

Figure 2-34 shows a sample view of the Job Details Scheduled vs Actual report.

Figure 2-34 Job Details Scheduled Vs Actual report



Job Details Scheduled Vs Actual

Date	Server Name	Client Name	Policy Name	Scheduled Job Count	Actual Job Count
Jun 24, 2016	bnrx86rhfriend	bnrx86rhfriend	ACCbkponHitCryptnbu80	7	7
Jun 24, 2016	bnrx86rhfriend	bnrx86rhfriend	anyavaliablebkpstu	6	6
Jun 24, 2016	bnrx86rhfriend	bnrx86rhfriend	normalbkponHRAWnbu80	7	7
Jun 24, 2016	bnrx86rhfriend	bnrx86rhfriend	normalbkponHitCryptnbu80	7	7
Jun 24, 2016	beloit.miiiiiiiinetas.com	shogun	san_test	0	1
Jun 25, 2016	bnrx86rhfriend	bnrx86rhfriend	ACCbkponHitCryptnbu80	18	18
Jun 25, 2016	beloit.miiinveritas.com	shogun	Checkpoint	0	1
Jun 25, 2016	bnrx86rhfriend	bnrx86rhfriend	anyavaliablebkpstu	21	20
Jun 25, 2016	bnrx86rhfriend	bnrx86rhfriend	normalbkponHRAWnbu80	18	18
Jun 25, 2016	bnrx86rhfriend	bnrx86rhfriend	normalbkponHitCryptnbu80	17	17
Jun 25, 2016	beloit.mimritaiiis.com	shogun	san_test	0	1

The following are details associated with the Job Details Scheduled Vs Actual report:

Report Name	Job Details Scheduled Vs Actual report
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Planning Activity > Scheduled Job > Job Details Scheduled Vs Actual
Report Purpose	This is a tabular report comparing scheduled to actual job counts grouped by date, primary server, client and policy. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	Backups > Activity Planning > Scheduled Jobs > Job Details - Scheduled Vs Actual

The following table lists the filters for Job Details Scheduled Vs Actual report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Schedule	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Scheduled Job	Exclude Manual Jobs	By default, the Actual Job Count includes manual jobs, which were initiated manually. You can exclude manual jobs from the actual job count, and view only the jobs that are of execution type Scheduled. To exclude manual jobs in the report, select **Yes**.

There is more information available about modifying the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report.

See "Modifying the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report" on page 119.

The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Years** tab on top-right corner of the report.

Modifying the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report

Note: By default, the Job Count Details-Scheduled Vs Actual report shows job count per policy. If you want to view the job count per client or primary server, change the filter parameters.

To change the report parameters

1. On the Job Count Details-Scheduled Vs Actual report, click the **Edit** link.
2. On the Report Wizard, in the **Define Viewable Columns** section, select a column name (**Client** or **Primary Server**) from the **Available Columns** list.
3. Click **>>** option.
4. Click **Run**.

Note: To view job count for a specific client, policy, primary server, or schedule, go to the **Filters** section and select the name of the policy, primary server, or schedule for which you want to view job count.

By default the jobs that were run (Actual Job Count) include manual jobs, which do not have any schedule time associated with them as they are initiated manually. You can exclude manual jobs from the actual job count, and view only the jobs that are of execution type **Scheduled**.

To exclude manual jobs from the actual jobs

1. On the Job Count Details-Scheduled Vs Actual report, click the **Edit** link.
2. On the Report Wizard, in the **Filter Options** section, select **Yes** from the Exclude Manual Jobs drop-down list.
3. Click **Run**.

The Job Count Details-Scheduled Vs Actual report shows comparison between Scheduled Job count and Actual Job count. The Actual Job count includes Manual Jobs.

There is more information available about the Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report.

See "Planning Activity > Scheduled Jobs > Job Details Scheduled Vs Actual report" on page 117.

Planning Activity > Scheduled Job > All Jobs report

This canned report shows jobs in a tabular form, which include the following:

Manual Jobs	These jobs are initiated manually, by NetBackup admin at his or her discretion. Therefore, these jobs do not have schedule time associated with them. **Note:** While generating the Job Count-Scheduled Vs Actual report, you have an option to exclude the manual jobs from the actual job count and show only those jobs that are of execution type **Scheduled**. See "Planning Activity > Scheduled Job > Job Count Scheduled Vs Actual report" on page 112.
Scheduled Jobs	These jobs are scheduled to run in future. Each Scheduled Job information comprises a client, policy, schedule, and schedule time. OpsCenter stores this information historically. Each Scheduled Job when run on the specified schedule time becomes an actual job of execution type **Scheduled**. Thus, a Scheduled Job has a corresponding actual job entry in OpsCenter database. This particular Scheduled Job can be identified by the unique combination of client, policy, schedule, and schedule time. You can compare the schedule time of this Scheduled Job with the corresponding Job Start Time to determine whether that job was run on scheduled time or not.

Planning Activity > Stored Backup Images > Valid Backup Images report

Stored Backup Images provide reports on NetBackup backup, duplicate, expired, unexpired images and their sizes.

The Valid Backup Images report shows unexpired backup images across products, domains, clients, policies, and business level views. This report is valid only for NetBackup. This report is available in Ranking and Distribution views.

The unit Years has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the Years tab on top-right corner of the Tabular Backup report.

The option Next has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.

The following units for Time Frame Grouping have been removed:

- Day of week Average
- Day of Week total
- Hour of day Average
- Hour of day total

- Minutes
- Month of year Average
- Month of year Total
- Quarter
- Quarter of year Average
- Quarter of year total

The default Report On parameter is None. Earlier it was Primary Server.

UNKNOWN has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are **UNKNOWN**. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR.

The following values for Job Type have been removed:

- Automatic Discovery and Protection
- Cleaning
- DB Recover
- DQTS
- Erase
- Generic
- Image Cleanup
- Import
- Inventory
- Label
- Media Contents
- Migration
- None
- Reclamation
- Replication
- Report
- Restore
- Retention
- Retrieve

- Storage Pool Management
- Tape Eject
- Tape Formatting
- Tape Request
- Task Last
- Test Run
- Undefined
- Utility
- Vault
- Verify

The default value "All" for Job Type is not there now. The default-selected value is Backup.

Add Scheduled Job filter. You can filter on the basis of Schedule Name or Schedule/Level Type.

The default unit for Y axis is now GB. Earlier it was MB.

The following option has been added:

Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30.

The Distrbution and ranking view is part of another report in OpsCenter "Valid Backup Images"

ImageExpirationTime with value NULL should also be considered as in VBR.

Planning Activity > Stored Backup Images > Duplicate Copies report

The axis on the left is for the height of the blue bars for example that tells the number of duplicate backup copies that exist overall. The yellow line for example is the axis on the right and it shows the percentage of backup images that are copies. This is a particularly useful report for situations where you want to make certain there is always more than 1 backup copy. If two copies of a backup exist, the blue bar would be a height of 1 (since there is 1 extra copy) and the line would show .5 for 50% since half of the backup images are copies. The same situation for 3 copies would be a blue bar height of 2 and a yellow line percentage of .66 or 66%. In operational use you can filter this report down to specific policies or the clients that you want to ensure always have a 50% or greater yellow line so that more than 1 backup copy exists.

Planning Activity > Stored Backup Images > Stored Backup Images > Stored Backup Images on Media

This report shows you the total amount of data in gigabytes that was backed up but has not expired yet for each of the days in the past two weeks. This report shows results only for NetBackup and NetBackup Appliances. The report can now also show trendlines with customized average periods.

Click **Show Chart as Table** link below the report to view tabular details.

You can also filter the report to show unexpired backed up data for a limited sample set, such as one or more policies, clients, views, or job status. You can use timeframe grouping filter. For example: If you want to view unexpired backup images for the period between 1st Jan 2010 to 1st Feb 2010, in groups each of one week, select 1 Week from the Group by drop-down list. On the report, you can see data in four stacked bars, one per week. Using the Report On parameter, you can select report grouping attribute from the drop-down list, which you want to view the report for. For example: Backup Job Attributes, Backup Image Attributes etc.

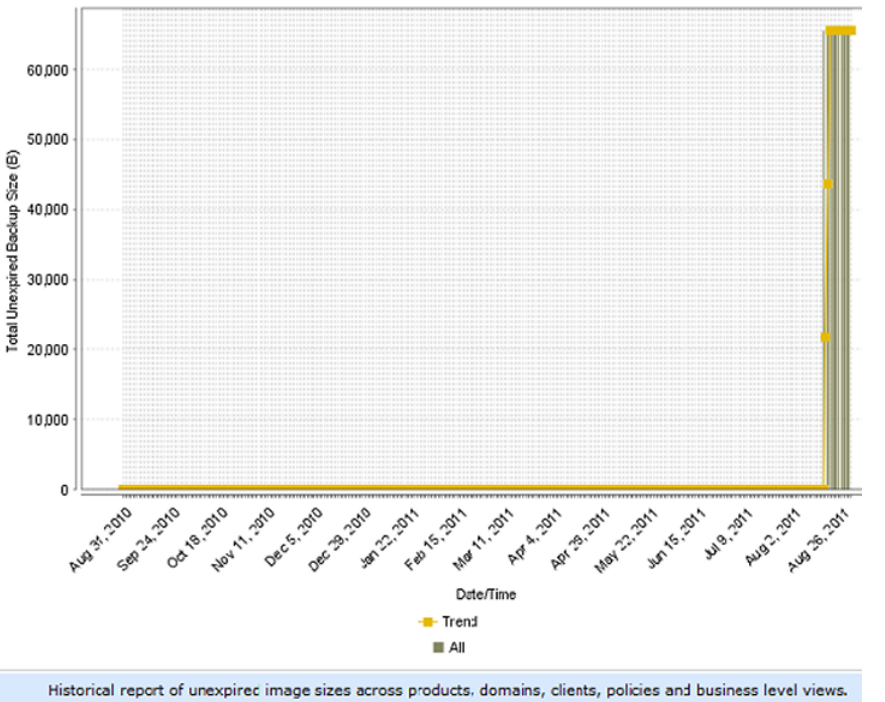
The following are details associated with the Stored Backup Images on Media report:

Report Name	Stored Backup Images on Media
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Planning Activity > Stored Backup Images on Media
Report Purpose	Historical report of unexpired image sizes across products, domains, clients, policies, and business level views.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	Backups > Activity Planning > Scheduled Jobs > Stored Backup Images

Deviation from VBR	The data for this report from VBR and OpsCenter does not match as OpsCenter points to expiration time from Image_Copy table while VBR used expiration time from Image_fragment table. This change was introduced in OpsCenter 7.1 to correct the behavior of the report and also improve the performance.

Figure 2-35 shows a sample view of the Stored Backup Images on Media report.

Figure 2-35 Stored Backup Images on Media report



The following table shows the filters for Stored Backup Image on Media report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Filter	Column	Description
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media server	Media server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list ..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.
	Policy Keyword	Select one or more policy keywords to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like Full, Incremental etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more products to view data for the selected products.

Example of filter usage: You may run the Stored Backup Images on Media report for a specific policy to view unexpired image sizes for the specific policy.

The following enhancements have been made in the Stored Backup Images on Media report:

Report Enhancements	The following report enhancements have been made: ■ The report now also shows trendlines with customized average periods. The following option has been added: **Show trendline with moving average period of 3**. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3. Select Show trendline with moving average checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points. ■ Fixed issues of data correctness and parity with VBR. Image Expiration time with value NULL is now considered in the report.

Filter
Enhancements

The following filter enhancements are listed:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also select **Year** from the top-right corner of the report.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next two weeks.
- The following units for Time Frame Grouping have been removed:
  - Day of week Average
  - Day of Week total
  - Hour of day Average
  - Hour of day total
  - Minutes
  - Month of year Average
  - Month of year Total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The default **Report On** parameter is now **None**. Earlier it was **Primary Server**.
- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for the policy types that are **unknown**. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR.
- The following values for **Job Type** column have been removed for the **Jobs** filter:
  - Automatic Discovery and Protection
  - Cleaning
  - DB Recover
  - DQTS
  - Erase
  - Generic
  - Image Cleanup
  - Import
  - Inventory
  - Label
  - Media Contents
  - Migration
  - None
  - Reclamation

- Replication
- Report
- Restore
- Retention
- Retrieve
- Storage Pool Management
- Tape Eject
- Tape Formatting
- Tape Request
- Task Last
- Test Run
- Undefined
- Utility
- Vault
- Verify

- The **Job Type** column is mandatory and the default-selected value for **Job Type** column is **Backup**. Earlier the **Job Type** column was not applied by default.
- A new filter called **Scheduled Jobs** has been added. You can now filter on the basis of Schedule Name or Schedule/Level Type.
- The default unit for Y1 axis is now **GB**. Earlier it was MB.

The Distribution view and Ranking view for this report is part of Valid Backup Images.

Status & Success Rate > Status > Failed Job Count report

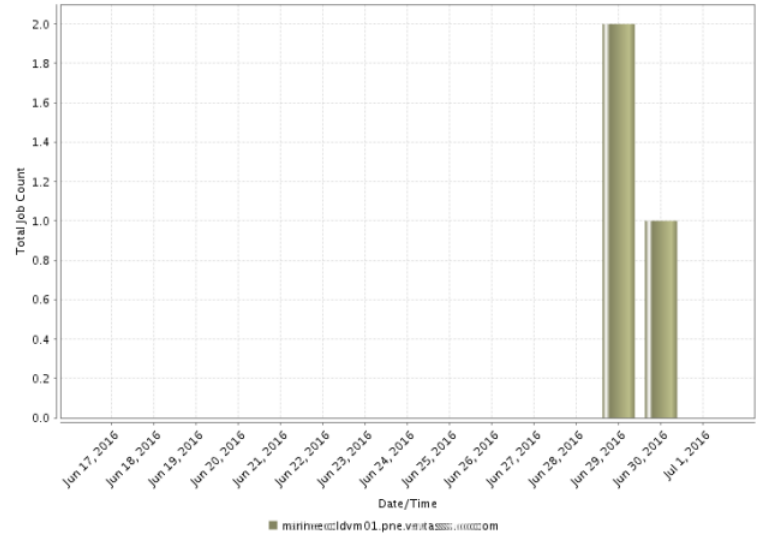
Status & Success Rate provides reports of both basic and advanced success and failure rates across NetBackup operations in both per backup window and week-at-a-glance views.

The Success Rate provides advanced reporting on the NetBackup job success rates including the ability to filter out retry attempts and partially successful jobs for both Full and Incremental job schedules.

The Failed Job Count report aggregates failed jobs and shows these across a timeline. In reality, this report is the same as “all jobs” as no distinction on whether the failed job was first or last one is made. It provides visualization of whether a problematic trend exists. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. The primary use case of the report is verification of whether actions taken to correct persistent failures produce results and reversing trends. The report can now also show trendlines with customized average periods.

Figure 2-36 shows a sample view of the Failed Job Count report.

Figure 2-36 Failed Job Count report



Historical trends of failed job counts by products, domains, clients, policies and business level views.

Show Chart as Table | Show Report Query

The following are details associated with the Failed Job Count report:

Report Name	Failed Job Count
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Failed Job Count
Report Purpose	This report shows the failed job density over time.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Historical
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Status > Failed Job Count

The following table shows the filters for Failed Job Count report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media server	Media server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list ..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.

Filter	Column	Description
Attempt	Attempt Status	The Attempt Status filter can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if **Attempt** is selected. By default, **Job** is selected. Number of attempts are not considered when **Job** is selected.

Example of filter usage: To view a count of all job attempts in the Failed Job Count report, select Attempt Status as **Attempt**.

The following report enhancements have been made for Failed Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- The Schedule Name column is added under the **Schedule** filter to filter data by schedule name.
- The report now also shows trendlines with customized average periods.
  The following option has been added:

Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.

Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

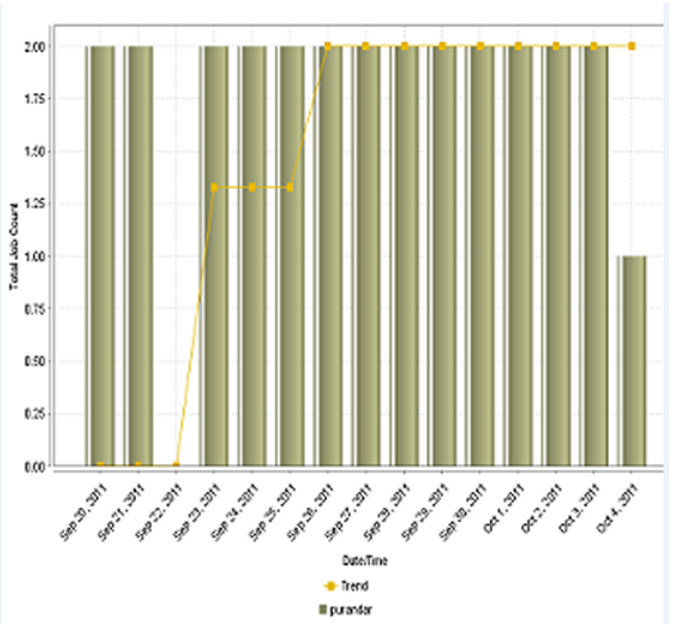
- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

Status & Success Rate > Status > Partially Successful Job Count report

This report aggregates partially successful jobs and shows these across a timeline. It provides a visualization of job volume trends that skip the files that are open during the backup job. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. The primary use case of the report is verification of whether actions taken to correct the open file situation by moving the scheduling of the client or policies produce results and reversing trends.

Figure 2-37 shows a sample view of the Partially Successful Job Count report.

Figure 2-37 Partially Successful Job Count report



The following are details associated with the Partially Successful Job Count report:

Report Name	Partially Successful Job Count
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Partially Successful Job Count
Report Purpose	This report shows the partially successful jobs density over time.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Historical
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Status > Partially Successful Job Count

The following table shows the filters for Partially Successful Job Count report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media server	Media server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list ..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.

Filter	Column	Description
Attempt	Attempt Status	The **Attempt Status** column can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if **Attempt** is selected. By default, **Job** is selected. Number of attempts are not considered when **Job** is selected.

Example of filter usage: You may run the Partially Successful Job Count report for a specific policy to view partially successful jobs for the specific policy.

The following report enhancements have been made for Partially Successful Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.
- The report now also shows trendlines with customized average periods.

The following option has been added:

Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.

Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

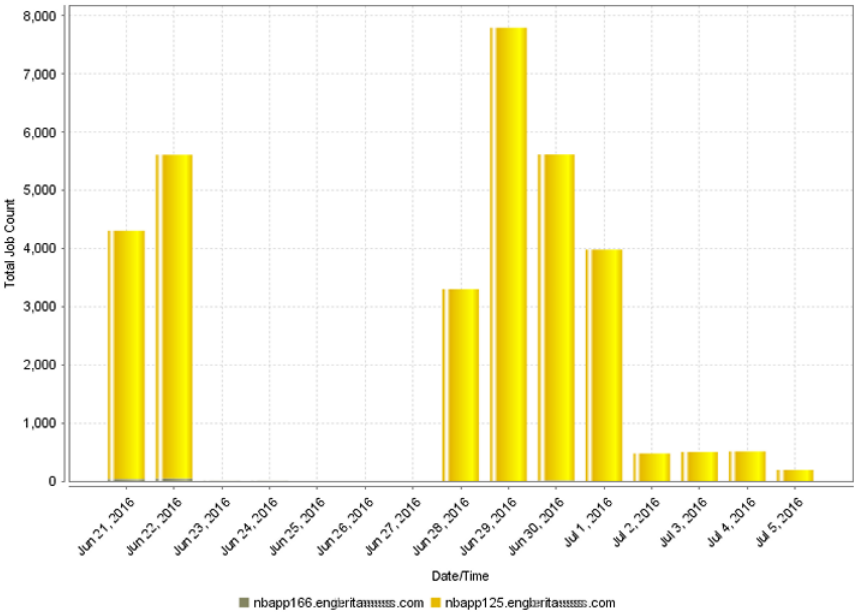
- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

Status & Success Rate > Status > Successful Job Count report

This report aggregates successful jobs and shows these across a timeline. It provides a visualization of job volume trends. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). By default backup jobs are shown in the report. Filtering is available on all components and attributes. The primary use case of the report is verification of trends and the days that are exception to the norm. The report is highly effective for presenting long-term historical data on one of the most fundamental metrics of managing a backup operation.

Figure 2-38 shows a sample view of the Successful Job Count report.

Figure 2-38 Successful Job Count report



The following are details associated with the Successful Job Count report:

Report Name	Successful Job Count
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Successful Job Count
Report Purpose	This report shows the successful jobs density over time.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Historical (Chart)
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Status > Successful Job Count

The following table shows the filters for Successful Job Count report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media server	Media server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list ..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.

Filter	Column	Description
Attempt	Attempt Status	The **Attempt Status** column can have two values i.e. Attempt or Job. When Job Count is calculated, the report considers all attempts if **Attempt** is selected. By default, **Job** is selected. Number of attempts are not considered when **Job** is selected.

Example of filter usage: You may run the Successful Job Count report for a specific policy to view successful job counts for the specific policy.

The following report enhancements have been made for the Successful Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.
- The report now also shows trendlines with customized average periods.

The following option has been added:

Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.

Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.

- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

Status & Success Rate > Status > All Failed Backups report

This report is one of three using the advanced success or failure calculation logic around the notion of first, all and last job. They require schedule and window parameters enabling a precise definition of timeframes. Additionally, these reports have aggregation levels of job and client. The first job success or failure is the first job for a client/policy/schedule combination in its defined backup window and last job is the opposite. As failed jobs are rerun one or more times, the “last job” represents the last of the reruns within the window. This report produces the details of the failed jobs based on which one of the three (first or all or last) methods is chosen. The main use case for this report is based on last job where failure notification to users is based around last job and failures leading up to the last one is ignored.

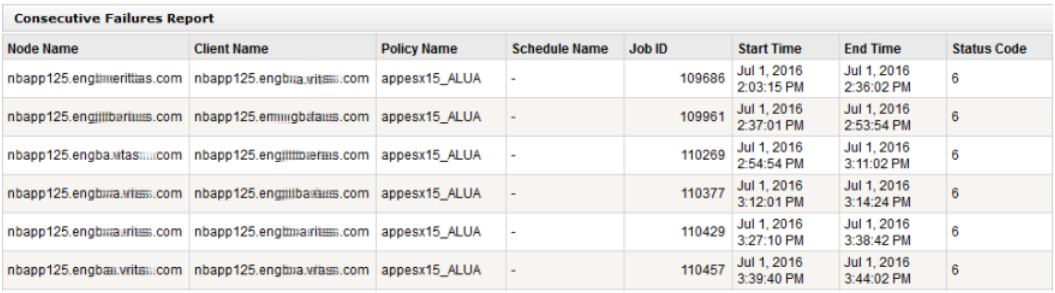
Status > Consecutive Failures

This report is the second of three using the advanced success or failure calculation logic around the notion of first, all and last job. The main use case is the calculation of two or more consecutive failures based around Last Job Success/Failure. It applies intricate logic to pick off the last failed job and in turn to determine that the last job failures are indeed consecutive. This report can be best verified through the Client Risk Analysis report. In this report, if three consecutive failures with 24 hour windows were chosen, the client or the policy combination should also appear on the risk report as not having a successful backup in 72 or more hours.

Jobs that fail consecutively appear in the Consecutive Failures report. The period for which they fail consecutively is configurable.

Figure 2-39 shows a sample view of Consecutive Failures Report.

Figure 2-39 Consecutive Failures Report



Consecutive Failures Report

Node Name	Client Name	Policy Name	Schedule Name	Job ID	Start Time	End Time	Status Code
nbapp125.engtimeritas.com	nbapp125.engba.vrits.com	appesx15_ALUA	-	109686	Jul 1, 2016 2:03:15 PM	Jul 1, 2016 2:36:02 PM	6
nbapp125.engtttbaritas.com	nbapp125.emmgbatas.com	appesx15_ALUA	-	109961	Jul 1, 2016 2:37:01 PM	Jul 1, 2016 2:53:54 PM	6
nbapp125.engba.vtas.com	nbapp125.engttttberas.com	appesx15_ALUA	-	110269	Jul 1, 2016 2:54:54 PM	Jul 1, 2016 3:11:02 PM	6
nbapp125.engba.vtes.com	nbapp125.engttbaxas.com	appesx15_ALUA	-	110377	Jul 1, 2016 3:12:01 PM	Jul 1, 2016 3:14:24 PM	6
nbapp125.engba.vtes.com	nbapp125.engba.vtes.com	appesx15_ALUA	-	110429	Jul 1, 2016 3:27:10 PM	Jul 1, 2016 3:38:42 PM	6
nbapp125.engba.vtes.com	nbapp125.engba.vtas.com	appesx15_ALUA	-	110457	Jul 1, 2016 3:39:40 PM	Jul 1, 2016 3:44:02 PM	6

The following columns are displayed in the report:

Node Name	Value in the **Node Name** column depends on the **Report On** parameter that you select. The default value of **Report On** parameter is Primary Server. So the value in **Node Name** column by default shows the primary server name. When you select a view from the **Filters** section while editing the report, the **Report On** parameter drop-down list also shows the view levels. Based on the levels that you select from the **Report On** drop-down list, value in the **Node Name** column changes. For example, if there is a view like `Location` with two levels: Location (View name) - US -- Client1 -- Client2 -- Client3 - India -- Client4 -- Client5 -- Client6 The following selections are possible: ■ Select this view called **Location** from the **Filters** section and select the **Report On** parameter as **Primary Server** (default selection). The **Node Name** column displays the primary server. ■ Select this view called **Location** from the **Filters** section and select the **Report On** parameter as **Level 1**. The **Node Name** column displays US and India ■ Select this view called **Location** from the **Filters** section and select the **Report On** parameter as **Level 2**. The **Node Name** column displays the clients (clients 1-6).
Client Name	Name of the client
Policy Name	Policies associated with the client and node name
Schedule Name	Schedules associated with the client
Job ID	Job IDs associated with the policy and schedule that fail consecutively.
Start Time	Date and Time when the job started
End Time	Date and time when the job ended.

Status Code	Status code for the job ID. You can also filter the report to see details of only a particular status code by using the Job > Status Code filter and selecting the specific status codes. Note that jobs with status code 0 (successful) may also appear in the report. This usually happens in case of multi-streaming jobs. Job IDs with status code 0 appear because if any of the sub-jobs of a multi-streaming job fail, it is considered a complete failure. Generally the **Start Time** for the multistreaming jobs would be very close.

The following are the details that are associated with the `Consecutive Failures` report:

Report Name	Consecutive Failures
Report Category	Status and Success Rate
Where to Locate	Report > Report Templates > Backup > Status and Success Rate > Status > `Consecutive Failures` report.
Report Purpose	Provides tabular view showing clients that had consecutive job failures.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, HTML, XML, TSV
Mapping with VBR report	All Reports > Standard Report > Backup > Status > `Consecutive Failures`

You can edit the `Consecutive Failures` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Consecutive Failures` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Filter	Column	Description
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Job	Job Types	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
	Status Code	Select one or more status codes to view data for the selected status codes.
Success Rate	Aggregation Level	Select different parameters for criteria definition about success rate of the jobs. Select All Jobs Success Rate, First job Success Rate, Last Job Success Rate. Select Aggregation Level to consider the kind of jobs for the specified time frame. For example, if you select First Job Success Rate then the report shows only the first job for the combination of primary server, client, policy, and schedule.
	Metric Type	Select **Metric Type** to calculate the success rate based as jobs.
	Full Days	Select **Full Days** to specify the list of days to be considered for Full backups.
	Full Window Parameter	Select **Full Window Parameter** to specify the start time for the full backup window.
	Count Partial Successful job as Successful	Select **Count Partially Successful Job as Successful** to count partially successful jobs as successful.
	Full for Duration of (In Hours)	Select **Full for Duration of** (In Hours) to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.
	Consecutive Failures	Select how many consecutive failures should be included in the report.
	Increment Window Parameter	Select **Increment Window Parameter** to specify the start time for the incremental backup window.
	Schedule/Level Type	Select the schedule of jobs is Full or Increment or All.

Filter	Column	Description
	Increment for Duration of (In Hours)	Select **Increment for Duration of** (In Hours) to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.
	Increment Days	Select **Increment Days** to specify the list of days to be considered for Incremental backups.

Example of filter usage: You may run the report for specific policy names to view details only for that specific policy.

Status & Success Rate > Status > Week At A Glance report

This report summarizes activity for a week by symbolically displaying the result of each job for each client under the day of the week. The symbols are the blue (Success) and yellow (Partial Success) men and failures that are denoted by a red “X”. This report provides quick and comprehensive verification that all is well in the data protection solution using symbols. A drill-down capability to the job level details (i.e Job ID, Start/End Time, Size etc.) is provided. You can drill down to any server on any day and get the job level detail.

It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. The report provides a visualization of job status for the most current data and how that compares to the previous six days.

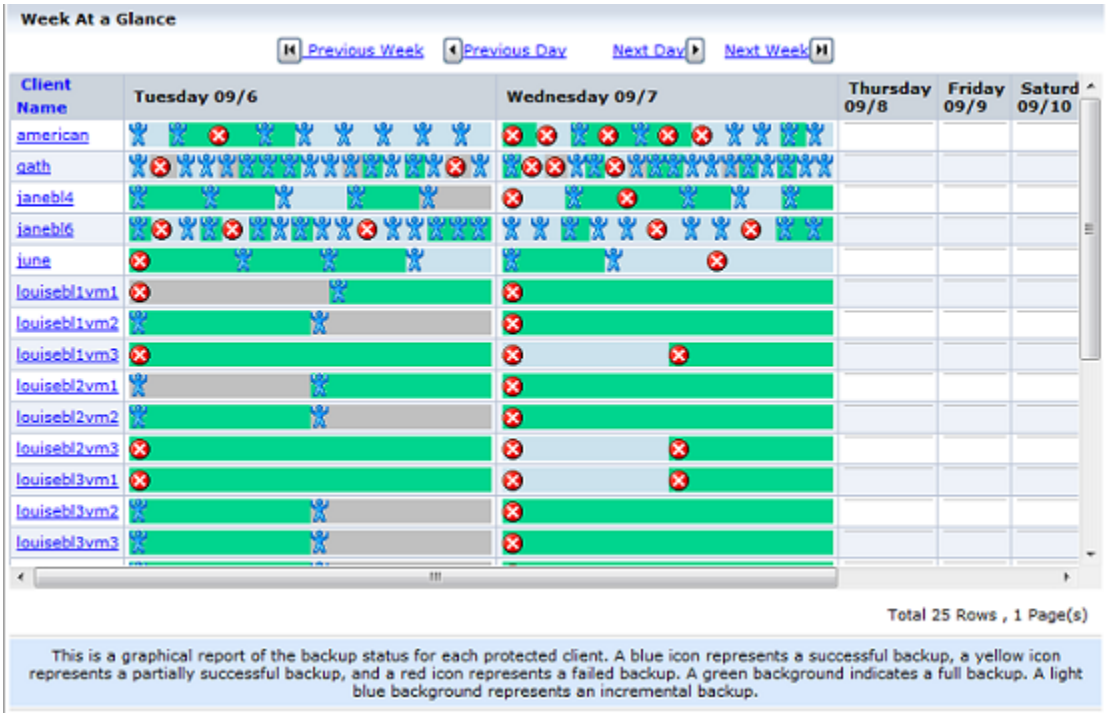
This report can be used for automated report generation and email features where different report filters can be used to show specific systems and then that data emailed to the relevant parties once a week. It is recommended that you use filters in large environments. This is because the report shows every primary server and client by default.

Week at a Glance Report’s performance declines as the data to be displayed in the report increases. For example, running a two-month report is slower than running a two-week report.

Note: The Week at a Glance report displays icons when it is exported or emailed in an HTML format. Earlier in OpsCenter 7.0.x, the Week at a Glance report could not display icons when exported or emailed in an HTML format. This issue has been fixed in OpsCenter 7.1 and later versions.

Figure 2-40 shows a sample view of the Week at a Glance report.

Figure 2-40 Week at a Glance report



This report shows that there were a number of failures and also quickly shows that most of the backups completed successfully. Using this report you can see if backups ran each day of the week and the status of that backup. This report can be scheduled to be emailed or exported weekly which saves a great deal of time.

The following are details associated with the Week at a Glance report:

Report Name	Week at a Glance
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Week At a Glance
Report Purpose	This is a graphical report of the backup status for each protected client. A blue icon represents a successful backup, a yellow icon represents a partially successful backup, and a red icon represents a failed backup. A green background indicates a full backup. A light blue background represents an incremental backup.

Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	Week at a Glance Detail See "Week at a Glance Detail report" on page 151. The Week at a Glance Details report further drills down to Skip File Details.
Can be scheduled	Yes
Supported export formats	CSV, TSV, XML, HTML
Mapping with VBR report	Backups > Status > Week At a Glance
Deviations from VBR	If one client is backed up by two primary servers, two rows are shown in OpsCenter while one row is displayed in VBR.

The following table shows the filters for Week at a Glance report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** dropdown list..
Client	Client Name Client OS	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.

Filter	Column	Description
Policy	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more products to view data for the selected products.

Example of filter usage: You may run the Week at a Glance report for a specific primary server to view backup status for the clients protected by the specific primary server. Further if you are interested in knowing about the status of say only Backup jobs (and no other jobs like Restore or archive jobs), you can use the **Job Type** filter and select **Backup**.

The following enhancements have been made in the Week at a Glance report:

Report Enhancements

The following report enhancements have been made:

- The Week at a Glance report can now show the files and directories that are backed up for each client. The following checkbox has been added on the **Modify Display Options** pane when you edit the report:
  Show the files and directories backed up for each client
  If you check this option and click **Run Report**, you can view the client name and the backed up directory in the **Client Name** column of Week at a Glance report.
- You can drill down from the **Client Name** column in the Week at a Glance report to view Week at a Glance Details report. This was also available earlier.
  Now an additional level of drill down is available from the Week at a Glance Details report. You can now further drill down from the **Job Primary ID** column in Week at a Glance Details report to view Skip File Details report.
- The **Client Name** column in the Week at a Glance report is now sorted by default.
- Earlier if you selected **Rolling 8 days** column in the **Week Information** filter, the Week at a Glance report displayed one day less than VBR. This issue has now been fixed.

Filter Enhancements

The following filter enhancements are listed:

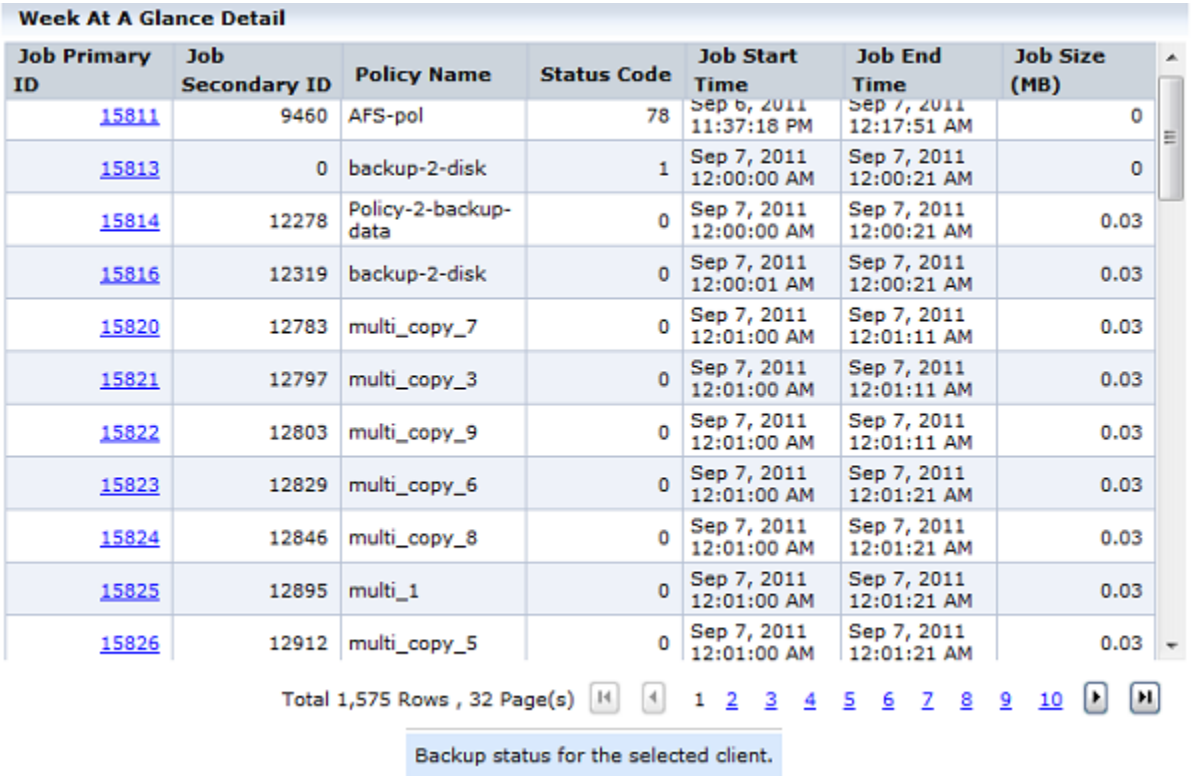
- For Week Information filter, the value list for **Week of the year** column has been updated. The values staring from **17 Weeks Ago** to **30 Weeks Ago** have been added. Earlier the value selections were limited from current week to 16 Weeks Ago.
  By selecting these additional values, you can view older data in the report.
- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are **UNKNOWN**. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR.
- **Schedule** filter has been added to the list of filters for this report. You can now view report data for jobs that have a specific schedule name.

Week at a Glance Detail report

In the Week at a Glance report, you can drill down from the **Client Name** column to know the job details that are associated with the client in the selected week. You can also click on a job icon to see job details for the selected day for the specific client.

Figure 2-41 shows a sample view of the Week at a Glance Details report that is obtained by clicking the **Client Name** column in Week at a Glance report.

Figure 2-41 Week at a Glance Detail report



Week At A Glance Detail

Job Primary ID	Job Secondary ID	Policy Name	Status Code	Job Start Time	Job End Time	Job Size (MB)
15811	9460	AFS-pol	78	Sep 6, 2011 11:37:18 PM	Sep 7, 2011 12:17:51 AM	0
15813	0	backup-2-disk	1	Sep 7, 2011 12:00:00 AM	Sep 7, 2011 12:00:21 AM	0
15814	12278	Policy-2-backup-data	0	Sep 7, 2011 12:00:00 AM	Sep 7, 2011 12:00:21 AM	0.03
15816	12319	backup-2-disk	0	Sep 7, 2011 12:00:01 AM	Sep 7, 2011 12:00:21 AM	0.03
15820	12783	multi_copy_7	0	Sep 7, 2011 12:01:00 AM	Sep 7, 2011 12:01:11 AM	0.03
15821	12797	multi_copy_3	0	Sep 7, 2011 12:01:00 AM	Sep 7, 2011 12:01:11 AM	0.03
15822	12803	multi_copy_9	0	Sep 7, 2011 12:01:00 AM	Sep 7, 2011 12:01:11 AM	0.03
15823	12829	multi_copy_6	0	Sep 7, 2011 12:01:00 AM	Sep 7, 2011 12:01:21 AM	0.03
15824	12846	multi_copy_8	0	Sep 7, 2011 12:01:00 AM	Sep 7, 2011 12:01:21 AM	0.03
15825	12895	multi_1	0	Sep 7, 2011 12:01:00 AM	Sep 7, 2011 12:01:21 AM	0.03
15826	12912	multi_copy_5	0	Sep 7, 2011 12:01:00 AM	Sep 7, 2011 12:01:21 AM	0.03

You can click a Job Primary ID to view skipped file details for the job. A new drilldown report named Skip File Details has been added.

The following are details associated with the Week At A Glance Details report:

Report Name	Week at a Glance Details
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Week At a Glance (click the Client Name link or any icon)
Report Purpose	Backup status for the selected client.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client

Report Display	Tabular
Drill down report	Skip File Detail See “Skip File Details” on page 104.
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	Backups > Status > Week At a Glance > Week at a Glance Details

You can edit the report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show jobs for a specific product or primary server.

The following table shows the filters for Week at a Glance Details report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** dropdown list..
Client	Client Name Client OS	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.

Filter	Column	Description
Policy	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classiciation names.
	Policy Keyword	Select one or more policy keywords to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like Full, Incremental etc. to view data for the selected schedule types.
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more products to view data for the selected products.

Example of filter usage: You may run the Week at a Glance Details report for a specific policy to view backup details for the specific policy. Further if you are interested in knowing about the status of say only Full schedule types, you can use the **Schedule** filter and select **Full**.

The following enhancements have been made in the Week at a Glance Details report:

- The **Job Primary ID** column in the Week at a Glance Details report is now a link and you can drill down to Skip File Details report. Use the Skip File Details report to view the skipped files that are associated with a job.
- The **Primary Server OS** column has been removed from the **Primary Server** filter.
- The **Media Server OS** column has been removed from the **Media Server** filter.
- The **Client Architecture** column has been removed from the **Client** filter.
- The **Policy Domain** column has been removed from the **Policy** filter.

- The **Job Type**, **Job Transport Type**, and **Product Type** columns have been added to the **Job** filter. You can now filter this report on the basis of job type, job transport type or product type.

Status & Success Rate > Status > Backup Window Failures report

This report lists the jobs which were scheduled to run but failed because the scheduled backup window was no longer open (the NetBackup status code is 196).

Status & Success Rate > Status > Partially Successful Job Details report

This report provides details for all NetBackup partially successful jobs. Partially successful jobs have an exit status of 1. The table in the report is organized by job ID, server name, and client name.

Status & Success Rate > Status > Skipped Files Summary report

The information in this report is presented using a set of linked reports. The main report that is organized by primary server, displays clients and policies, and the corresponding number of files that were skipped.

Skipped file details for client report	This drilldown report from the **Client Name** column identifies risks to the client because of any skipped files. This drilldown report uses the run time parameters that are passed from the main report.
Skipped file details for policy report	This drilldown report from the **Policy Name** column identifies risks to the client due to any skipped files. This drilldown report uses the run time parameters that are passed from the main report.
Skipped file details for policy and client report	This drilldown report from the **No. of Skipped Files** column provides the names of all skipped files. This drilldown report uses the run time parameters that are passed from the main report.

Status & Success Rate > Status > Job Attempt Status Detail report

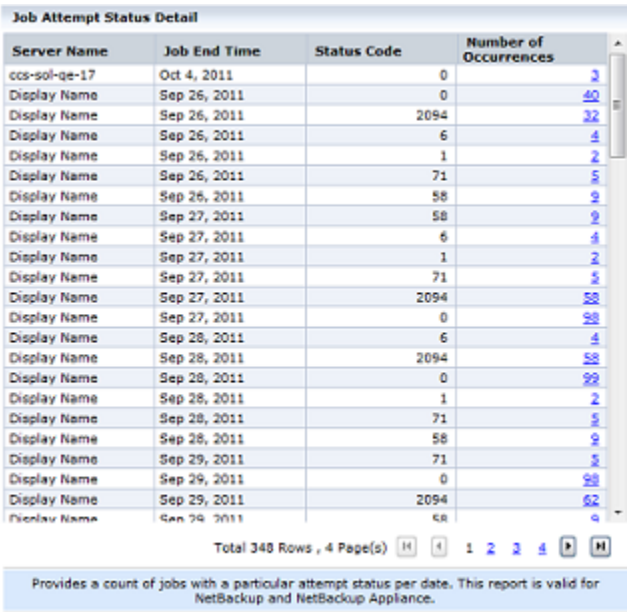
This report provides information about the completion status for a NetBackup job. The report table provides a count of jobs having a particular status code on a specific day. The table is organized by server name and date. This report was earlier named as Job Exit Status Detail report.

A drilldown report is available from the **Number of Occurrences** column of the table of the main report. This drilldown report shows job details, such as job type and policy name. The table includes all jobs having a particular status code on a given day.

Note: This report may provide inaccurate output when a Job ID is reset in NetBackup like for catalog recovery or via manual resetting of the Job ID. In case the Job ID is reset, you must delete the NetBackup primary server from the OpsCenter console and add it again.

Figure 2-42 shows a sample view of the Job Attempt Status Detail report.

Figure 2-42 Job Attempt Status Detail report



Job Attempt Status Detail

Server Name	Job End Time	Status Code	Number of Occurrences
ccs-sol-qe-17	Oct 4, 2011	0	3
Display Name	Sep 26, 2011	0	40
Display Name	Sep 26, 2011	2094	32
Display Name	Sep 26, 2011	6	4
Display Name	Sep 26, 2011	1	2
Display Name	Sep 26, 2011	71	5
Display Name	Sep 26, 2011	58	9
Display Name	Sep 27, 2011	58	9
Display Name	Sep 27, 2011	6	4
Display Name	Sep 27, 2011	1	2
Display Name	Sep 27, 2011	71	5
Display Name	Sep 27, 2011	2094	58
Display Name	Sep 27, 2011	0	98
Display Name	Sep 28, 2011	6	4
Display Name	Sep 28, 2011	2094	58
Display Name	Sep 28, 2011	0	99
Display Name	Sep 28, 2011	1	2
Display Name	Sep 28, 2011	71	5
Display Name	Sep 28, 2011	58	9
Display Name	Sep 29, 2011	71	5
Display Name	Sep 29, 2011	0	98
Display Name	Sep 29, 2011	2094	62
Display Name	Sep 29, 2011	58	9

Total 348 Rows , 4 Page(s) 1 2 3 4

Provides a count of jobs with a particular attempt status per date. This report is valid for NetBackup and NetBackup Appliance.

The following are details associated with the Job Attempt Status Detail report:

Report Name	Job Attempt Status Detail
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Job Attempt Status Detail
Report Purpose	This report shows the successful jobs density over time.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	Yes See "Job details by attempt status" on page 158.
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with NOM report	Standard Reports > Job > Job Attempt Status Detail

The following table shows the filters for Job Attempt Status Detail report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Job	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.

Example of filter usage: You may run the Job Attempt Status Detail report for a specific job type like Backup to view status code details for the backup jobs.

The following report enhancements have been made for the Job Attempt Status Detail report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- This report was earlier named Job Exit Status Detail. This has been renamed to Job Attempt Status Detail report.

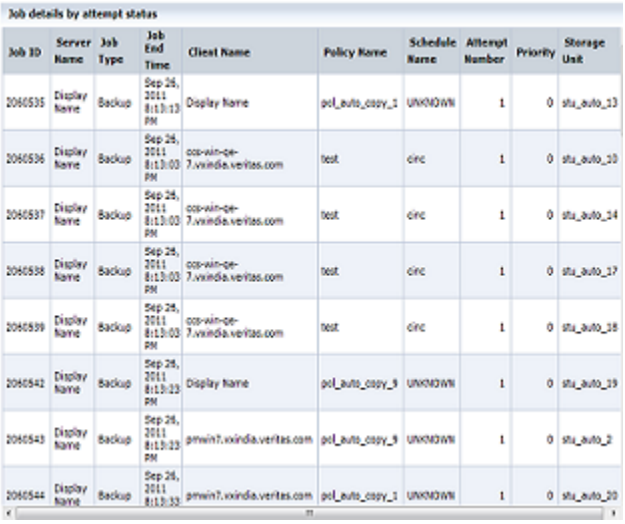
Job details by attempt status

A drilldown report named Job details by attempt status is available when you click the **Number of Occurrences** column in Job Attempt Status Detail report. This drilldown report shows job details, such as job type and policy name. The table includes all jobs that have a particular status code on a given day.

This tabular reports shows job information i.e. Job Type, Job End time etc by its attempt numbers.

Figure 2-43 shows a sample view of the Job details by attempt status report.

Figure 2-43 Job details by attempt status report



Job details by attempt status

Job ID	Server Name	Job Type	Job End Time	Client Name	Policy Name	Schedule Name	Attempt Number	Priority	Storage Unit
2060535	Display Name	Backup	Sep 26, 2011 8:13:13 PM	Display Name	pol_auto_copy_1	UNKNOWN	1	0	stu_auto_13
2060536	Display Name	Backup	Sep 26, 2011 8:13:03 PM	ccp-win-ge-7.vxindia.veritas.com	test	circ	1	0	stu_auto_10
2060537	Display Name	Backup	Sep 26, 2011 8:13:03 PM	ccp-win-ge-7.vxindia.veritas.com	test	circ	1	0	stu_auto_14
2060538	Display Name	Backup	Sep 26, 2011 8:13:03 PM	ccp-win-ge-7.vxindia.veritas.com	test	circ	1	0	stu_auto_17
2060539	Display Name	Backup	Sep 26, 2011 8:13:03 PM	ccp-win-ge-7.vxindia.veritas.com	test	circ	1	0	stu_auto_18
2060542	Display Name	Backup	Sep 26, 2011 8:13:23 PM	Display Name	pol_auto_copy_9	UNKNOWN	1	0	stu_auto_19
2060543	Display Name	Backup	Sep 26, 2011 8:13:23 PM	pnwin7.vxindia.veritas.com	pol_auto_copy_9	UNKNOWN	1	0	stu_auto_2
2060544	Display Name	Backup	Sep 26, 2011 8:13:33	pnwin7.vxindia.veritas.com	pol_auto_copy_1	UNKNOWN	1	0	stu_auto_20

The following are details associated with the Job details by attempt status report:

Report Name	Job details by attempt status
Report Category	Backup

Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Job Attempt Status Detail (drill down from **Number of Occurrences** column) > Job details by attempt status
Report Purpose	This report shows job information by job attempt.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with NOM report	Standard Reports > Job > Job Attempt Status Detail (drill down from **Number of Occurrences** column) > Job Details By Status for

The following table shows the filters for Job details by attempt status report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Job	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Status Code	Select one or more status codes to view data for the selected status codes.

Example of filter usage: You may run the Job details by attempt status report for a specific job type like Backup to view job attempt details for the backup jobs.

The following report enhancements have been made for the Job details by attempt status report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

Status & Success Rate > Status > Job Details report

This report provides detailed information about NetBackup jobs.

Status & Success Rate > Status > Job Summary by Status report

Status Report provides information on basic NetBackup job status including successful, partially successful, skipped files, and failed backup attempts.

The Job Summary by Status report summarizes NetBackup jobs based on the job exit status for a specified time interval. You can use this report to provide trend information.

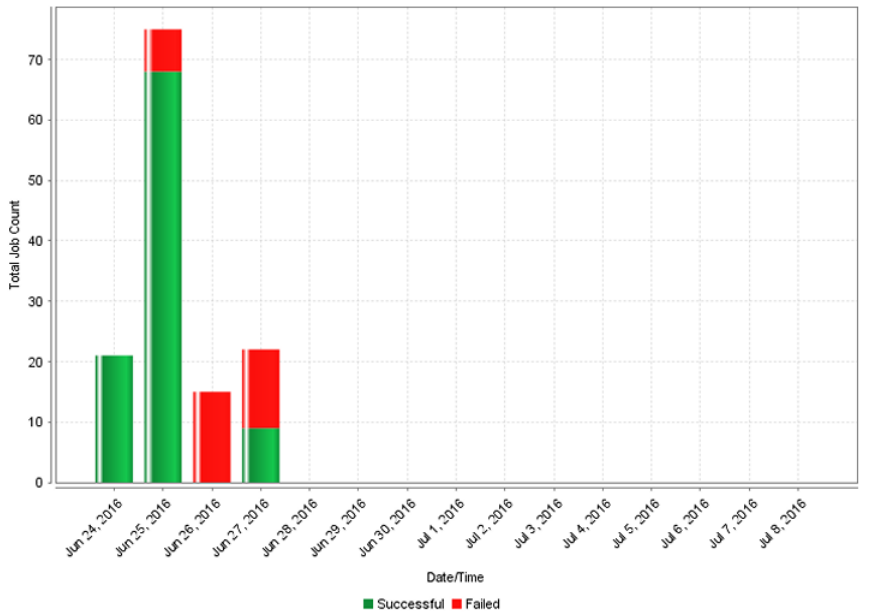
The bar chart shows a count of successful, partially successful, and failed jobs per a given date.

Status & Success Rate > Status > Job Status > Historical report

A Job Status report in red (failure), yellow (partial success) and green (success) displayed in stacked bar format that is grouped by hour, day, week, month, or year across any timeframe. The report is a count of jobs for each of the three outcomes. The simplicity of the presentation helps easily identify both positive and negative trends as well as one-off deviations. For NetBackup environments, the report can also be generated where attempts rather than jobs are counted. In NetBackup, jobs can be configured for x many attempts before a job exits with a status. The report can be filtered across a selection that includes views, backup and media servers, backup level, policies, schedules, transport types, Operating Systems, and business classifications.

Figure 2-44 shows a sample view of the Job Status (Historical) report.

Figure 2-44 Job Status (Historical) report



Historical red/yellow/green type status count report across products, domains, clients, policies and business level views.

The following are details associated with the Job Status (Historical) report:

Report Name	Job Status
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Job Status
Report Purpose	This report shows job density over time.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client, Policy
Report Display	Historical
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backup > Status and Success Rate > Status > Job Status

The following table shows the filters for Job Status report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** dropdown list..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.

Filter	Column	Description
Job	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	By default, Backup jobs are shown in the report. Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.

Example of filter usage: You may run the Job Status report for a specific policy to view job counts for the specific policy.

The following report enhancements have been made for the Successful Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

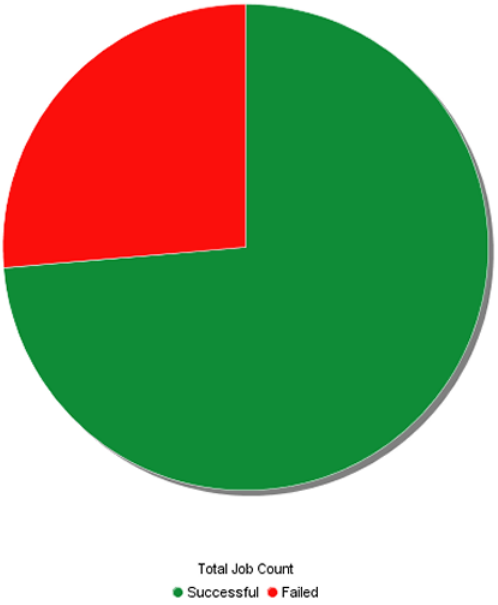
- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.
- The report now also shows trendlines with customized average periods.
  The following option has been added:
  Show trendline with moving average period of 3. The value can be 1, 2, 3, 7, 14, or 30. The default value is 3.
  Select **Show trendline with moving average** checkbox and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.
- UNKNOWN has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

Status & Success Rate > Status > Job Status > Distribution report

A job status report in red (failure), yellow (partial success) and green (success) displayed in pie chart format. The report is a count of jobs for each of the three outcomes. The main use cases of the report are typically short-term verification (i.e. last 24 – 48 hours) of backup job status and long term (i.e. 1+ months) management level reporting requiring high-level status summaries. The report can be filtered across a selection that includes views, backup and media servers, backup level, policies, schedules, transport types, Operating Systems, and business classifications.

Figure 2-45 shows a sample view of the Job Status (Distribution) report.

Figure 2-45 Job Status (Distribution) report



Historical red/yellow/green type status count report across products, domains, clients, policies and business level views.

The following are details associated with the Job Status (Distribution) report:

Report Name	Job Status
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Job Status
Report Purpose	This report shows job density over time.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client, Policy
Report Display	Distribution
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backup > Status and Success Rate > Status > Job Status

The following table shows the filters for Job Status report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** dropdown list..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.

Filter	Column	Description
Job	Job Status	Select one or more job status like Failed, Successful etc. to view data for the selected job status.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types. By default, only **Backup** is selected.
	Product Type	Select one or more backup products to view data for the selected products.

Example of filter usage: You may run the Job Status report for a specific policy to view job counts for the specific policy.

The following report enhancements have been made for the Successful Job Count report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

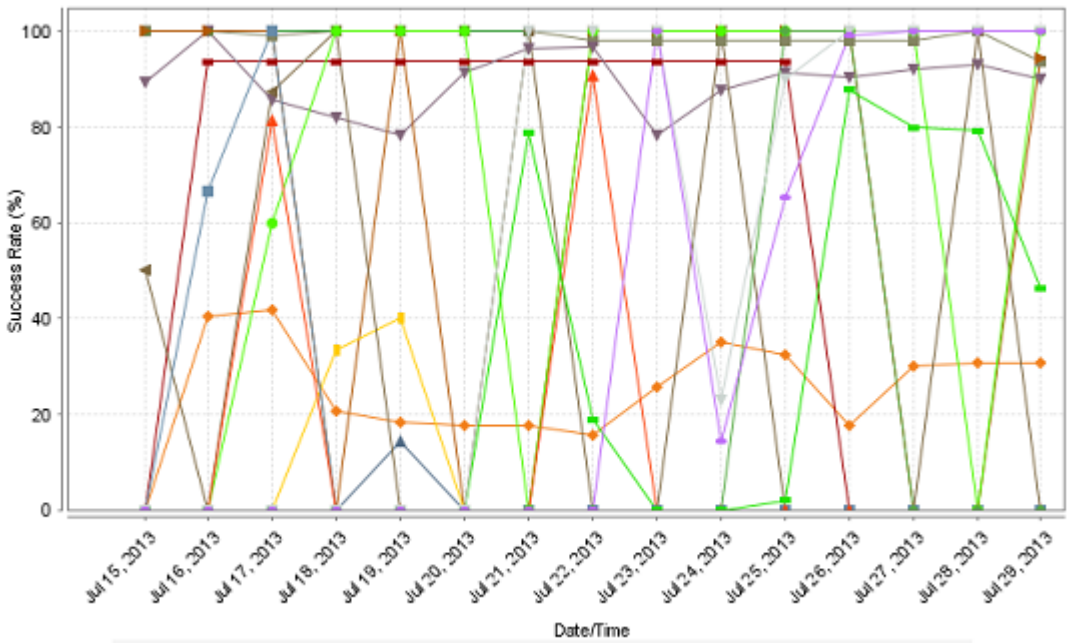
- The **Schedule Name** column is added under the **Schedule** filter to filter data by schedule name.
- UNKNOWN has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are UNKNOWN. In earlier versions of OpsCenter the unknown policy types were shown as blank. Now all static columns like job type, schedule type, policy type, etc. are shown as UNKNOWN like in VBR

Status & Success Rate > Success Rate > Success Rate – All Jobs report

This last of the single-line success rate reports give the highest number since it shows at least one success per client stream. Meaning as long as one job is successful despite any number of retries, it is a 100% success. This report typically shows overall exposure to someone outside the backup team. A 100% on this report indicates that everything was backed up even though it may have taken a number of retries.

Figure 2-46 shows a sample view of the Success Rate-All Jobs report.

Figure 2-46 Success Rate – All Jobs report



The following are details associated with the Success Rate – All Jobs report:

Report Name	Success Rate - All Jobs
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Success Rate > Success Rate - All Jobs
Report Purpose	This report shows the Success rate by job level across products, domains, clients, policies and business level views.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Historical (Chart)
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Success Rate > Success Rate - At Least 1 Success Per Client

The following table shows the filters for Success Rate – All Jobs report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** dropdown list..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.

Filter	Column	Description
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
Success Rate	Consider Partially Successful Job as Successful	The default selection is **Yes**. Select **No** if you do not want to consider partially successful jobs as successful. Selecting **Yes** or **No** may impact the **Success Rate** percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs, and 2 failed jobs. If you select the value as **Yes**, the **Success Rate** is 80%. However if you select the value as **No**, the **Success Rate** is 50%.

Example of filter usage: Run the Success Rate - All Jobs report for a specific backup product to get an idea of the success rate for backup jobs.

The following report enhancements have been made for Success Rate – All Jobs report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- Two new filters called **Schedule** and **Success Rate** have been added.
- A new checkbox named **Target Performance** has been added in the **Modify Display Options** page under **Timeline Chart Properties**. You can use the **Target Performance** option to specify where a report draws the target line, with which you can compare the actual performance shown. The **Target Performance** option allows you to specify the target for Y1 axis. In case you set a value of say 100 for Y1 axis and run the report, you will see a straight line parallel to X-axis and the value as 100 on Y1 axis. Using this option, you can easily compare the actual performance with the target performance.

Status & Success Rate > Success Rate > Advanced Success Rate report

This report uses the advanced success or the failure calculation logic around the notion of first, all and last job. It collects all information around both successes and failures and presents the results that are grouped by (day or month) timeframe for either client or the job success rate. Client success rate is a count of successful clients where all policies that are defined to the client must be successful to declare the client successful. Thus a client is either 0% or 100% and no intermediate state.

Job success rate is derived from all jobs and separated out by first, all and last and a specific client can have a job success rate that can range between 0% and 100%. End-user and customer typically get Last Job Success for job and client whereas backup architects and administrators examine all three. These reports work well with views and can be reported on at any level with robust filtering capabilities.

This report simply aggregates jobs according to success rate and shows these across a timeline. It can be reported on against views and view levels, along with any of the key backup infrastructure components (primary server etc) and attributes (policy, policy, job etc). Filtering is available on all components and attributes. The primary use case of the report is verification of trends and the days that are exception to the norm. The report is highly effective for presenting long-term tabular data on one of the most fundamental metrics of managing a backup operation.

Figure 2-47 shows a sample view of the Advanced Success Rate report.

Figure 2-47 Advanced Success Rate report

Advanced Success Rate

Period	Node Name	Successful Jobs	Failed Jobs	Total Job Count	Success Rate (%)	Size(MB)
2011-09-27	purandar	412	80	492	83.74	737.94
2011-09-28	purandar	413	78	491	84.11	20,462.7
2011-09-29	purandar	444	74	518	85.71	2,770.32
2011-09-30	purandar	4213	153	4366	96.5	6,541.72
2011-10-01	purandar	4213	72	4285	98.32	676.57
2011-10-02	purandar	4211	74	4285	98.27	856.5
2011-10-03	purandar	4211	71	4282	98.34	856.5
GRAND SUMMARY		18117	602	18719	96.78	32,902.27

The following are details associated with the Advanced Success Rate report:

Report Name	Advanced Success Rate
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Success Rate > Advanced Success Rate

Report Purpose	This report shows the primary server, number of backups that were successful and failed, the success rate and total amount processed for each day.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Status > Daily Summary of Backup Activity

The following table shows the filters for Advanced Success Rate report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Job	Job Type	You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types. By default, Backup jobs are shown in the report.
	Status Code	Select one or more status codes to view data for the selected status codes.

Filter	Column	Description
Success Rate	Aggregation Level	Select **Aggregation Level** to consider the kind of jobs for the specified time frame. For example, if you select **First Job Success Rate** then the report shows only the first job for the combination of primary, client, policy, and schedule.
	Full Days	Select **Full Days** to specify the list of days to be considered for Full backups.
	Full Window Parameter	Select **Full Window Parameter** to specify the start time for the full backup window.
	Metric Type	Select **Metric Type** to calculate the success rate based on clients or jobs.
	Full for Duration of (In Hours)	Select **Full for Duration of (In Hours)** to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.
	Increment Days	Select **Increment Days** to specify the list of days to be considered for Incremental backups.
	Increment Window Parameter	Select **Increment Window Parameter** to specify the start time for the incremental backup window.
	Increment for Duration of (In Hours)	Select **Increment for Duration of (In Hours)** to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.
	Consider Partially Successful Job as Successful	Select **Count Partially Successful Job as Successful** to count partially successful jobs as successful while calculating the Success Rate.

Example of filter usage: Run the Advanced Success Rate report for a one week timeframe and for a single primary server.

The default Relative Timeframe is now changed to Previous 15 days. Earlier the report showed data for the Previous 14 days by default.

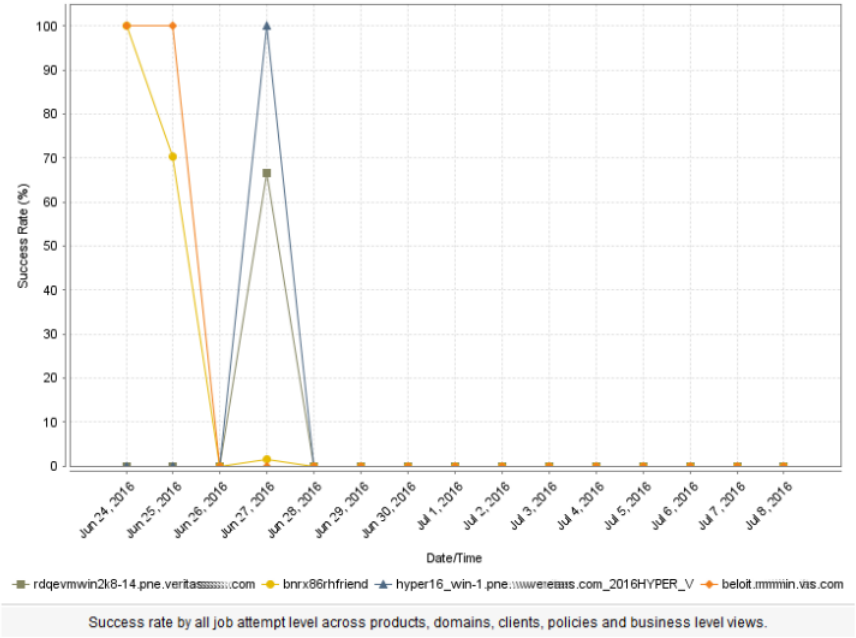
Status & Success Rate > Success Rate > Success Rate - All Attempts report

This report shows success rate as it is aggregated at the attempt (“try”) level. Jobs can be configured for x many attempts before exiting with a status. If for example the attempt setting is two and success is attained on the second attempt, this translates into a 50% attempt rate and 100% job success rate. This metric is only supported for backup applications in which attempt level data is available. A target line is also supported providing for an effective visual presentation on when the

target is exceeded. It can be reported on against any view or level within a view along with any of the key backup infrastructure components (backup server, media server) and attributes (policy, policy type, schedule, OS, product, transport type). Filtering is available on all components and attributes. Main use case is long-term historical data on one of the key performance indicators.

Figure 2-48 shows a sample view of the Success Rate All Attempts report.

Figure 2-48 Success Rate – All Attempts report



The following are details associated with the Success Rate – All Attempts report:

Report Name	Success Rate - All Attempts
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Success Rate > Success Rate - All Attempts
Report Purpose	This report shows the success rate by all job attempt level across products, domains, clients, policies and business level views.
Supported products	NetBackup, NetBackup Appliance

Applicable View	Primary Server, Client
Report Display	Historical (Chart)
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Success Rate > Success Rate - All Attempts

The following table shows the filters for Success Rate – All Attempts report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** dropdown list..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.

Filter	Column	Description
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
Success Rate	Consider Partially Successful Job as Successful	The default selection is **Yes**. Select **No** if you do not want to consider partially successful jobs as successful. Selecting **Yes** or **No** may impact the **Success Rate** percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs, and 2 failed jobs for all job attempts. If you select the value as **Yes**, the **Success Rate** is 80%. However if you select the value as **No**, the **Success Rate** is 50%.

Examples of filter usage: You can run this report for a few primary servers for which you want to view the success rate for all attempts.

The following report enhancements have been made for Success Rate - All Attempts report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total

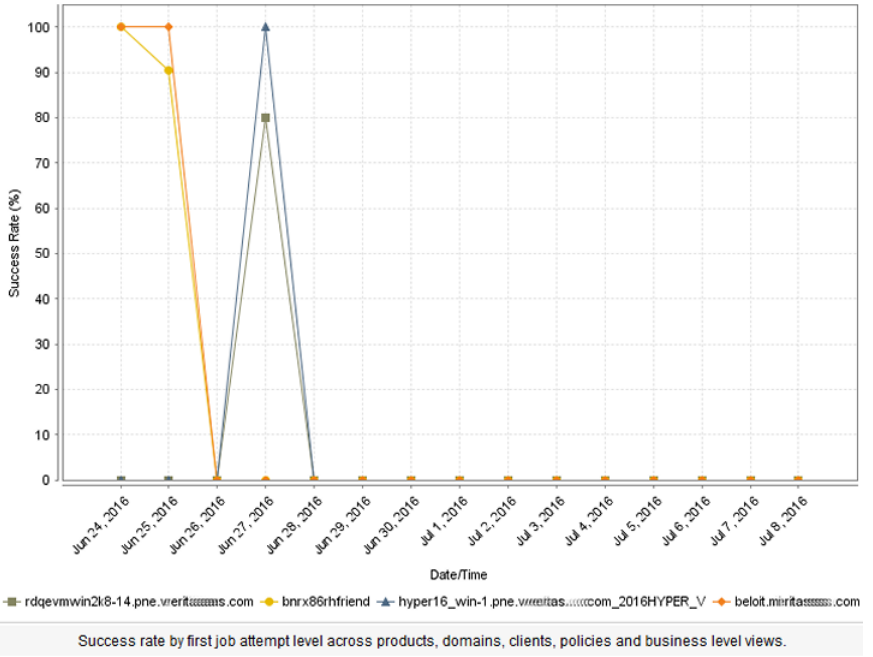
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- Two new filters called **Schedule** and **Success Rate** have been added.
- A new checkbox named **Target Performance** has been added in the **Modify Display Options** page under **Timeline Chart Properties**. You can use the **Target Performance** option to specify where a report draws the target line, with which you can compare the actual performance shown. The **Target Performance** option allows you to specify the target for Y1 axis. In case you set a value of say 100 for Y1 axis and run the report, you will see a straight line parallel to X-axis and the value as 100 on Y1 axis. Using this option, you can easily compare the actual performance with the target performance.

Status & Success Rate > Success Rate > Success Rate - First Attempt report

This report shows success rate as it is aggregated at the attempt (known as “try”) level. Specifically, it zooms in on the measurement of the first attempt for each job. Jobs can be configured for x many attempts before you exit with a status. If for example the attempt setting is two and success is attained on the second attempt, this data translates into a 50% All Attempt rate and 0% First Attempt rate and 100% job success rate. This metric is only supported for backup applications in which attempt level data is available. A target line is also supported providing for an effective visual presentation on when the target is exceeded. Filtering is available on all components and attributes. Main use case is to use this report and the All Attempts report together to see how often success is attained on the first attempt as opposed to second, third etc. attempts.

Figure 2-49 shows a sample view of Success Rate - First Attempt report.

Figure 2-49 Success Rate - First Attempt report



The following are details associated with the Success Rate – First Attempt report:

Report Name	Success Rate - First Attempt
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Success Rate > Success Rate - First Attempt
Report Purpose	This report shows the success rate by first job attempt level across products, domains, clients, policies and business level views.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical (Chart)
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV

Mapping with VBR report Backups > Success Rate > Success Rate - First Attempt

The following table shows the filters for Success Rate – First Attempt report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** dropdown list..
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.

Filter	Column	Description
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.
Success Rate	Consider Partially Successful Job as Successful	The default selection is **Yes**. Select **No** if you do not want to consider partially successful jobs as successful. Selecting **Yes** or **No** may impact the **Success Rate** percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs, and 2 failed jobs for the first job attempt. If you select the value as **Yes**, the **Success Rate** is 80%. However if you select the value as **No**, the **Success Rate** is 50%.

Examples of filter usage: You can run this report for a few primary servers for which you want to view the success rate for the first attempt.

The following report enhancements have been made for Success Rate - First Attempt report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes

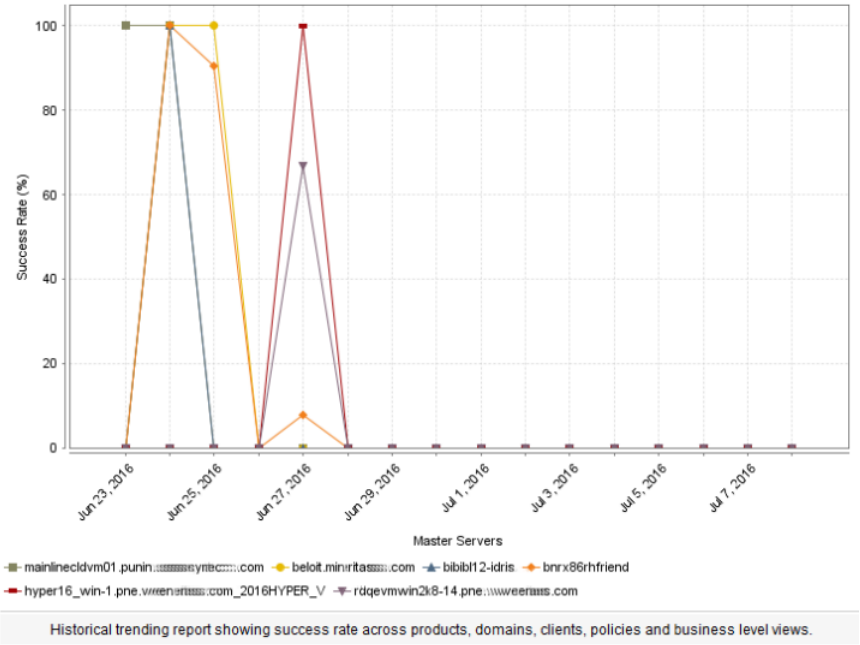
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- Two new filters called **Schedule** and **Success Rate** have been added.
- A new checkbox named **Target Performance** has been added in the **Modify Display Options** page under **Timeline Chart Properties**. You can use the **Target Performance** option to specify where a report draws the target line, with which you can compare the actual performance shown. The **Target Performance** option allows you to specify the target for Y1 axis. In case you set a value of say 100 for Y1 axis and run the report, you will see a straight line parallel to X-axis and the value as 100 on Y1 axis. Using this option, you can easily compare the actual performance with the target performance.

Status & Success Rate > Success Rate > Success Rate - Line report

This report is a historical report that shows success rate across products, domains, clients, policies, and business level views. This report simply aggregates jobs according to success rate and shows these across a timeline. Filtering is available on all components and attributes. The primary use case of the report is verification of trends and the days that are exception to the norm. The report is highly effective for presenting long-term historical data on one of the most fundamental metrics of managing a backup operation.

Figure 2-50 shows a sample view of the Success Rate Line report.

Figure 2-50 Success Rate - Line report



The following are details associated with the Success Rate Line report:

Report Name	Success Rate Line report
Report Category	Backup
Where to Locate	Report > Report Templates > Backup > Status & Success Rate > Status > Success Rate Line
Report Purpose	This report shows job success rate density over time.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Historical (Chart)
Drill down report	No
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with VBR report	Backups > Success Rate > Success Rate Line

The following table shows the filters for Success Rate Line report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Job	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Status Code	Select one or more status codes to view data for the selected status codes.

Filter	Column	Description
Success Rate	Aggregation Level	Select **Aggregation Level** to consider the kind of jobs for the specified time frame. For example, if you select **First Job Success Rate** then the report shows only the first job for the combination of primary server, client, policy, and schedule.
	Full Days	Select **Full Days** to specify the list of days to be considered for Full backups.
	Full Window Parameter	Select **Full Window Parameter** to specify the start time for the full backup window.
	Metric Type	Select **Metric Type** to calculate the success rate based on clients or jobs.
	Full for Duration of (In Hours)	Select **Full for Duration of (In Hours)** to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.
	Increment Days	Select **Increment Days** to specify the list of days to be considered for Incremental backups.
	Increment Window Parameter	Select **Increment Window Parameter** to specify the start time for the incremental backup window.
	Increment for Duration of (In Hours)	Select **Increment for Duration of (In Hours)** to calculate the end time for the incremental backup window. Backup window end time is equal to the duration from the start time of the backup window.
	Consider Partially Successful Job as Successful	Select **Count Partially Successful Job as Successful** to count partially successful jobs as successful while calculating the Success Rate.

Example of filter usage: Run the Success Rate Line report for a specific job type like Restore to get an idea of the success rate for restore operations.

The following report enhancements have been made for the Success Rate Line report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

About Catalog reports in OpsCenter

This section describes catalog reports for all NetBackup Catalog backup operations for both NetBackup and NetBackup Appliances..

Cold catalog backup report

This report shows the count of cold NetBackup catalog backups and information about the media that NetBackup uses for offline backups.

Tool tips in the bar chart show the report name and backup count. The table in the report also lists the media that NetBackup uses for the backups for each primary server.

About Chargeback reports in OpsCenter

This section provides descriptions of chargeback reports for estimating the specific costs of providing backup services and storage consumed (with and without deduplication) to provide chargeback billing of these costs.

Deduplication Chargeback report	See "Deduplication Chargeback report" on page 186.
Cost Tabular report	See "Cost Tabular report" on page 191.
Chargeback report	See "Backup Chargeback report" on page 191.

Deduplication Chargeback report

This report shows the savings that is achieved because of the deduplication technology.

To generate this report, you first need to have a cost variable of Protected Job Size.

The deduplication technology can identify files and the data segments that contain identical data and treats them as a single instance of the file, which it backs up only once. For example, PureDisk has backed up 100 MB data , in which 20 MB of data is duplicate or identical. PureDisk protects the same data but eliminates the duplicity using deduplication. Therefore, the data that is protected is 100 MB, but the actual data that is backed up by PureDisk is 80 MB, as 20 MB of data is duplicate data. This results in saving 20 MB of data. You can generate the Deduplication Chargeback report that shows the amount you have saved using deduplication.

The Deduplication Chargeback report is available in Distribution, Historical, and Ranking views.

Figure 2-51 shows a sample distribution view of the Deduplication Chargeback report.

Figure 2-51 Deduplication Chargeback - Distribution view

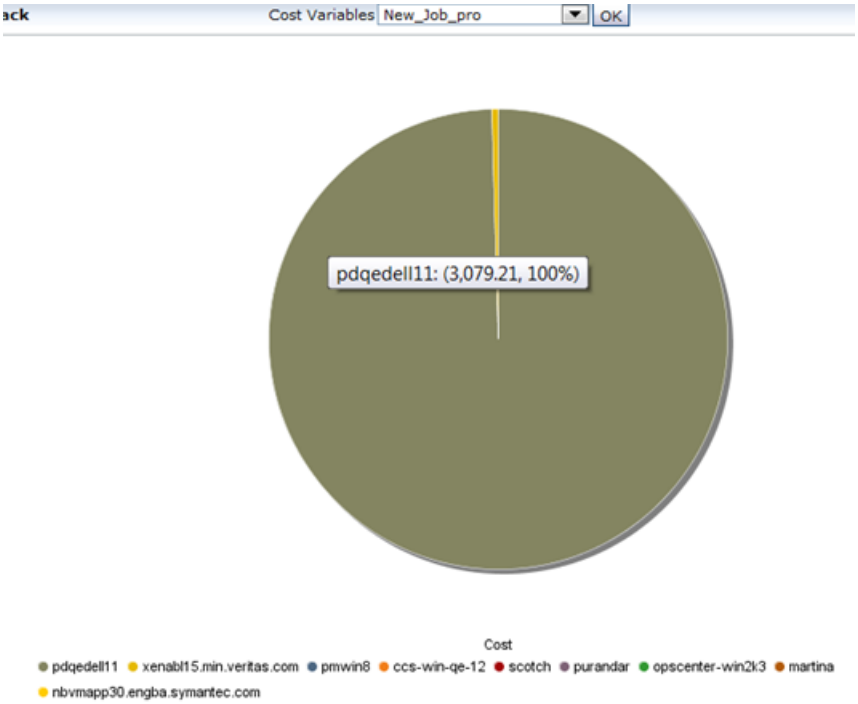


Figure 2-52 shows a sample historical view of the Deduplication chargeback report.

Figure 2-52 Deduplication Chargeback - Historical View

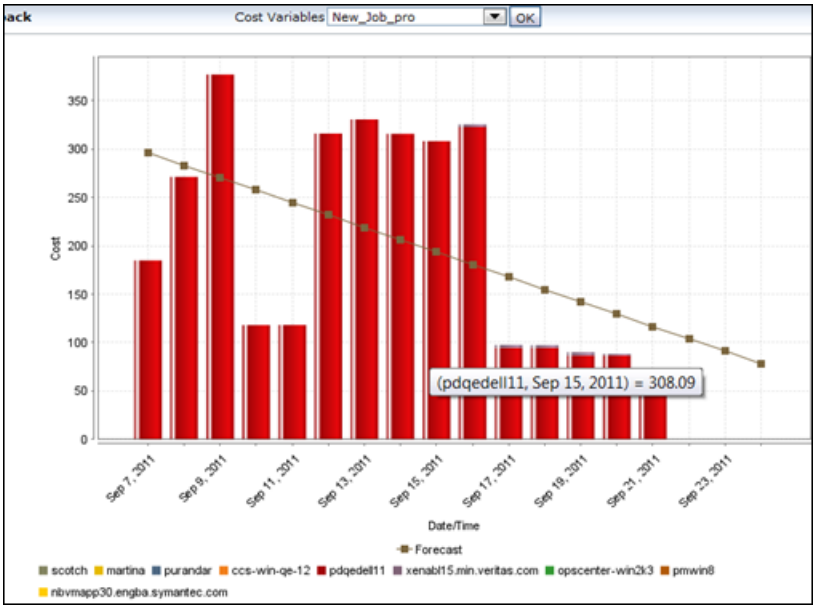
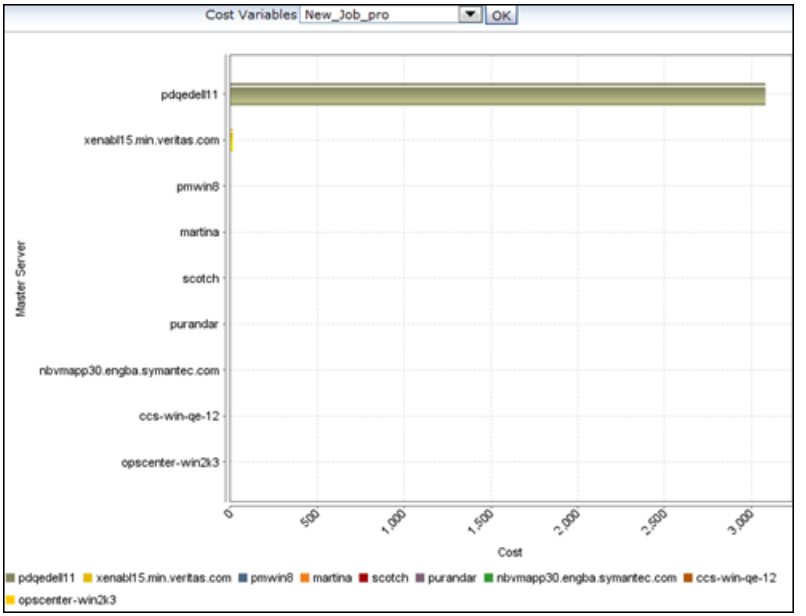


Figure 2-53 shows a sample ranking view of the Deduplication chargeback report.

Figure 2-53 Deduplication Chargeback - Ranking View



The following are details associated with the Deduplication Chargeback Report:

Report Name	Deduplication Chargeback Report
Report Category	Chargeback Reports
Where to Locate	Report > Report Templates > Chargeback > Deduplication Chargeback Report
Report Purpose	This report shows the savings that is achieved because of the deduplication technology.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Distribution, Historical, and Ranking
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Costs > Saving Reports

The following table shows the filters for Deduplication Chargeback report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.

Example of filter usage: Run the Deduplication chargeback report for a specific primary server to view the cost savings for the specific primary server.

The following report enhancements have been made for Deduplication Chargeback report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.
- The following options have been removed from **Time Frame Group By** selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)
- The **Primary Server Operating system** filter has been removed.

- The following **Report On** options have been removed:
  - Backup Image Copy Is Currently Expired
  - Backup Image Copy Media Server
  - Backup Image Encryption State
  - Backup Image Fragment Is Currently Expired
  - Backup Image Is Currently Expired
  - Backup Image Type
  - Data Classification Primary Server
  - Data Classification Name

Cost Tabular report

This report shows the chargeback of your backup services in a tabular form.

OpsCenter provides organizations with a tool to evaluate the cost of the IT services they consume, which is called Chargeback. You can create cost variables and the formulas that enable you to run the reports that show costs of backup services.

To generate the Cost report you need to have a cost formula created.

Backup Chargeback report

This report shows the chargeback of your backup services in Historical and Ranking views. You need to have a cost formula created to generate this report.

Figure 2-54 shows a sample Historical view of the Backup Chargeback report:

Figure 2-54 Backup Chargeback report - Historical View

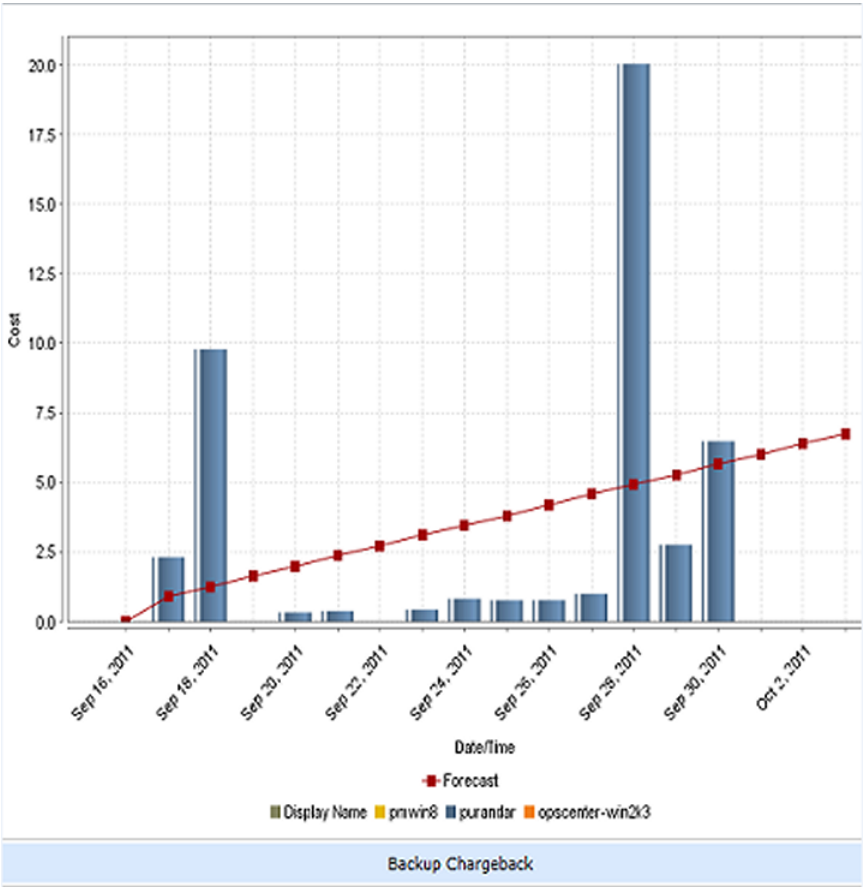
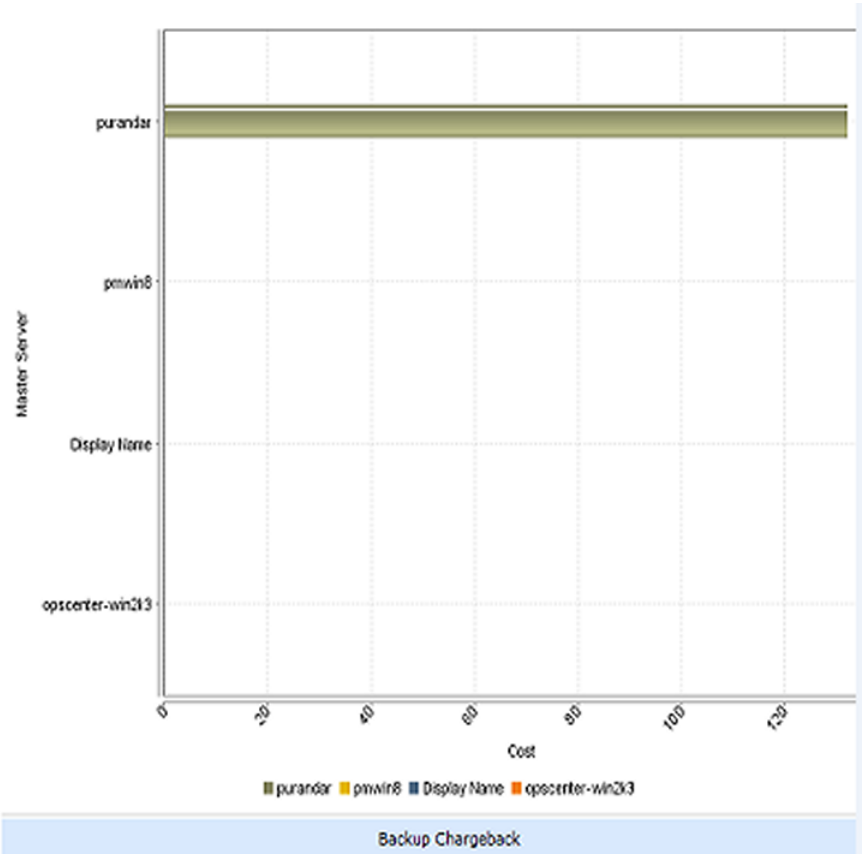


Figure 2-55 shows a sample Rankings view of the Backup Chargeback report.

Figure 2-55 Backup Chargeback report - Rankings view



The following are details associated with the Backup Chargeback Report:

Report Name	Backup Chargeback Report
Report Category	Chargeback Reports
Where to Locate	Report > Report Templates > Chargeback > Backup Chargeback Report
Report Purpose	This report shows the chargeback of your backup services.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Historical, Ranking

Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Costs > Cost Reports

The following table shows the filters for Backup Chargeback report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.

Example of filter usage: Run the Backup Chargeback report for a specific primary server to view the cost savings for the specific primary server

The following report enhancements have been made for Backup Chargeback report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.
- The following options have been removed from Time Frame Group By selection:
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter
  - Quarter of year Average
  - Quarter of year total
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.

- The following **Report On** options have been added under Backup Job Attributes:
  - Job Status (Complete and Partial only)
  - Job Status (Complete only)

  The following **Report On** options have been removed:
  - Backup Image Copy Is Currently Expired
  - Backup Image Copy Media Server
  - Backup Image Encryption State
  - Backup Image Fragment Is Currently Expired
  - Backup Image Is Currently Expired
  - Backup Image Type
  - Data Classification Primary Server
  - Data Classification Name
- The **Primary Server Operating System** filter has been removed.

About Client reports in OpsCenter

This section provides and describes the status reports of all NetBackup Clients (physical and virtual) including at risk vs unprotected vs protected Clients and Bare Metal Recovery (BMR) status.

Risk Analysis > Client Risk Analysis	See "Risk Analysis > Client Risk Analysis report" on page 196.
Risk Analysis > Client Coverage	See "Risk Analysis > Client Coverage report" on page 199.
Risk Analysis > Recovery Point Objective	See "Risk Analysis > Recovery Point Objective report" on page 207.
About clients not backed up report	See "Clients Not Backed up report" on page 211.
Virtual Client Summary	See "Virtual Client Summary report" on page 213.
About job success by client report	See "Job Success by Client report" on page 217.
About client summary dashboard report	See "Client summary dashboard report" on page 223.

About BMR client configuration backup failures report	See "BMR client configuration backup failures report" on page 224.
About jobs by application report	See "Jobs by application report" on page 225.
SAN client jobs report	See " SAN client jobs report" on page 225.

Risk Analysis > Client Risk Analysis report

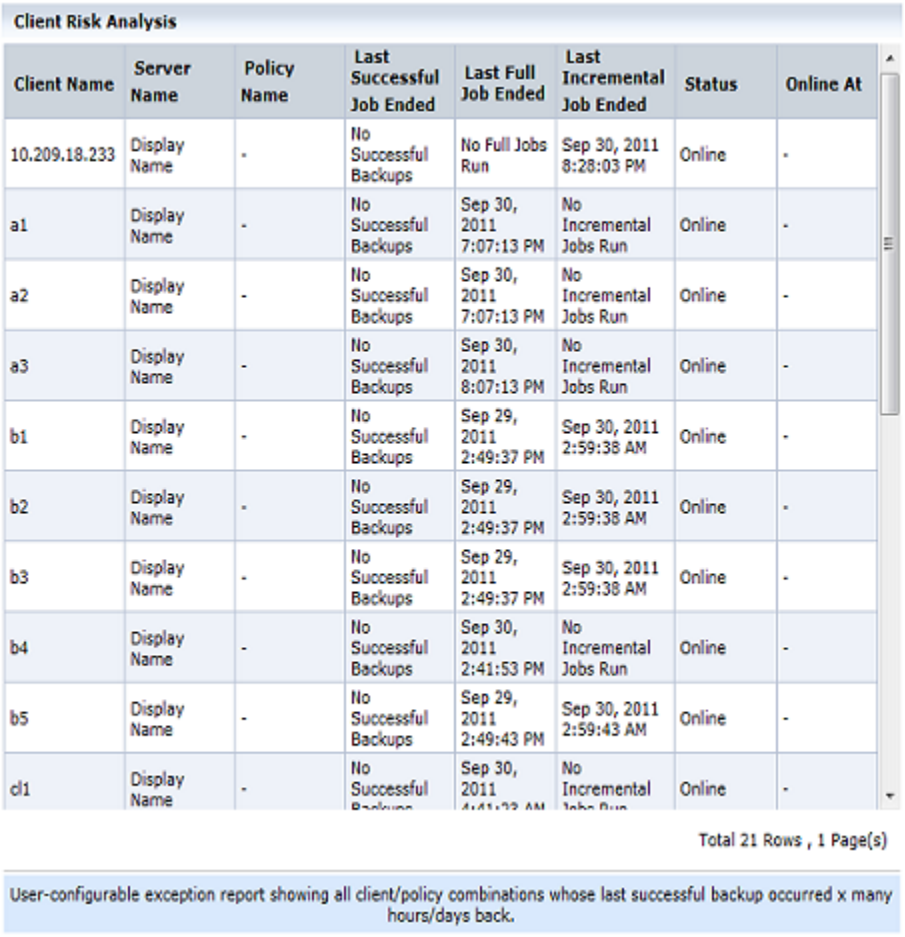
Risk Analysis provides reports on the NetBackup Clients at risk for being un-protected or under-protected based on their Recovery Point Objectives (RPO's).

The Client Risk Analysis report identifies the backup clients that have gone without a successful backup for a specified period of time and hence are at risk from a restore standpoint or recoverability standpoint. The "specified period of time" is user- defined along with several other variables for filtering purposes. The report is interpreted as all client or policy combinations that have gone x hours, days, weeks, or months without a successful backup.

The level of granularity is at a client level or policy level and exposes the clients that have multiple backup policies where one of them may repeatedly fail. The primary use case is to show that all clients have been backed up as of the last x hours and all clients have a full backup not more than x days ago. The report also has an "Is Active" filter to include only those that are currently active as well as the capability to count partial successes as success and vice versa.

Figure 2-56 shows a sample view of the Client Risk Analysis report.

Figure 2-56 Client Risk Analysis report



Client Risk Analysis

Client Name	Server Name	Policy Name	Last Successful Job Ended	Last Full Job Ended	Last Incremental Job Ended	Status	Online At
10.209.18.233	Display Name	-	No Successful Backups	No Full Jobs Run	Sep 30, 2011 8:28:03 PM	Online	-
a1	Display Name	-	No Successful Backups	Sep 30, 2011 7:07:13 PM	No Incremental Jobs Run	Online	-
a2	Display Name	-	No Successful Backups	Sep 30, 2011 7:07:13 PM	No Incremental Jobs Run	Online	-
a3	Display Name	-	No Successful Backups	Sep 30, 2011 8:07:13 PM	No Incremental Jobs Run	Online	-
b1	Display Name	-	No Successful Backups	Sep 29, 2011 2:49:37 PM	Sep 30, 2011 2:59:38 AM	Online	-
b2	Display Name	-	No Successful Backups	Sep 29, 2011 2:49:37 PM	Sep 30, 2011 2:59:38 AM	Online	-
b3	Display Name	-	No Successful Backups	Sep 29, 2011 2:49:37 PM	Sep 30, 2011 2:59:38 AM	Online	-
b4	Display Name	-	No Successful Backups	Sep 30, 2011 2:41:53 PM	No Incremental Jobs Run	Online	-
b5	Display Name	-	No Successful Backups	Sep 29, 2011 2:49:43 PM	Sep 30, 2011 2:59:43 AM	Online	-
cl1	Display Name	-	No Successful	Sep 30, 2011	No Incremental	Online	-

Total 21 Rows , 1 Page(s)

User-configurable exception report showing all client/policy combinations whose last successful backup occurred x many hours/days back.

The following table provides details on each column that is displayed in the report:

Client Name	Name of the client that is at risk because of unsuccessful backup.
Server Name	Name of the server associated with this client.
Policy Name	Name of the associated policy.
Last Successful Job Ended	Date and time when this client was successfully backed up.
Last Full Job Ended	Date and time when the last full backup job ended.

Last Incremental Job Ended	Date and time when the last incremental backup job ended.
Schedule Name	Name of the schedule for the last successful backup of this client. This column is blank if the client was not successfully backed up anytime.
Status	Status of the client; whether it is online or offline.
Online At	If the client is offline, this column displays when the client will be online again. This column is blank if the client is already online.

The following are details associated with the Client Risk Analysis Report:

Report Name	Client Risk Analysis Report
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Client Risk Analysis Report
Report Purpose	The report takes a look at all of the clients configured and determines if the client has had a full successful backup in the time frame specified. If not, it will be called out as a Risk so that action can be taken to get a successful full backup.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported export formats	CSV, HTML, PDF, XML, TSV
Mapping with VBR report	Backups > Risk Analysis > Client Risk Analysis

The following table shows the filters for Client Risk Analysis report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Filter	Column	Description
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Client	Client is Active	The default selection is **Yes**. By default, active clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select **No** if you want to view the report for all the clients.
Schedule	Schedule /Level Type	Select one or more schedule types like Full, Incremental etc. to view data for the selected schedule types.
Job	Job Status	Select a Job Status like Successful or Partially Successful or both to view data for the selected job status in the report.

Example of filter usage: Run the Client Risk Analysis report to include all clients (both active and non-active) by selecting **Client is Active** as **No**.

The following enhancements have been made in the Client Risk Analysis report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.
- Earlier there was a **Host** filter with **Host is Active** column. The **Host** filter has been removed. The **Host is Active** column is now renamed as **Client is Active** column and exists under the **Client** filter. The default value of **Client is Active** column is **Yes**.
- The default value of **Job Status** column under **Job** filter has been changed to **Successful**.

Risk Analysis > Client Coverage report

This is a report where a .CSV file can be imported and compared to the existing backup solution to determine if there are systems that are not being protected correctly. The purpose of this report is to show what hosts are not backed up because the backup application is not even aware of them. The report compares what OpsCenter hosts are known to be backed up with an external list that is fed in by .csv file. The list can come from a content management database (CMDB), DNS listings or any other authoritative source of what hosts should be backed up. The report works across all backup applications and shows you what backup application and policy executed the backup and the time of the last full or incremental backup.

The Client Coverage report tells you whether all clients in your environment are being backed up or not. OpsCenter can only report on clients that have already been defined and configured for backups. This report helps you to identify the clients that are a part of your environment but are not known to OpsCenter. These clients may not be getting backed up because of backup software not being installed or the clients not being configured for backups.

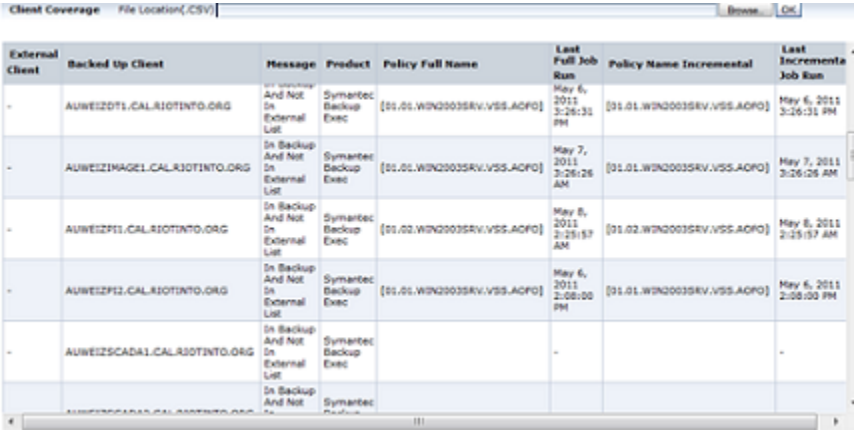
To run this report, you must specify a CSV file (comma-separated value) that contains a complete and authoritative inventory of all servers across the enterprise. Some of the independent sources of server inventory across the enterprise which can be used to generate a CSV file are the following:

- Configuration Management Database (CMDB)
- Asset Management System
- Domain Name System (DNS)
- Homegrown databases
- Spreadsheet

OpsCenter imports data from the CSV file and compares the list of clients (available in CSV) with the clients known to OpsCenter. The clients which are present in CSV but not in OpsCenter can be easily identified from this report.

Figure 2-57 shows a sample view of the Client Coverage report.

Figure 2-57 Client Coverage report



Note: The CSV file must be located on the machine from where you are running the Client Coverage report. See "About comparison of clients listed in CSV and OpsCenter" on page 206. for more information on how the comparison takes place.

The following table provides details on each column that is displayed in the report:

External Client	Name of the client that appears in the CSV file. **Note:** A client may be known by multiple names and all the names may be documented in the CSV file. The name that appears in the External Client column is the first name that is documented in the CSV file. For example, if a CSV file lists multiple names for a client such as, myhost, myhost.vtas.com, myhost.veritas.com, then myhost appears in the External Client column.
Backed Up Client	Name of the backed up client in OpsCenter
Message	The result of comparison. The following are the possible messages: ■ Match - Direct ■ Match - FQDN vs. Short name ■ In External List And Not In Backup The Client Coverage report helps you to identify these clients which are present in your environment but are not known to OpsCenter. You must verify if these clients are being backed up. See "About comparison of clients listed in CSV and OpsCenter" on page 206.
Product	A list of backup products used for backing up the client, such as, NetBackup.
Policy Full Name	The backup policy associated with the client when the last full backup was successful
Last Full Job Time	This is the time when the last full backup was successful for the specific client.
Policy Name Incremental	The backup policy associated with the client when the last incremental backup was successful.
Last Incremental Job Time	This is the time when the last incremental backup was successful for the specific client.

The following are details associated with the Client Coverage report:

Report Name	Client Coverage
Report Category	Client
Where to Locate	Report > Report Templates > Client Reports > Risk Analysis > Client Coverage

Report Purpose	This report shows a comparison of the list of clients being backed up against an independently-sourced list (like CMDB, third party and homegrown asset management systems) of clients.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Client
Report Display	Tabular
Drill down report	No
Can be scheduled	No
Supported export formats	PDF, CSV, TSV, HTML, XML
Mapping with VBR report	Backups > Risk Analysis > Client Risk Analysis > Client Coverage

The following table shows the filters for Client Coverage report and how you can use these filters to view specific data in the report.

View Selection	Select a view from the **Select View Name** drop-down list. This can be done to view the report for a specific location, department etc. In case you select a specific view, you must create the CSV file that contains the clients in the particular view only. For example, if you want to see the Client Coverage report for HR department in Canada, then the CSV file must contain the client list specific to the HR department in Canada.
Additional Parameters	

Client Selection Criteria

All

- **All**: This is selected by default. Comparison results for all the clients are displayed.
- **In external list but was never backed up**: Select this option if you want to view the clients that are present in your environment but are not known to OpsCenter. You must verify if these clients are being backed up.
- **Getting backed up but not in external list**: Select this option if you want to view the clients that are known to OpsCenter but not present in the CSV file. This may be due to several reasons like machine not being available in the network or machine not registered in the DNS, and so on.
- **Is matching (Direct)**: Select this option if you want to view the clients for which host name in CSV is exactly the same as the host name in OpsCenter. For example, myhost.vtas.com in CSV and myhost.veritas.com in OpsCenter.
- **Is matching (FQDN vs Short Name)** : Select this option if you want to view the clients for which the host name is an FQDN in CSV and a short name in OpsCenter or a short name in CSV and an FQDN in OpsCenter. For example, if the CSV file contains myhost.veritas.com and OpsCenter contains myhost, then the comparison result is Match - FQDN vs. Short Name. Similarly, if the CSV file contains myhost and OpsCenter contains myhost.veritas.com, then the client is displayed in the report.
- **Was getting backed up but not in external list**: Select this option if you want to view the clients that were being backed up earlier but not present in the CSV file.
- **Was matching (Direct)**: Select this option if you want to view the clients for which host name in CSV was exactly the same as the host name in OpsCenter. For

example, myhost.vtas.com in CSV and myhost.veritas.com in OpsCenter.

- **Was matching (FQDN vs Short Name)** : Select this option if you want to view the clients for which the host name was an FQDN in CSV and a short name in OpsCenter or a short name in CSV and an FQDN in OpsCenter.

Wild Card

You can specify a part of the backed up client name so that the report shows data only for the specific backed up clients that are of your interest. For example, to see details of all backed up servers running Oracle which are known to have a string "ora" somewhere in the host name, you can type the following:

- %ora% - Include or exclude all backed up clients with ‘ora' anywhere in the host name
- ora - Include or exclude all backed up clients named ora.
- ora% - Include or exclude all backed up clients whose names start with ora.
- %ora - Include or exclude all backed up clients whose names end with ora.
- Similarly, you can specify multiple search strings as follows:
  - %ora%, %syb% - Include or exclude all OpsCenter hosts with Ora or Syb anywhere in the backed up client name.

Note: This search is applicable only for Backed up clients and not the External Clients.

Note: The search is not case-sensitive. For example, if you search for Ora, you may find results like ora, Ora, oRa, and so on.

Display Options

Type a report description.

Select the number of rows you want displayed on a single page.

Example of filter usage: To view details of all backed up servers running VMWare that are known to have 'vm' somewhere in the host name, type %vm% in the Wild Card text box.

About CSV formats

The CSV file required as an input to the Client Coverage report can be created using a text editor or Microsoft Excel application.

A typical CSV file format is as follows:

Host1_name1,Host1_name2,Host1_name3,Host1_name4

Host2

Host3

Note: Host1_name1,Host1_name2,Host1_name3,Host1_name4 are multiple names of the same machine. Multiple names for the same machine may exist due to many reasons like because of a machine having multiple Network Interface Cards etc.

Note: Each host machine exists in a new line. For example, Host1, Host2, and Host3 all exist in three separate lines.

Here is a sample CSV format:

css-bin3,css-bin3.veritas.com

macy.veritas.com,macy,macy.vtas.com

css-bin10.veritas.com

Note: There is no space after the comma in the CSV file.

About comparison of clients listed in CSV and OpsCenter

OpsCenter imports data from the CSV file and compares the list of clients (available in CSV) with the clients known to OpsCenter.

The Client Coverage report shows any or all of the following outcomes after comparison:

Client is in External Client and Backed Up Client list	This means that a client exists in both the CSV file and OpsCenter database. **Note:** In case multiple names for a system are present in CSV and OpsCenter, then all the names present in CSV are compared with each name in OpsCenter till a match is obtained. The comparison results in this case may be one of the following: ■ Match - Direct: This happens when the host name in CSV is exactly the same as the host name in OpsCenter. For example, myhost.veritas.com in CSV and myhost.vtas.com in OpsCenter. ■ Match - FQDN vs. Short Name: This happens when the host name is an FQDN in CSV and a short name in OpsCenter or a short name in CSV and an FQDN in OpsCenter. For example, if the CSV file contains myhost.veritas.com and OpsCenter contains `myhost`, then the comparison result is Match - FQDN vs. Short Name. Similarly, if the CSV file contains `myhost` and OpsCenter contains myhost.veritas.com, then the comparison result is Match - FQDN vs. Short Name.
In External List And Not In Backup	The Client Coverage report helps you to identify these clients which are present in your environment but are not known to OpsCenter. You must verify if these clients are being backed up.
In Backup And Not In External List	This happens when the host name is known to OpsCenter but not present in the CSV file. This may be due to several reasons like computer not being available in the network or computer not registered in the DNS, and so on.

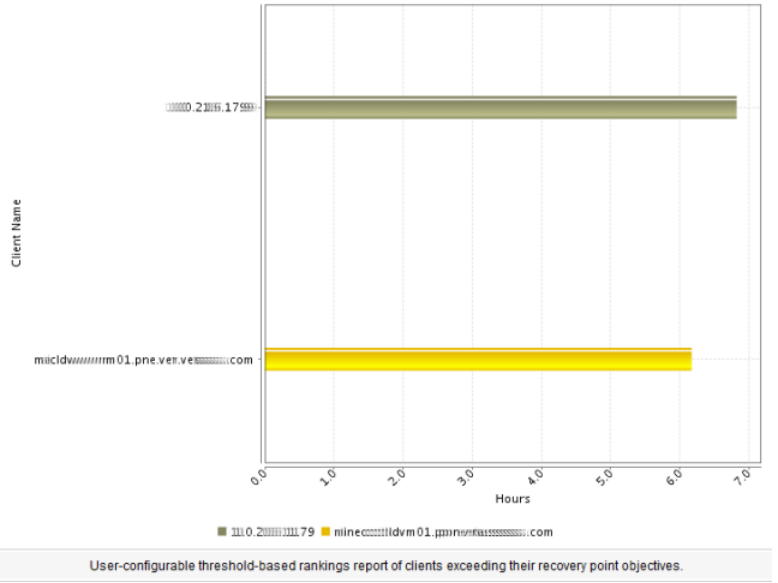
Risk Analysis > Recovery Point Objective report

Recovery Point Objective (RPO) and Recovery Time Objective (RTO) have emerged as generally accepted metrics for client recoverability. This report ranks all clients by the amount of time that is elapsed since their last successful backup. The report shows how long it has been since each system has had a successful backup and therefore would have difficulty meeting a Recovery Point. In larger environments being able to run this report on a weekly basis will quickly show where there is risk due to systems that have not been backed up in a pre-determined amount of time.

In contrast to the Client Risk Analysis report, the level of granularity is the client level and thus clients with multiple backup policies are represented by the policy with most recent success. It is recommended that this report not be used for multi-policy clients. The **client "IsActive"** filter allows for those hosts that are not actively being backed up to be omitted. The elapsed time in the report is always between now and the last successful backup. The report is effective in its graphical rankings format placing the clients with longest elapsed time at the top.

Figure 2-58 shows a sample view of the Recovery Point Objective report.

Figure 2-58 Recovery Point Objective report



In the example, no backups have been run for nearly 10 hours for all the clients. This means that for the five systems on the report, the best RPO possible would be nearly 10 hours. If you have committed to an 8 hour RPO, then these systems need to be backed up quickly to be able to meet that SLA.

The following are details associated with the Recovery Point Objective report:

Report Name	Recovery Point Objective
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Risk Analysis > Recovery Point Objective
Report Purpose	User-configurable threshold-based rankings report of clients exceeding their recovery point objectives.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Rankings (Chart)

Drill down report	No
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, HTML, XML
Mapping with VBR report	Backups > Risk Analysis > Recovery Point Objective - RPO

The following table shows the filters for Recovery Point Objective report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list.
Client	Client is Active	The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select **No** if you want to view the report for all the clients.
	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.

Filter	Column	Description
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
	Schedule Name	Select one or more schedule names to view data for the selected schedule names.
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	The value selection for Job Type is mandatory. By default, Backup jobs are shown in the report. You can select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.

Example of filter usage: You may run the report for specific primary servers to view details for the clients backed up by specific primary servers.

The following enhancements have been made in the Stored Backup Images on Media report:

- You can now click (drill down) the bar for each client and view Recovery Point Objective report for job type, schedule/level type and policy name.
- The **Job Type** column has been added under the **Job** filter.
- For the **Policy** filter, the following columns have been added:
  - Policy Keyword
  - Policy Type
- The **Schedule** filter has been added.
- The following **Report On** parameters have been added:
  - Job Type
  - Policy Name
  - Schedule/Level Type
- Earlier there was a **Host** filter with **Host is Active** column. The **Host** filter has been removed. The **Host is Active** column is now renamed as **Client is Active** column and exists under the **Client** filter. The default value of **Client is Active** column is **Yes**.

Clients Not Backed up report

This report provides a list of NetBackup clients that have not been backed up or clients for which all backups failed during the reporting period.

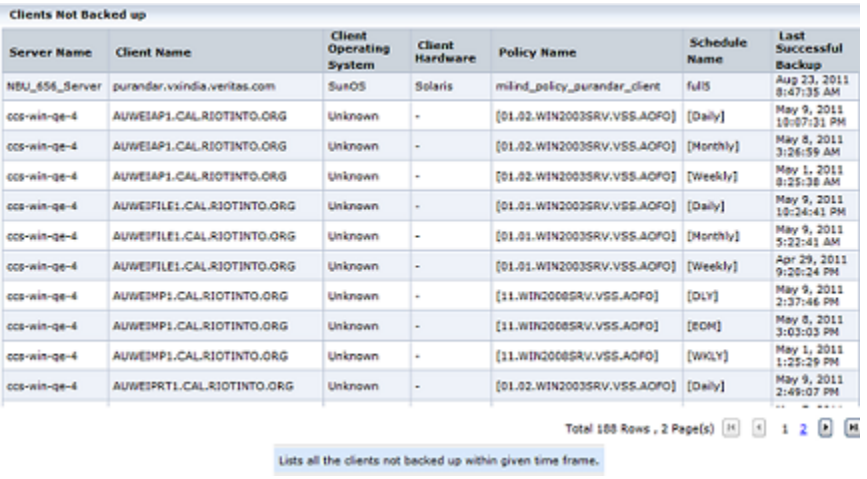
You can determine if all jobs of a policy and client combination have failed or have not been initiated during the reporting period. You can filter by type of policy like SharePoint, Oracle, Windows NT and so on.

The client name is displayed multiple times in the report if the client has multiple NetBackup policies that are associated with it and none of the policies are run during the reporting period. The report shows details like policy name, schedule name, and date of the last successful backup.

You can now view data in this report for a specific client view by selecting a client view from the View filter. Earlier you could only filter the report data for a primary server view.

Figure 2-59 shows a sample view of the Clients not backed up report.

Figure 2-59 Clients Not Backed up report



Clients Not Backed up

Server Name	Client Name	Client Operating System	Client Hardware	Policy Name	Schedule Name	Last Successful Backup
NBU_656_Server	purandar.vxindia.veritas.com	SunOS	Solaris	milind_policy_purandar_client	full5	Aug 23, 2011 8:47:35 AM
ccs-win-qe-4	AUWEIAP1.CAL.RIOTINTO.ORG	Unknown	-	[01.02.WIN2003SRV.VSS.AOFO]	[Daily]	May 9, 2011 10:07:31 PM
ccs-win-qe-4	AUWEIAP1.CAL.RIOTINTO.ORG	Unknown	-	[01.02.WIN2003SRV.VSS.AOFO]	[Monthly]	May 8, 2011 3:26:59 AM
ccs-win-qe-4	AUWEIAP1.CAL.RIOTINTO.ORG	Unknown	-	[01.02.WIN2003SRV.VSS.AOFO]	[Weekly]	May 1, 2011 8:25:38 AM
ccs-win-qe-4	AUWEIFILE1.CAL.RIOTINTO.ORG	Unknown	-	[01.01.WIN2003SRV.VSS.AOFO]	[Daily]	May 9, 2011 10:24:41 PM
ccs-win-qe-4	AUWEIFILE1.CAL.RIOTINTO.ORG	Unknown	-	[01.01.WIN2003SRV.VSS.AOFO]	[Monthly]	May 9, 2011 5:22:41 AM
ccs-win-qe-4	AUWEIFILE1.CAL.RIOTINTO.ORG	Unknown	-	[01.01.WIN2003SRV.VSS.AOFO]	[Weekly]	Apr 29, 2011 9:20:24 PM
ccs-win-qe-4	AUWEIMP1.CAL.RIOTINTO.ORG	Unknown	-	[11.WIN2008SRV.VSS.AOFO]	[DLY]	May 9, 2011 2:37:46 PM
ccs-win-qe-4	AUWEIMP1.CAL.RIOTINTO.ORG	Unknown	-	[11.WIN2008SRV.VSS.AOFO]	[EOM]	May 8, 2011 3:03:03 PM
ccs-win-qe-4	AUWEIMP1.CAL.RIOTINTO.ORG	Unknown	-	[11.WIN2008SRV.VSS.AOFO]	[WKLY]	May 1, 2011 1:25:29 PM
ccs-win-qe-4	AUWEIPRT1.CAL.RIOTINTO.ORG	Unknown	-	[01.02.WIN2003SRV.VSS.AOFO]	[Daily]	May 9, 2011 2:49:07 PM

Total 188 Rows , 2 Page(s) 1 2

Lists all the clients not backed up within given time frame.

The following are details for the Clients Not Backed up report:

Report Name	Clients Not Backed up
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Clients Not Backed up

Report Purpose	This report lists all the clients that are not backed up in the selected timeframe.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Client > Clients Not Backed up
Deviation from NOM	**Last Successful Backup** column shows the job end time in OpsCenter. However, this column shows the job start time in NOM.

The following table shows the filters for Clients not backed up report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Policy	Policy Type	Select one or more policy types like NDMP, FlashBackup etc. to view data for the selected policy types.

Example of filter usage: You may run the Clients not Backed up report for a specific policy type like FlashBackup to view backup details for the specific policy type.

The following enhancements have been made in the Clients Not Backed up report:

- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the **Years** tab on top-right corner of the Tabular Backup Report.
- **UNKNOWN** has been added as a value for **Policy Type** column in the Policy filter. You can now filter report data for policy types that are unknown. In earlier versions of OpsCenter, the unknown policy types were shown as blank.

Virtual Client Summary report

The Virtual Client Summary report shows details of all virtual clients of a NetBackup primary server. Using this report, you can determine whether these virtual clients were backed up by NetBackup or not. Thus, you can report on the virtual clients that need to be protected. It also shows at a glance that last time the client was backed up. .

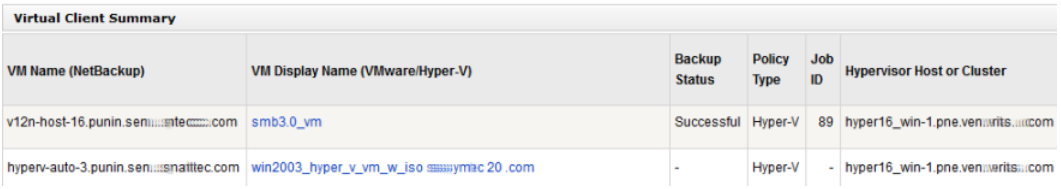
You can also drill down in this report to see the job details of a specific virtual client.

OpsCenter can poll the vCenter or Hyper-V server to determine what systems have been configured and compare that with the NetBackup policies that have been created. This helps to track those virtual machines that are not being protected by any NetBackup polices.

Note: Cheking that the virtual machine is added in the is possible opnly when the policy is manually created or when successful backup has happened for the virtual machine.

Figure 2-60 shows a sample view of the Virtual Client Summary report.

Figure 2-60 Virtual Client Summary report



Virtual Client Summary

VM Name (NetBackup)	VM Display Name (VMware/Hyper-V)	Backup Status	Policy Type	Job ID	Hypervisor Host or Cluster
v12n-host-16.punin.sen...nte....com	smb3.0_vm	Successful	Hyper-V	89	hyper16_win-1.pne.ven...rits....com
hyperv-auto-3.punin.sen...snatttec.com	win2003_hyper_v_vm_w_iso ...ymac 20 .com	-	Hyper-V	-	hyper16_win-1.pne.ven...erits....com

The sample report shows an example of vCenter server that has a number of VMs configured. Most of the virtual clients do not exist in any NetBackup policy and need to be added or protected. It also shows at a glance the last time the system was backed up (from the **Last Successful Backup Time** column).

The Virtual Client Summary report shows the following columns:

Virtual Server Name	Name of the virtual server host such as VMware or Hyper-V server
Data Store	Data store associated with the virtual client. Data Store is where virtual machine configuration files are stored.
Host	Name of the backup host.

Virtual Client Name	Display name of the virtual client running on a virtual server. Multiple virtual clients may have the same IP address. But they can be identified by their UUIDs. UUID is a unique identifier of a virtual client. **Note:** Click the virtual client name link to view its job details.
UUID	BIOS UUID for the virtual client.
VM Host Name	
Instance ID	
IP Address	IP address of the virtual client
Type	Type of the virtual server that this client belongs to, such as VMware or Hyper-V
Server Name	Name of the NetBackup Primary Server, which backs up this virtual client This field is shown blank if this virtual client is not backed up by any NetBackup primary server
Exists in a Policy	This status field that describes whether backing up this virtual client is defined in any NetBackup policy or not If a NetBackup Primary Server backs up this client, this field displays “Yes”. If it shows “No”, it means that this client should be backed up and be protected.
Last Backup Time	Time when this virtual client was backed up last This field displays **'-'** if the client is not defined in a backup policy or it is yet to be backed up.

The following are details for the Virtual Client Summary report:

Report Name	Virtual Client Summary
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Virtual Client Summary

Report Purpose	This report shows details of the VMware or Hyper-V servers that you have configured with NetBackup. It also shows whether these virtual machines are protected by NetBackup or not.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	Yes See "Virtual Client Job Details" on page 215.
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Client > Virtual Client Summary

The following table shows the filters for Virtual Client Summary report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.

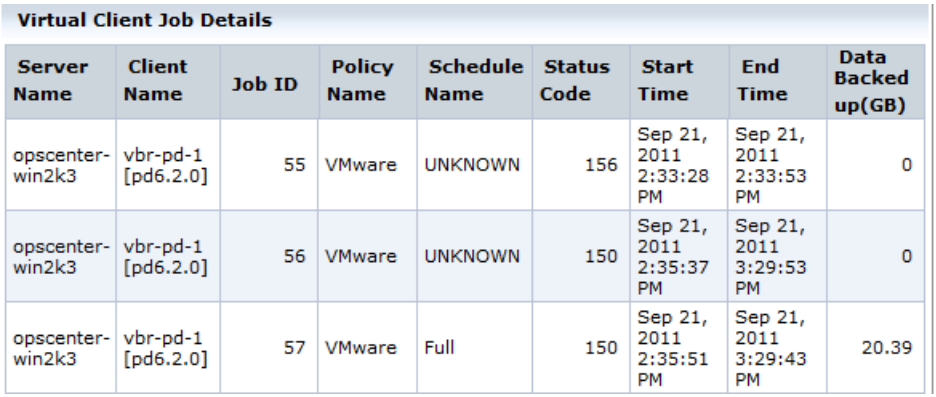
Example of filter usage: You may run the Virtual Client Summary report for a specific client view to view details for the specific clients.

Virtual Client Job Details

This drilldown report is obtained when you click a virtual client name (link) from the Virtual Summary report. This report shows details for a virtual client like policies, schedules, backup start and end time, data backed up etc.

Figure 2-61 shows a sample view of the Virtual Client Job Details report.

Figure 2-61 Virtual Client Job Details



Virtual Client Job Details

Server Name	Client Name	Job ID	Policy Name	Schedule Name	Status Code	Start Time	End Time	Data Backed up(GB)
opscenter-win2k3	vbr-pd-1 [pd6.2.0]	55	VMware	UNKNOWN	156	Sep 21, 2011 2:33:28 PM	Sep 21, 2011 2:33:53 PM	0
opscenter-win2k3	vbr-pd-1 [pd6.2.0]	56	VMware	UNKNOWN	150	Sep 21, 2011 2:35:37 PM	Sep 21, 2011 3:29:53 PM	0
opscenter-win2k3	vbr-pd-1 [pd6.2.0]	57	VMware	Full	150	Sep 21, 2011 2:35:51 PM	Sep 21, 2011 3:29:43 PM	20.39

The following are details associated with the Virtual Client Job Details report:

Report Name	Virtual Client Job Details
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Virtual Client Summary (click the virtual client name) > Virtual Client Job Details
Report Purpose	This report shows the details of selected virtual machine.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Client > Virtual Client Summary (click the virtual client name)

The following table shows the filters for Virtual Client Job Details report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.

Example of filter usage: You may run the Virtual Client Job Details report for a specific client to view details for the specific clients.

Job Success by Client report

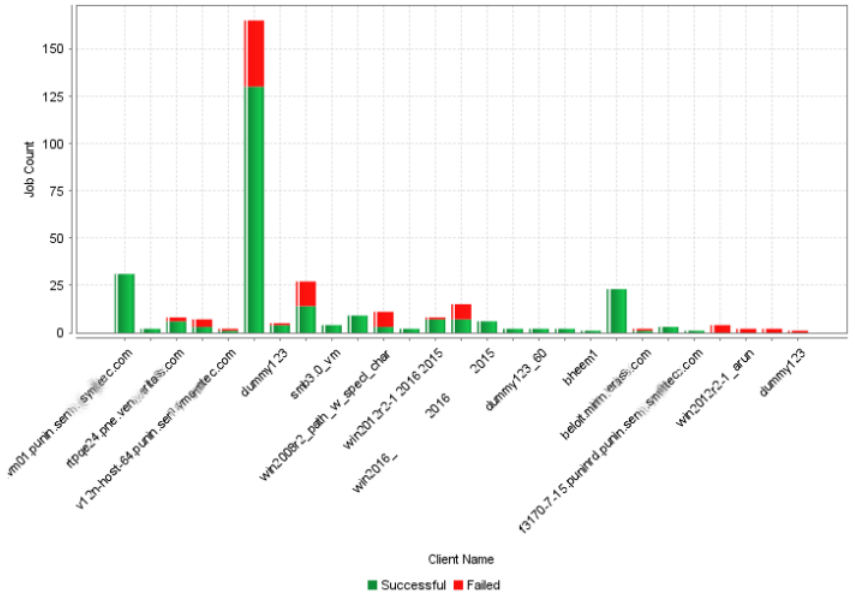
This report shows the rate of success for client jobs.

The bar chart shows totals for successful, partially successful, and failed jobs for each client that is backed up by the selected primary servers. Tool tips in the bars show these job counts. The tool tips for each client also include links to a drill-down report showing details for all job types.

Click **Show Chart as Table** link to display job counts of successful, partially successful, or failed jobs for each client in the selected timeframe.

Figure 2-62 shows a sample view of the Job Success by Client report.

Figure 2-62 Job Success by Client report



The following are details for the Job Success by Client report:

Report Name	Job Success by Client
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Job Success by Client
Report Purpose	This report shows the job success by client. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical (Chart)
Drill down report	Job Details by Client
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Client > Job Success by Client

The following table shows the filters for Job Success by Client report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: You may run the Job Success by Client report for a specific primary server to view job success details for the clients that are protected by the specific primary server.

The following enhancements have been made for the Job Success by Client report:

- You can now drill down by clicking the bars in the report. A drill-down report called Job Details by Client is available.
- The Report On parameter that let you group the report by Exit Status has been removed from the **Modify Display Options** page.

Job Details by Client

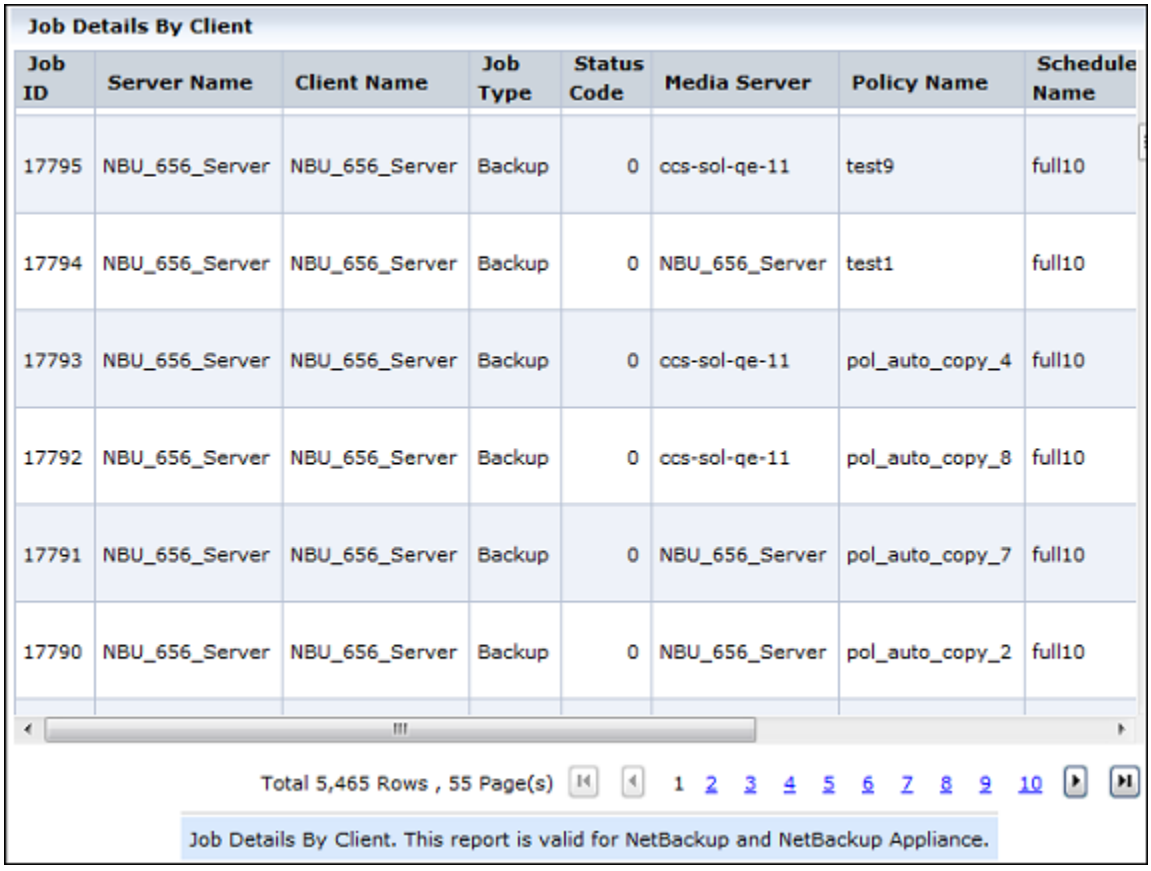
This report can be drilled down either by clicking the bar charts in Jobs Success by Client report or from the **Client Name** column in Jobs Success by Client (Tabular) report. This drilldown report lists details of all the jobs for the selected client and time frame.

The table includes details like Job type, status code, and media server name.

The report now also displays the **Media Server** column.

Figure 2-63 shows a sample view of the Job Details by Client report.

Figure 2-63 Job Details by Client



Job Details By Client

Job ID	Server Name	Client Name	Job Type	Status Code	Media Server	Policy Name	Schedule Name
17795	NBU_656_Server	NBU_656_Server	Backup	0	ccs-sol-qe-11	test9	full10
17794	NBU_656_Server	NBU_656_Server	Backup	0	NBU_656_Server	test1	full10
17793	NBU_656_Server	NBU_656_Server	Backup	0	ccs-sol-qe-11	pol_auto_copy_4	full10
17792	NBU_656_Server	NBU_656_Server	Backup	0	ccs-sol-qe-11	pol_auto_copy_8	full10
17791	NBU_656_Server	NBU_656_Server	Backup	0	NBU_656_Server	pol_auto_copy_7	full10
17790	NBU_656_Server	NBU_656_Server	Backup	0	NBU_656_Server	pol_auto_copy_2	full10

Total 5,465 Rows , 55 Page(s) 1 2 3 4 5 6 7 8 9 10

Job Details By Client. This report is valid for NetBackup and NetBackup Appliance.

The following is more information on the Job Details by Client report:

Report Name	Job Details by Client
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Job Success by Client (click the bar chart) or Job Success by Client (Tabular) (click the **Client Name** column)
Report Purpose	This report lists job details for client. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client

Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Client > Job Success by Client > Job Details by Client

The following table shows the filters for Job Details by Client report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.

Example of filter usage: You may run the Job Details by Client report for specific clients or primary servers.

Job Success by Client (Tabular) report

This report shows the rate of success for client jobs. The tabular report shows totals for successful, partially successful, and failed jobs for each client that is backed up by the selected primary servers.

You can also drill-down from the following columns in the table:

- **Client Name**
- **Number of Successful Jobs**
- **Number of Partially Successful Jobs**
- **Number of Failed Jobs**

Figure 2-64 shows a sample view of the Job Success by Client (Tabular) report.

Figure 2-64 Job Success by Client (Tabular) report

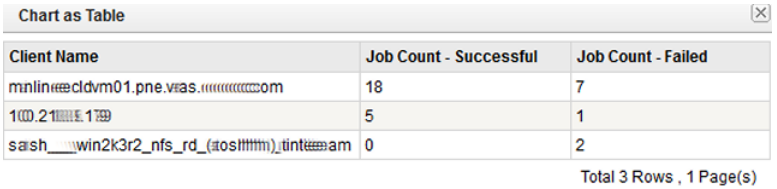


Chart as Table

Client Name	Job Count - Successful	Job Count - Failed
mnlin[illegible]cldvm01.pne.v[illegible]as.[illegible]om	18	7
1[illegible].21[illegible].1[illegible]	5	1
sa[illegible]sh___\win2k3r2_nfs_rd_([illegible]) tint[illegible]am	0	2

Total 3 Rows , 1 Page(s)

The following are details for the Job Success by Client (Tabular) report:

Report Name	Job Success by Client
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Job Success by Client (Tabular)
Report Purpose	This report shows the job success by client. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	Job Details for Client Successful Job Details for Client Partially Successful Job Details for Client Failed Job Details for Client
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Client > Job Success by Client

The following table shows the filters for Job Success by Client report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Filter	Column	Description
Primary Server	Primary Server	Select one or more primary servers to view data for the clients backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Client	Client Name	Select one or more clients to view data for the clients.

Example of filter usage: You may run the Job Success by Client (Tabular) report for specific clients to view job success details for the selected clients.

Client summary dashboard report

This report summarizes several parameters for each client for the selected server context and acts as a dashboard of NetBackup activities. You can use drilldown links to view client detail reports for many of the columns in the table.

The drilldown reports provide information about the client and answer the following questions:

- What is the server name, IP address, and operating system type?
- How much volume for a client is backed up?
- How many successful, partially successful, and failed jobs for the client?
- What is the number of restore jobs that run for the client?
- What is the average job throughput?

You can now view data in this report for a specific client view by selecting a client view from the View filter. Earlier you could only filter the report data for a primary server view.

The report can also be used as a tool to monitor the health of backup activities for your managed clients.

Total jobs for client report	This drilldown report from the **Number of Total Jobs** column lists all the jobs for the selected client and time frame. The job details include policy name, schedule name, and throughput (KB/sec). This drilldown report uses the run time parameters that are passed from the main report.

Successful jobs for client report	This drilldown report from the **Number of Successful Jobs** column lists the successful jobs for the selected client and time frame. The report lists job details, such as, job type, policy name, start and end times, and job duration. This drilldown report uses the run time parameters that are passed from the main report.
Partially successful jobs for client report	This drilldown report from the **Number of Partial Successful Jobs** column shows the partially successful jobs for the selected client and time frame. The report lists job details, such as, job type, policy name, start and end times, and job duration. This drilldown report uses the run time parameters that are passed from the main report.
Failed jobs for client report	This drilldown report from the **Number of Failed Jobs** column lists the failed jobs for the selected client and time frame. Any jobs with an exit status other than 0 or 1 are considered to be failed jobs. The report lists job details, such as, job type, policy name, start and end times, and job duration. This drilldown report uses the run time parameters that are passed from the main report.
Restore jobs for client report	This drilldown report from the **Number of Restore Jobs** column lists restores job details for the selected client. It provides details like policy name, schedule name, and throughput (KB/sec). This drilldown report uses the run time parameters that are passed from the main report.

BMR client configuration backup failures report

If a NetBackup policy has the Collect BMR Info flag set, the job backs up BMR (Bare Metal Restore) client configuration. This job type starts one or more dependant jobs to back up the client data.

This report shows all jobs that failed to completely back up a BMR client configuration, but their related child jobs (client data backup jobs) were partially or fully successful.

You can now view data in this report for a specific client view by selecting a client view from the **View** filter. Earlier you could only filter the report data for a primary server view.

Jobs by application report

This report uses the NetBackup policy type to simulate an application level report. For example, an Oracle policy type implies an Oracle application. The report then lets you see all Oracle backups.

The table in this report organizes jobs in the table by server, client, and application and includes the backup size in MBs and the number of files. The Application (policy type) column provides a drilldown link to job details for the respective application.

There is a drilldown report available from the **Application** column of the table of the main report. This drilldown report lists all the jobs for the selected client and policy type. The table includes job details such as, job ID, exit status, and job start and end times, and a count of files.

This drilldown report uses the run time parameters that are passed from the main report.

SAN client jobs report

This report shows all the jobs for selected Fiber Transport (FT) media servers and selected SAN clients.

The report answers the following questions and provides the following information:

- Did the job run on a LAN or an FT pipe?
- Are two different clients backed up by a single media server, thus reducing the throughput?
- A list of all the FT media servers
- A list of all the SAN clients.

About Cloud reports

Cloud reports provide information for the NetBackup data written to a cloud storage location including storage forecasting, trending, throughput performance, and chargeback costs of storing NetBackup data in a specific cloud storage provider.

Cloud reports are only for NetBackup servers that have Cloud configured on them.

OpsCenter supports the following cloud providers:

Note: Among all Amazon S3-compatible cloud providers that NetBackup supports, OpsCenter supports monitoring and reporting of Amazon (S3) and Amazon GovCloud (S3) providers only.

If you have configured cloud storage servers for AT&T or Rackspace providers and upgraded to 8.1.2, stale information is displayed in cloud reports for AT&T and Rackspace providers.

The following Cloud reports are available:

Job Success Rate	See "Job Success Rate report" on page 226.
Data Expiring in Future	See "Data Expiring in Future" on page 229.
Cloud Metering	See "Cloud Metering" on page 231.
Average Data Transfer Rate	See "Average Data Transfer Rate" on page 233.
Cloud Metering Chargeback	See "Cloud Metering Chargeback" on page 236.

Job Success Rate report

This report gives the success rate of backup jobs on the Cloud for each configured Cloud storage provider. It also helps you to compare job success rates for different Cloud storage providers.

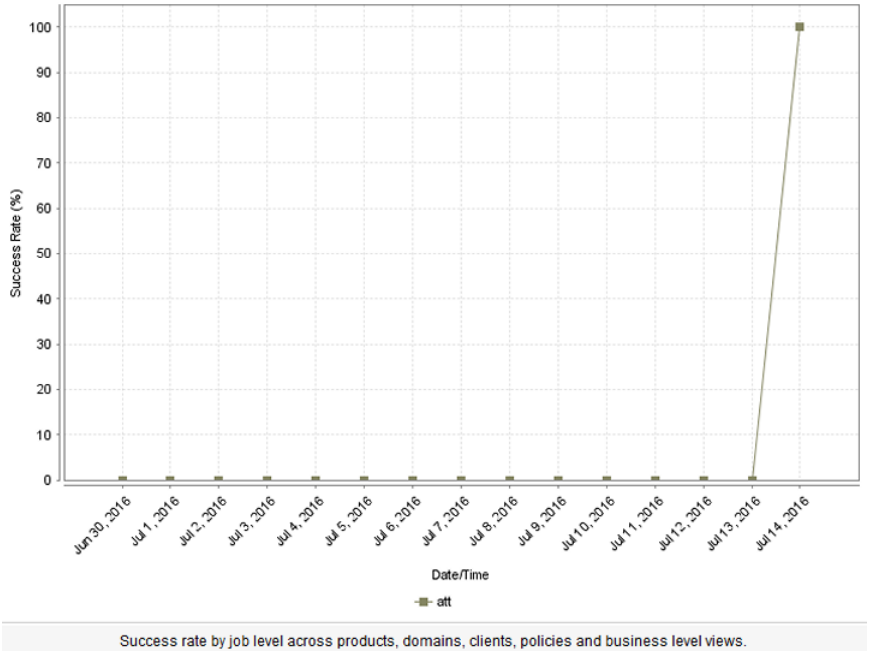
You can also view the Success Rate (%) for a specific job end date or time in a tabular format. Click **Show Table** to view the details in a tabular format.

The X-axis shows the Job end time and date and Y-axis shows the Job Success Rate in percentage. The Legend defines different colors for specific storage providers.

Click **Show Chart as Table** to view details in the tabular format.

Figure 2-65 is a sample view of the Job Success Rate report.

Figure 2-65 Job Success Rate report



Success rate by job level across products, domains, clients, policies and business level views.

The following are details associated with the Job Success Rate report:

Report Name	Job Success Rate
Report Category	Cloud Reports
Where to Locate	Report > Report Templates > Cloud Reports > Job Success Rate
Report Purpose	Success rate by job level across products, domains, clients, policies and business level views.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views, clients, or primary servers.

The following table shows the filters for Job Success Rate report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list.
Client	Client is Active	The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select **No** if you want to view the report for all the clients.
	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.

Filter	Column	Description
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Product Type	Select one or more backup products to view data for the selected products.
Success Rate	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.

Example of filter usage: You may run the Job Success Rate report for specific clients to view details only for the specific clients.

You can also select time interval for which you want to group the records. For example, if you select 1 month as the Time Frame and 10 days as the Group By interval, the report shows records in three chunks of data grouped by 10 days.

Data Expiring in Future

The report shows how much data on the Cloud is going to expire for each Cloud provider. By default, the report shows the data expiring each day for the next seven days.

The report shows the total expired backup size and also the number of images that are going to expire in the next seven days for each Cloud provider. The Y1 axis gives the total expired backup size and the Y2 axis indicates the number of images that are going to expire. Click **Show Chart as Table** to view the data in a tabular format.

The following details are associated with the Data Expiring in Future report:

Report Name	Data Expiring in Future
Report Category	Cloud Reports
Where to Locate	Report > Report Templates > Cloud Reports > Data Expiring in Future
Report Purpose	This report shows the data expiring each day for the next 7 days.
Supported products	NetBackup, NetBackup Primary Appliance

Applicable View	Primary Server
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views, clients, or primary servers.

The following table shows the filters for Data Expiring in Future report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list.
Client	Client is Active Client Name Client OS	The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select **No** if you want to view the report for all the clients. Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed. Select one or more client OS to view data for the selected client OS in the report.

Filter	Column	Description
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule/Level Type	Select one or more schedule types like CINC, Copy, Daily etc. to view data for the selected schedule types.
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types.
	Product Type	Select one or more backup products to view data for the selected products.

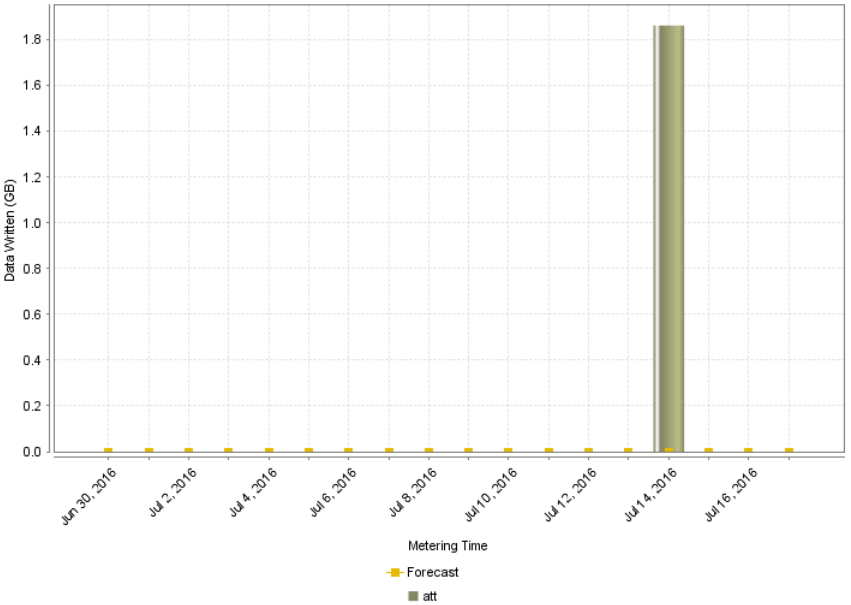
Example of filter usage: You may run the Data Expiring in Future report for specific clients to view details only for the specific clients.

Cloud Metering

This report shows the data written to the cloud. It also shows forecast and trend.

Figure 2-66 shows a sample view of the Cloud Metering report.

Figure 2-66 Cloud Metering report



The following are details associated with the Cloud Metering report:

Report Name	Cloud Metering
Report Category	Cloud Reports
Where to Locate	Report > Report Templates > Cloud Reports > Cloud Metering
Report Purpose	Historical view of data written to cloud per Cloud Provider.
Supported products	NetBackup **Note:** NetBackup Appliance is not supported.
Applicable View	Primary Server
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views or media servers.

The following table shows the filters for the Cloud Metering report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list.

Example of filter usage: You may run the Cloud Metering report for specific media servers to view details only for the specific media servers.

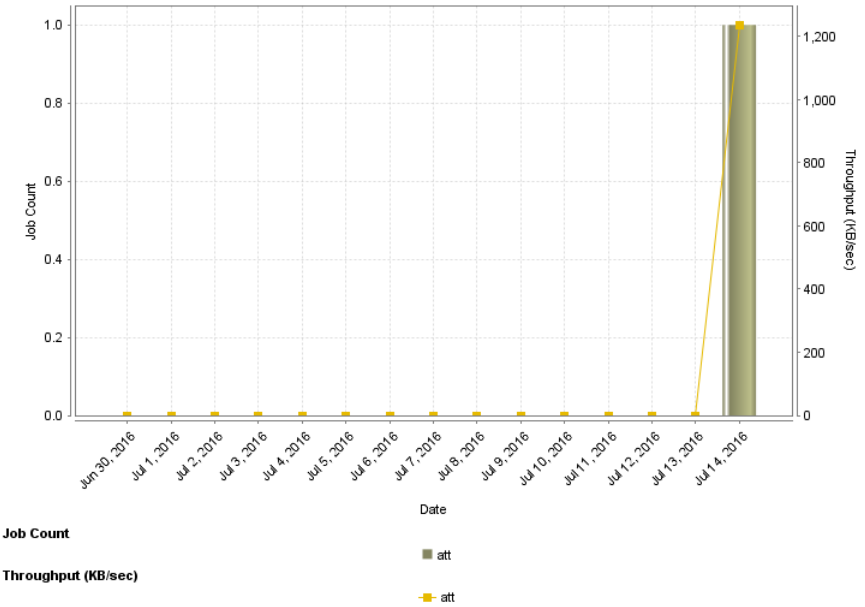
Average Data Transfer Rate

You can see the Cloud job count and throughput in KB/sec. The bars represent job count while the lines represent throughput.

This report gives an insight on the throughput for each Cloud Provider. If you are using services from multiple Cloud providers, you can compare and identify the Cloud provider that is providing a better throughput.

Figure 2-67 shows a sample view of the Average Data Transfer Rate report.

Figure 2-67 Average Data Transfer Rate report



The following are details associated with the Average Data Transfer Rate report:

Report Name	Average Data Transfer Rate
Report Category	Cloud Reports
Where to Locate	Report > Report Templates > Cloud Reports > Average Data Transfer Rate
Report Purpose	Data expiring each day for the next 7 days.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Historical
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views, clients, or primary servers.

The following table shows the filters for Average Data Transfer Rate report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list.
Client	Client is Active	The default selection is Yes. By default, Active Clients are displayed in the report. Hence the clients that are not actively backed up are omitted by default. Select **No** if you want to view the report for all the clients.
	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.
	Client OS	Select one or more client OS to view data for the selected client OS in the report.
Policy	Policy Data Classification Name	Select one or more policy data classification names to view data for the selected policy data classification names.
	Policy Keyword	Select one or more policy keyword to view data for the policies having the selected keyword.
	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.
Schedule	Schedule Name	Select one or more schedule names to view data for the selected schedules.

Filter	Column	Description
Job	Job Status	Select one or more Job Status like Failed, Missed, Partially Successful etc. to view data for the selected job status in the report.
	Job Transport Type	Select one or more transport types like FT, LAN, or Unknown to view data for the jobs that have the selected transport type.
	Product Type	Select one or more backup products to view data for the selected products.

Example of filter usage: You may run the Average Data Transfer Rate report for specific primary servers to view details only for the specific primary servers.

Cloud Metering Chargeback

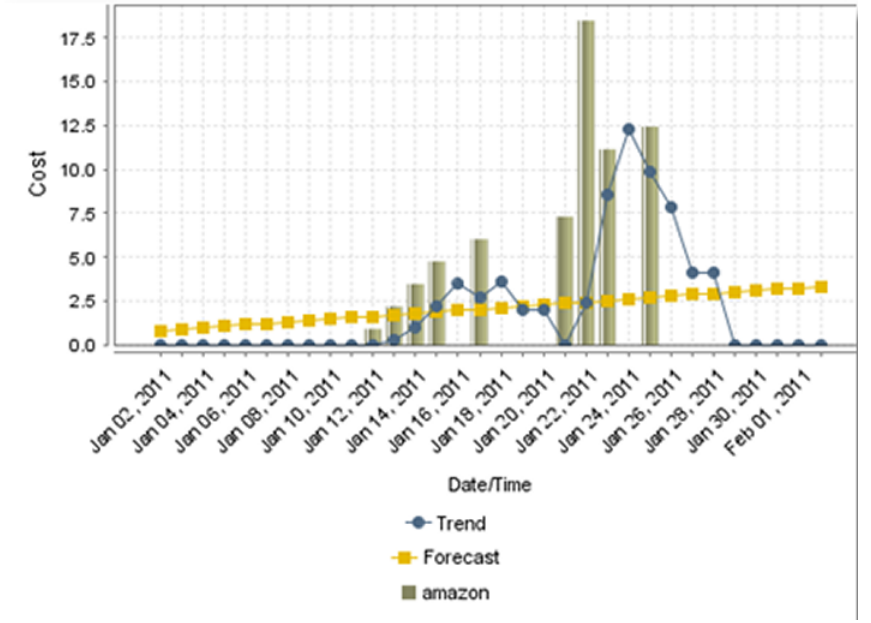
This report is valid for OpsCenter Analytics (a licensed version of OpsCenter). To run this report, you need a cost formula based on a cost variable that uses the **Storage Server** variable metric. To do this, first create a cost variable based on a variable metric named **Storage Size** and then create a cost formula based on this cost variable. Only the cost formulae that are based on the **Storage Server** variable metric appear in the **Cost Formula** drop-down list.

The Cloud Metering Chargeback report calculates how much you need to pay to the Cloud provider on a specific date. The forecast and trendlines help you understand how much you are going to spend on a particular Cloud provider in the future.

The Ranking view shows the amount you pay to each Cloud-provider. From the Ranking view, you can compare the price that you pay to each Cloud provider.

Figure 2-68 shows a sample view of the Cloud Metering Chargeback report.

Figure 2-68 Cloud Metering Chargeback report



The following are details associated with the Cloud Metering Chargeback report:

Report Name	Cloud Metering Chargeback
Report Category	Cloud Reports
Where to Locate	Report > Report Templates > Cloud Reports > Cloud Metering Chargeback
Report Purpose	Metering Chargeback
Supported products	NetBackup **Note:** NetBackup Appliance is not supported.
Applicable View	Primary Server
Report Display	Historical, Ranking
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML

You can edit the report and configure the timeframe or run the report for specific views or media servers.

The following table shows the filters for the Cloud Metering Chargeback report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Media Server	Media Server	Select one or more media servers to view data for the specific media servers in the report. All media servers that are attached to the primary servers in the OpsCenter console are shown in the **Value** drop-down list.

Example of filter usage: You may run the Cloud Metering Chargeback report for specific media servers to view details only for the specific media servers.

About Disk and Tape Device Activity reports in OpsCenter

Disk and tape device activity reports provide information for all the NetBackup disk, tape, and SAN Client storage units showing utilization and free space available in each storage device for each primary server

Current Disk Pool Usage report	See "Disk and Tape Device Activity > Current Disk Pool Usage Report" on page 239.
NetBackup Disk Pool Capacity report	See "NetBackup Disk Pool Capacity report" on page 240.
NetBackup Disk Pool Size vs. Percentage Full report	See "NetBackup Disk Pool Size vs. Percentage Full report" on page 241.
Library Summary report	See "Library Summary report" on page 241.
Library Capacity Forecast report	See " Library Capacity Forecast report" on page 241.
Drive Throughput report	See "Disk and Tape Device Activity > Tape Drive Throughput" on page 242.
Drive Utilization report	See "Disk and Tape Device Activity > Tape Drive Utilization Report" on page 245.
Disk Usage report	See "Disk Usage report" on page 247.
Storage Unit Usage report	See "Storage Unit Usage report" on page 249.

Disk and Tape Device Activity > Current Disk Pool Usage Report

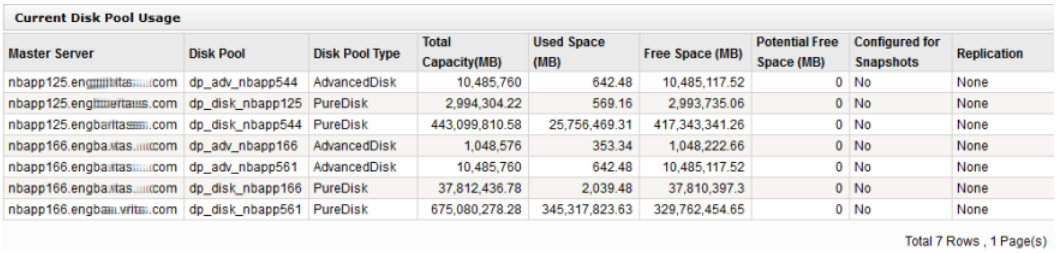
This report shows a comprehensive utilization of disk by pool and type for each primary server that has configured disk pools. It provides details about the disk pool usage and also about the free space available in the disk pool.

Note: The following properties do not apply to cloud storage disk pools: Total Capacity (MB), Used Space (MB), Free Space (MB), and Potential Free Space (MB).

All these values are derived from the storage capacity, which cannot be fetched from the cloud provider.

Figure 2-69 shows a sample view of Current Disk Pool Usage Report.

Figure 2-69 Current Disk Pool Usage Report



Current Disk Pool Usage

Master Server	Disk Pool	Disk Pool Type	Total Capacity(MB)	Used Space (MB)	Free Space (MB)	Potential Free Space (MB)	Configured for Snapshots	Replication
nbapp125.eng[illegible].com	dp_adv_nbapp544	AdvancedDisk	10,485,760	642.48	10,485,117.52	0	No	None
nbapp125.eng[illegible].com	dp_disk_nbapp125	PureDisk	2,994,304.22	569.16	2,993,735.06	0	No	None
nbapp125.engba[illegible].com	dp_disk_nbapp544	PureDisk	443,099,810.58	25,756,469.31	417,343,341.26	0	No	None
nbapp166.engba.[illegible].com	dp_adv_nbapp166	AdvancedDisk	1,048,576	353.34	1,048,222.66	0	No	None
nbapp166.engba.[illegible].com	dp_adv_nbapp561	AdvancedDisk	10,485,760	642.48	10,485,117.52	0	No	None
nbapp166.engba.[illegible].com	dp_disk_nbapp166	PureDisk	37,812,436.78	2,039.48	37,810,397.3	0	No	None
nbapp166.engba[illegible].com	dp_disk_nbapp561	PureDisk	675,080,278.28	345,317,823.63	329,762,454.65	0	No	None

Total 7 Rows , 1 Page(s)

The following are the details that are associated with the `Current Disk Pool Usage` report:

Report Name	Current Disk Pool Usage
Report Category	Disk and Tape Device Activity
Where to Locate	Report > Report Templates > Disk and Tape Device Activity > `Current Disk Pool Usage` report.
Report Purpose	Comprehensive utilization report by disk pool and disk type for each primary server for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular

Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Disk Based Data Protection > `Current Disk Pool Usage`

You can edit the `Current Disk Pool Usage` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Current Disk Pool Usage` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: Run the Current Disk Pool Usage report for a specific primary server to view the used disk space for that primary server.

The following report enhancements have been made for the Current Disk Pool Usage report:

- **Job Transport Type** column has been added to the Job filter. For example, you can view report data for jobs for which the Job transport type is **FT** or **LAN**.
- The column heading **Server Type** has been modified to **Disk Type**.
- New columns **Configured for Snapshots** and **Replication** are added in the report table.

NetBackup Disk Pool Capacity report

The basic version of this report shows the total amount of space that is occupied by backups across all NetBackup Disk Pools that include OpenStorage Devices, SharedDisk, or even AdvancedDisk pools. Along with usage the average of the high and the low water mark is taken for each disk pool and drawn on the graph. Since this is an average it should not be used for planning purposes but rather estimation. In actual usage this report should be filtered on a specific Disk Pool to

show the exact high and low water mark. Finally the forecast is shown so that it can be determined when capacity needs to be added or backups expired to maintain operations.

NetBackup Disk Pool Size vs. Percentage Full report

A Disk Pool may be an OpenStorage device, a SharedDisk, or a group of local or network disk volumes that are pooled together. The bars represent the total number of available bytes across all disk pools with the colors representing the total amount of space per disk pool. The lines represent the percentage full each disk pool is. So this report can help identify how much disk space is used for backups, which pools are the largest, which ones are near capacity and how the backup environment is load balancing across disk storage.

Library Summary report

This report provides a current point in time inventory of library capacity. The reports list the libraries name, Volume DB Server, used/available/total slot count, and used or available or total capacity. Two calculated columns show the % utilization of slots and library capacity. The report provides a rich selection of filters enabling users with a diverse tape library environment to zoom in on any segment of their tape library population.

Note: The Library Summary report might display some negative values. These negative values are a result of negative slot counts. If the user added -1 NetBackup is unable to connect to the media. If the slot count is 0 NetBackup only calculates data for TLD and TLD8 media leading to negative values in the report. The user must enter the media slot count from **Settings** > **Configuration** > **Tape Library**.

Library Capacity Forecast report

This report provides a capacity forecast of Tape Libraries. A libraries' capacity is calculated by multiplying Slot Count by Slot Capacity. Slot capacity is the capacity of the tape in the slot. As no standard exists for measuring library capacity, the report enables several methods by which an individual tapes capacity is determined. These consist of using the maximum, the minimum and the average size of full tapes to determine tape capacity. Additionally, user-defined capacity for tape types is available in the report parameter selection UI. The report extrapolates out the trend line through the forecast period using classic linear regression and also plots the libraries capacity. At the date in which the library capacity line intersects the capacity forecast line is when the libraries capacity is reached.

Disk and Tape Device Activity > Tape Drive Throughput

This report shows the speed (KB/Sec) at which data backups flow through the tape drives. The report uses the “heat map” concept and depicts ranges of speeds (slow to fast) through configurable shades of green color. Reports are generated based on either Hours-of-Day or Days-of-Week. Advanced averaging logic is used to determine the throughput values for each cell in the report. The averaging is done at an image fragment level ensuring granularity and precision in calculations. The reports can be aggregated and filtered at the Tape Library, Media Server, Drive Type, Logical Drive, and Physical Drive levels. The sort options allow intuitive presentation of voluminous data. These reports are important sources of information for performance analysis and capacity planning activities.

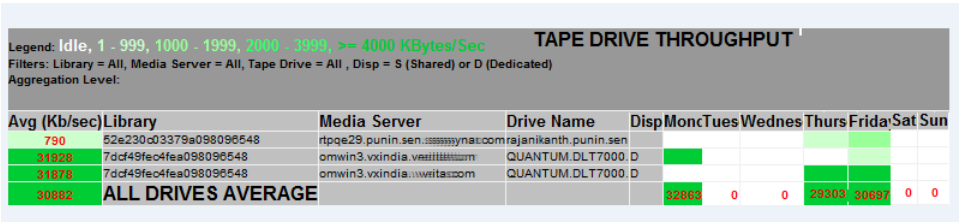
As an example on the analysis that can be performed on this report, suppose you look at an LTO4 drive that can run at 120+MB/sec, having a report that shows only 5 -6 MB/sec would indicate that the drives are not even close to being at the maximum capacity. Adding drives in an environment such as this would not impact the backup window. We see a lot of money being spent on new tape drives when customers have trouble pushing tape drives from years ago. If you cannot push an LTO2 drive, then upgrading to an LTO4 will not benefit you (unless you wanted the hardware encryption option of course). These reports are important sources of information for performance analysis and capacity planning activities.

Note that the Tape Drive Throughput report displays data only till 1 A.M. and not till the time when you run the report. This is because OpsCenter collects data for Tape Drive Throughput report once per day at 1 A.M..after midnight. Therefore the Tape Drive Throughput report is only able to report on data up until 1 AM on that day, even when run with a relative timeframe of Previous 24 hours. Similarly if you run Tape Drive Throughput report at 2 P.M. in the afternoon, the reports display data collected till 1 A.M. only.

Note: It is recommended that you configure the retention period of error logs in NetBackup as more than 1 day. If the retention period of error logs is less than 24 hours, it may result in data loss for some reports like Drive Throughput.

Figure 2-70 shows a sample view of Drive Throughput Report.

Figure 2-70 Tape Drive Throughput Report



TAPE DRIVE THROUGHPUT

Legend: Idle, 1 - 999, 1000 - 1999, 2000 - 3999, >= 4000 KBytes/Sec
Filters: Library = All, Media Server = All, Tape Drive = All , Disp = S (Shared) or D (Dedicated)
Aggregation Level:

Avg (Kb/sec)	Library	Media Server	Drive Name	Disp	Monc	Tues	Wednes	Thurs	Frida	Sat	Sun
790	52e230c03379a098096548	rtpqe29.punin.sen.[illegible]ynat.com	rajanikanth.punin.sen								
31928	7dcf49fec4fea098096548	omwin3.vxindia.ver[illegible]m	QUANTUM.DLT7000.D	D							
31878	7dcf49fec4fea098096548	omwin3.vxindia.[illegible]wita.com	QUANTUM.DLT7000.D	D							
30882	ALL DRIVES AVERAGE				32863	0	0	29303	30697	0	0

The following are the details that are associated with the `Tape Drive Throughput` report:

Report Name	Tape Drive Throughput
Report Category	Disk and Tape Device Activity
Where to Locate	Report > Report Templates > Disk and Tape Device Activity > `Tape Drive Throughput` report.
Report Purpose	A heat-map report showing drive throughput by library, media server, tape drive and drive type. Darker the color, higher is the throughput for that particular time, for NetBackup servers.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	HTML
Mapping with VBR report	All Reports > Standard Reports > Backups > Tape Devices > `Drive Throughput`

You can edit the `Drive Throughput` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Drive Throughput` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Schedule	Schedule/Level Type	Select one or more schedule or level types to view the data for the configured schedules.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
Drive	Drive	Select one or more drives to view the specific data on those drives.
Tape Library	Tape Library Serial Number	Select one or more tape library serial numbers to view the data specific for those tapes.

Example of filter usage: You may run the report for specific policy data classification names to view details only for the specific policy classifications. You may run the report for a specific job type like Backup to view drive throughput details for the backup jobs.

The following report enhancements have been made for the Drive Throughput report:

- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Drive Throughput report:

- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Backup from Snapshot, Snapshot, Duplicate, and Replication.
- **UNKNOWN** has been added as a value for Schedule Level/Type column in the Schedule filter. You can now filter report data for Schedule Level/Type that is UNKNOWN.

Disk and Tape Device Activity > Tape Drive Utilization Report

Tape drives are still very popular as backup destinations and are moderately expensive especially if new drives are purchased each time a new update is available such as moving from LTO3 to LTO4. Many times when backup windows are not being met the first thing suggested is more tape drives. What we have found is that in most cases customers are under-utilizing the tape drive investment either due to time of day considerations – i.e. backups cannot run during the day due to performance issues – or they simply have too few Media Servers. OpsCenter and OpsCenter Analytics have a number of drive utilization and throughput reports that can show at a glance when tape drives are being used, and if there are large gaps in usage that could be filled up with changes to the backup Policies. This can help not only fully utilize the drives, but defer a hardware purchase since it is easy to see when the drives have open cycles.

This report shows the utilization (0 – 100%) of tape drives. The report uses the “heat map” concept and depicts ranges of utilization (low to high) through configurable shades of blue for example. Reports are based on either Hour-Of-Day or Day-of- Week. Advanced logic is used to determine the utilization values for each cell in the report. Utilization is calculated off a per minute basis ensuring precision in calculations versus traditional methods of periodic polling of the devices. The reports can be aggregated and filtered at the Tape Library, Media Server, Drive Type, Logical Drive, and Physical Drive levels. The sort options allow for intuitive presentation of voluminous data. These reports are important sources of information for performance analysis and capacity planning activities.

Note that the Tape Drive Utilization report displays data only till 1 A.M. and not till the time when you run the report. This is because OpsCenter collects data for Tape Drive Utilization report once per day at 1 A.M..after midnight. Therefore the Tape Drive Utilization report is only able to report on data up until 1 AM on that day, even when run with a relative timeframe of Previous 24 hours. Similarly if you run Tape Drive Utilization report at 2 P.M. in the afternoon, the reports display data collected till 1 A.M. only.

Figure 2-71 shows a sample view of Tape Drive Utilization Report.

Figure 2-71 Drive Utilization Report

The following are the details that are associated with the `Drive Utilization` report:

Report Name	Tape Drive Utilization
Report Category	Disk and Tape Device Activity
Where to Locate	Report > Report Templates > Disk and Tape Device Activity > `Tape Drive Utilization`.
Report Purpose	A heat-map report showing drive utilization by library, media server, tape drive and drive type. Darker colour signifies higher utilization of drive for a particular time.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	HTML
Mapping with VBR report	All Reports > Standard Report > > Backups > Tape Device Activity > `Drive Utilization`

You can edit the `Drive Utilization` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Drive Utilization` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Filter	Column	Description
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
Job	Job Type	Select one or more job types as Archive, Backup, or Restore to view data for the selected job types.
Drive	Drive	Select one or more drives to view the specific data on those drives.
Tape Library	Tape Library Serial Number	Select one or more tape library serial numbers to view the data specific for those tapes.

Example of filter usage: You may run the report for specific policy names to view the details only for a specific policy. You may run the report for tape drive utilization for a specific job type like Backup to view the details.

The following report enhancements have been made for the Drive Utilization report:

- The option **Next** has been removed from the drop-down menu for **Relative Timeframe**. You now cannot enter a relative timeframe like next 2 weeks. This is because the report does not support any futuristic data.

The following filter enhancements have been made for the Tape Drive Utilization report:

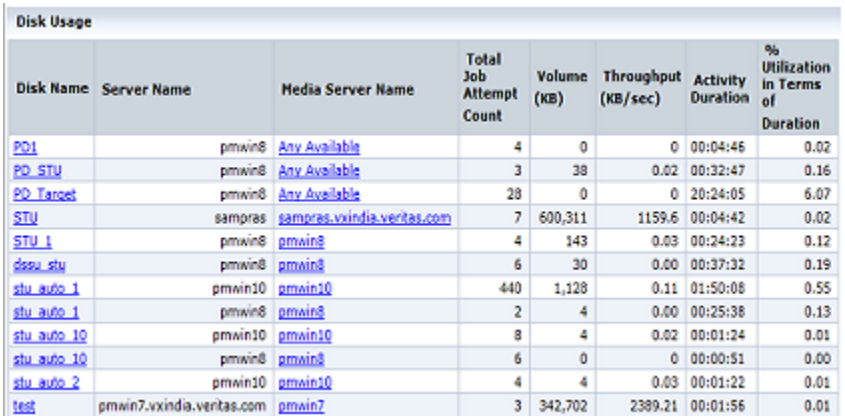
- Job types which are not applicable for this report are removed from the filter. The supported job types are Backup, Archive, Restore, Backup from Snapshot, Snapshot, Duplicate, and Replication.
- **UNKNOWN** has been added as a value for Schedule Level/Type column in the Schedule filter. You can now filter report data for Schedule Level/Type that is UNKNOWN.

Disk Usage report

This report shows disk usage for the selected server and time frame. The table in the report provides details such as total number of jobs, total volume processed (KB), average throughput (KB/sec), duration of activity, and percentage utilization in terms of duration.

Figure 2-72 shows a sample view of the Disk Usage report.

Figure 2-72 Disk Usage report



Disk Usage

Disk Name	Server Name	Media Server Name	Total Job Attempt Count	Volume (KB)	Throughput (KB/sec)	Activity Duration	% Utilization in Terms of Duration
PD1	pmwin8	Any Available	4	0	0	00:04:46	0.02
PD_STU	pmwin8	Any Available	3	38	0.02	00:32:47	0.16
PD_Target	pmwin8	Any Available	28	0	0	20:24:05	6.07
STU	sampras	sampras.vxindia.veritas.com	7	600,311	1159.6	00:04:42	0.02
STU_1	pmwin8	pmwin8	4	143	0.03	00:24:23	0.12
dssu_stu	pmwin8	pmwin8	6	30	0.00	00:37:32	0.19
stu_auto_1	pmwin10	pmwin10	440	1,128	0.11	01:50:08	0.55
stu_auto_1	pmwin8	pmwin8	2	4	0.00	00:25:38	0.13
stu_auto_10	pmwin10	pmwin10	8	4	0.02	00:01:24	0.01
stu_auto_10	pmwin8	pmwin8	6	0	0	00:00:51	0.00
stu_auto_2	pmwin10	pmwin10	4	4	0.03	00:01:22	0.01
test	pmwin7.vxindia.veritas.com	pmwin7	3	342,702	2389.21	00:01:56	0.01

The **Disk Name** and **Media Server Name** columns of the table contain drilldown links to detailed throughput and disk usage reports.

Disk Throughput	This drilldown report from the **Disk Name** column shows the data transfer rate (throughput) for a disk storage unit for the selected server or server groups. This drilldown report uses the run time parameters that are passed from the main report.
Disk Usage Details	This drilldown report from the **Media Server Name** column shows the usage details for all the disk storage units for the selected media server. This drilldown report uses the run time parameters that are passed from the main report. The Disk cell in each row of the report table is a link to a drill-down report. The rest of the cells indicate whether the disk was in use or not during the time slot.

The following are the details that are associated with the Disk Usage report:

Report Name	Disk Usage
Report Category	Performance Reports
Where to Locate	Report > Report Templates > Performance Reports > Disk Usage

Report Purpose	This report shows the disk usage of a primary server.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	Yes
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	Reporting > All Reports > Standard Reports > Performance Report > Disk Usage

The following table shows the filters for Disk Usage report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view disk usage for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.

Example of filter usage: You may run the Disk Usage report for specific primary servers to view the disk usage of the specific primary servers.

The following report enhancements have been made for the Successful Jobs of a Server report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

Storage Unit Usage report

This report shows storage unit usage for a selected primary server and time frame. The first column of each row of the report table lists a storage unit. The storage unit name is also a drilldown link to a detailed report. The media server name in the second column is also a drilldown link.

The rest of the row provides details such as total number of jobs, total volume processed (KB), average throughput (KB/sec), duration of activity and percentage of utilization in terms of duration.

Storage unit throughput report	This drilldown report from the **Storage Unit** column shows the data transfer rate (throughput) of the selected storage unit. This drilldown report uses the run time parameters that are passed from the main report.
Storage unit usage details for media server report	This drilldown report from the **Media Server** Name column shows the usage details for all of the storage units of the selected media server. This drilldown report uses the run time parameters that are passed from the main report. The Storage unit column of the report table is a link to a drilldown throughput report. The rest of the cells indicate whether the storage unit was in use or not during the time slot.

About Media reports in OpsCenter

This section describes media reports that provide information for all the NetBackup media status, expiration, and availability, including tape, disk, Appliances, and the optional NetBackup Vault feature for offsite media tracking.

Media State report	See "Media Reports > Media State" on page 251.
Available Media report	See "Available Media report" on page 252.
Drives in Use report	See "Drives in Use report" on page 252.
Full Media Capacity report	See "Full Media Capacity report" on page 252.
Media Summary by Media Server report	See "Media Summary by Media Server report" on page 253.
Media Utilization report	See "Media Reports > Media Utilization" on page 253.
Tape Count report	See "Tape Count report" on page 255.
Tapes Expiring in Future report	See "Tapes Expiring in Future report" on page 255.

TapesExpiring Now report	See "Tapes Expiring Now report" on page 255.
Vault Media Usage report	See "Vault Media Usage report" on page 255.
Media Expiration Schedule report	See "Media Reports > Media Expiration Schedule" on page 256.

Media Reports > Media State

This report displays the media status and count (per media type) for each primary server and media server combination. Media state can be frozen, active, off-site, and so on.

Figure 2-73 shows a sample view of Media State Report.

Figure 2-73 Media State Report

Media State

Server Name	Media Server	Media Status	Count of Media	Media Type
ramgad.vxindiaeritass.com	Unassigned	Active	1	DLT3
rajanikanth.punin.sem.....vmaic.com	Unassigned	Active	2	HCART
NBAPP...nbapp101.engu...rmnttc.com	Unassigned	Active	5	HCART2
omwin3.vxindiaeritass.com	Unassigned	Active	1	DLT2
omwin3.vxindiaveritass.com	Unassigned	Active	6	HCART
omwin3.vxindiawritas.com	Unassigned	Active	1	HCART2
omwin3.vxindiawritas.com	Unassigned	Active	1	HC_CLN
rajanikanth.punin.sem.....ymaic.com	c1.wxxinderitass.com	Active	2	HCART

The following are the details that are associated with the `Media State` report:

Report Name	Media State
Report Category	Media Reports
Where to Locate	Report > Report Templates > Media Reports > `Media State`.
Report Purpose	Lists number of media in each media status per media type and per media server.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML

Mapping with NOM report	All Reports > Standard Report > Media and Devices > `Media State`

You can edit the `Media State` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Media State` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: Run the Media State report for a specific primary server to view the media state for that primary server.

Available Media report

This report lists the media that is available for use by NetBackup for each primary server that is selected.

The report table provides information, such as, media server, media status, robot type, volume group and pool, and the time assigned.

Drives in Use report

This report shows the drive usage for the selected server. The report table provides details for the drive, for example, drive name and type, robot number and type, and assigned host.

Full Media Capacity report

This report shows the average amount of protected data (in kilobytes) on a tape for each primary server and media type. These are the tapes that NetBackup marked as full.

The bar chart depicts the amount of data (in kilobytes) per media type.

The report table is organized by server, media type and count, and shows the size and number of images on the tape.

Media Summary by Media Server report

For each media server, this report provides the number of tapes and images, the last written date, and amount of data on the tapes. The name of the media server is also a drilldown link to a detailed report for media.

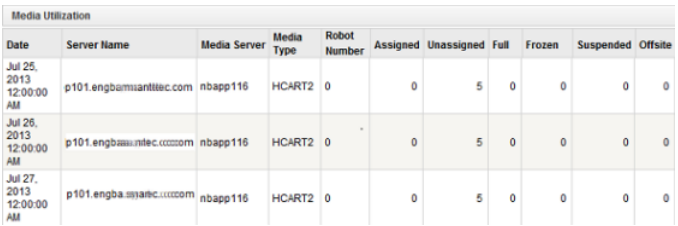
Media summary by media status for a media server report	This drilldown report from the Media Server column provides a media status summary for a selected media server. This report displays media status, number of tapes and images, the last written date, and amount of data on tapes. This drilldown report uses the run time parameters that are passed from the main report.
Media details of media status for a media server report	This drilldown report from the Media Status column provides media details for the selected media server and selected media status. Media status can be Active, Frozen, Full, Invalid, or Suspended. This drilldown report uses the run time parameters that are passed from the main report. The report displays media ID, type, volume pool, last written date, expiration date, number of images, and the amount of data on tape.

Media Reports > Media Utilization

This report shows the number of media in use for a server per date. The columns in the table show assigned, unassigned, frozen, full, off-site, or suspended media states. The data for this report is only calculated once in a day. So the report shows the summary till the previous date. The data for today reflects in the report that you generate tomorrow. The table in the report is organized by date and server, and shows counts for each media state.

Figure 2-74 shows a sample view of Media Utilization Report.

Figure 2-74 Media Utilization Report



Media Utilization

Date	Server Name	Media Server	Media Type	Robot Number	Assigned	Unassigned	Full	Frozen	Suspended	Offsite
Jul 25, 2013 12:00:00 AM	p101.engbamuantttec.com	nbapp116	HCART2	0	0	5	0	0	0	0
Jul 26, 2013 12:00:00 AM	p101.engba[illegible]ntec.[illegible]com	nbapp116	HCART2	0	0	5	0	0	0	0
Jul 27, 2013 12:00:00 AM	p101.engba.[illegible]antec.[illegible]com	nbapp116	HCART2	0	0	5	0	0	0	0

The following are the details that are associated with the `Media Utilization` report:

Report Name	Media Utilization
Report Category	Media Reports
Where to Locate	Report > Report Templates > Media Reports > `Media Utilization`.
Report Purpose	Lists tabular details of media count by media status and media type.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Report > Media and Devices > `Media Utilization`

You can edit the `Media Utilization` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Media Utilization` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: Run the Media Utilization report for a one week timeframe and for a single primary server.

The following report enhancements have been made for the Media State report:

- The unit **Years** has been added for **Relative Timeframe** selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks.

Tape Count report

This report shows tape count for the following Report On parameters:

- Backup Media Retention Level
- Tape Type
- Volume Pool Name

In Veritas Backup Reporter (VBR), there was a separate report for each of these parameters. In OpsCenter, the three reports are merged into one report.

The Tape Count report is available in the Distribution view.

Tapes Expiring in Future report

This report shows the number of media that expire at each day in the upcoming seven days. This time frame can be changed to show more in to the future. The report is helpful in determining if a large quantity of media may become free in the future which could justify delaying the purchase of more media.

Note: The filter Backup Media Role applied to the Tape Expiring Now report does not return any data.

Tapes Expiring Now report

This report lists the media that are about to expire. The Volume Pool Name , Media ID, and Media Barcode that are listed make it easy to locate the media. The default time frame when the report is clicked will show what is expiring in the next 24 hours. That time frame can be changed to show media expiring in the next week, month, or any future time window desirable.

Vault Media Usage report

This report shows off-site media trends for selected vaults and current off-site media count. The report consists of two component reports, a bar chart and a table.

This report helps understand your off-site media trends.

Questions like the following are answered by this report:

- How does the off-site media count vary for each vault?
- What are the details of the current off-site media ?

The bar chart shows the weekly trend of off-site media counts for selected vaults. While running the report you select the vaults for which you want to run this report. The report shows a weekly line trend for selected vault. This chart is a good indication of how the off-site media count varies over the period of time. You can compare the media counts of different vaults to see which vault is consuming more media and how it varies.

The report table provides the details of vaulted media for the selected vaults. When you run the report you specify the vault names. The report provides important media details like media ID, off-site slot number, container ID, expiration date, barcode , and so on.

Media Reports > Media Expiration Schedule

This report gives graphical representation of the expiration schedule for media. The report predicts the availability of media based on the expiration date of the media. Using this report you can determine what media will be available for reuse. The stacked bars represent the number of media of a specific type that are expired or going to expire on a particular day. Different colors are used in the bars for different media types. Tool tips for the bar segments provide the media type and count of the media that is available on that day.

The following are the details that are associated with the `Media Expiration Schedule` report:

Report Name	Media Expiration Schedule
Report Category	Media Reports
Where to Locate	Report > Report Templates > Media Reports > `Media Expiration Schedule`.
Report Purpose	Stacked bars representing number of media getting expired on a particular reporting day.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Historical
Drill down report	Yes. See Media Expiration Details.
Can be scheduled	Yes

Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Report > Media and Devices> `Media Expiration Schedule`

You can edit the `Media Expiration Schedule` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Media Expiration Schedule` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: Run the Media Expiration Schedule report for a specific primary server to view the expiration schedule of media for that primary server.

The following report enhancements have been made for the Media Expiration Schedule report:

- A new drilldown report named Media Expiration Details has been added.
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last X years. You can also select Year from the top-right corner of the report.
- The following options have been removed from **TimeFrameGroupBy selection:**
  - Days of week Average
  - Days of week total
  - Hours of day Average
  - Hours of day Total
  - Minutes
  - Month of year Average
  - Month of year total
  - Quarter of year Average

- Quarter of year total

Figure 2-1 shows a sample view of Media Expiration Schedule Report.

Figure 2-75 Media Expiration Details Report

Media Expiration Details

Server Name	Media ID	Media Type	Barcode	Used Media Size(KB)	Volume Pool Name	Robot Number	Robot Name	Expiration Date
friend.-idris	0017L4	HCART	000017L4	414,477,936	NetBackup	0	TLD	Aug 14, 2016 6:16:15 AM
friend.-idris	0016L4	HCART	000016L4	414,839,328	NetBackup	0	TLD	Aug 14, 2016 10:46:15 AM
friend.-idris	0015L4	HCART	000015L4	414,650,596	NetBackup	0	TLD	Aug 14, 2016 10:46:15 AM
friend.-idris	0013L4	HCART	000013L4	414,445,792	NetBackup	0	TLD	Aug 14, 2016 8:31:15 AM
friend.-idris	0011L4	HCART	000011L4	414,591,840	NetBackup	0	TLD	Aug 14, 2016 6:16:15 AM
friend.-idris	0009L4	HCART	000009L4	414,037,984	NetBackup	0	TLD	Aug 14, 2016 4:16:15 AM

The following are the details that are associated with the `Media Expiration Details` report:

Report Name	Media Expiration Details
Report Category	Media reports (Drill down)
Where to Locate	Report > Report Templates > Media Reports > Media Expiration Schedule (click the bar in the historical graph)
Report Purpose	Details regarding number of media getting expired on a particular reporting day along with media details
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Report > Backup Media Reports > Media Expiration Schedule (click the bar in the historical graph)

You can edit the `Media Expiration Details` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the

filters for `Media Expiration Details` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: Run the Media Expiration Details report for a specific primary server to view the media expiration details for that primary server.

About Performance reports in OpsCenter

This section describes performance reports that provide information for overall performance and throughput statistics on NetBackup Primary and Media Servers.

Primary Server Job Throughput report	See "Primary Server Job Throughput report" on page 259.
Media Server Job Throughput	See "Media Server Job Throughput report " on page 265.
NetBackup SAN Client Performance report	See "NetBackup SAN Client Performance report" on page 265.

Primary Server Job Throughput report

This report provides a tool to compare performance of various primary servers. The table of this report displays throughput and job success information for each primary server. It shows job count and job success rate, and enables you to compare throughputs of different servers to identify any servers that are performing poorly.

Figure 2-76 shows a sample view of the Primary Server Job Throughput report.

Figure 2-76 Primary Server Job Throughput report

Master Server Job Throughput

Server Name	Total Job Count	Volume(KB)	Throughput (KB/sec)	Number of Successful Jobs	Success Rate (%)	Last Job
Display Name	1,685	1,850	0.00	1189	70	Oct 3, 2011 1:12:09 PM
ccs-scl-qe-17	12	21,567,108	9111.58	9	75	Oct 6, 2011 3:26:53 AM
opscenter-win2k3	16	7	0.00	2	12	Oct 6, 2011 3:39:34 AM
pnwin8	2,027	2,513	0.00	1335	65	Oct 6, 2011 3:04:48 AM
purandar	34,197	62,842,871	0.59	30949	90	Oct 6, 2011 3:48:03 AM

Drilldown links for the server name, number of total and successful jobs columns are also provided.

Total jobs of a server report	This drilldown report from the **Total Job Count** column lists the details for all jobs for a selected server. The report details include details like job type and status, policy and schedule names, and start time. This drilldown report uses the run time parameters that are passed from the main report.
Successful jobs of a server report	This drilldown report from the **Number of Successful Jobs** column shows details for successful jobs for a given server. The report provides details like job type, policy and schedule names, volume, and file counts. This drilldown report uses the run time parameters that are passed from the main report.

The following are the details that are associated with the Primary Server Job Throughput report:

Report Name	Primary Server Job Throughput
Report Category	Performance Reports
Where to Locate	Report > Report Templates > Performance Reports > Primary Server Job Throughput
Report Purpose	This report shows the performance of a primary server.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Tabular

Drill down report	Yes See "Total Jobs of a Server report" on page 261. See "Successful Jobs of a Server" on page 263.
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	Reporting > All Reports > Standard Reports > Performance Report > Primary Server Job Throughput

The following table shows the filters for Primary Server Job Throughput report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: You may run the Primary Server Job Throughput report for a specific primary servers to view the performance of the specific primary servers.

The following report enhancements have been made for the Primary Server Job Throughput report:

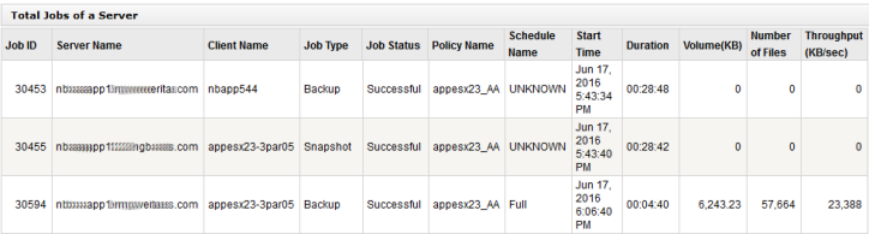
- The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

Total Jobs of a Server report

This tabular report shows the job information run for a primary server i.e. Client Name, Job Type, Job Status, Policy Name, Schedule Name etc.

Figure 2-77 shows a sample view of Total Jobs of a Server report.

Figure 2-77 Total Jobs of a Server report



Total Jobs of a Server

Job ID	Server Name	Client Name	Job Type	Job Status	Policy Name	Schedule Name	Start Time	Duration	Volume(KB)	Number of Files	Throughput (KB/sec)
30453	nb[illegible]app1[illegible]erita[illegible].com	nbapp544	Backup	Successful	appesx23_AA	UNKNOWN	Jun 17, 2016 5:43:34 PM	00:28:48	0	0	0
30455	nb[illegible]app1[illegible]ngb[illegible].com	appesx23-3par05	Snapshot	Successful	appesx23_AA	UNKNOWN	Jun 17, 2016 5:43:40 PM	00:28:42	0	0	0
30594	nb[illegible]app1[illegible]wer[illegible].com	appesx23-3par05	Backup	Successful	appesx23_AA	Full	Jun 17, 2016 6:06:40 PM	00:04:40	6,243.23	57,664	23,388

The following are the details that are associated with the Total Jobs of a Server report:

Report Name	Total Jobs of a Server
Report Category	Performance Reports
Where to Locate	Report > Report Templates > Performance Reports > Primary Server Job Throughput (drill down from **Total Job Count** column) > Total Jobs of a Server
Report Purpose	This report shows the job information for a primary server.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	Reporting > All Reports > Standard Reports > Performance Report > Primary Server Job Throughput (drill down on Number of Successful Jobs column) > Total Jobs of a Server

The following table shows the filters for Total Jobs of a Server report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.

Filter	Column	Description
Primary Server	Primary Server	Select one or more primary servers to view data for the clients backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

The following report enhancements have been made for the Backup Job Size Variance report:

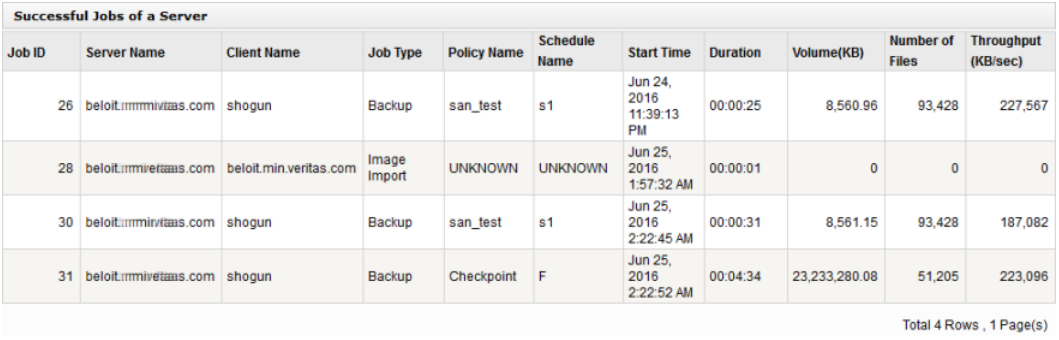
- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

Successful Jobs of a Server

This drilldown report is obtained when you click number of successful jobs (link) from the Primary Server Job Throughput report. This tabular report shows details of all successful jobs of a Server. It shows information like Client Name, Policy Name, Schedule Name, Start Time, Number of Files, Duration, Volume, Throughput etc.

Figure 2-78 shows a sample view of the Successful Jobs of a Server report.

Figure 2-78 Successful Jobs of a Server report



Successful Jobs of a Server

Job ID	Server Name	Client Name	Job Type	Policy Name	Schedule Name	Start Time	Duration	Volume(KB)	Number of Files	Throughput (KB/sec)
26	beloit.[redacted]s.com	shogun	Backup	san_test	s1	Jun 24, 2016 11:39:13 PM	00:00:25	8,560.96	93,428	227,567
28	beloit.[redacted]s.com	beloit.min.veritas.com	Image Import	UNKNOWN	UNKNOWN	Jun 25, 2016 1:57:32 AM	00:00:01	0	0	0
30	beloit.[redacted]s.com	shogun	Backup	san_test	s1	Jun 25, 2016 2:22:45 AM	00:00:31	8,561.15	93,428	187,082
31	beloit.[redacted]s.com	shogun	Backup	Checkpoint	F	Jun 25, 2016 2:22:52 AM	00:04:34	23,233,280.08	51,205	223,096

Total 4 Rows , 1 Page(s)

The following are the details that are associated with the Successful Jobs of a Server report:

Report Name	Successful Jobs of a Server
Report Category	Performance Reports

Where to Locate	Report > Report Templates > Performance Reports > Primary Server Job Throughput (drill down from **Number of Successful Jobs** column) > Successful Jobs of a Server
Report Purpose	This report shows the successful jobs for a primary server.
Supported products	NetBackup, NetBackup Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	Reporting > All Reports > Standard Reports > Performance Report > Primary Server Job Throughput (drill down on **Number of Successful Jobs** column) > Total Jobs of a Server

The following table shows the filters for Successful Jobs of a Server report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

The following report enhancements have been made for the Successful Jobs of a Server report:

- The unit **Years** has been added for Relative Timeframe selection.
  You can now view data for the last x years.
- The option **Next** has been removed from the drop-down menu for Relative Timeframe. You now cannot enter a relative timeframe like Next 2 weeks. This is because the report does not support any futuristic data.

Media Server Job Throughput report

This report provides details of data that is backed up by NetBackup media servers and shows server throughput. The report is a useful tool to compare performance of the media servers that are present in your NetBackup environment.

The pie chart provides a breakdown of the volume of data that is processed for each media server. A drilldown detail link for throughput details is provided from each volume pie slice.

Job details for client and media server report	This drilldown report from the client name column provides details for a given client, job type, job status, and media server. The report details include job ID, job type, exit status, start time, and duration in seconds. This drilldown report uses the run time parameters that are passed from the parent report.
Media server throughput for media server report	You can use this drill-down report from the Throughput (KB/sec) column to see the variation of throughput per day. The throughput is represented by a bar for each day of the reporting period. This drill-down report uses the run time parameters that are passed from the main report.

NetBackup SAN Client Performance report

This report is specific to NetBackup 6.5 and above which features Fibre Channel connected clients called “SAN Clients”. The blue and the yellow bars for example are stacked together to show the total number of jobs per day. The blue bars represent the jobs that ran over the LAN and the yellow is jobs ran over the SAN. The purple and the yellow lines show the total job throughput for all those jobs that ran that day. The purple represents total job throughput by LAN and the yellow represents total job throughput by SAN. This report helps identify what ratio of LAN to SAN traffic for backups are run and what performance benefit is gained by doing so.

About Policy reports in OpsCenter

This section describes policy reports that provide information for the NetBackup Policy information including Policies consuming the most storage space.

Top 10 Policies Using Most Server Space report	See "Top 10 Policies Using Most Server Space report" on page 266.
Job Success Rate by Policy Type report	See "Job Success Rate by Policy Type report" on page 270.
Policy Change report	See "Policy Change report" on page 271.
Policy Summary Dashboard report	See "Policy Summary Dashboard report" on page 271.

Top 10 Policies Using Most Server Space report

This report displays the 10 policies that have backed up the most data in your NetBackup environment. You can edit the report and run it for one or more primary servers.

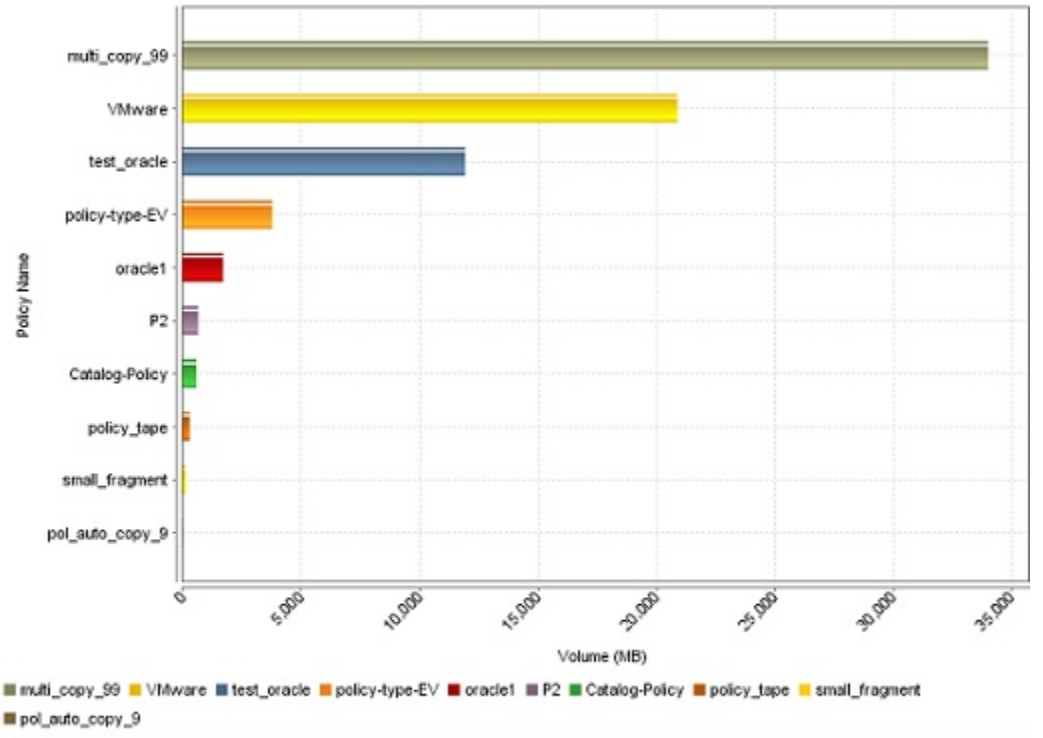
Tool tips appear when you point at each colored bar chart. The tool tip shows the primary server, policy, and also shows the volume of data in MB.

Click **Show Chart as Table** link at the bottom of the report to view the report details in a tabular format. The table lists the volume of data in MB for each policy.

A new drilldown report named Job Details for Policy is now available from the main report. This drilldown report from the colored bars in the chart provides details about all jobs for a selected policy. The drilldown report includes information, such as, job type, status code, client name, and volume in KB.

Figure 2-79 shows a sample view of the Top 10 Policies Using Most Server Space report.

Figure 2-79 Top 10 Policies Using Most Server Space report



Show Chart as Table

The following are details associated with the Top 10 Policies using most server space report:

Report Name	Top 10 Policies Using Most Server Space
Report Category	Policy
Where to Locate	Report > Report Templates > Policy Reports > Top 10 Policies using most Server Space
Report Purpose	This report shows a ranking of backup policies by space consumption. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance

Applicable View	Primary Server
Report Display	Ranking (Chart)
Drill down report	Job Details for Policy See “Job Details for Policy” on page 268.
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Policy > Top 10 Policies using most Server Space

The following table lists the filters for Top 10 Policies using most server space report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Job	Job Type	Select one or more job types like Archive, Backup, Restore etc. to view data for the selected job types. By default, the report displays information for the following types of jobs: ■ Backup ■ Catalog Backup ■ Vault You must select at least one job type from the Value list.

Example of filter usage: You may run the Top 10 Policies using most server space report for specific primary servers or views to view details only for the specific primary servers or views.

Job Details for Policy

A new drill-down report named Job Details for Policy is available when you click the colored bars from the Top 10 Policies Using Most Server Space report. This drill-down report provides details about all jobs for a selected policy.

This drill-down report uses the run time parameters that are passed from the main report. The drill-down report includes information, such as, job type, status code, client name, and volume in KB.

Figure 2-80 shows a sample view of the Job Details for Policy report.

Figure 2-80 Job Details for Policy report

Job Details for Policy

Job ID	Policy Name	Server Name	Job Type	Status Code	Client Name	Start Time	End Time	Duration	Volume (KB)	Number of Files	Throughput (KB/sec)
85	anyavaliablebkpstu	bnrx86rhfriend	Backup	0	bnrx86rhfriend	Jun 24, 2016 4:29:52 PM	Jun 24, 2016 4:31:39 PM	00:01:47	3,212,224	10	50,747
87	anyavaliablebkpstu	bnrx86rhfriend	Backup	0	bnrx86rhfriend	Jun 24, 2016 4:31:55 PM	Jun 24, 2016 4:33:03 PM	00:01:08	3,212,224	10	390,117
88	anyavaliablebkpstu	bnrx86rhfriend	Backup	0	bnrx86rhfriend	Jun 24, 2016 4:31:59 PM	Jun 24, 2016 4:33:07 PM	00:01:08	3,212,224	10	390,591
89	anyavaliablebkpstu	bnrx86rhfriend	Backup	0	bnrx86rhfriend	Jun 24, 2016 4:32:18 PM	Jun 24, 2016 4:33:27 PM	00:01:09	3,212,224	10	389,596

The following are details associated with the Job Details for Policy report:

Report Name	Job Details for Policy
Report Category	Drill down report
Where to Locate	Report > Report Templates > Policy Reports > Top 10 Policies Using most Server Space (click the colored bars)
Report Purpose	This report lists all jobs for the selected policy. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Policy > Top 10 Policies using most Server Space > Job Details for Policy

The following table lists the filters for Job Details for Policy report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Policy	Policy Data Classification Name	Select one or more policy data classification names like Gold, Silver, Bronze etc. to view data for the policies having the selected data classification names.
	Policy Name	Select one or more policy names to view data for the selected policies.

Example of filter usage: You may run the report for specific policy data classification names to view details only for the specific policy classifications.

Job Success Rate by Policy Type report

This report provides a quick view of the status of jobs by policy type. The report shows the job success rate for clients, server, and job policy type.

The bar chart shows the count of successful, partially successful, and failed jobs per policy type. The tool tips in the colored bars provide job counts and also are drilldown links to view the details for the policy.

The table in the report displays job information, such as, client name, policy type, and the success rate.

Note: This report may not show appropriate data for duplication jobs that are associated with SLP policy.

This issue occurs because the duplication jobs do not have a policy type. The job batches duplication of images that are created from possibly different policies and policy types. The duplication job itself has an internal policy that is created but this internal policy does not have the policy type set because this is not a backup job.

Job details for policy type report	This drilldown report from the **Policy Type** column and the colored bars in the chart provides details about all jobs for a selected policy type. This drilldown report uses the run time parameters that are passed from the main report. The table includes information, such as, exit status, client name, volume in KB, and count of files.

Successful, partially successful, and failed job details for policy type report	There are three drilldown reports from the **Number of Successful Jobs**, **Number of Partially Successful Jobs**, or **Number of Failed Jobs** columns. The job exit status is used as a filter for the reports. These reports are similar and provide details for all jobs for a selected client and policy type. This drilldown report uses the run time parameters that are passed from the main report. The table in this report provides details like, policy and schedule name, start and end times, and duration for the job. The table for failed jobs also includes a column for the job exit status.

Policy Change report

This report shows a count of the changes that were made to job policies in a given time frame for the selected servers.

The pie chart shows the number of policy changes (a policy can change multiple times) for each primary server. (Each different server appears in a different color in the chart.) Tool tips in the chart provide a count of the changes.

The table in the report displays the count of changes that were made to each policy for each server.

Policy Summary Dashboard report

This report acts as a dashboard of activities that are summarized by your policies. It gives an overview of activities and can be used as a tool to troubleshoot and manage by exception using the drilldown links to other detail reports.

It provides answers for some of the following questions for each policy:

- What is the total number of jobs?
- How many jobs were successful?
- How many jobs were partially successful?
- How many jobs failed?

The table in this report shows information per policy like policy name and type, job volume in MB, job count, and counts for job exit status. You can also drill down from the job exit status counts in the columns and view individual policy details based on exit status and job policy and type.

There are drilldown reports available from the Total Jobs, Number of Successful Jobs, Number of Partially Successful Jobs, or Number of Failed Jobs columns of the main report. These drilldown reports provide an overview of all jobs for the selected policy name, server, and time frame based on the job status.

These drilldown reports use the run time parameters that are passed from the main report.

Figure 2-81 shows a sample view of the Policy Summary Dashboard report.

Figure 2-81 Policy Summary Dashboard report

Policy Summary Dashboard

Server Name	Policy Name	Policy Type	Volume (MB)	Average Throughput (KB/sec)	Total Jobs	Number of Successful Jobs	Number of Partially Successful Jobs	Number of Failed Jobs	Success Rate (%)
ccs-sol-qe-17	policy1	MS-Windows	0.02	0.24	1	1	0	0	100
ccs-sol-qe-17	policy_tape	MS-Windows	0.01	0.05	2	2	0	0	100
ccs-sol-qe-17	policy_tape	Standard	302.75	711.06	9	9	0	0	100
martina	Pol_020_Schedules	Standard	0.72	0	56	23	0	33	41.07
martina	Pol_100_Schedules	Standard	0.72	0	56	23	0	33	41.07
martina	Pol_100_Schedules_Test	Standard	0.72	0	56	23	0	33	41.07
martina	Pol_All-Local-Drives	Standard	0	0	4	0	0	4	0
martina	Pol_Attr_AllowMultStreams	Standard	0.25	1.44	16	16	0	0	100
martina	Pol_Attr_BMR	Standard	0.25	1.24	18	8	10	0	44.44
martina	Pol_Attr_Compress	Standard	0.25	0	13	8	0	5	61.54
martina	Pol_Attr_CrossMountPoint	Standard	0.25	3.28	8	8	0	0	100
martina	Pol_Attr_DataClassification_Bronze	Standard	0	0	52	0	0	52	0
martina	Pol_Attr_DataClassification_Gold	Standard	0	0	50	0	0	50	0
martina	Pol_Attr_DataClassification_Platinum	Standard	0	0	51	0	0	51	0
martina	Pol_Attr_DataClassification_Silver	Standard	0	0	49	0	0	49	0
martina	Pol_Attr_Encrypt	Standard	0	0	21	0	0	21	0
martina	Pol_Attr_FollowNFS	Standard	0.25	3.51	8	8	0	0	100
martina	Pol_Attr_Keyword	Standard	0.25	3.12	8	8	0	0	100
martina	Pol_Attr_PolicyType_AFS	AFS	0	0	23	0	0	23	0
martina	Pol_Attr_PolicyType_DB2	DB2	0	0	26	0	0	26	0
martina	Pol_Attr_PolicyType_DataStore	DataStore	0	0	26	0	0	26	0
martina	Pol_Attr_PolicyType_DataToolSQLBackTrack	DataTools-SQL-BackTrack	0	0	48	0	0	48	0

The following are details associated with the Policy Summary Dashboard report:

Report Name	Policy Summary Dashboard
Report Category	Policy
Where to Locate	Report > Report Templates > Policy Reports > Policy Summary Dashboard
Report Purpose	Tabular report summarizing size, throughput, job counts and success rate by primary server, policy and policy type.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular

Drill down report	Yes See "Total Jobs for Policy" on page 273. See "Successful Jobs for Policy" on page 275. See "Partial Jobs for Policy report" on page 276. See "Failed Jobs for Policy" on page 278.
Can be scheduled	Yes
Supported export formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Policy > Policy Summary Dashboard

The following table lists the filters for Policy Summary Dashboard report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.
Success Rate	Consider Partially Successful Job as Successful	The default selection is **Yes**. Select **No** if you do not want to consider partially successful jobs as successful. Selecting **Yes** or **No** may impact the **Success Rate** percentage that is shown in the report. Consider a policy that has 5 successful jobs, 3 partially successful jobs and 2 failed jobs. If you select the value as **Yes**, the **Success Rate** column shows 80%. However if you select the value as **No**, the **Success Rate** column shows 50%.

Example of filter usage: You may run the Policy Summary Dashboard report for specific primary servers or views to view details only for the specific primary servers or views.

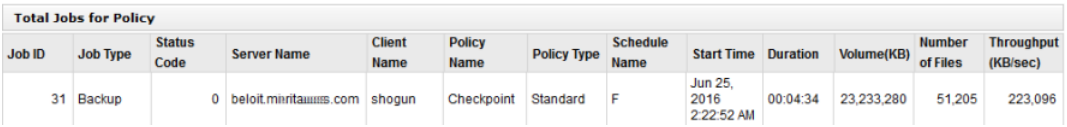
Total Jobs for Policy

This drilldown report is available when you click a value (link) from the Total Jobs column of the Policy Summary Dashboard report. This drilldown report provides an overview of all jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report.

The report provides details like schedule name, start times, and duration of the job etc.

Figure 2-82 shows a sample view of the Total Jobs for Policy report.

Figure 2-82 Total Jobs for Policy report



Total Jobs for Policy

Job ID	Job Type	Status Code	Server Name	Client Name	Policy Name	Policy Type	Schedule Name	Start Time	Duration	Volume(KB)	Number of Files	Throughput (KB/sec)
31	Backup	0	beloit.mkritaxxxs.com	shogun	Checkpoint	Standard	F	Jun 25, 2016 2:22:52 AM	00:04:34	23,233,280	51,205	223,096

The following are details associated with the Total Jobs for Policy report:

Report Name	Total Jobs for Policy
Report Category	Policy (Drill down report)
Where to Locate	Report > Report Templates > Policy Reports > Policy Summary Dashboard (click total jobs) > Total Jobs for Policy
Report Purpose	This report lists all jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Policy > Policy Summary Dashboard > Total Jobs for Policy

The following table lists the filters for Total Jobs for Policy report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** dropdown list.

Filter	Column	Description
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.

Example of filter usage: You may run the Total Jobs for Policy report for specific policies to view details only for the specific policies.

Successful Jobs for Policy

This drilldown report is available when you click the successful jobs (link) from the Policy Summary Dashboard report. This drilldown report provides an overview of all the successful jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report. The report provides details like schedule name, start times, and duration of the job etc.

Figure 2-83 shows a sample view of the Successful Jobs for Policy report.

Figure 2-83 Successful Jobs for Policy report

Successful Jobs for Policy

Job ID	Job Type	Status Code	Server Name	Client Name	Policy Name	Policy Type	Schedule Name	Start Time	Duration	Volume(KB)	Number of Files	Throughput (KB/sec)
31	Backup	0	beloit.miritamm.com	shogun	Checkpoint	Standard	F	Jun 25, 2016 2:22:52 AM	00:04:34	23,233,280	51,205	223,096

The following are details associated with the Successful Jobs for Policy report:

Report Name	Successful Jobs for Policy
Report Category	Policy (Drill down report)
Where to Locate	Report > Report Templates > Policy Reports > Policy Summary Dashboard (click Successful jobs)
Report Purpose	This report lists all the successful jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	No

Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Policy > Policy Summary Dashboard > Successful Jobs for Policy

The following table lists the filters for Successful Jobs for Policy report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.

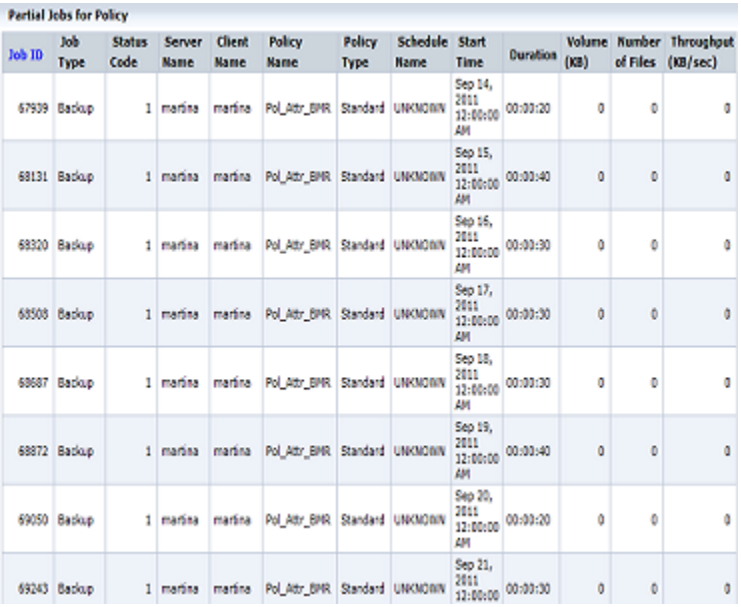
Example of filter usage: You may run the Successful Jobs for Policy report for specific policies to view details only for the specific policies.

Partial Jobs for Policy report

This drilldown report is available when you click a value (link) from the Number of Partially Successful Jobs from the Policy Summary Dashboard report. This drilldown report provides an overview of all the partially successful jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report. The report provides details like schedule name, start times, and duration of the job etc.

Figure 2-84 shows a sample view of the Successful Jobs for Policy report.

Figure 2-84 Partially Successful Jobs for Policy report



Partial Jobs for Policy

Job ID	Job Type	Status Code	Server Name	Client Name	Policy Name	Policy Type	Schedule Name	Start Time	Duration	Volume (KB)	Number of Files	Throughput (KB/sec)
67939	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 14, 2011 12:00:00 AM	00:00:20	0	0	0
68131	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 15, 2011 12:00:00 AM	00:00:40	0	0	0
68320	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 16, 2011 12:00:00 AM	00:00:30	0	0	0
68508	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 17, 2011 12:00:00 AM	00:00:30	0	0	0
68687	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 18, 2011 12:00:00 AM	00:00:30	0	0	0
68872	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 19, 2011 12:00:00 AM	00:00:40	0	0	0
69050	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 20, 2011 12:00:00 AM	00:00:20	0	0	0
69243	Backup	1	martina	martina	Pol_Attr_BMR	Standard	UNKNOWN	Sep 21, 2011 12:00:00	00:00:30	0	0	0

The following are details associated with the Partially Successful Jobs for Policy report:

Report Name	Partially Successful Jobs for Policy
Report Category	Policy (Drill down report)
Where to Locate	Report > Report Templates > Policy Reports > Policy Summary Dashboard (click Partially Successful jobs) > Partially Successful Jobs for Policy
Report Purpose	This report lists all the partially successful jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes

Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Policy > Policy Summary Dashboard > Partially Successful Jobs for Policy

The following table lists the filters for Partial Jobs for Policy report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Policy	Policy Name Policy Type	Select one or more policy names to view data for the selected policies. Select one or more policy types to view data for the selected policy types.

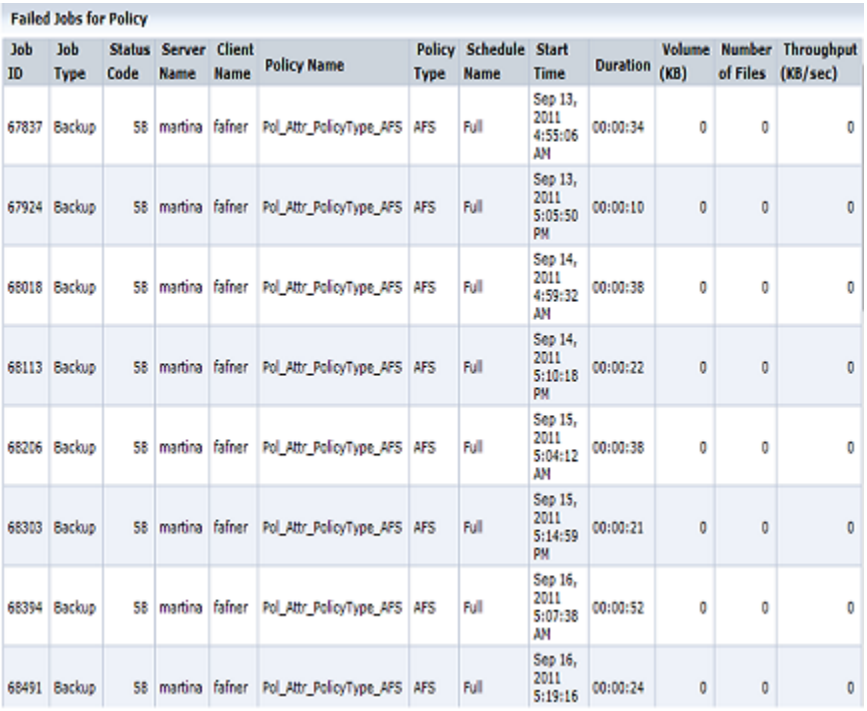
Example of filter usage: You may run the Partial Jobs for Policy report for specific policies to view details only for the specific policies.

Failed Jobs for Policy

This drilldown report is available when you click a value (link) from the **Number of Failed Jobs** column of the Policy Summary Dashboard report. This drilldown report provides an overview of all the failed jobs for the selected policy name, server, and time frame. This drilldown report uses the run time parameters that are passed from the main report. The report provides details like schedule name, start times, and duration of the job etc.

Figure 2-85 shows a sample view of the Failed Jobs for Policy report.

Figure 2-85 Failed Jobs for Policy report



Failed Jobs for Policy

Job ID	Job Type	Status Code	Server Name	Client Name	Policy Name	Policy Type	Schedule Name	Start Time	Duration	Volume (KB)	Number of Files	Throughput (KB/sec)
67837	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 13, 2011 4:55:06 AM	00:00:34	0	0	0
67924	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 13, 2011 5:05:50 PM	00:00:10	0	0	0
68018	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 14, 2011 4:59:32 AM	00:00:38	0	0	0
68113	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 14, 2011 5:10:18 PM	00:00:22	0	0	0
68206	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 15, 2011 5:04:12 AM	00:00:38	0	0	0
68303	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 15, 2011 5:14:59 PM	00:00:21	0	0	0
68394	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 16, 2011 5:07:38 AM	00:00:52	0	0	0
68491	Backup	58	martina	fafner	Pol_Attr_PolicyType_AFS	AFS	Full	Sep 16, 2011 5:19:16	00:00:24	0	0	0

The following are details associated with the Failed Jobs for Policy report:

Report Name	Failed Jobs for Policy
Report Category	Policy (Drill down report)
Where to Locate	Report > Report Templates > Policy Reports > Policy Summary Dashboard (click Failed jobs) > Failed Jobs for Policy
Report Purpose	This report lists all the failed jobs of the selected policy. This report is valid for NetBackup and NetBackup Appliance.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Tabular
Drill down report	No
Can be scheduled	Yes

Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Policy > Policy Summary Dashboard > Failed Jobs for Policy

The following table lists the filters for Failed Jobs for Policy report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .
Policy	Policy Name	Select one or more policy names to view data for the selected policies.
	Policy Type	Select one or more policy types to view data for the selected policy types.

Example of filter usage: You may run the Failed Jobs for Policy report for specific policies to view details only for the specific policies.

About Restore reports in OpsCenter

This section describes restore job reports that provide information for all the NetBackup restore and recovery operations.These reports are applicable only for NetBackup.

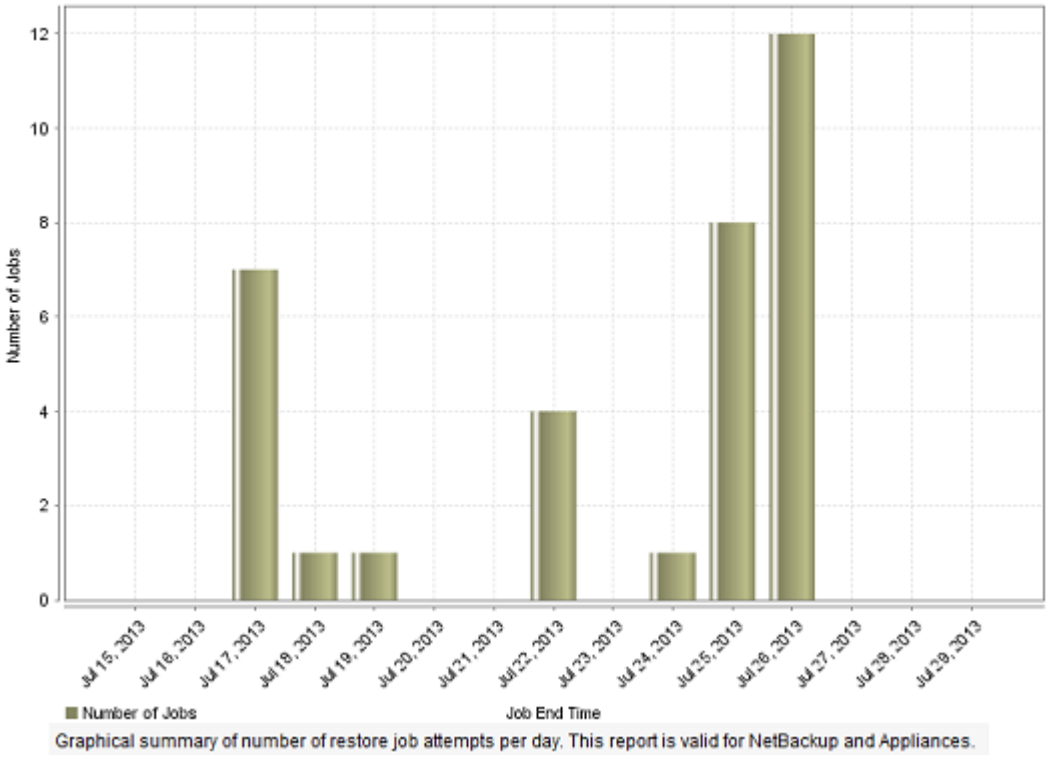
Restore Job Summary by Job Count report	See "Restore > Restore Job Attempt Summary by Job Count" on page 280.
Restore Job Summary by Volume Restored report	See "Restore > Restore Job Attempt Summary by Volume Restored" on page 283.
Restore Job Details report	See "Restore > Restore Job Details" on page 286.
Client Restore report	See "Client Restore report" on page 288.

Restore > Restore Job Attempt Summary by Job Count

This report shows graphical summary of number of restore jobs per day.

Figure 2-86 shows a sample view of Restore Job Attempt Summary by Job Count Report.

Figure 2-86 Restore Job Attempt Summary by Job Count Report



In addition, you can view the report in a tabular format.

Figure 2-87 shows a sample view of Restore Job Attempt Summary by Job Count Report.

Figure 2-87 Restore Job Attempt Summary by Job Count Report (Tabular)

Job End Time	Number of Jobs
Jul 15, 2013	0
Jul 16, 2013	0
Jul 17, 2013	7
Jul 18, 2013	1
Jul 19, 2013	1
Jul 20, 2013	0
Jul 21, 2013	0
Jul 22, 2013	4
Jul 23, 2013	0

The following are the details that are associated with the `Restore Job Attempt Summary by Job Count` report:

Report Name	Restore Job Attempt Summary by Job Count
Report Category	Backup
Where to Locate	All Reports > Report Templates > Restore > `Restore Job Summary by Job Count` report.
Report Purpose	Graphical summary of number of jobs per day.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical
Drill down report	Yes. See Restore Job Attempt Details
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > `Restore Job Summary`

You can edit this report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `the` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

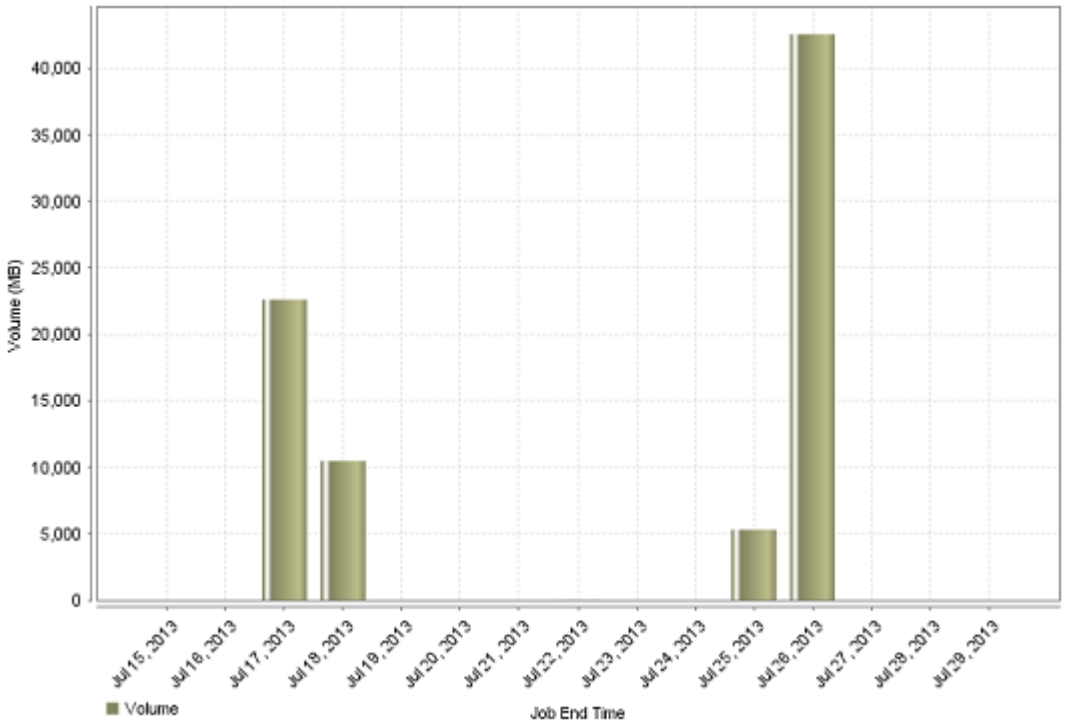
Example of filter usage: Run the report for a specific primary server to view the restore jobs per day for that primary server.

Restore > Restore Job Attempt Summary by Volume Restored

This report shows graphical summary of volume of restore jobs per day.

Figure 2-88 shows a sample view of Restore Job Attempt Summary by Volume Restored Report.

Figure 2-88 Restore Job Attempt Summary by Volume Restored Report



Graphical summary of volume of data restored per day. This report is valid for NetBackup and Appliances.

In addition, you can view the historical report in tabular format.

Figure 2-89 shows a sample view of Restore Job Attempt Summary by Volume Restored Report.

Figure 2-89 Restore Job Attempt Summary by Volume Restored Report (Tabular)

Job End Time	Volume (MB)
Jul 15, 2013	0
Jul 16, 2013	0
Jul 17, 2013	22,579.75
Jul 18, 2013	10,460.1
Jul 19, 2013	0
Jul 20, 2013	0
Jul 21, 2013	0
Jul 22, 2013	7.93
Jul 23, 2013	0

The following are the details that are associated with the `Restore Job Attempt Summary by Volume Restored` report:

Report Name	Restore Job Attempt Summary by Volume Restored
Report Category	Restore
Where to Locate	All Reports > Report Templates > Restore > `Restore Job Summary by Volume Restored` report.
Report Purpose	Graphical summary showing number of restore jobs per day.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical
Drill down report	Yes. See Restore Job Attempt Details
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > `Restore Job Summary`

You can edit this report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of

specific primary servers. The following table shows the filters for `the` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: Run the report for a specific primary server to view the Restore Job Summary by Volume Restored for that primary server.

Following filter enhancements have been done for the report.

- New supported formats TSV, XML, PDF, and HTML are added.

Restore > Restore Job Details

This report lists all the completed restore jobs for a selected timeframe.

Figure 2-90 shows a sample view of Restore Job Details Report.

Figure 2-90 Restore Job Details Report

Restore Job Details

Job ID	Server Name	Type	Client Name	Media Server	Start Time	End Time	Attempt Number	Size(KB)	Count of Files
4	nbapp141.eng	Restore	nbapp141	nbapp141	Jul 17, 2013 8:58:14 AM	Jul 17, 2013 8:58:20 AM	1	30	1
8	nbapp141.eng	Restore	nbapp230	nbapp230	Jul 17, 2013 9:32:09 AM	Jul 17, 2013 9:32:14 AM	1	30	1
12	nbapp141.eng	Restore	nbapppoc07	nbapppoc07	Jul 17, 2013 12:31:00 PM	Jul 17, 2013 12:31:05 PM	1	30	1

The following are the details that are associated with the `Restore Job Details` report:

Report Name	Restore Job Details
Report Category	Restore
Where to Locate	All Reports > Report Templates > Restore > `Restore Job Details` report.
Report Purpose	Lists all completed jobs for the selected timeframe.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	Historical, Ranking, Distribution
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Jobs > Restore Job Details

You can edit the `Restore Job Details` report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to view reports of specific primary servers. The following table shows the filters for `Restore Job Details` report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Primary Server	Primary Server	Select one or more primary servers to view data for the virtual clients that are backed up by the selected primary servers in the report. All primary servers that are added to the OpsCenter console are shown in the **Value** drop-down list .

Example of filter usage: Run the Restore Job Details report for a specific primary server to view the completed restore jobs for that primary server.

The following report enhancements have been made for the Restore Job Details report:

- The unit Years has been added for Relative Timeframe selection. You can now view data for the last x years. You can also see the Years tab on top-right corner of the Tabular Backup Report.

- The default Relative Timeframe for this report was 28 days now it is changes to next 2 weeks.

The following filter enhancements have been made for the Restore Job Details report:

- The units **Weeks, Months** and **Years** have been added for Relative Timeframe selection. You can now view data for the last X years.
- The default Relative Timeframe for this report is changed to **Previous 14 days**.
- The column **Elapsed Time** has been removed.
- New supported formats like TSV, XML, PDF & HTML added.
- Rows per page parameter value were 20 now it is set to 100.

Client Restore report

This report provides restore job details for a specified client. The table in the report contains information, such as, primary and media server names, and start and end times.

You can edit the report to show or hide the columns that you are interested in. All the columns are shown by default. You can also filter the report to show activity for a limited sample set, such as one or more clients or views.

Figure 2-91 shows a sample view of the Client Restore report.

Figure 2-91 Client Restore report

Client Restore

Job ID	Server Name	Client Name	Media Server	Start Time	End Time	Size(KB)	Count of Files
9405	purandar	purandar	purandar	Aug 3, 2011 7:55:03 PM	Aug 3, 2011 7:55:10 PM	31	1
9406	purandar	purandar	purandar	Aug 3, 2011 7:57:14 PM	Aug 3, 2011 7:57:21 PM	31	1
9422	purandar	purandar	ccs-sol-qe-11	Aug 4, 2011 2:02:46 PM	Aug 4, 2011 2:04:17 PM	4,610,656	21,880
9423	purandar	purandar	ccs-sol-qe-11	Aug 4, 2011 2:09:58 PM	Aug 4, 2011 2:10:11 PM	0	0
9424	purandar	purandar	ccs-sol-qe-11	Aug 4, 2011 2:14:29 PM	Aug 4, 2011 2:14:39 PM	0	0
9435	purandar	purandar	ccs-sol-qe-11	Aug 5, 2011 12:32:31 PM	Aug 5, 2011 12:34:38 PM	4,232,256	21,880

The following are details associated with the Client Restore Report:

Report Name	Client Restore
Report Category	Client Reports
Where to Locate	Report > Report Templates > Client Reports > Client Restore
Report Purpose	Lists all the restore jobs of the given client.
Supported products	NetBackup, NetBackup Primary Appliance
Applicable View	Primary Server, Client
Report Display	N.A.
Drill down report	None
Can be scheduled	Yes
Supported formats	PDF, CSV, TSV, XML, HTML
Mapping with NOM report	All Reports > Standard Reports > Client > Client Restore

The following table shows the filters for Client Restore report and how you can use these filters to view specific data in the report.

Filter	Column	Description
View		Select a view to show data for the selected view in the report. By default **All My Views** is selected.
Client	Client Name	Select one or more clients to view data for the selected clients in the report. All clients that are protected by the primary servers in the OpsCenter console are listed.

Example of filter usage: You may run the Clients Restore report for specific clients to view details only for the specific clients.

The unit **Years** has been added for Relative Timeframe selection. You can now view data for the last x years. You can also select **Year** from the top-right corner of the report.

About Storage Lifecycle Policy reports

This section describes the Storage Lifecycle policy reports that provide information about the NetBackup Storage Lifecycle Policies (SLP's)and NetBackup Auto Image Replication (AIR). It also inludes detailed information on SLP sizes, progress, and backlog per Primary.

The `Storage Lifecycle Policy` reports in OpsCenter help you gain an end-to-end visibility across destinations in a storage lifecycle policy. With the Auto Image Replication functionality, you can replicate images from one NetBackup domain to another NetBackup domain. You can specify a different primary server as a storage destination in an SLP. The SLP reports in OpsCenter show an end-to-end view of the SLP process that includes backup to import of duplicated image into different NetBackup domains. The SLP reports help you to verify if each step in the SLP is executed and identify the possible bottlenecks.

The `Storage Lifecycle Policy` reports in OpsCenter help you find answers to the following questions:

- Is the SLP performing according to schedule?
- Have the 2nd, 3rd… Copies been made? Does the original image still exist?
- Am I at a risk of data loss? A copy at a certain phase is about to expire and the subsequent phase's copy has not been made.
- What is my backlog? Is it getting steadily worse?

Review the following points about SLP reports:

- The SLP reports are applicable only to NetBackup.
- The SLP reports can be run only for 7.1 or higher primary servers. If you upgrade from 7.0 (or 7.0.1) to a 7.1 primary server, the SLP reports also show the images for 7.0 or 7.0.1 primary servers.
  If you upgrade NetBackup from 7.0 or 7.0.1 to 7.1 and the SLP definition contains multiple backup operations, then the first copy is marked as "Backup" and the remaining are marked as "Duplication". For example, if you created an SLP that contains four destinations where two destinations are for backup and two are for duplication, then image copy data marks the first copy as Backup and remaining for Duplication.
- The data that is shown in the SLP reports is collected from the NetBackup catalog and the SLP worklist by NBSL. Once the initial data collection is complete, the updated data is collected from the NetBackup catalog in every 15 minutes and from the SLP worklist in every 10 minutes. The SLP worklist is located in the EMM and contains metadata like how many copies need to be created, where they need to be created, when they are completed etc.
  The data that is displayed in the SLP reports is based on the image data that exists in the SLP worklist and the NetBackup catalog.
- The effects of deduplication, compression, or optimized deduplication on image or copy size are not considered in the SLP reports.

- By default, data for SLP reports is purged from the OpsCenter database after 90 days. You can also customize the purge interval for SLP images from **Settings > Configuration > Data Purge**.
- In general, the copy data in the SLP reports (like Copies Completed column) is based on the data that is collected from the SLP worklist. EMM creates the SLP worklist once a backup is complete. OpsCenter collects this data in every 10 minutes and shows it in the SLP reports. Depending on when the SLP worklist is created and also the OpsCenter data collection cycle, the OpsCenter consoles show details for the copy data.
- The timeframe filter for all SLP reports is based on the time when the primary backup image (and not an image copy) was created. For example, if you view the SLP Status by Image Copy report between 7'th May 1:00 P.M. to 8'th May 1:00 P.M., then the copies that got created for an SLP after 8'th May 1:00 P.M. may be displayed. These copies may be displayed as the timeframe filter is based on the time when the primary backup image was created and not on the copy creation time.
- SLP reports do not consider non-SLP based duplications.
- Creating custom reports for SLP's is not supported.

The following are two high-level SLP reports:

SLP Status report	See "SLP Status report" on page 292.
SLP Backlog report	See "SLP Backlog report" on page 297.

Before using the SLP reports, you must understand the SLP and Auto Image Replication concepts in NetBackup.

See "About SLP and Auto Image Replication" on page 291.

About SLP and Auto Image Replication

This section gives a brief overview about SLP and Auto Image Replication in NetBackup.

A Storage Lifecycle Policy (SLP) is a storage plan that specifies where data will be stored and for how long. The SLP determines where the backup image is initially written and where it is subsequently duplicated. With NetBackup 7.1, you can also duplicate backup image or duplicate copies from one storage domain to another for business continuity planning purposes. This means that you can now copy backup images from one primary server to another primary server, and also specify a different primary server as a storage destination in an SLP.

The SLP and Auto Image Replication functionality in NetBackup allow you to move data to tiers of storage on different primary servers commensurate with the value of the data as it ages.

More information about SLP and Auto Image Replication functionality is available in the *NetBackup Administrator's Guide*.

SLP Status report

The SLP Status report provides a summary of lifecycle policies that are associated with a primary server. The SLP Status report is a tabular report that lets you know the current progress of SLPs in the selected timeframe for each primary server that is added to the OpsCenter console.

The SLP status report gives a quick summary of the SLP activity and lets you identify the SLPs that are incomplete. You can see if all your duplications (copies) are complete or not.

By clicking the links in the SLP Status report, you can drill down to more detailed reports. You can use the drill-down reports to focus on SLP's, images, or the image copies that are incomplete. You can also view SLP status for each destination and also for each SLP.

From the SLP Status report, you can drill down to the following reports:

SLP Status by SLP report	See "SLP Status by SLP report" on page 298. From the SLP Status by SLP report, you can drill down to the following reports: ■ SLP Status by Destinations report See "SLP Status by Destinations report" on page 317. ■ SLP Duplication Progress report See "SLP Duplication Progress report" on page 321.
SLP Status by Client report	See "SLP Status by Client report" on page 303.
SLP Status by Image report	See "SLP Status by Image report" on page 308.
SLP Status by Image Copy report	See "SLP Status by Image Copy report" on page 313.

The SLP Status report comprises of the following columns:

Primary Server (where the SLP lives)	Name of the primary server (link) where the SLP runs. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The NetBackup primary server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report. Click on the primary server (link) to see the drilldown report named SLP Status by SLP.
Oldest Unfinished Image	This column tells you about the oldest image that is SLP-incomplete for the selected primary server. This column represents the image end time (and date). The data from this column helps you to identify the possible bottlenecks in the SLP process. This column is mandatory and cannot be removed when you edit the report.
Total Clients	Number of the unique clients that are backed up by the SLP for the selected primary server. Note that if the same client is backed up twice or thrice by the SLP, the client is counted only once. Click the number (link) to view the SLP Status by Client report. This column is mandatory and cannot be removed when you edit the report.
Total Existing Images	Total number of the images that are present in the OpsCenter database for SLP's on the selected primary server (includes both SLP-complete images and SLP-incomplete images). Click the number (link) to view the SLP Status by Image report for the specific primary server. This report displays details of images in the OpsCenter database that are associated with the SLP's on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

Images % SLP Complete

Percentage of images in the OpsCenter database that are SLP-complete for the selected primary server. This column is calculated using data from the following columns of the SLP Status report:

- Images SLP Complete
- Total Existing Images

The contents of Images % SLP Complete column is calculated by using the following formula:

Images SLP Complete / Total Existing Images * 100

This column is mandatory and cannot be removed when you edit the report.

Images SLP Complete

Number of images in the OpsCenter database that are SLP-complete for the specific SLP on the selected primary server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-complete for the specific SLP.

Images Not SLP Complete

Number of images in the OpsCenter database that are SLP-incomplete for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-incomplete.

Total Expected Copies

Total number of image copies in the OpsCenter database for the specific SLP on the selected primary server (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report.

% Copy Complete

Percentage of completed copies in the OpsCenter database for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated by using data from the following columns of the SLP Status By SLP report:

- Copies Completed
- Total Expected Copies

The contents of % Copy Complete column is calculated by using the following formula:

Copies Completed / Total Expected Copies * 100

Copies Completed

Number of the completed copies that are present in the OpsCenter database for SLP's on the selected primary server. Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are complete for the selected primary server.

You can remove this column when you edit the report.

Copies Not Complete

Number of incomplete copies in the OpsCenter database for SLP's on a selected primary server. This column is calculated using the following formula:

Copies Not Complete = Total Expected Copies –Copies Completed

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for image copies in the OpsCenter database that are incomplete for the selected primary server.

This column is mandatory and cannot be removed when you edit the report.

Total Expected Size - all copies (MB)	Expected aggregate size of all copies for SLP's on the selected primary server that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report. The Total Expected Size for all copies is calculated by using the following formula: Total Expected Size for all copies = (Number of copies) * (backup copy size) **Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.
Completed Copy Size (%)	Percentage of completed copy size for the selected primary server. This column is mandatory and cannot be removed when you edit the report. The Completed Copy Size (%) for the specific primary server is calculated using data from the following columns of the SLP Status report: ■ Completed Copy Size ■ Total Expected Size – all copies The contents of Completed Copy Size (%) column is calculated for each primary server by using the following formula: Completed Copy Size / Total Expected Size – all copies * 100
Completed Copy Size (MB)	Aggregate size of all the completed copies in the OpsCenter database for the selected primary server. You can remove this column when you edit the report. Note: The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

Remaining Copy Size (MB)	Aggregate size of all remaining copies that are to be created for the selected primary server. This column is mandatory and cannot be removed when you edit the report. The Remaining Copy Size (MB) for a specific primary server is calculated in the following manner: (Remaining Copy Count) x (Size of Backup Copy1) **Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status report. The following filters are available when you edit the SLP Status report:

Views	Select a particular view to see data for the selected view.
Primary Server	Select one or more primary servers to see data for the selected primary servers.

SLP Backlog report

The SLP Backlog report lets you monitor the overall SLP backlog in a glance. This report shows the trend of images created vs. the images which are SLP incomplete in a line chart format. This report illustrates what the SLP backlog looks like against the image creation volume for the selected timeframe and the selected SLP's. By comparing the line charts in this report, you can understand the rate at which copies are created vs. the rate at which images requiring copies are created. This report provides you with empirical evidence on how efficiently the SLP performs and visibility into its capacity (i.e. at what point does the outflow begin to fall steadily behind).

Data for the SLP Backlog report is collected from the OpsCenter database at midnight (12:00 A.M. by the OpsCenter Server clock). The data collection for the SLP Backlog report occurs after every 24 hours. This report is available in both graphical (chart) and tabular formats. To view the report details in a tabular format, click the link **Show Chart as Table** at the bottom of the report.

You can edit the report to view specific data in the report. You can also save this report. Note that when you save the SLP Backlog report and run the saved report after some time, the report displays current data. You can export or email this report for reference.

Note that the data that is shown in the SLP Backlog report (images that are created and unfinished images) is in GB by default. You can edit the report and change the units to KB, MB, or TB. The default timeframe for the SLP Backlog report is last two weeks.

While editing the SLP Backlog report, you can group the timeframe for which you want to see data. However, the time frame grouping for the SLP Backlog report is supported for the following intervals only:

- one day
- one week
- one month

The SLP Backlog report does not support any other time frame grouping (like two days, three months, 1 minute, or four weeks).

You can use filters to view specific data in the SLP Backlog report. The following filters are available when you edit the SLP Backlog report:

Views	Select a particular view to see data for the selected view.
Primary Server	Select one or more primary servers to see data for the selected primary servers.
Storage Lifecycle Policy	Select one or more SLP's to see data for the selected SLP's.

SLP Status by SLP report

You can view the SLP status by SLP report when you click the primary server (link) in the SLP report. It provides detailed information on the status of each SLP that is configured on the selected primary server.

The SLP status by SLP report lets you monitor the progress of each SLP and also quickly identify the possible bottlenecks.

The SLP Status by SLP report comprises of the following columns:

Primary Server (where the SLP lives)	Name of the primary server where the SLP runs. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The NetBackup primary server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.

SLP Name	Name of the SLP (link) that is configured on the primary server. This column is mandatory and cannot be removed when you edit the report. Click the name (link) to view the SLP Status by Destinations report.
SLP Version	Version (link) that is associated with the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report. Click the version (link) to view the SLP Duplication Progress report.
Oldest Unfinished Image	The oldest image that is not SLP-complete for the specific SLP on the selected primary server. This column represents the image end time (and date). This data helps you to identify the possible bottlenecks for the specific SLP. This column is mandatory and cannot be removed when you edit the report.
Total Clients	Number of unique clients (link) that are backed up by the specific SLP. Note that if the same client is backed up twice or thrice by the SLP, the client is counted only once. This column is mandatory and cannot be removed when you edit the report. Click the number (link) to view the SLP Status by Client report.
Total Existing Images	The total number of images that are present in the OpsCenter database for the specific SLP on the selected primary server. This includes both SLP-complete images and SLP-incomplete images. This column is mandatory and cannot be removed when you edit the report. Click the number (link) to view the SLP Status by Image report for the specific SLP on the selected primary server. This report displays details of images in the OpsCenter database that are associated with the SLP's on the selected primary server.

Images % SLP Complete

Percentage of images in the OpsCenter database that are SLP-complete for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated using data from the following columns of the SLP Status by SLP report:

- Images SLP Complete
- Total Existing Images

The contents of Images % SLP Complete column is calculated by using the following formula:

Images SLP Complete / Total Existing Images * 100

Images SLP Complete

Number of images in the OpsCenter database that are SLP-complete for the specific SLP on the selected primary server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-complete for the specific SLP.

Images Not SLP Complete

Number of images in the OpsCenter database that are SLP-incomplete for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-incomplete.

Total Expected Copies

Total number of image copies in the OpsCenter database for the specific SLP on the selected primary server (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report.

% Copy Complete

Percentage of completed copies in the OpsCenter database for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by using data from the following columns of the SLP Status By SLP report:

- Copies Completed
- Total Expected Copies

The contents of **% Copy Complete** column is calculated by using the following formula:

Copies Completed / Total Expected Copies * 100

Copies Completed

The number of completed copies that are present in the OpsCenter database for the specific SLP on the selected primary server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are complete for the selected primary server.

Copies Not Complete

Shows the number of incomplete copies in the OpsCenter database for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by using the following formula:

Copies Not Complete = Total Expected Copies –Copies Completed

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are incomplete for the selected SLP.

Total Expected Size - all copies (MB)	Expected aggregate size of all copies for the selected SLP that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated by using the following formula: Total Expected Size for all copies = (Number of copies for the specific SLP) * (backup copy size for the specific SLP) **Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.
Completed Copy Size (%)	Percentage of completed copy size for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated from the following columns of the SLP Status By SLP report: ■ Completed Copy Size ■ Total Expected Size – all copies The contents of **Completed Copy Size (%)** column is calculated by using the following formula: Completed Copy Size / Total Expected Size – all copies * 100
Completed Copy Size (MB)	Aggregate size of all the completed copies in the OpsCenter database for the specific SLP on the selected primary server. You can remove this column when you edit the report. **Note:** The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

Remaining Copy Size (MB)	Aggregate size of all remaining copies that are to be created for the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated in the following manner: (Remaining Copy Count for the specific SLP) x (Size of backup copy for the specific SLP) **Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by SLP report. The following filters are available when you edit the SLP Status by SLP report:

Views	Select a particular view to see data for the selected view.
Primary Server	Select one or more primary servers to see data for the selected primary servers.
Storage Lifecycle Policy	Select one or more SLP's to see data for the selected SLP's.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

SLP Status by Client report

The SLP Status by Client report is available as a drill-down report from the SLP Status and SLP Status by SLP report. You can view the SLP status by Client report when you click the links in the Total Clients column in the following reports:

- SLP Status
- SLP Status by SLP (a filtered view of the SLP status by Client report is shown)

The SLP Status by Client report lets you monitor the SLP progress for each client that is associated with the SLP. This report helps you to know details about the SLPs that protect the clients.

This report also provides details about origin primary server (primary server where the data is backed up) and the primary server where the SLP is running currently. These two primary servers may be different when in case of Auto Image Replication.

The SLP Status by Client report comprises of the following columns:

Primary Server (where the SLP lives)	Name of the primary server where the SLP that is associated with the client exists. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The NetBackup primary server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
SLP Name	Name of the SLP that is associated with the selected primary server and client. This column is mandatory and cannot be removed when you edit the report.
SLP Version	Version that is associated with the specific SLP. This column is mandatory and cannot be removed when you edit the report.
Client Name	Client name (link) that is backed up by the specific SLP on the selected primary server. This column is mandatory and cannot be removed when you edit the report. Click the client name (link) to view the SLP Status by Image report. The SLP Status by Image report is filtered for the specific client and the specific SLP.
Origin Primary Server (created the image)	`Origin Primary Server` is where the primary backup copy resides. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The `Origin Primary Server` must be a NetBackup 7.1 or later primary server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
Oldest Unfinished Image	This column tells you about the oldest image that is not SLP-complete for the selected primary server, SLP, and client. This column represents the image end time (and date). This data helps you to identify the possible bottlenecks for the specific SLP. This column is mandatory and cannot be removed when you edit the report.

Total Existing Images

The total number of images that are present in the OpsCenter database for the specific SLP and client on the selected primary server. This includes both SLP-complete images and SLP-incomplete images. This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image report for the specific SLP on the selected primary server. This report displays details of images in the OpsCenter database that are associated with the SLP's and client on the selected primary server.

Images % SLP Complete

Percentage of images in the OpsCenter database that are SLP-complete for the specific SLP and client on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this report is calculated from the following columns of the SLP Status by Client report:

- Images SLP Complete
- Total Existing Images

The data in the **Images % SLP Complete** column is calculated by using the following formula:

Images SLP Complete / Total Existing Images * 100

Images SLP Complete

Number of images in the OpsCenter database that are SLP-complete for the specific SLP and client on the selected primary server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-complete for the specific SLP and client.

Images Not SLP Complete

Number of images in the OpsCenter database that are SLP-incomplete for the specific SLP and client on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image report. A filtered view of the report appears that displays details of images in the OpsCenter database that are SLP-incomplete.

Total Expected Copies

Total number of copies expected in the OpsCenter database for the specific SLP and client on the selected primary server (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report.

% Copy Complete

Percentage of completed copies in the OpsCenter database for the specific SLP and client on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status by Client report:

- Copies Completed
- Total Expected Copies

The contents of **% Copies Complete** column is calculated by using the following formula:

Copies Completed / Total Expected Copies * 100

Copies Completed

The number of completed copies that are present in the OpsCenter database for the specific SLP and client on the selected primary server. You can remove this column when you edit the report.

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are complete for the selected primary server.

Copies Not Complete

Shows the number of incomplete copies in the OpsCenter database for the specific SLP and client on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by the following formula:

Copies not Complete = Total Expected Copies – Copies Completed

Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are incomplete for the selected SLP.

Total Expected Size - all copies (MB)

Expected aggregate size of all copies for the selected SLP and client that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated by the following formula:

Total Expected Size for all copies = (Number of copies) * (backup copy size)

Note: The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.

Completed Copy Size (%)

Percentage of completed copy size for the specific SLP and client on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status by Client report:

- Completed Copy Size
- Total Expected Size – all copies

The contents of **Completed Copy Size (%)** column is calculated by using the following formula:

Completed Copy Size / Total Expected Size – all copies * 100

Completed Copy Size (MB)

Aggregate size of all the completed copies in the OpsCenter database for the specific SLP and client on the selected primary server. You can remove this column when you edit the report.

Note: The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

Remaining Copy Size (MB)	Aggregate size of all remaining copies that are to be created for the specific SLP and client on the selected primary server. This column is mandatory and cannot be removed when you edit the report. The column content is calculated in the following manner: (Remaining Copy Count) x (Size of Backup Copy1) **Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Client report. The following filters are available when you edit the SLP Status by Client report:

Views	Select a particular view to see data for the selected view.
Primary Server	Select one or more primary servers to see data for the selected primary servers.
Storage Lifecycle Policy	Select one or more SLP's to see data for the selected SLP's.
Client	Select one or more clients to see data for the selected clients.

The default timeframe for this report is based on what timeframe is selected for top-level report.

SLP Status by Image report

The SLP Status by Image report is available as a drill-down report from the SLP Status, SLP Status by SLP, and SLP Status by Client report. You can view the SLP Status by Image report when you click the links in the following columns:

- Total Existing Images
- Images SLP Complete (filtered view of the SLP Status by Image report is shown)
- Images Not SLP Complete (filtered view of the SLP Status by Image report is shown)

The SLP Status by Image report lets you monitor the lifecycle for the images that are associated with the SLP. This report helps you to know which images are complete and incomplete for a specific SLP and identify bottlenecks in the SLP process. This report gives an idea of how a specific image is duplicated across primary servers and also provides specific details about the image like backup time, SLP completion time, copies associated with each image and it's status etc. The

SLP status by Image report can help you to identify the image IDs that are not SLP-complete.

The SLP Status by Image report comprises of the following columns:

Primary Server (where the SLP lives)	Name of the primary server where the SLP runs. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The NetBackup primary server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
SLP Name	Name of the SLP that is associated with the selected primary server and image. This column is mandatory and cannot be removed when you edit the report.
SLP Version	Version (link) that is associated with the specific SLP. This column is mandatory and cannot be removed when you edit the report. Click the version (link) to view the SLP Duplication Progress report.
Policy Name	Policy that is associated with the SLP. This column is mandatory and cannot be removed when you edit the report.
Schedule Name	Schedule that is associated with the policy. You can remove this column when you edit the report.
Client Name	Client name that is backed up by the SLP for the selected primary server. This column is mandatory and cannot be removed when you edit the report.
Origin Primary Server (created the image)	`Origin Primary Server` is where the primary backup copy resides. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The origin primary server and primary server where the SLP lives (or is running currently) may be different if you use Auto Image Replication. The `Origin Primary Server` must be a NetBackup 7.1 or later primary server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.

Image ID	Image ID (link) associated with the image. The Image ID is unique for each image. Click the image ID (link) to view the SLP Status by Image Copy report. This column is mandatory and cannot be removed when you edit the report.
Backup Time	Date and time when the primary backup is completed. This column is mandatory and cannot be removed when you edit the report.
SLP Completion Time	Date and time when the image is SLP-complete. This column is mandatory and cannot be removed when you edit the report.
Lag Time (SLP Completion Time – Backup Time)	The Lag Time gives you an idea of how much time was required to complete the SLP and judge how fast or slow duplications occur. The Lag time is displayed in seconds. The Lag time for a specific image copy is computed by using data from the following columns and by using the following formula: Lag Time = SLP Completion Time – Backup Time This column is mandatory and cannot be removed when you edit the report.
Total Expected Copies	Total number of copies expected in the OpsCenter database for the specific SLP and image on the selected primary server (includes both complete copies and incomplete copies). Click the number (link) to view the SLP Status by Image Copy report. This column is mandatory and cannot be removed when you edit the report.
Copies Completed	The number of completed copies that are present in the OpsCenter database for the specific SLP and image on the selected primary server. Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are complete for the selected primary server. You can remove this column when you edit the report.

Copies Not Complete	Shows the number of incomplete copies in the OpsCenter database for the specific SLP and image on the selected primary server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated by the following formula: Copies not Complete = Total Expected Copies –Copies Completed Click the number (link) to view the SLP Status by Image Copy report. A filtered view of the report appears that displays details for copies in the OpsCenter database that are incomplete for the selected SLP.
% Copy Complete	Percentage of completed copies in the OpsCenter database for the specific SLP and image on the selected primary server. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated from the following columns of the SLP Status by Image report: ■ Copies Completed ■ Total Expected Copies The contents of this column is calculated by using the following formula: Copies Completed / Total Expected Copies * 100
Total Expected Size - all copies (MB)	Expected aggregate size of all copies for the selected SLP and image that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated by the following formula: Total Expected Size for all copies = (Number of copies) * (backup copy size) **Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.

Completed Copy Size (MB) Aggregate size of all the completed copies in the OpsCenter database for the specific SLP and image on the selected primary server. You can remove this column when you edit the report.

Note: The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

Completed Copy Size (%) Percentage of completed copy size for the specific SLP and image on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated from the following columns of the SLP Status By Image report:

- Completed Copy Size
- Total Expected Size – all copies

The contents of Completed Copy Size (%) column is calculated by using the following formula:

Completed Copy Size / Total Expected Size – all copies * 100

Remaining Copy Size (MB) Aggregate size of all remaining copies that are to be created for the specific SLP and image on the selected primary server. This column is mandatory and cannot be removed when you edit the report.

The data for this column is calculated in the following manner:

(Remaining Copy Count) x (Size of Backup Copy1)

Note: The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Image report. The following filters are available when you edit the SLP Status by Image report:

Views Select a particular view to see data for the selected view.

Primary Server Select one or more primary servers to see data for the selected primary servers.

Storage Lifecycle Policy	You can select the following columns: ■ **SLP Name**: Select one or more SLP's to view data for the selected SLP's. ■ **SLP status**: Select SLP status for which you want to view data.
Policy	Select one or more policies to see data for the selected policies.
Schedule	Select one or more schedules to see data for the selected schedules.
Client	Select one or more clients to see data for the selected clients.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

SLP Status by Image Copy report

The SLP status by Image Copy report is available as a drill-down report from the SLP Status, SLP Status by SLP, and SLP Status by Image report. You can view the SLP Status by Image Copy report when you click the links in the following columns:

- Total Expected Copies
- Copies Completed (filtered view of the SLP Status by Image Copy report is shown)
- Copies Not Complete (filtered view of the SLP Status by Image Copy report is shown)

The SLP Status by Image Copy report shows how the image copies are created for different SLP destinations across different primary servers. This report provides detailed information about the image copies that the SLP creates. This report provides details such as which copy is complete, which SLP is not complete and the specific copy operations that are pending.

The SLP Status by Image Copy report comprises of the following columns:

Primary Server (where the SLP lives)	Name of the primary server where the SLP runs. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The NetBackup primary server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
SLP Name	Name of the SLP that is associated with the selected primary server. This column is mandatory and cannot be removed when you edit the report.
SLP Version	Version (link) that is associated with the specific SLP. This column is mandatory and cannot be removed when you edit the report. Click the version (link) to view the SLP Duplication Progress report.
Data Classification	Data classification that is associated with the SLP. This column is mandatory and cannot be removed when you edit the report.
Policy Name	Policy that is associated with the SLP. This column is mandatory and cannot be removed when you edit the report.
Schedule Name	Schedule that is associated with the NetBackup policy. You can remove this column when you edit the report.
Client Name	Client name that is backed up by the SLP for the selected primary server. This column is mandatory and cannot be removed when you edit the report.
Image ID	Image ID associated with the image. The image ID is unique for each image. This column is mandatory and cannot be removed when you edit the report. Click the image ID (link) to view the SLP Status by Image Copy report.
Job ID	Job ID associated with the specific operation. This column is mandatory and cannot be removed when you edit the report.

Origin Primary Server (created the image)	`Origin Primary Server` is where the primary backup copy resides. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The origin primary server and primary server where the SLP lives (or is running currently) may be different if you use Auto Image Replication. The `Origin Primary Server` must be a NetBackup 7.1 or later primary server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
Operation	The operation that is performed on an image copy like Duplication, Backup, Import etc. This column is mandatory and cannot be removed when you edit the report.
State	Current status of the copy like Complete, Not Started, In Process, Deleted, Paused. You can remove this column when you edit the report.
Format	The **Format** column helps to differentiate between the NetBackup image format and the snapshot copy. This report shows the details of any snapshot copy that is a part of the storage lifecycle policy.
Destination	Destination where a copy should reside as per the SLP definition. This column is mandatory and cannot be removed when you edit the report.
Expiration Time	Time when the copy expires. You can remove this column when you edit the report.
Copy/Import Completion Time	Time when the copy is completed. This column is mandatory and cannot be removed when you edit the report.
Lag Time (Copy Time – Backup Time)	The Lag Time gives you an idea of how fast or slow duplications occur. The Lag time is displayed in seconds. This column is mandatory and cannot be removed when you edit the report.

Completed Copy Size (MB)	Aggregate size of all the completed copies in the OpsCenter database for the specific SLP and image on the selected primary server. This column is mandatory and cannot be removed when you edit the report. **Note:** The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Image Copy report. The following filters are available when you edit the SLP Status by Image Copy report:

Views	Select a particular view to see data for the selected view.
Primary Server	Select one or more primary servers to see data for the selected primary servers.
Storage Lifecycle Policy	You can select the following parameters: ■ Replication to Remote Primary: If the value is Yes, then copy details for replication jobs are displayed. ■ Operation: Select one or more operations that you want to view. ■ SLP name: Select one or more SLP's that you want to view. ■ State: Select one or more states that you want to view. **Example**: If you want to view all pending import operations, select the following parameters: ■ Operation = Import ■ State = Not Started **Example**: If you want to view the replication status for jobs, select the following parameters: ■ Replication to Remote Primary = Yes ■ Operation = Duplication
Policy	Select one or more policies to see data for the selected policies.

Schedule	Select one or more schedules to see data for the selected schedules.
Client	Select one or more clients to see data for the selected clients.
Images	Enter the image ID for which you want to view data.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

SLP Status by Destinations report

The SLP Status by Destinations report is available as a drill-down report from the SLP Status by SLP report. You can view the SLP Status by Destinations report when you click the SLP name (link) in the SLP Status by SLP report.

The SLP Status by Destinations report provides a summary of all the destinations for a specific SLP. You can view the SLP status by Destinations report to monitor the SLP progress for each SLP destination. For example, you may want to know the image copies that are not complete for a specific SLP destination.

The SLP Status by Destinations report comprises of the following columns:

Primary Server (where the SLP lives)	Name of the primary server where the SLP runs. The SLP may run on the source primary server or any of the destination primary servers (in case of Auto Image Replication). The NetBackup primary server must be of 7.1 or a later version and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
SLP Name	Name of the SLP that you selected. This column is mandatory and cannot be removed when you edit the report.
SLP Version	Version that is associated with the SLP. This column is mandatory and cannot be removed when you edit the report.
Data Classification	Data classification that is associated with the SLP destination. This column is mandatory and cannot be removed when you edit the report.

Origin Primary Server (created the image)	`Origin Primary Server` is where the primary backup copy resides. The SLP may run on the origin primary server or any of the destination primary servers (in case of Auto Image Replication). The origin primary server and primary server where the SLP lives (or is running currently) may be different in case of Auto Image Replication. The `Origin Primary Server` must be a NetBackup 7.1 or later primary server and also added to the OpsCenter console. This column is mandatory and cannot be removed when you edit the report.
Operation	The operation that is performed on an image copy like Duplication, Backup, Import etc. for the specific SLP destination. This column is mandatory and cannot be removed when you edit the report.
Retention	Retention period that is associated with the specific SLP destination. This column is mandatory and cannot be removed when you edit the report.
Destination	Destination where an image should reside as per the SLP definition. This column is mandatory and cannot be removed when you edit the report.
Average Lag Time (Copy Time – Backup Time)	The Average Lag Time gives you an idea of how much time is required to duplicate the primary copy to a particular destination for a specific SLP and judge how fast or slow duplications occur. The Average Lag Time is displayed in seconds. This column is mandatory and cannot be removed when you edit the report.
Total Expected Copies	Total number of copies in the OpsCenter database for the SLP and the specific SLP destination (includes both complete copies and incomplete copies). This column is mandatory and cannot be removed when you edit the report.
Copies Completed	The number of completed copies that are present in the OpsCenter database for the SLP and the specific SLP destination. You can remove this column when you edit the report.

% Copy Complete	Percentage of completed copies in the OpsCenter database for the SLP and the specific SLP destination. The column contents are calculated using data from the following columns of the SLP Status by Destinations report: ■ Copies Completed ■ Total Expected Copies The contents of % Copies Complete column is calculated by using the following formula: Copies Completed / Total Expected Copies * 100 This column is mandatory and cannot be removed when you edit the report.
Total Expected Size - all copies (MB)	Expected aggregate size of all copies for SLP and the specific SLP destination that are present in the OpsCenter database. This column is mandatory and cannot be removed when you edit the report. The column contents are calculated by using the following formula: Total Expected Size for all copies = (Number of copies) * (backup copy size) **Note:** The total expected size for all copies is a front-end size and is derived from the number of copies multiplied by the size of backup copy. The effects of deduplication, compression, or optimized deduplication on the Total Expected Size – all copies are not considered in the SLP reports.
Completed Copy Size (MB)	Aggregate size of all the completed copies in the OpsCenter database for the SLP and the specific SLP destination. You can remove this column when you edit the report. **Note:** The Completed Copy Size is a front-end size. The effects of deduplication, compression, or optimized deduplication on completed copy size are not considered in the SLP reports.

Completed Copy Size (%)	Percentage of completed copy size for the SLP and the specific SLP destination. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated from the following columns of the SLP Status by Destinations report: ■ Completed Copy Size ■ Total Expected Size – all copies The contents of Completed Copy Size (%) column is calculated by using the following formula: Completed Copy Size / Total Expected Size – all copies * 100
Remaining Copy Size (MB)	Aggregate size of all remaining copies that are to be created for the SLP and the Size (MB) specific SLP destination. This column is mandatory and cannot be removed when you edit the report. The data for this column is calculated in the following manner: (Remaining Copy Count) x (Size of Backup Copy1) **Note:** The remaining copy size is a front-end size and is derived from the number of remaining copies multiplied by the size of backup copy 1. The effects of deduplication, compression, or optimized deduplication on remaining copy size are not considered in the SLP reports.

You can use filters to view specific data in the SLP Status by Image Copy report. The following filters are available when you edit the SLP Status by Image Copy report:

View	Select a particular view to see data for the selected view.
Primary Server	Select one or more primary servers to see data for the selected primary servers.
Storage Lifecycle Policy	You can select the following columns: ■ **Replication to Remote Primary**: If the value is **Yes**, then SLP's that duplicate across primary servers are displayed. ■ **Operation**: Select one or more operations that you want to view ■ **SLP name**: Select one or more SLP's that you want to view.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

SLP Duplication Progress report

The SLP Duplication Progress report is available as a drill-down report from the SLP Status by SLP report. You can view the SLP Duplication Progress report when you click the SLP version (link) in the SLP Status by SLP report.

The SLP Duplication Progress report is a graphical report that shows how the image copies are created for an SLP on a specific primary server. This indicates how duplications are progressing for an SLP on a specific primary server.

The SLP Duplication Progress report is in a bar chart format and shows the following data for each axis:

- X axis shows all duplication destinations that are associated with the SLP
- Y1 axis bar charts show the percentage of images that are completed
- Y2 axis shows how many images are created.

Note: The SLP Duplication Progress report shows data for only one primary server where that SLP version is running.

You can also view the report data in a tabular format. To view the report details in a tabular format, click the link **Show Chart as Table** at the bottom of the report.

You can edit the report to view specific data in the report. You can also save this report for reference.

You can use filters to view specific data in the SLP Duplication Progress report. The following filters are available when you edit the SLP Duplication Progress report:

View	Select a particular view to see data for the selected view.
Primary Server	Select one or more primary servers to see data for the selected primary servers.
Storage Lifecycle Policy	Select an SLP to see data for the selected SLP. You can select only one SLP.

The default timeframe for this report is based on what timeframe is selected for the top-level report.

Limitations of SLP reports

The data that is shown in the SLP reports is collected primarily from the EMM worklist and also from the NetBackup catalog. Hence it is important to understand how the EMM worklist functions. The functionality of the EMM worklist affects the data that is displayed in the SLP reports.

The following sections provide an insight on SLP and EMM functionality and also list some limitations that are associated with the SLP reports.

About storage lifecycle policy retention

While creating a storage lifecycle policy in NetBackup, you can specify the destinations where copies should be created. For an SLP, an image can be written to the initial destination as part of the following operations:

- Backup
- Import

You can define the Retention type for each SLP destination. You can select many retention types like Fixed (1, 2, 3 weeks), Expire after Copy, Staged capacity managed etc. The following table explains the meaning of Fixed and Expire after Copy retention types:

Fixed	Fixed retention type means that the backup data is retained for a specific length of time before the backups are expired. When the retention period is reached, NetBackup deletes information about the expired backup.
Expire after Copy	Expire after Copy retention type means that the image expires after the dependent duplication is complete.

When you are creating a NetBackup policy, the SLP that you created (like SLP1) can be selected as Policy Storage (storage unit). The SLP (SLP1) is executed when the policy runs.

About data collection from EMM

The SLP1 performs the following operations:

data that is shown in the SLP reports is collected from the EMM worklist and the NetBackup catalog. The worklist is located in the EMM and contains metadata like how many copies need to be created, where they need to be created, when they are completed etc. In general, the copy data that is shown in the SLP reports (like Copies Completed, Completed Copy Size columns etc.) is based on the EMM

worklist. EMM creates the worklist after a backup is complete based on lifecycle configuration parameters.

Consider a case when you configure an SLP named SLP1:

- Backup (Stu1)
- Duplication (Stu2)
- Duplication (Stu3)

After the backup is complete, a worklist that contains an entry for each copy is created in the EMM database. In this example, the EMM worklist has three copy entries (corresponding to the number of copies that are defined in the SLP). The EMM worklist is updated as and when a duplication job is processed (for example, State for the copy changes from **Not Started** to **In Process** to **Complete**).

SLP reporting limitations

OpsCenter collects data for SLP reports in the following phases:

Table 2-1 SLP data collection

Serial No.	Phase	Description
1.	Initial Data Collection	When a NetBackup 7.1 or later primary server is added to the OpsCenter console, OpsCenter Server initially collects all data from the EMM worklist.
2.	Periodic Data Collection	After the initial data load, OpsCenter collects only the changed data after every 10 minutes.

OpsCenter depends on the EMM worklist for SLP reporting. The following EMM behavior affects the data that is shown in the SLP reports:

- If the Retention type of the SLP destination is **Expire after Copy**, then EMM deletes the copy entry from the EMM worklist after duplication is complete. This behavior affects the initial data collection and periodic data collection for SLP reports.
  See “Issues associated with initial data collection” on page 324.
  See “Issues associated with periodic data collection” on page 325.
- If the Retention type of the SLP destination is **Fixed**, then EMM deletes the copy entry based on the Retention period that is specified in the policy. This behavior affects the initial data collection and periodic data collection for SLP reports.

See "Issues associated with initial data collection" on page 324.
See "Issues associated with periodic data collection" on page 325.

- If the SLP images reside on a tape drive, then EMM deletes the copy entry when the particular SLP is complete. This behavior affects the initial data collection and periodic data collection for SLP reports.
  See "Issues associated with initial data collection" on page 324.
  See "Issues associated with periodic data collection" on page 325.
- If you cancel an SLP that is in progress, then all the copy entries that are associated with this SLP image are deleted from the EMM worklist. This behavior affects the periodic data collection for SLP reports.
  See "Issues associated with periodic data collection" on page 325.

Issues associated with initial data collection

For initial data collection, the following potential issues can be seen in SLP reports due to the EMM behavior.

Since initial data collection loads all the data from the EMM, it may have an image entry with missing copy entries. It is possible that the copy entries in the EMM worklist are deleted due to the following factors:

- If the Retention type of an SLP destination is **Expire after Copy** or **Fixed**.
- If duplications happen on a tape drive

The deletion of copies has the following affect on the data that is shown in specific SLP reports:

- The SLP Duplication Progress report is in a bar chart format. The X axis shows all duplication destinations associated with the SLP; Y1 axis bar charts show the percentage of images completed (**% Images Count**) and Y2 axis shows how many images are actually created (**Completed Images Count**).
  If a backup copy is deleted from the EMM worklist, then this report may show that the backup copy count is less than the duplication count. This is misleading. It is expected that when an SLP is complete, same number of copies should be created on all the destinations. Similarly the % Size Completed computation is inaccurate for this report.
- If a backup copy entry is deleted from the EMM worklist, the SLP Duplication Progress report will not show the backup bar chart. Similarly, if a duplication copy entry is deleted, the Duplication Progress report will not show the duplication bar chart.
- The SLP Status by Destination report will show incorrect copy sizes across destinations. The following columns of the SLP Status by Destination report show incorrect data:

- **Total Expected Size – all copies (MB)**
- **Completed Copy Size (MB)**

Issues associated with periodic data collection

When OpsCenter collects data periodically after every 10 minutes, the following potential problems can be seen in SLP reports.

Consider a scenario when OpsCenter has collected the data for all copies associated with SLP1 which is in progress. However, before the next data collection happens one of the copy entries is removed from the EMM worklist (due to the EMM behavior). In this scenario, OpsCenter marks such copy entries as Complete if the image is SLP-complete during the next data collection cycle.

In this example scenario, you may see the following issues:

- For all such copies that OpsCenter marks complete, the SLP Status by Image Copy report does not show any value for the Lag Time and the Copy End Time.
- If the last copy entry for an SLP is removed from the EMM worklist (due to EMM behavior), then the SLP Completion Time that is shown in the SLP Status by Image report is inaccurate.

Note: The same issues are seen if you cancel an SLP that is in progress (like SLP1). These issues occur because all the copy entries associated with this SLP image are deleted from the EMM worklist.

Known Issues with SLP reports

The following known issues are associated with the SLP reports:

- When there are multiple copies in an SLP and two or more copies share the same destination, then only one-bar chart is shown for such copies in the SLP Duplication Progress report.
- The size of image copies for which Import is in a Not Started state, is not considered. Because of this behavior, the `SLP Status`, SLP Status by SLP, SLP Status by Client reports may display **Completed Copy Size %** as 100% while in reality there may be image copies for which the Import operation is in a Not Started state.
- If the Import is in a Not Started state for some image copies, the SLP Status by Destination report may show two rows for the same storage destination. This data is shown because there is insufficient data for image copies for which Import is in a Not Started state. The additional row is not shown once the Import operation is complete for all image copies.

About Workload Analyzer reports in OpsCenter

This section provides descriptions on the Workload Report Templates available in OpsCenter. The reports are in a graphical format and provide details on the overall past, current, and projected workload of your NetBackup environment including job counts, sizes, throughput, and scheduled job queues.

Workload Analyzer report

The Workload Analyzer is a report that gives information about the activities that are done across a period of seven days. The activities are number of jobs running at a given period of time and the amount of data that is transferred during this period. The report contains 168 data points of analysis in terms of the activities that are done for each hour for a period of seven days.

The report is comprised of four reports that are based on time, data transfer, job queue, and job throughput. Time is the point from when the jobs start, the periods for which the jobs are active, and the point when the jobs end. Job queue is based on the length of time, a job is in queue before the job is initiated. Job size is the amount of data that is moved from the target to the destination depending on the job type. Job size is also based on how much data is broken down and moved in a given hour. Job throughput is based on the data transmission rate.

The Workload Analyzer reports consider only the jobs done for calculating and generating the report. The calculation can result in a difference in data for the current hour and date. For example, a job that started in the past, and is in the queued state for a long time is not considered in the job queue report. It is considered only when it is complete.

See “Workload Analyzer subreports: Job Count, Size, Queue, and Throughput” on page 326.

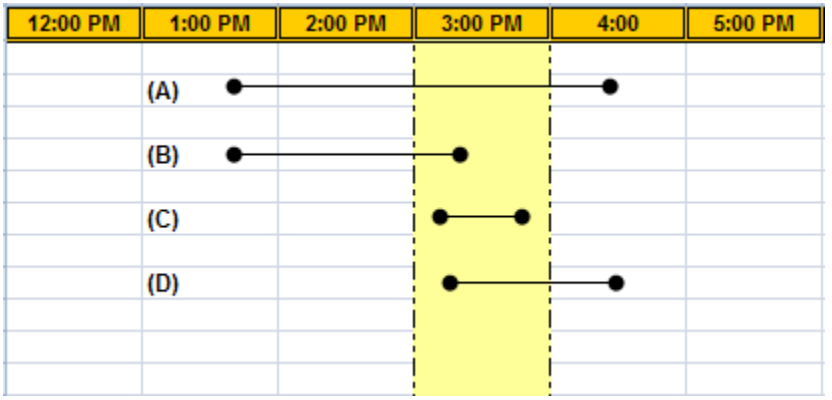
See “Generating a Workload Analyzer report” on page 331.

Workload Analyzer subreports: Job Count, Size, Queue, and Throughput

The Workload Analyzer reports are based on time, queue, size, and throughput. The following reports are a part of the Workload Analyzer report:

- **Job Count Workload Analyzer**: This report is based on the number of jobs running at a given period of time. The purpose of this report is to display the data that is based on time and load. You can determine the time for the job count on the basis of the start and end time of the job. Data for load is determined based on how many jobs are active during a given period of time. Calculations are done to determine the number of jobs that are active during a given period of time.

For example, the following figure displays the job counts for a given period of time. (A) shows the jobs that start before the time interval and end after the time interval. (B) shows the jobs that start before the time interval and end during the time interval. (C) shows the jobs that start and end during the time interval. (D) shows the jobs that start during the time interval and end after the time interval.



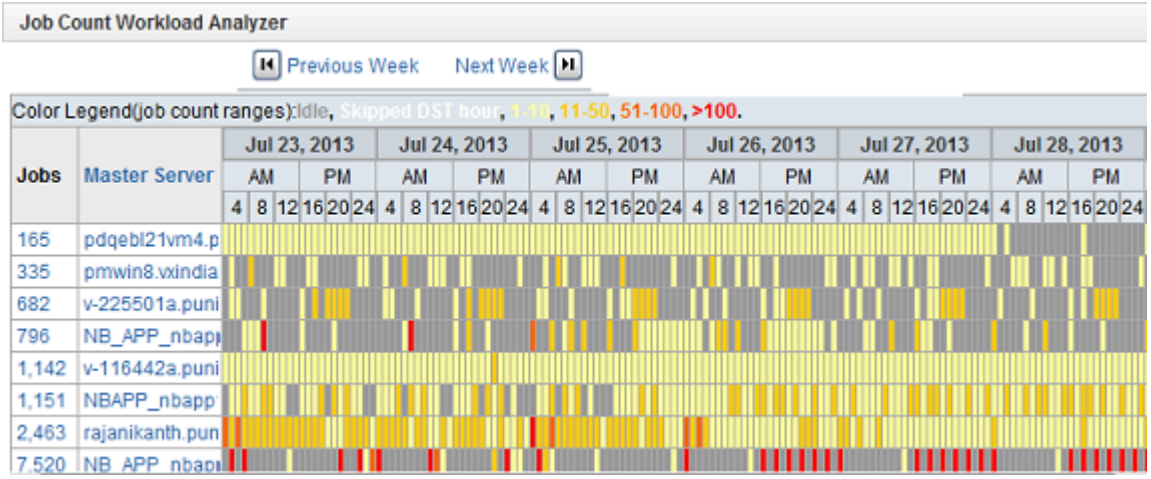
- **Job Size Workload Analyzer**: This report is based on the amount of data that is transferred during a given period of time. The calculation is based on the total amount of data that is backed up by the jobs divided by the time period.
  For example, in the following figure there are four jobs that have different durations across a four hour time period. The left-hand side displays the amount of data that's transferred during the four hour time period. The right-hand side of the report displays the start time and end time for each job, amount of data transferred, and duration. Job A is active for a period of four hours, it starts at 1:20 P.M. and ends at 4:20 P.M. During that period the total data that is transferred is 80,000 MB. You can calculate data transfer rate, multiply data transfer rate by the number of minutes during each hour when there is job activity. Job activity in the first hour is 20 minutes, in the second and third hour it is 60 minutes, and fourth hour it is 20 minutes. Jobs B, C, and D follow a similar pattern. Load is the sum of loads of all jobs during that hour. The yellow slot shows maximum activity and the data that is transferred is 115960 KB.
- **Job Queue Workload Analyzer**: This report is based on the period for which, jobs are in a queue state before data back up begins. Queue time is calculated through the use of timestamps such as time taken to initiate the job, time taken to start and end the job. Jobs that have a high queue time are identified to reduce scenarios where many jobs with high queue time are initiated at the same time. The queuing is calculated at individual job level and then aggregated to the level where the report is generated.

- **Job Throughput Workload Analyzer**: This report is based on the rate in Mbytes\Sec at which the data is transferred This calculation provides an important indicator to understand the performance. The throughput report is based on cross-hour calculation. The report displays accurate analysis of the data. Compared to the other workload reports, the totals for the rows of this report are averaged.

  The Start Write time ensures that the speed is only measured against the time in which, the actual data transfer takes place. This calculation ensures that the queue time is not considered. The queue report calculates the queue time. In the following figure, the throughput is calculated across four jobs that span for a period of three hours. One job belongs to Policy B and three jobs belong to Policy A. The green boxes indicate the time in which the write job occurs.

Workload Analyzer report template options

The Workload Analyzer report template is a pre-fixed 168 hour reporting template. The template makes extensive use of color to display the analyzed data through the heat map technology. You can configure the color range. Report categories that include attributes such as backup server, media server, client, policy, provide a good means to understand the basics of workload and performance. All the reports that comprise the workload analyzer report template are based on time. The following figure is a sample report template.



The highlights of the workload analyzer report template are as follows:

- You can hover the mouse on each cell in the report to get details such as date, time, hour, and actual value of the hour.

- You can configure the range for each color. The color depicts the density of the jobs running at that hour. It also displays the number of minutes of queue time, the amount of data transferred, and the throughput rate. The deeper the color of the cell, the higher is the value in the cell.
- You can use the **Report on** feature to select entities for which, you require the data. For example, if you select **Report on** for a primary server, the second column in the report displays data for the primary server only. The entities include **Backup Server, Media Server, Backup Client, Policy, Policy Type, Schedule, Job Type, Job Level, Job Error Code, Exit Status, Job Exit Code, Job Transport Type, Schedule\Level Type**, and **Storage Unit**.
- You can drill down to the next level in the report. The second column is hyper linked and provides the drill-down option. For example, from the primary server you can drill down to client. A drill-down report is launched. You can drill down to clients from the media server, policy, policy schedule, schedule, job type, job error code, job status, job level, transport type. Other drill-down options are policy type to policy, job status to job error code, view to next level down the view hierarchy.
- The last row on the report shows the total values of all the rows for the entire time span. The first column shows data for the entire week, whereas the hour column shows data for that particular hour for all entities.
- You can use various filters in the report. The filters include:

Filter type	Description
Time Filter	Filter on Absolute or Relative time filter
View	Filter on any view.
Primary Server, media server	Filter on available primary servers and media servers.
Client	Filter on available client.
Policy	Filter on name and type of policy.
Schedule	Filter on schedules
Job	Filter on status, status code, transport type, type, and schedule or level type.
Storage unit	Filter on the name.
Workload	Filter on duration threshold and time basis.

- You can use the **Report on** feature for different variables. The variables include **Backup Server, Media Server, Backup Client, Policy, Policy Type, Schedule, Job Type, Job Level, Job Error Code,** and **Storage Unit**.
- You can drill down on any cell to know the details about the data.

The following drill-down options are available for all the Workload Analyzer reports.

- Primary Server to Client
- Media server to Client
- Policy Type to Policy
- Policy to Client
- Policy ScheduletoClient
- Schedule to Client
- Job Type to Client
- Job Error Code to Client
- Job Status to Client (when Job Status <> Failure)
- Job Status to Job Error Code (when Job Status = Failure)
- Job Level to Client
- Transport Type to Client
- View to Next level down the view hierarchy

The colors in the report represent different data values, the information is available in the following table.

Table 2-2 Color range values

Color range	Value
Idle	Displays the cells that are gray, which means there are no active jobs assigned.
1 - 10	Displays value for the data that has the color range between 1 - 10, the light yellow cells represent these values.
11 - 50	Displays value for the data that has the color range between 11 - 50, the dark yellow cells represent these values.
51 - 100	Displays value for the data that has the color range between 51 - 100, the orange cells represent these values.

Table 2-2 Color range values *(continued)*

Color range	Value
More than 100	Displays the value for data that has the color range that is greater than 100, the red cells represent these values.

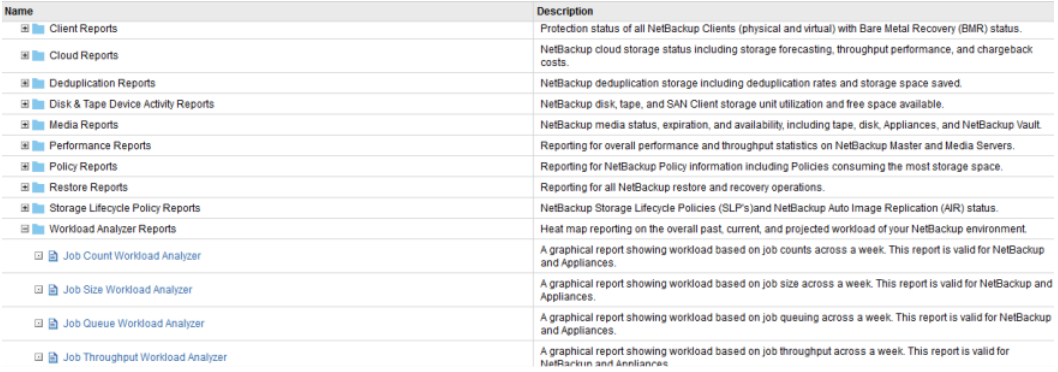
See "Workload Analyzer subreports: Job Count, Size, Queue, and Throughput" on page 326.

Generating a Workload Analyzer report

You can generate the Workload Analyzer report using the Workload Analyzer report template from the reports tree. The report comprises of four reports that are based on time, data transfer, queue time, and throughput speed.

To generate the workload analyzer report

1. In the OpsCenter console, click **Reports**.
2. On the **Reports Template** tab, click **Create New Report**. The reports are also available under the reports tree as shown in the following figure



3. On the **Report Wizard**, retain the default selection **Create a report using an existng report template**and click **Next**.
4. From the **Select Report Template** list, select the Workload Analyzer report you want to create and click **Next**.

5 Select the time frame from the **Relative TimeFrame (beginning at)** or **Absolute TimeFrame (beginning at)** options.

The Timeframe option displays the output for seven days for the previous week or the next week. The Relative Timeframe option also displays data from the date you choose, it can also be from the middle of a week. Absolute Timeframe displays data for a week for the date you select. For example, if you select today's date, the data that is displayed is for the next week including today's date. The selection is for a week and there is no end time provided for selection.

6 Select the required filters and click **Next**.

7 View the report and click **Next**.

8 Enter a name and description in the **Report name** and **Description** text boxes. Select the location and click **Save** to save the report.

Note: Open the saved report. Use the options **Previous Week** and **Next Week** to view data for the previous seven days or next seven days.

About exporting and emailing the Workload Analyzer report

The Workload Analyzer report can be exported in the HTML format. You can set the export location through the **Report Export Location** tab.

The report can be emailed only in the HTML format.

Note: When the Workload Analyzer report is emailed for Outlook Express, it does not show the correct alignment of the cells of the report.

Chapter 3

Custom reports in OpsCenter Analytics

This chapter includes the following topics:

- Creating a custom report in OpsCenter
- Creating an OpsCenter report using SQL query

Creating a custom report in OpsCenter

In addition to using the reports that come by default with OpsCenter, you can use the Custom Report Wizard to create custom reports that are unique to your installation.

After creating a custom report, you can modify the report, print, save, and email it.

As you work with different report categories, the Report Wizard displays different parameters. Many of the parameters are used for multiple report categories, and they appear in different combinations for each type.

You can create a custom report by using the parameters that are available in the Custom Report Wizard.

See "About Custom Report Wizard parameters" on page 339.

To create a custom report

1. In the OpsCenter console, click **Reports > Report Templates**.
2. Click **Create New Report**.
3. On the **Select Report Creation Option** page, click **Create a Custom Report** to start the Custom Report Wizard.

4 Select a report category from the **Category** drop-down list:

Backup/Recovery	Select this category to create reports on jobs, disk pool, logs, image, media, tape drive etc.

5 The Subcategories appear as per what you select from the Category drop-down list. From the Subcategory drop-down list, select one of the following report subcategories:

The following subcategories appear when you select Backup/Recovery as the main category:

Disk Pool	Select to view a consolidated report related to disk pool.
Job/Image/Media/Disk	Select to view job, image, media, or disk data. The reports based on this subcategory provide a consolidated view of job, image, media, and disk. For example, you can create a custom report that tells the number of images per job type or a tabular report that tells which image is backed up on which media. You can also view the backups that are taken on the disk.
Log	Select to view logs that are generated as a result of backup and recovery activity in NetBackup.
Media	Select to view reports on media like tape media etc.
Tape Drive	Select to view reports on tape drives. This subcategory does not show reports related to media servers.The associated filter parameters, such as Tape Drive Device Host or Tape Drive Type appear.
Scheduled Jobs	Generate reports on Scheduled Jobs using this category. For example you can create a report that compares the scheduled time and the actual time for scheduled jobs.

6 Select a report format from the following formats in the **View Type** drop-down list:

Distribution	Display groupings or objects or resources in a pie chart.
Ranking	Display a horizontal bar graph showing all the data for each view level object, from greatest to the least, within the selected time frame.
Historical	Display a stacked (segmented) bar graph with a trendline superimposed over it showing the average upward and downward trends of the data over time.
Tabular	Display data in the form of a table.

7 Click **Next**.

8 In the **Select Parameters** panel of the Custom Report Wizard, select values for one or more report parameters. The report parameters that appear depend on the report category and the view type that you selected.

See "Configuring timeframe parameters" on page 339.

See "About Custom Report Wizard parameters" on page 339.

As you select parameters, the Content pane may refresh to display additional selections. For example, when you select a view filter, you are then given a choice of items on which to filter the report display.

9 Click **Next**.

10 In the **Modify Display Options** panel, define the measurements to be collected for historical, ranking, tabular, and distribution reports. Different display options are displayed for different view types.

See "About display options" on page 342.

Click **Next**.

11 In the **View Report Data** panel, you can view the report that is created as per your selection.

Click **Next**.

To return to the Custom Report Wizard and make changes to the report, click **Back**.

12 Save the report. Enter a report name, a description (optional), and location where you want to save the report.

Click **Save**.

Example 1: You may want to create a custom report based on your specific requirements. For example, you may want to create a daily status report of the clients that are backed up everyday.

This report gives the detailed tabular information of the jobs directory being backed up, its status (if it's successful, partially successful or failed), Level Type (Incremental, Full, Differential Incremental), the job file count and job size in the datacenter . You can enhance this report by adding more available columns based on the report requirement.

See the procedure to know how you can create a daily status report of the clients that are backed up everyday.

To create a daily status report of the clients that are backed up everyday

1. In the OpsCenter console, click **Reports**.
2. On the **Report Templates** tab, click **Create New Report**.
3. On the Report Wizard, select the **Create a custom report** option and click **Next**.
4. Select the **Report Category** as **Backup/Recovery** and the **Subcategory** as **Job/Images/Media/Disk**.
5. Select the **Report View type** as **Tabular**.

   Click **Next**.
6. Select the appropriate timeframe for which you want to view the data.
7. Select the **Job** filter. Select the **Column** as **Backup Job data type**, **Operator** as **=**, and **Value** as **Yes**. Click **Add**.
8. Click **Next**.
9. Under **Tabular Report Properties**, select the **Time Basis** as **Job End Time**. Change the **Display Unit** as per your requirement.
10. Select **Available columns** from the list that appears:
    - Backup Job File Count
    - Backup Job Size
    - Job Directory
    - Job End Time
    - Job Start Time
    - Job Status
    - Job Status Code

- Job Type
- Primary Server
- Schedule Name
- Schedule/Level Type

Click **Add**.

11 Click **Next** to run the report.

Example 2: You may want to create a report that examines the number of tapes in each status category and its percentage.

To report on the distribution of tape status in your environment

1 In the OpsCenter console, click **Reports**.

2 On the **Report Templates** tab, click **Create New Report**.

3 On the Report Wizard, select the **Create a custom report** option and click **Next**.

4 Select the **Report Category** as **Backup/Recovery** and the **Subcategory** as **Media**.

5 Select the **Report View type** as **Distribution**.

Click **Next**.

6 Select the appropriate timeframe for which you want to view the data. You can also select **No Time Basis**.

7 Optionally, select any filters based on your requirement.

Click **Next**.

8 In the Distribution Chart Properties section, make the following selections:

Chart Type	Pie Chart
Report On	Media History Status
Report Data	Media ID
	Count

9 Click **Next**.

Example 3: You may want to create a custom tabular report that shows the following information:

- Know what jobs were successful in the past week for a specific primary server

- Show the amount of time the backup took
- Show how large the backup was

To create a report showing successful backup job details for a primary server

1. In the OpsCenter console, click **Reports**.
2. On the **Report Templates** tab, click **Create New Report**.
3. On the Report Wizard, select the **Create a custom report** option and click **Next**.
4. Select the **Report Category** as **Backup/Recovery** and the **Subcategory** as **Job/Image/Media/Disk**.
5. Select the **Report View type** as **Tabular**.
6. Change Relative Time Frame to Previous 1 Week
7. Under **Filters**, select **Job**. In the Column area, select **Job Type**, select the **=** Operator and choose a value of **Backup**.

   Click **Add**.
8. Back under the Column heading, select **Job Status** leave the Operator at "=" and choose **Successful** as the value

   Click **Add**.
9. Click **Next**.
10. Select the Time Basis as **Job Start Time**
11. You may change the Display Unit or Time Duration. For example if the primary server takes smaller backups, then you may change the Display Unit to MB.
12. From the Available Columns list, select the following:
    - Backup Job Size
    - Client Name
    - Job Duration

    Click **Add** to move them under the Selected Columns area.
13. In the Selected Column area, perform the following operations for each of the rows:
    - Click the check box next to **Client Name** on the right and click **Move Up** to make it the first row.
    - On the Job Duration row, change Operation to **Total**.

- On the Job Size row, change Sort Order to **Descending** and Operation to **Total**.

14 Click **Next**.

About Custom Report Wizard parameters

The Custom Report Wizard displays a set of parameters that varies depending on the report type. The following topics describe all the available parameters:

- Define Time frame parameters
  See "Configuring timeframe parameters" on page 339.
- About display options
  See "About display options" on page 342.
- Report conditions
  See "Defining report conditions" on page 346.
- Filter parameters
  See "Selecting and using filter parameters" on page 341.

Configuring timeframe parameters

You use the Time Frame parameters to define the report's overall time frame and the intervals for which data is reported.

You can specify absolute or relative time frame for a report.

You can select the following timeframe parameters:

Relative Timeframe	Select **Previous** or **Next** from the drop-down list (wherever applicable), and then specify the number of hours, days, weeks, months, quarters, or years to define the period. The report displays data collected within the specified time period, for example, data of the previous 3 months. The Relative Timeframe is especially useful for reports that you plan to generate on a regular basis. Such reports always show data collected over the most recent time interval.

Start from the beginning of <*selected unit*>

This applies only to Relative time frames. In Start from the beginning of <*selected unit*>, the <*selected unit*> may stand for Hours, Days, Weeks, Months, Quarters, or Years depending on what unit you select as a Relative Timeframe.

If you specify a relative timeframe and check **Start from the beginning of <selected unit>**, the Relative timeframe is calculated starting from the first day for week, month, quarter, or year selection, from 12 A.M. for day selection, and from the earliest whole number (no minutes or seconds) for hour selection. Do not select the **Start from the beginning of <unit>** check box if you want to view data for the entire period specified in Relative Timeframe.

Examples:

- The current date is June 13, 2010. If you select the Relative Timeframe as Previous 1 Month and do not select the **Start from the beginning of Month** check box, the report shows data from May 14, 2010 to June 13, 2010. However if you select the **Start from the beginning of Month** check box, the report shows data from June 1, 2010 to June 13, 2010.
- The current date and time is September 13, 10:30 PM. If you select the Relative Timeframe as Previous 2 Days and do not select the **Start from the beginning of Days** check box, the report shows data from September 11, 10:30 P.M. to September 13, 10:30 P.M. However if you select the **Start from the beginning of Days** check box, the report shows data from September 12, 12 A.M. to September 13, 10:30 P.M.
- The current time is 4:25 P.M. If you select the Relative Timeframe as Previous 2 Hours and do not select the **Start from the beginning of Hour** check box, the report shows data from 2:25 P.M. to 4:25 P.M. However if you select the **Start from the beginning of Hours** check box, the report shows data from 3 P.M. to 4:25 P.M.

  Note: If you specify relative time frame and check **Start from the beginning of <*selected unit*>**, the report is configured to display data collected over the interval ending at the current date. This is effectively equivalent to specifying an absolute time frame; the report's contents remain static whenever you display it.

Absolute Timeframe

Define the beginning and end of the time interval to be covered by the report. When you enter absolute dates, the report's contents remain static whenever you display it.

Ignore From Date	This applies only to Absolute timeframes. Check this option to view all the data on and before the **To** date that you enter in the Absolute timeframe. **Example**: Suppose you specify an absolute timframe: From March 1, 2004, 12:00 A.M. to April 30, 2004, 12:00 A.M. The report displays data from the time period between the start and end dates. Now if you check **Ignore From Date**, the report ignores the From Date and displays all data before April 30, 2004, 12:00 A.M.
Ignore To Date	This applies only to Absolute timeframes. Check this option to view all data on and after the **From** date that you enter in the Absolute timeframe. **Example:** Suppose you specify an absolute timframe: From March 1, 2004, 12:00 A.M. to April 30, 2004, 12:00 A.M. The report displays data from the time period between the start and end dates. Now if you check **IgnoreTo Date**, the report ignores the To Date and displays all data on and after March 1, 2004, 12:00 A.M.
No Time Basis	This signifies that the data shown should not be grouped with time. The report includes all the data in the OpsCenter database irrespective of time. The timeframe grouping is not applicable.
Day Window	Day Window is applicable when you specify an Absolute or Relative timeframe. From the Day Window, you can specify the time interval that constitutes one day. Select values from the **From** and **To** drop-down lists. Example: 6:00 PM to 6:00 AM Example: 12:00 AM (midnight) to 12:00 PM (noon)
Report Time Frame Grouping	This option appears only when you select a Historical view type. Select the time interval by which you want to group the records. For example, if you selected 1 month as the Report Time Frame and 10 days as the Group By interval, the report shows records in three chunks of data grouped by 10 days.

Selecting and using filter parameters

You can use filter parameters to obtain additional filtering capability for the report that you want to display. For example depending on the category or subcategory that you select, you may filter on the following:

- Client Operating System
- Client is Active

- Policy Active: Select **Yes** to view policies that are active. Select **No** to view policies that are not active.
- **Media is On Hold** column has been added under the **Media** filter.
- **Image is on hold** and **Image Copy is on hold** columns have been added under the **Image** filter.

To specify additional filtering criteria

1. On the Custom Reports Wizard, select a report category, subcategory and view type. Click **Next**.
2. On the **Select Parameters** panel, the respective filters appear in the **Filters** section.

   The list of filters that appear depend on the report category and view type that you select.
3. Click the filter that you want to use, and then specify one or more values using the fields provided.

About display options

Use the **Modify Display Options** panel to define the measurements to be collected for historical, ranking, tabular, and distribution reports. Different display options are displayed for different view types.

About Historical view display options

The following display options are available for historical reports. The following parameters are displayed:

Report On	Define the report's scope using the drop-down list. This field denotes the entity on which grouping is required. For example, when you select the Report On parameter as Client, the Y-axis report data is grouped per client. Example: Job Status, Image type etc.
Description	Description to display along with the report. If you leave this field blank, no description is provided by default.
X-Axis	
Display Name	For Historical reports, a label for the horizontal (X) axis. If you leave this field blank, a default label is provided.

Report Data	The metric used to define the graph's horizontal (X) axis. Examples: `Attempt End Time`, `Client Name` If you choose a Report Data parameter like Client Name which is not time-based, another parameter called Time Basis appears.
Time Basis	This parameter appears if you select a Report Data parameter like Client Name that is not related to time. Time Basis resembles the time attribute on which time filter is applied as criteria. This attribute is not shown if you select No Time Basis while configuring the timeframe in the Wizard. Time Basis is the metric used for assigning a time to each item in the report, if not specified by the Report Data parameter. Example: The start time or the end time for each backup job.
Y1 or Y2 -Axis	
Display Name	For Historical reports, a label for the horizontal (Y1 or Y2) axis. If you leave this field blank, a default label is provided.
Report Data	For Historical reports, the metric used to define the graph's vertical (Y1 or Y2) axis. Examples: Job Size, Status Code etc.
Display Unit	For numeric data types, such as Job Size, the units in which to display the data. This is applicable only for size-related attributes like Job size, image size, fragment size etc. Examples: MB, GB.
Chart Type	The report format. Additional formats may be available depending on the values specified in Report Data.
Show Forecast with forecast periods	Use the Trendline and Forecast parameters to project future trends by averaging actual data from the recent past. Check **Show forecast with forecast periods**, and use the drop-down list to specify a number of forecast periods (intervals). This displays a forecast line extending to future dates, using linear regression to predict values based on the trend of data within the report's time frame. Example: 12 shows forecast data for the next 12 months (if the Time Frame Group By is 1 month). The following Web site helps in calculating the forecast: http://easycalculation.com/statistics/regression.php

Show trendline with moving average period of	Use the Trendline parameter to indicate a general pattern or direction by averaging actual data from the recent past. Check **Show trendline with moving average**, and use the drop-down list to specify the number of data points to factor into the average. At each interval on the graph, the trendline shows a moving average of the most recent data points. Example: 3 displays a trendline that, at each interval, shows the average of the current data point and the two previous data points.
Target Performance	For Historical reports, select the **Target Performance** checkbox and then either Y1 or Y2-Axis radio button. Type a value in the text box to include a target level or threshold in the report display. The target value appears as a horizontal line, useful for making quick visual comparisons between the target value and the actual values being reported.

About Ranking chart display options

The following display options are available for Ranking reports. The following parameters are displayed:

Chart Type	Select **Bar Chart** from the drop-down list.
Report On	Select the entity that you want to see in the report like Image Type.
Display	Select how many rankings you want to see and how you want them arranged (in Ascending or descending order).
Y-Axis Display Name	Enter a label for the Y-Axis.
Report Data	This is the data that should be plotted on the Y-axis.
Time Basis	Metric used for assigning a time to each item in the report, if not specified by the Report Data parameter. Example: The start time or the end time for each backup job.
Description	Description to display along with the report. If you leave this field blank, no description is provided by default.

About Distribution chart display options

The following display options are available for Distribution reports:

Chart Type	Select **Pie Chart** from the drop-down list.

Report On	Select the entity that you want to see in the report like Attempt Status.
Report Data	This is the data that should be plotted on the pie chart.
Time Basis	Metric used for assigning a time to each item in the report, if not specified by the Report Data parameter. Example: The start time or the end time for each backup job.
Description	Description to display along with the report. If you leave this field blank, no description is provided by default.

About Tabular display options

Use the **Modify Display Options** panel to establish the column titles for a tabular report.

The following display options appear for a tabular report:

Time Basis	From the **Time Basis** drop-down list, select a time basis like Job End Time or Job Start Time. Time Basis is used to assign a time to each item in the report.
Description	Enter a description for the report. This is optional.
Display Unit	From the **Display Unit** drop-down list, select one of the following units: ■ B ■ KB ■ MB ■ GB ■ TB
Time Duration	From the **Time Duration** drop-down list, select one of the following time intervals: ■ Seconds ■ Minutes ■ Hours ■ Days ■ Weeks ■ Months ■ Years

Available Columns	From the **Available Columns** list, select one or more values for table columns, for example, Client Name, Status, Job Group ID. Click **Add**. The columns selected from the **Available Columns** list are added to the **Selected Columns**, which you can rearrange as you want them to be displayed on reports.
Selected Columns	The columns selected from the **Available Columns** list are added to the **Selected Columns**, which you can rearrange as you want them to be displayed on reports using the following controls: ■ Sort order ■ Operation ■ Move Up ■ Move Down ■ Remove All the columns from the **Selected Columns** list are displayed in the report.
Rows per page	From the **Rows Per Page** drop-down list, select number of rows of records that you want to display on one report page.
Display unique rows in the report	When you select this option, all duplicate rows are replaced by a single row in the report and only distinct records are shown. Duplicate rows generally appear if the rows do not have a unique ID.

Defining report conditions

In the **Conditions** section of the **Modify Display Options** panel, specify exception conditions for notification. Exception conditions represent potential problems, for example an unusually high percentage of backup job failures or an unusually low quantity of data being backed up. Each condition is defined by assigning threshold values for a particular metric, such as Success Rate or Total Backup Job Size. You can set a low threshold, a high threshold, or both. The conditions are applicable only for numeric values like Job Size (and not for values like Job Type, Primary Server). You can apply condition for attributes like Job type or Primary server provided you have applied a function like Count, Distinct Count etc. on it.

After you specify your conditions, you can create a report schedule so that when a condition is true, an email notification is sent or the report is exported, or both. The conditions are applied only when a report is scheduled.

Creating an OpsCenter report using SQL query

This section provides the procedure to create a report using SQL query.

Only OpsCenter Analytics users can access the custom SQL query function.

See "About custom SQL query in OpsCenter Analytics" on page 11.

Note: OpsCenter provides detailed information about the OpsCenter database schema that you may want to know before running any SQL query to generate reports. On the Report Wizard > SQL Query page, click the following link to open the PDF that contains all relevant information: Refer to the OpsCenter Database Schema Document

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Note: OpsCenter Reporter and Restore Operator do not have access to the custom SQL query option.

To create a report using SQL query

1. In the OpsCenter console, click **Reports**.
2. On the **Report Templates** tab, click **Create New Report**.
3. On the Report Wizard, select the **Create a report using SQL Query** option and click **Next**.
4. On the SQL Query page, enter an SQL query to view the required data.

   For example, to view all NetBackup primary servers that monitored and managed by OpsCenter, enter the following SQL query: select * from domain_primarieserver
5. Click **Next**.

   You can view all primary server details that are stored in the domain_primarieserver database table.

   Note: When you run a stored procedure that has multiple result sets, then output of only the first result set is displayed on the GUI. The output of other result sets is not shown on the GUI.

Note that OpsCenter stores most of the time fields in Gregorian. If you want to see the value for a given Gregorian date field in a timezone that is configured on the OpsCenter host, you should use `utcbiginttonomtime`(*gregorianDatefield*) function, where *gregorianDatefield* is any time value in gregorian. The function `utcbiginttonomtime` function cannot consider DST time offset. Hence it ignores any DST offset while showing the date and time value.

You must not use `utcbiginttoutctime()` function as it does not show time in a time zone that is configured on your OpsCenter host.

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