

ZENworks Content Reporting Package

November 21, 2013

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The ZENworks Content Reporting Package is a ZENworks Reporting 5 domain, a set of predefined ad hoc views, and a set of default reports that can be used to obtain information about the content stored in the ZENworks Content Repository for troubleshooting, monitoring and planning purposes. This package works with ZENworks 11.2.4 and 11.3.

WARNING: The SQL queries used in this domain may require significant time to complete in production environments as they are complex in nature. I recommend that you consider using a small test environment when building custom reports and that you use scheduled reporting where possible.

1 Installing the ZENworks Content Reporting Package

To install the ZENworks Content Reporting Package, you first need to ensure that your environment meets the following prerequisites:

- You know the database host name/ip address, port, instance name, database name, and database credentials to access your ZENworks database server.
- You have installed ZENworks Reporting 5 (ZR5) on a server that can establish a network connection to the database server.
- If you want to access the dashboard and reports from your iOS or Android mobile devices, ensure that you have installed the JasperMobile application from the store and configure it to connect to your ZR5 server.

If you meet these prerequisites, you can install the ZENworks Content Reporting Package by doing the following:

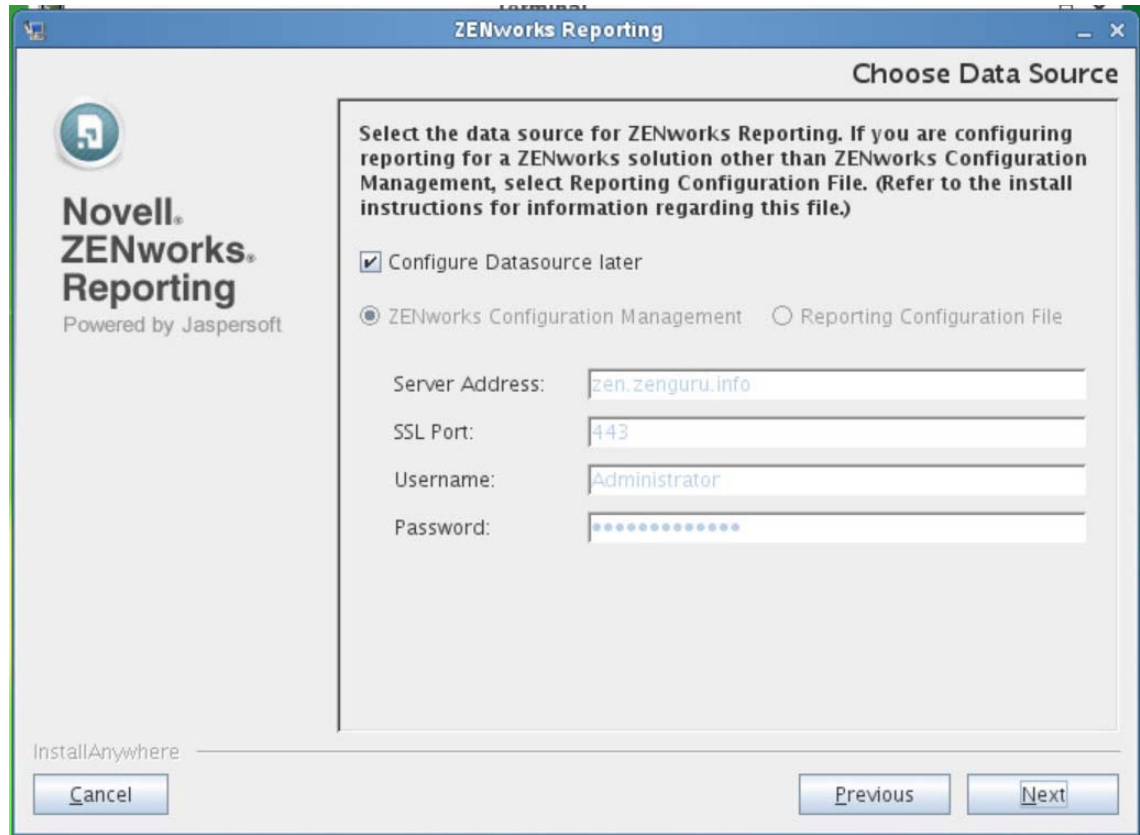
- 1 On your ZENworks Reporting server, run the ZENworks Reporting configuration tool:

```
%ZENWORKS_HOME%\zenworks-reporting\bin\zrsconfig.sh
```

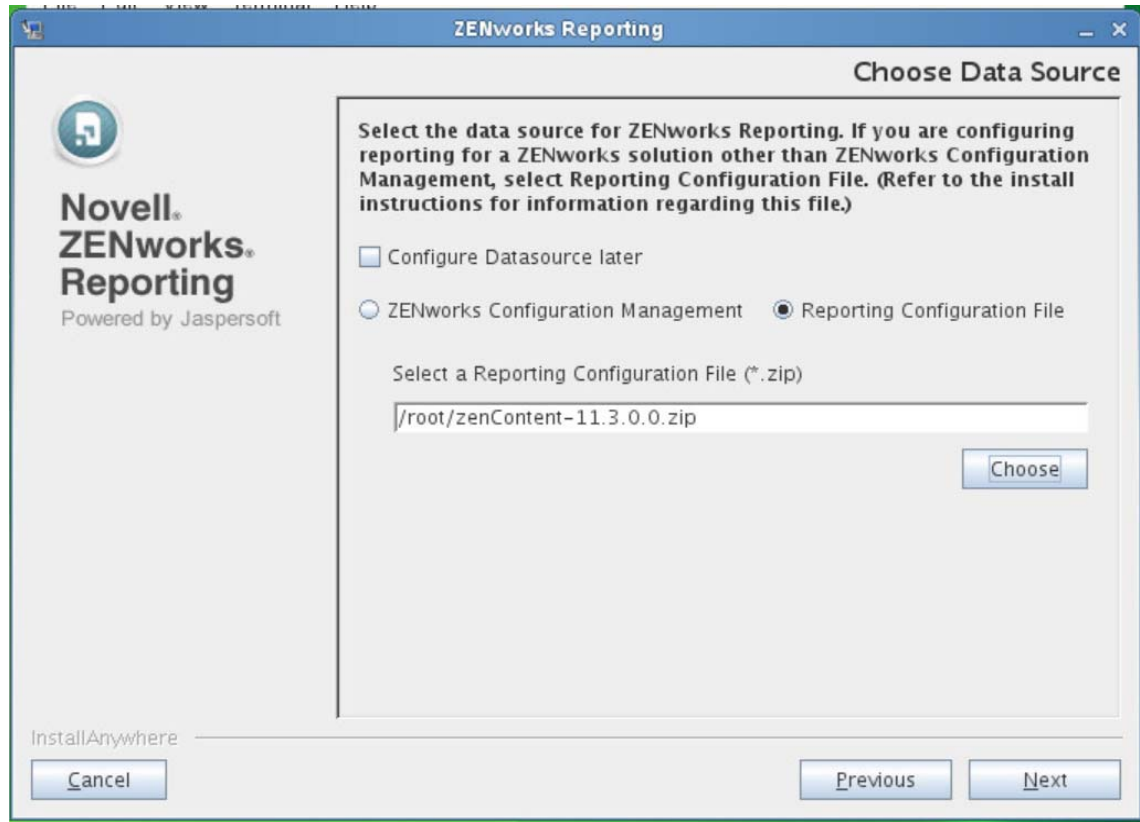
or

```
%ZENWORKS_HOME%\zenworks-reporting\bin\zrsconfig.exe
```

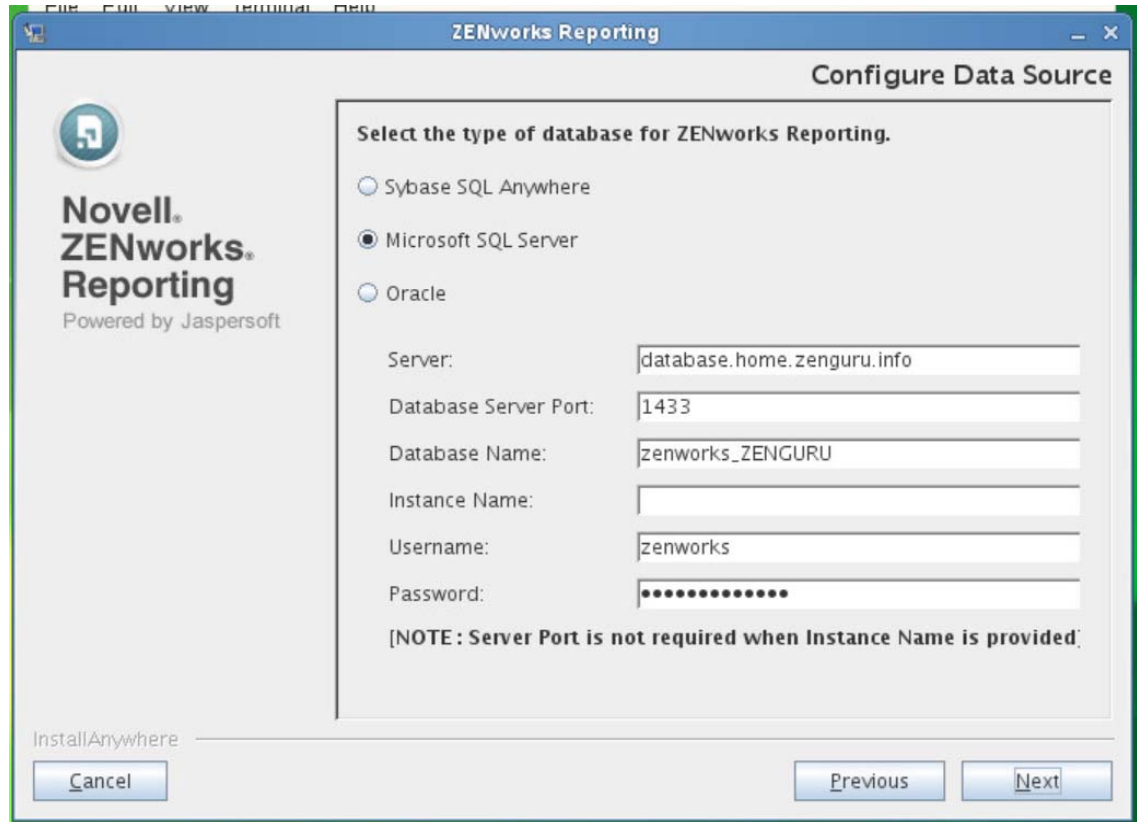
- 2 Click *Next* through all of the screens in the wizard until the Choose Data Source screen, shown below:



- 3 Deselect the *Configure Datasource later* checkbox.
- 4 Select *Reporting Configuration File*. This will ask for a path to a Reporting Configuration File as shown below:



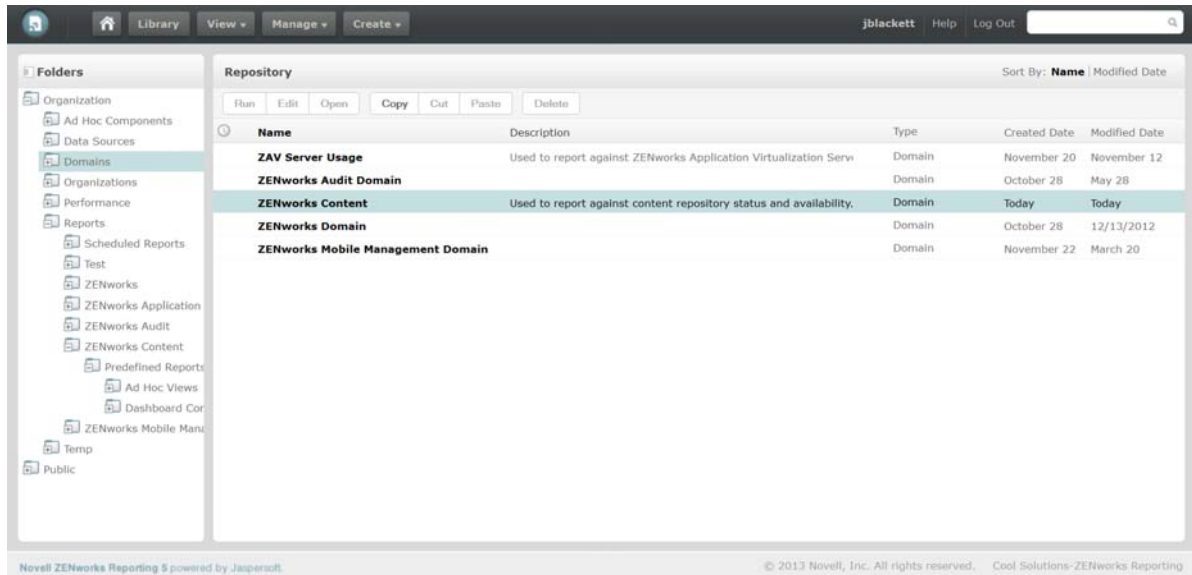
- 5 Browse to the ZENworks Content Reporting Package zip file (zenContent-11.3.0.0.zip) that you download from this cool solution.
- 6 Click *Next*.
- 7 On the Configure Data Source page, enter the information to connect to the ZENworks database, similar to the dialog shown below:



- 8 Click *Next*.
- 9 Accept the defaults for the rest of the configuration tool and complete the configuration. This creates the data source and then imports the domain, views, and reports.

2 Using the ZENworks Content Reporting Package

After the configuration script is finished running, the ZAV Server Usage Reporting components are present in the ZR5 server. You can see this by logging into ZR5 and looking at the Repository browser. You should see the following:



The following objects are added to the ZR5 repository:

The rest of this document looks at each of these object types in more detail so that you can properly use the capabilities of ZR5 to report against ZAV Server Usage data.

- ◆ Organization/Data Sources/ZENworks Content Data Source
This object contains the connection information for the ZR5 server to be able to connect to the ZENworks database.
- ◆ Organization/Domains/ZENworks Content
This object contains metadata used by the Ad Hoc reporting tool to allow you to quickly and easily build dynamic charts, crosstabs, and tabular reports.
- ◆ Organization/Reports/ZENworks Content/Predefined Reports/Ad Hoc Views
This folder contains a number of Ad Hoc Views that can be used to generate additional reports or used as a template for building your own custom reports.
- ◆ Organization/Reports/ZENworks Content/Predefined Reports/Dashboard Components
This folder contains a number of small charts, crosstabs, and tables that are useful on dashboards. They are built from the Ad Hoc Views in the Usage folder.

The rest of this document looks at each of these object types in more detail so that you can properly use the capabilities of ZR5 to report against ZENworks Content data. It is divided into the following topics:

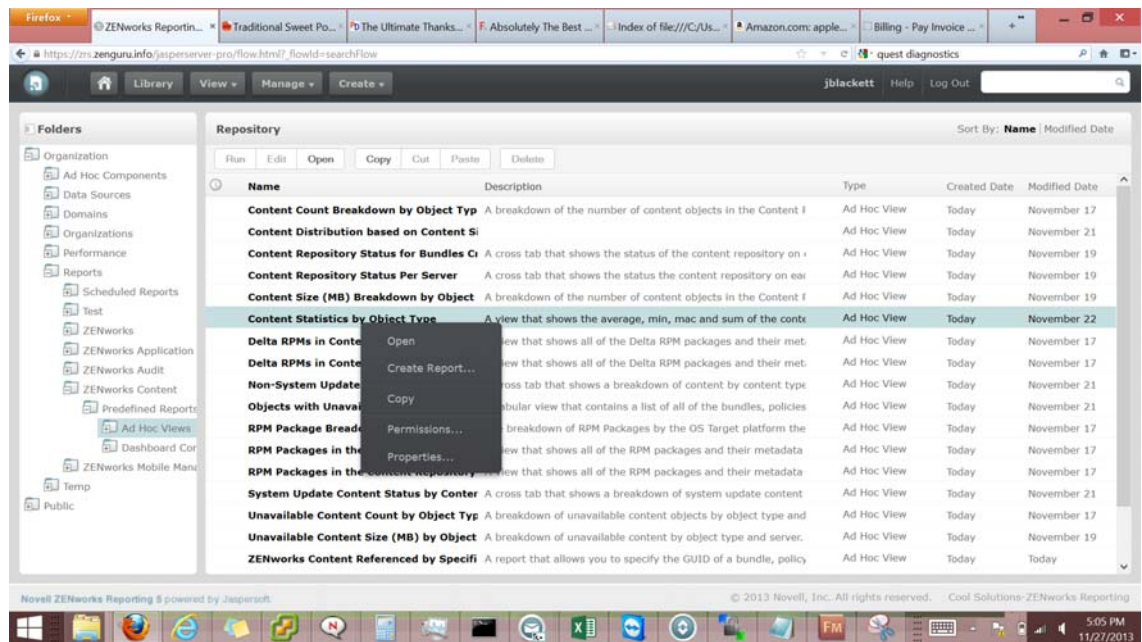
- ◆ [Section 2.1, "Creating Reports from the Predefined ZENworks Content Ad Hoc Views," on page 6](#)
- ◆ [Section 2.2, "Using the Predefined ZENworks Content Ad Hoc Views to create custom views," on page 10](#)
- ◆ [Section 2.3, "Creating Custom ZENworks Content Views using the ZENworks Content Domain," on page 10](#)

2.1 Creating Reports from the Predefined ZENworks Content Ad Hoc Views

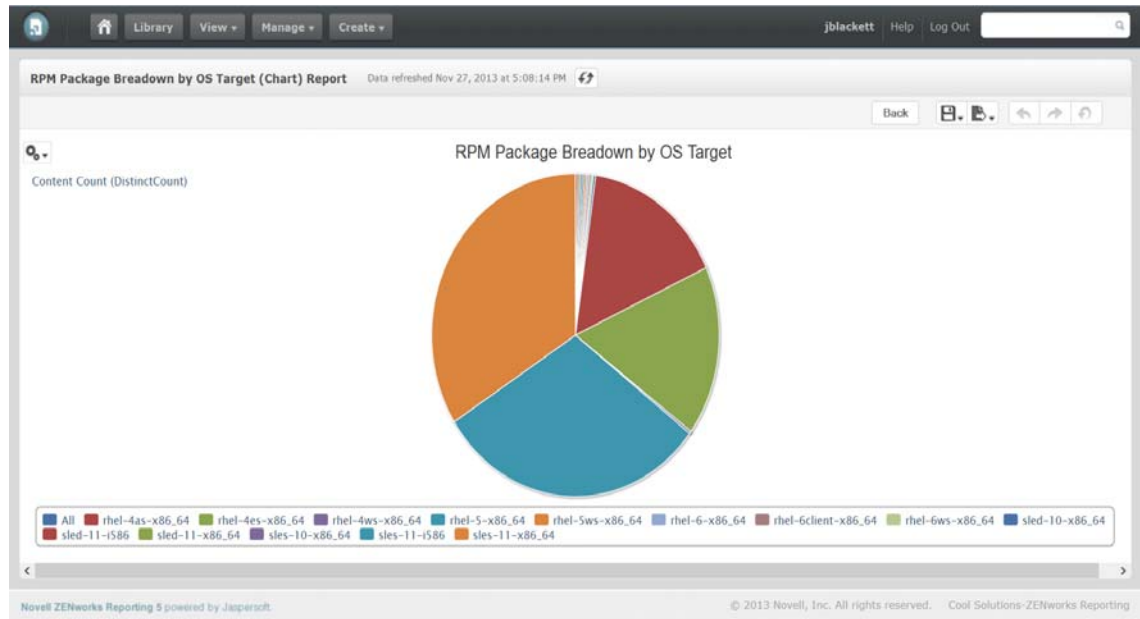
The ZENworks Content Reporting Package includes a number of predefined usage views that you can use to create reports to view information, print information, or add key information to custom dashboards of your own. To create a report from these default views, do the following:

- 1 Select the *Repository View*.
- 2 Browse to *Organization > Reports > ZENworks Content > Predefined Reports > Ad Hoc Views*.
- 3 Right-click one of the Ad Hoc Views in the list, as shown below:


Select ad hoc view



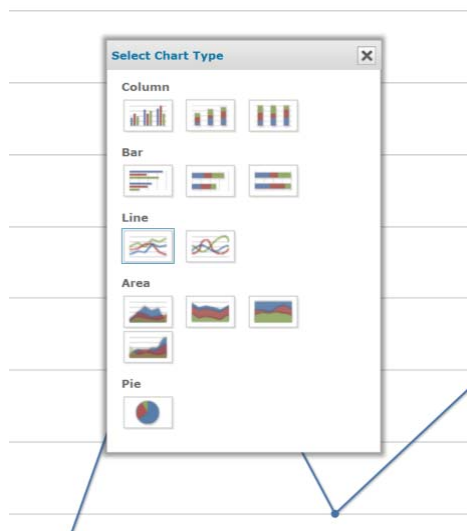
- 4 Select *Create Report*. This opens the Report viewer with your selected report. You should see something similar to this:




- 5 (optional) If this is a Chart report, and you want to change the chart type, click the *Chart Types*

dropdown  in the left corner of the chart. You can then select a new way to look at the data as shown below:

Select chart type



- 6 (optional) If you want to change the values for any filters, click the *Options* button  in the upper right corner. This displays a dialog similar to the one below:

Input Controls

The screenshot shows a dialog box titled "Input Controls". It features two date range input fields: "Session Start Time between" with the value "DAY-30" and "and" with the value "DAY". Below these is a "Display Name" list box with a blue highlight on "7-Zip". The list also contains "Firefox ESR", "LibreOffice", "Messenger", and "All None Inverse". At the bottom are buttons for "Apply", "OK", "Reset", "Cancel", and "Save".

- 7 After you have the chart and inputs the way you want, you can format the data in any tabular fields if needed. When you are finished, save the report in the system, save it to a PDF or other file format, or do both.

Any reports you create can also be accessed from the JasperMobile application from either the Library or the Repository browser, as described below:

- 1 Launch the JasperMobile application.
- 2 Make sure that your ZR5 server is the active profile.
- 3 Tap *Search*.
- 4 Enter the name of the report you created. This displays the input filters, similar to the screen below:

Top 10 Applications by Sessions Launch...

Session Start Time between:

2013-09-20 09:41:27

and:

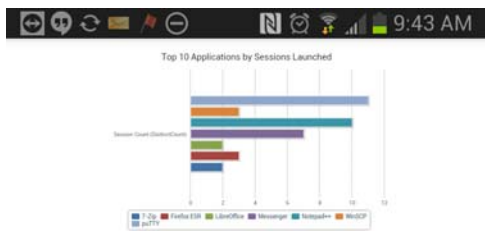
2013-11-20 09:41:27

Report Output Format:

HTML

Run Report

5 Click *Run Report* to display the report, similar to the one shown below:



2.2 Using the Predefined ZENworks Content Ad Hoc Views to create custom views

All of the predefined reports included with the ZENworks Content Reporting Package are built using ZR5 Ad Hoc Views. If you need to customize these reports, or if you want an easy way to get started with a new report, you can use these Ad Hoc Views as templates. Rather than changing the default views, you should make copies and then modify them as necessary. An example of how to do this is described below:

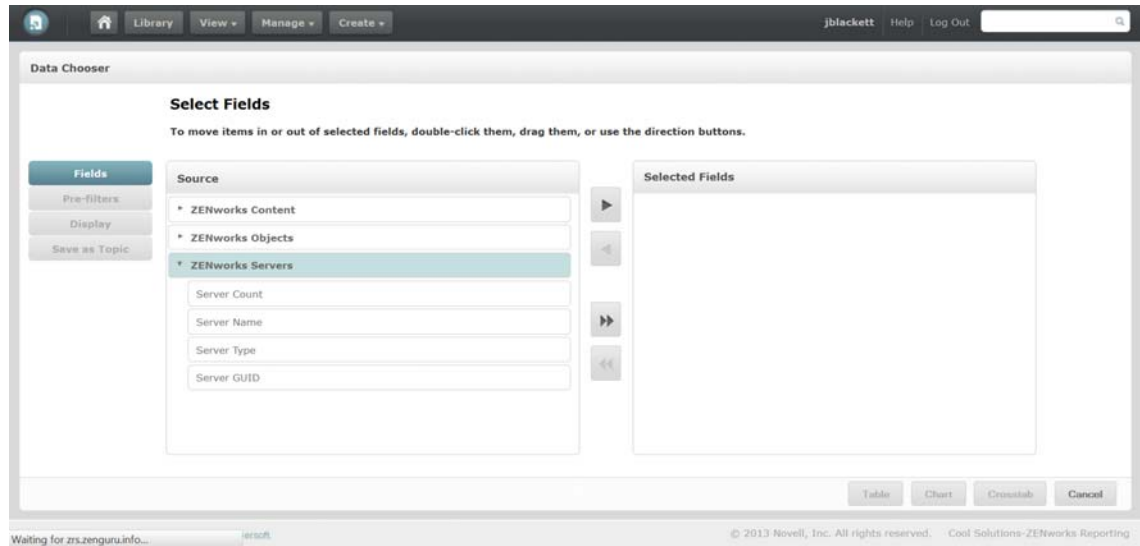
- 1 Select the *Repository View*.
- 2 Browse to *Organization > Reports > ZENworks Content*.
- 3 Create a folder called Custom Reports.
- 4 Browse to *Organization > Reports > ZENworks Content > Predefined Reports > Usage*.
- 5 Right-click one of the Ad Hoc Views in the list, then select *Copy*.
- 6 Right-click your *Custom Reports* folder, then select *Paste*.
- 7 Highlight the copied view, then click *Open*.
- 8 Drag new values in, change the drilldown level in charts, create additional filters for the report, and make any title or formatting changes you want.
- 9 Save the report, export it as an HTML, PDF, etc., or do both.

You can now use this custom view to create reports that you can then view, schedule, or use in dashboards.

2.3 Creating Custom ZENworks Content Views using the ZENworks Content Domain

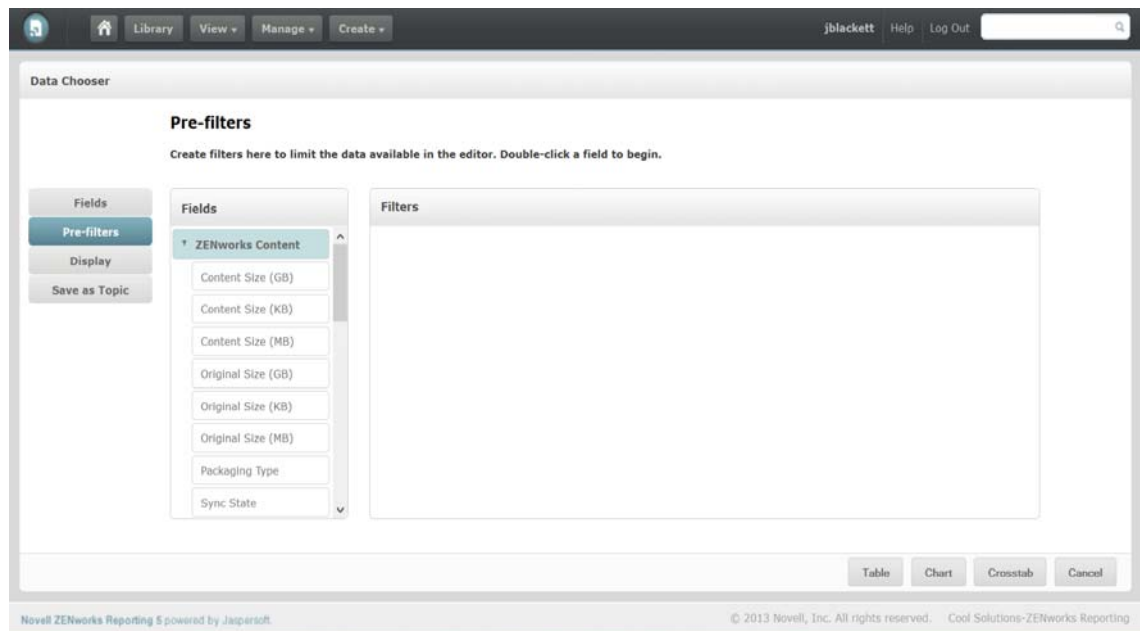
Because the ZENworks Content Reporting Package includes a full ZR5 domain for accessing the ZENworks Content data, you can use the domain to quickly and easily build new custom views, reports, and dashboards. To build your own view using the domain, do the following:

- 1 From the ZR5 home page, click *Create Ad Hoc View*.
- 2 Select the *Domains* tab.
- 3 Highlight the *Domains > ZENworks Content* entry, then click *Choose Data* to display the data chooser:



- 4 Select the fields, described in the next section, that you want to have available in your report.
- 5 (optional) If you want to add pre-filters to the query, click Pre-filters. In many of the default views included with the package, the view has been pre-filtered by adding the appropriate Top 10 fields with a comparator of greater than 0 as shown below:

Set Pre-Filters



- 6 (optional) If you want to change the names of any of the fields to something more applicable for your environment, you can use the Display tab to set custom field names.
- 7 (optional) If you believe that you will use this set of fields, pre-filters, and names often, you can save this set of items as a Topic which can be re-used the next time you create a view.
- 8 Click Table, Chart, or Crosstab to open the View Designer.

- 9 Drag items from the Fields list into the report or use them as filters.
- 10 When you are finished, save the view. You can then utilize the view to create reports as described in the previous section.

The next section provides additional information about each of the objects in the domain to help you build the reports you need.

3 ZENworks Content Domain Reference

The ZENworks Content Domain provides the following fields and measures that can be used in your reports:

Table 1 ZENworks Content Domain Objects

Field / Measure Name	Path	Description / Use Case
Content Size (GB)	ZENworks Content	The size of the file in gigabytes as stored in the content repository.
Content Size (KB)	ZENworks Content	The size of the file in kilobytes as stored in the content repository.
Content Size (MB)	ZENworks Content	=The size of the file in megabytes as stored in the content repository.
Original Size (GB)	ZENworks Content	The original file size in gigabytes of the file uploaded into the system.
Original Size (KB)	ZENworks Content	The original file size in kilobytes of the file uploaded into the system.
Original Size (MB)	ZENworks Content	The original file size in megabytes of the file uploaded into the system.
Packaging Type	ZENworks Content	Specifies whether the package is a compress, encrypted, none, or both.
Sync State	ZENworks Content	The sync state of the file in the content repository on a given server.
Content Count	ZENworks Content	A measure that can be used to count the number of unique content files in the ZENworks content repository. When used in a table this value displays the GUID of the content object.
Content Name	ZENworks Content	The original file name of the file stored in the content system.
Original Size (Bytes)	ZENworks Content	The original file size in bytes of the file uploaded into the system.
Content Size (Bytes)	ZENworks Content	The size of the file in bytes as stored in the content repository.

Field / Measure Name	Path	Description / Use Case
Content Type	ZENworks Content	The content type tag for the content. The field will be empty for content that is associated with a bundle or policy. This is useful in determining when and how the content is replicated.
Content GUID	ZENworks Content	A unique hex identifier for the content. Useful in filters when searching by GUID.
Architecture	ZENworks Content \ Delta RPM Package Details	The Architecture attribute from the RPM package header.
Package Name	ZENworks Content \ Delta RPM Package Details	The name of the PRM package.
New Release	ZENworks Content \ Delta RPM Package Details	The Release of the package that will be installed by the package.
New Version	ZENworks Content \ Delta RPM Package Details	The Version of the package that will be installed by the package.
Old Epoch	ZENworks Content \ Delta RPM Package Details	The Epoch of the package that can be updated by this package.
Old Release	ZENworks Content \ Delta RPM Package Details	The Release of the package that can be updated by this package.
Old Version	ZENworks Content \ Delta RPM Package Details	The Version of the package that can be updated by this package.
Architecture	ZENworks Content \ RPM Package Details	The Architecture attribute from the RPM package header.
Epoch	ZENworks Content \ RPM Package Details	The Epoch attribute from the RPM package header.
Metadata File Name	ZENworks Content \ RPM Package Details	The name of the XML file stored in the content system that contains the RPM metadata. This file is pulled down to any device associated with a bundle that references the package so that it can be used for dependency resolution.
Package Name	ZENworks Content \ RPM Package Details	The name of the RPM package.
Target Platform	ZENworks Content \ RPM Package Details	The platform assigned to the RPM. Only devices of the specified platform can install the package through ZENworks.
Release	ZENworks Content \ RPM Package Details	The Release attribute from the RPM package header.
Version	ZENworks Content \ RPM Package Details	The Version attribute from the RPM package header.

Field / Measure Name	Path	Description / Use Case
Bundle Creation Date	ZENworks Objects	The date the bundle was created. When this attribute is used, only content replicated by bundles will be displayed.
Distinguished Name	ZENworks Objects	The full path and file name of the bundle, policy or update.
Object Count	ZENworks Objects	A measure that can be used in charts and crosstabs to count ZENworks objects in reports. In tables this will display the GUID of the bundle, policy or update.
Object Name	ZENworks Objects	The name of the object.
Object Type	ZENworks Objects	The type of the ZENworks object.
Object SubType	ZENworks Objects	The subtype of the ZENworks object.
Object Content Type	ZENworks Objects	The content type tag for the content. The field will be empty for content that is not associated with a bundle, policy or system update.
Object GUID	ZENworks Objects	A unique hex identifier for the object (bundle policy or system update). Useful in filters when searching by GUID.
Server Count	ZENworks Servers	A measure used to count ZENworks servers in charts and crosstabs. In a table this will display the GUID of the server.
Server Name	ZENworks Servers	The name of the ZENworks Server.
Server Type	ZENworks Servers	A value that indicates whether the server is a Primary or Satellite server.
Server GUID	ZENworks Servers	A unique hex identifier for the server. Useful in filters when searching by GUID.

4 Summary

Using ZENworks Reporting 5 and the ZENworks Content Reporting Package, you can create dynamic dashboards and reports. Additionally, you can mix and match report components on dashboards with other ZENworks Content reports or other ZENworks reports to help you get a quick view of usage across your environment.