



# IBM Tivoli Training

## Netcool/Proviso

### *Generating DataView debug data*



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This IBM Education Assistant module demonstrates how to generate DataView debug data using the SilverStream PVRDebugControl tool.

## Objectives

Upon completion of this module, you should be able to:

- Understand the appropriate tool, PVRDebugControl, used to get specific DataView debug data
- Define the basic steps to generate a DSO level 5 debug report
- Understand the impact on DataView log files when using PVRDebugControl

Upon completion of this module you should be able to:

- Understand the appropriate tool, PVRDebugControl, used to get specific DataView debug data
- Define the basic steps to generate a DSO level 5 debug report
- Understand the impact that running debug has on log files

## Assumptions

Before issuing commands:

- You must have Netcool/Proviso<sup>®</sup> 4.3.4 or higher installed and running
- You have login access to the DataView server

Before issuing commands:

- You must have Netcool/Proviso 4.3.4, or higher, installed and running
- You must have access to the DataView server and DataView UNIX<sup>®</sup> login

## Gathering detailed DataView log data

- Enhanced debug data is often required to troubleshoot failing reports.
- DataView debug data is written to the SilverServerConsole.log.
- The PVRDebugControl tool controls what and how much data is written to the log.
- Log size can increase depending on the debug modules and level selected.

When problems within DataView are encountered, the PVRDebugControl tool can be utilized. Understand that:

- Enhanced debug data is often required to troubleshoot failing reports.
- DataView debug data is written to the SilverServerConsole.log.
- The PVRDebugControl tool controls what and how much data is being written to the log.
- Log size varies depending on the debug modules and debug level selected

## Example of generating a DSO level 5 DataView debug log for a failing report

1. Launch the report in a browser.
2. Launch the PVRDebugControl tool
3. Set PVRDebugControl to capture level 5 DSO debug data
4. Prepare to capture debug data to a file
5. Refresh the report and capture the data
6. Return the PVRDebugControl to normal operation

This module will demonstrate an example of generating DSO Level 5 debug data.

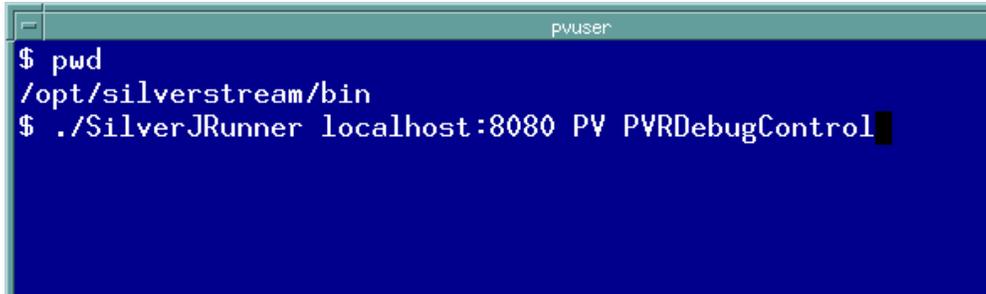
To gather the debug information required to troubleshoot a reporting problem using the PVRDebugControl tool, the following steps must be taken:

Launch the report in a browser.

Then follow these steps in order:

1. Launch the PVRDebugControl tool
2. Set PVRDebugControl to capture level 5 DSO debug data
3. Prepare to capture debug data to a file
4. Refresh the report and capture the data
5. Return the PVRDebugControl to normal operation

## Launch the PVRDebugControl tool

A terminal window with a dark blue background and white text. The window title bar shows 'pvuser'. The terminal content is as follows:

```
$ pwd
/opt/silverstream/bin
$ ./SilverJRunner localhost:8080 PV PVRDebugControl
```

The PVRDebugControl tool is located in the SilverStream bin directory. Use the SilverJRunner process to launch the PVRDebugControl. Specify the host and port as well as the ORACLE\_SID for the Proviso database. You can supply the administrator credentials for SilverStream also.

In this module's example, the command issued is:

```
/opt/silverstream/bin/SilverJRunner -space- localhost:8080 -space- PV -space -
PVRDebugControl
```

## Enter SilverStream administrator credentials



The screenshot shows a standard Windows-style dialog box titled "Enter Password". The text inside reads "Enter your password for". Below this, the "Realm:" is set to "SilverStream". The "User name:" field contains the text "administrator". The "Password:" field contains seven asterisks "\*\*\*\*\*". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

If the SilverStream credentials were not supplied with the command, you need to enter them when prompted.

In this example, the default SilverStream admin user and password are used.

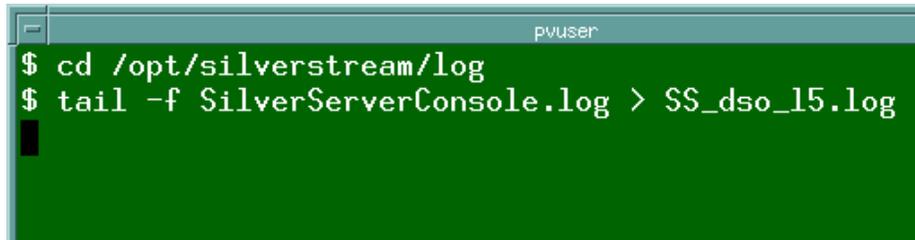
## Example of setting DSO level 5 debug

The screenshot shows the 'PVRDebugControl' application window. The title bar reads 'PVRDebugControl'. The main content area is titled 'DATAVIEW Debug'. It features a 'Debug Level: From 4 to 5' section with a 'DebugLevel' dropdown menu set to '5' and a 'Submit' button. To the right is a 'Display Mode' section with 'Console' and 'File' checkboxes, where 'Console' is selected. Below these is a 'Modules' list with checkboxes for 'DSO', 'Reporter Ed', 'Dispatcher', 'Page Control', 'Stylesheet L', 'Configuratio', 'Portal Tree', and 'Utils'. A red box highlights the 'DSO' checkbox. A blue box with white text contains the following instructions: '1. Select DSO', '2. Select Console', '3. Set Debug Level equal to 5', and '4. Click Submit'.

In the PVRDebugControl tool, you will need to set the appropriate options to produce a DSO level 5 debug report.

First, select the DSO module. Then, within the Display mode segment, select console. Set the debug level to 5 and click submit. At this point you are generating level 5 debug data for DataView. Be aware that the SilverServerConsole log will now rapidly increase in size.

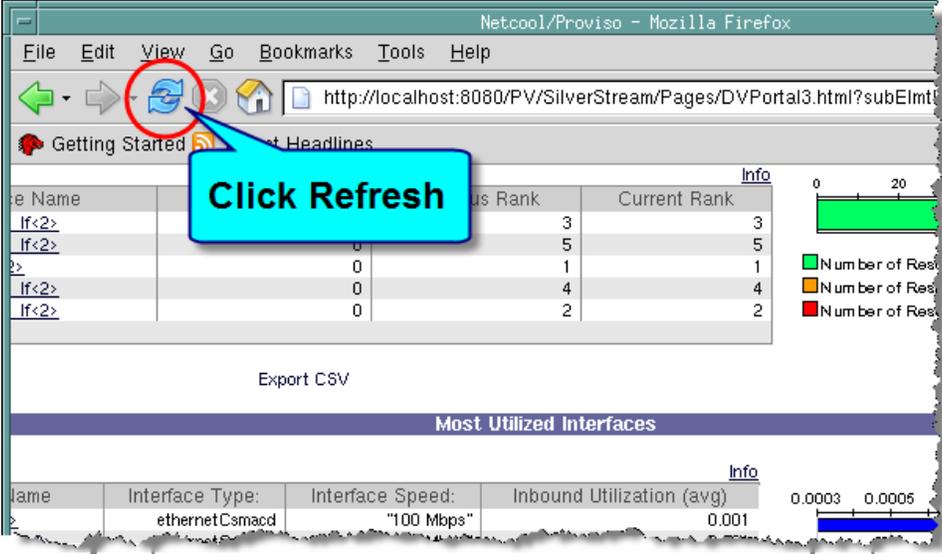
## Enter the log capture command

A terminal window with a green background and white text. The window title is 'pvuser'. The commands entered are: '\$ cd /opt/silverstream/log' and '\$ tail -f SilverServerConsole.log > \$\$\_dso\_l5.log'. A black cursor is visible at the end of the second command.

```
pvuser
$ cd /opt/silverstream/log
$ tail -f SilverServerConsole.log > $$_dso_l5.log
```

The SilverServerConsole.log is where the output from the DSO level 5 debug will be placed. It contains previous data collected prior to running the DSO level 5 debug dump. Use the tail command and redirect the output to a separate log file to ensure the debug dump information is readily available. In the example, the new log file is named SS\_dso\_l5.log.

## Refresh the report



The screenshot shows a Mozilla Firefox browser window with the address bar containing the URL `http://localhost:8080/PV/SilverStream/Pages/DVPortal3.html?subElmt`. A red circle highlights the refresh button in the navigation bar, and a blue callout box with the text "Click Refresh" points to it. The main content area displays a table with columns for "Name", "Previous Rank", and "Current Rank". Below the table is an "Export CSV" button. A section titled "Most Utilized Interfaces" contains another table with columns for "Name", "Interface Type", "Interface Speed", and "Inbound Utilization (avg)". A status bar at the bottom of the browser window displays "Generating DataView debug data" and "© 2009 IBM Corporation".

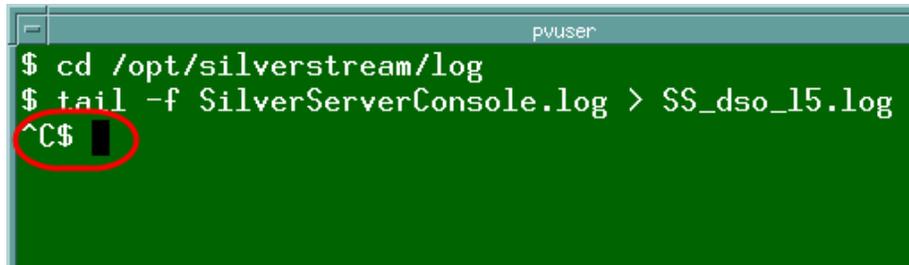
Name	Previous Rank	Current Rank
If<2>	3	3
If<2>	5	5
If<2>	1	1
If<2>	4	4
If<2>	2	2

Name	Interface Type	Interface Speed	Inbound Utilization (avg)
	ethernetCsmacd	"100 Mbps"	0.001

Open the browser window and refresh the failing report. This will generate DSO level 5 debug dump data, which is sent to the SilverServerConsole.log. And, as shown previously, that log file is tailed, and the output of the tail is redirected to a separate log file.

## Stop the logging by entering Control-C



```
pvuser
$ cd /opt/silverstream/log
$ tail -f SilverServerConsole.log > SS_dso_15.log
^C$
```

After the refresh has completed, stop the tail by issuing a Control-C in the Xterm window.

## Contents of log

```

pvuser
$ cd /opt/silverstream/log
$ ls -l
total 6148
-rw-rw-rw- 1 pvuser  staff  1515077 Feb 24 09:00 SS_dso_15.log
-rw-r--r-- 1 pvuser  staff  1606910 Feb 24 09:00 SilverServerConsole.log
-rw-rw-r-- 1 pvuser  staff  1622 Jan 22 11:02 SilverStream.log.dvinstall
$ more SS_dso_15.log
Thu Feb 19 16:05:04 CST 2009 . environment --> Weekly Retention Period I
n Weeks : 80
Thu Feb 19 16:05:07 CST 2009 . environment --> Monthly Retention Period
In Months : 18
Thu Feb 19 16:04:45 CST 2009 . Setting environment --> Starting Day Of Week Is S
unday : true
Thu Feb 19 16:05:04 CST 2009 . Initialization DV CORBA_PORT_NUMBER = 45105
erStream/0
Thu Feb 19 16:05:07 CST 2009 . persisting version information: type = DV, relVer
sion = 4.0.0k, name = exteNd Application Server, buildVersion = 020918_1, server
Name = student98, componentId = 8080
Thu Feb 19 16:05:08 CST 2009 . persisting version information: type = DV, relVer

```

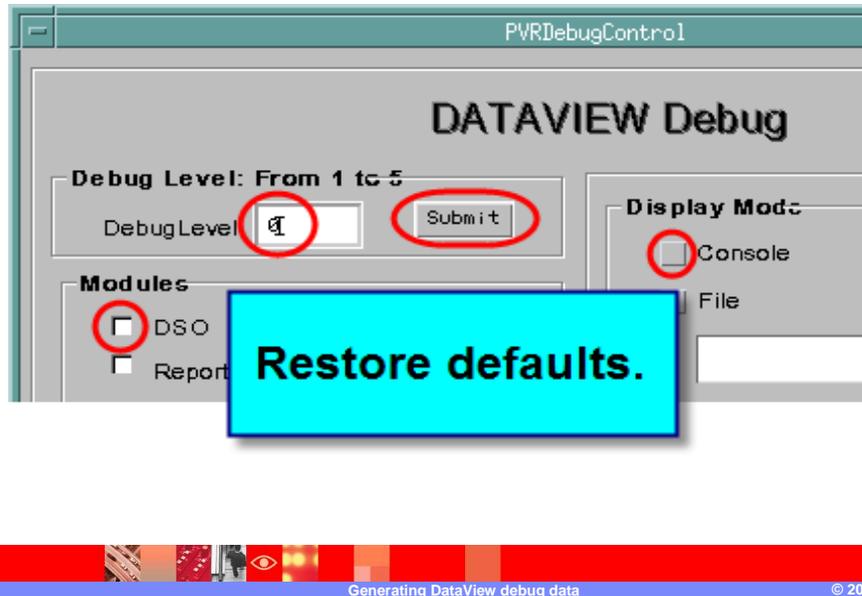
Log size increases when DSO level 5 debug is run.

You must reset PVRDebugControl to defaults after capturing debug data.

The SS\_dso\_15.log file is large for this particular Proviso installation. That is because of the module and debug level selected using the PVRDebugControl tool. These log files can be much larger in your Proviso installation.

The options used to create the DSO level 5 debug dump fill the logs rapidly. For that reason, it is important to reset the default values in the PVRDebugControl tool after the log has been captured.

## Restore debug defaults



Deselect the DSO module and Console. Reset the debug level to 0 and submit. The PVRDebugControl is now returned to the default values. Exit the tool.

## Summary

You should now be able to:

- Understand the appropriate tool, PVRDebugControl, used to get specific DataView debug data
- Define the basic steps to generate a DSO level 5 debug report
- Understand the impact on DataView log files when using PVRDebugControl

You should now be able to:

- Understand the appropriate tool, PVRDebugControl, used to get specific DataView debug data
- Define the basic steps to generate a DSO level 5 debug report
- Understand the impact on log files of running debug

## Training roadmap for *Netcool/Proviso*

[http://www.ibm.com/software/tivoli/education/edu\\_prd.html](http://www.ibm.com/software/tivoli/education/edu_prd.html)



Copy and paste the link provided into the browser of your choice to explore the training roadmap for Netcool/Proviso.

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