



IBM Tivoli Training

Netcool/Proviso

Using dialogTest2 DebugDump tool



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This IBM Education Assistant module examines the use of the dialogTest2 tool for troubleshooting collection problems in Netcool/Proviso®.

Objectives

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

- Define when use of collector debug tools is necessary
- Use the dialogTest2 DebugDump command and describe its output

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Assumptions

Before running dialogTest2 DebugDump:

- You must have access to the DataLoad sever
- You have access to the pvuser login

Before using collector debugging tools:

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The screenshot displays the IBM Network and Service Center interface. On the left, there is a sidebar with a calendar for February 2009, a 'Violation Type' section listing 'Burst' and 'Period', and a 'Reports' section with links for 'Bit Health Summary Resource', 'Bit Throughput Summary Resource', 'Device Availability Summary', and 'Device Health Summary Resource'. The main content area shows a 'Health Summary' for 'Inbound Volume (octets)'. A line graph plots the volume over a 24-hour period, showing a consistent level of activity with a noticeable gap between 10:00 and 13:00. A green callout box highlights the text: 'Troubleshooting report problems often involves determining if there are breakdowns in the collection process.' The interface also includes a 'Welcome netops1' message and an 'Export CSV' link.

Report problems, particularly gaps in report data, often are the result of data collection issues. A specific tool in the DataLoad contribs directory can be used to assist in problem resolution. This information will be used in combination with logs and additional data that is gathered to perform troubleshooting.

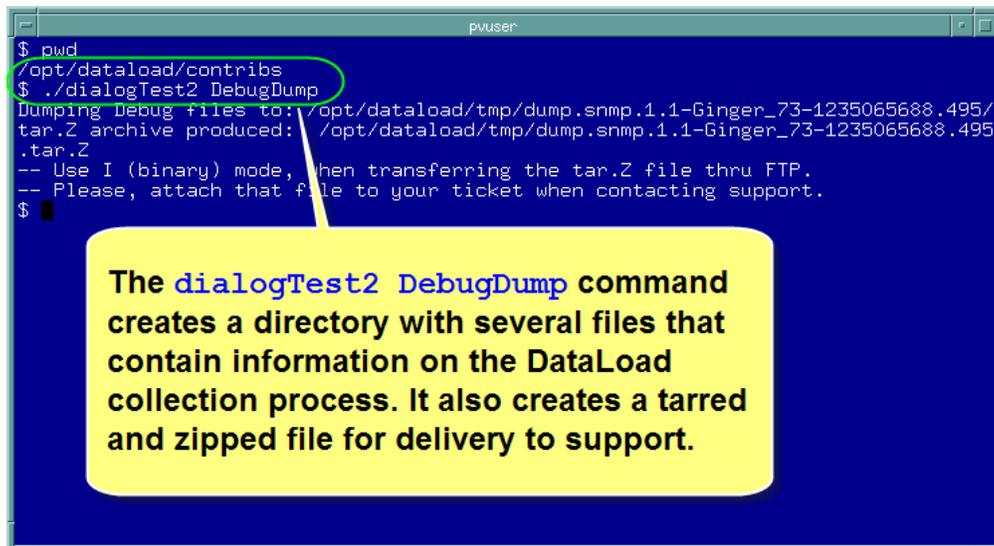
dailogTest2 command

- The dialogTest2 command can be used with the DebugDump option to gather data regarding the current state of SNMP collection for a DataLoad server.
- The output of the dialogTest2 DebugDump command and logs produced by the DataLoad can be used to troubleshoot collector problems.
- The dialogTest2 command has a number of options that can be seen by issuing the command: `dialogTest2 - help`
- Support may direct you to run the dailogTest2 command with other options as part of troubleshooting.

The following points highlight the dialogTest2 command.

- The dialogTest2 command can be used with the DebugDump option to gather data regarding the current state of SNMP collection for a DataLoad server.
- The output of the dialogTest2 DebugDump command and logs produced by the DataLoad can be used to troubleshoot collector problems.
- The dialogTest2 command has a number of options that can be seen by issuing the command: `dialogTest2 -help`
- Support might direct you to run the dailogTest2 command with other options as part of troubleshooting.

dialogTest2 DebugDump command



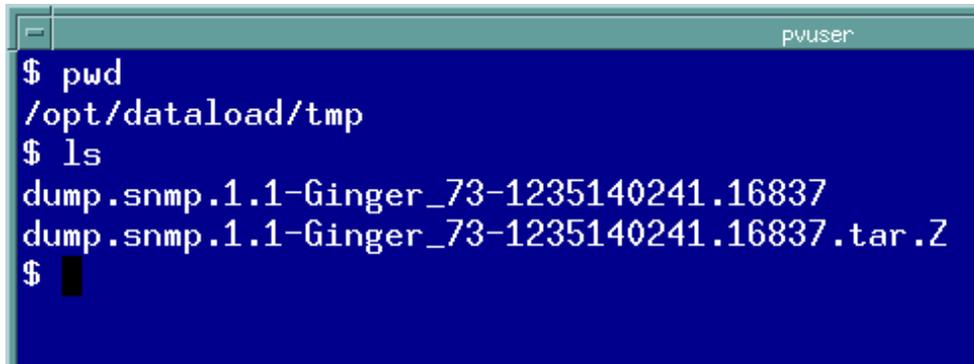
```
pvuser
$ pwd
/opt/dataload/contribs
$ ./dialogTest2 DebugDump
Dumping Debug files to: /opt/dataload/tmp/dump.snmp.1.1-Ginger_73-1235065688.495/
tar.Z archive produced: /opt/dataload/tmp/dump.snmp.1.1-Ginger_73-1235065688.495
.tar.Z
-- Use I (binary) mode, when transferring the tar.Z file thru FTP.
-- Please, attach that file to your ticket when contacting support.
$
```

The `dialogTest2 DebugDump` command creates a directory with several files that contain information on the DataLoad collection process. It also creates a tarred and zipped file for delivery to support.

When troubleshooting problems with reports, it is often vital to obtain a snapshot of what and how data is being collected. There is a tool, `dialogTest2`, that when used with the `DebugDump` option can obtain a comprehensive view of the collection process.

Select the appropriate DataLoad for the collector under review. In the DataLoad home `contribs` directory, issue the command `dialogTest2` with the `DebugDump` option.

DebugDump output

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

```
$ pwd
/opt/dataload/tmp
$ ls
dump.snmp.1.1-Ginger_73-1235140241.16837
dump.snmp.1.1-Ginger_73-1235140241.16837.tar.Z
$
```

This dialogTest2 DebugDump command creates a directory with a number of files in the DataLoad home tmp directory. It also creates a copy of that directory and its files as a tarred, zipped file that can be sent to support.

DebugDump output continued

```
pwuser
$ pwd
/opt/dataload/tmp/dump.snmp.1.1-Ginger_73-1235140241.16837
$ ls
CalDef__0.txt                               SubElmtGrpDesc__1233174781.txt
Cal__1232644940.txt                         SubElmtGrpHierarchy__1233174781.txt
ElmtProp__1233069270.txt                   SubElmt__1233174747.txt
Elmt__1233069270.txt                       SummaryOfCollections__1235140241.txt
MetricsMibs__1232999203.txt                SummaryOfDevices__1235140241.txt
Metrics__1232999203.txt                    dl.cfg
Request__1232999349.txt                    statGet.requests.txt
SnmpConf__1.txt                             statGet.stats.txt
SubElmtGrpContent__1233174781.txt          systemDescr.txt
$
```

The list of files created by the dialogTest2 DebugDump command can be viewed. For example, the file that begins with SummaryOfCollections can be reviewed to help identify lost collection requests.

The SummaryOfCollections file

```

$ more SummaryOfCollections__1235140241.txt
#--This file contains current defined collections
#--CSV format is :
RequestID, MetricID, GenMetricID, SubElmtID, ExpectedHourlyCount, DataType, ElmtID, ElmtName, MetricName, SubElmtName, SubElmtInst, taskID
#--
#-- End Of Header
#--  RequiD=100000
#--    MetricID=
#--    me (PDUs) Cascade
#--    TargetID=
#--    ct~Frame Relay~DL
#--    ExpRes=0
#--  RequiD=100000221, Inst=, Period=900, CalendarID=0, Storage= always
#--    MetricID=7532, GenericID=2197, MetricType=snmp, MetricName=Inbound Volume (PDUs) Cascade Frame Relay DLC, DataType=float
#--    TargetID=4302, TargetType=alias_group, TargetSeGrpName=Sub-Element Collection~Frame Relay~DLC~Cascade (Lucent)
#--    ExpRes=0
#--  RequiD=100000222, Inst=, Period=900, CalendarID=0, Storage= always
#--    MetricID=4429, GenericID=2213, MetricType=snmp, MetricName=Outbound Volume (bits) Cascade Frame Relay DLC, DataType=float
#--    TargetID=4302, TargetType=alias_group, TargetSeGrpName=Sub-Element Collection
--More-- (0%)

```

The SummaryOfCollections file contains information on what is defined to be collected.

Sample output of the SummaryOfCollections file is displayed. This data can be used to assist in determining what collections are occurring.

The statGet.requests file

```
pvuser
$ more statGet.requests.txt
+ [0] ID 1001,{CAL none (peri=900)(next=2009/02/20 08:45:00)}(P2) ASLEEP: ServiceForm ... Elmt=192.168.14.65;Metric=Inbound Volume (bits) RFC-1315 Frame Relay DLC:Inst=IP<13>Dlci<18>
+ [1] ID 1002,{CAL none (peri=900)(next=2009/02/20 08:45:00)}(P2) ASLEEP: ServiceForm ... Elmt=192.168.14.64;Metric=Voltage Level;Inst=Voltage Sensor<1>
+ [2] ID 1003,{CAL none (peri=900)(next=2009/02/20 08:45:00)}(P2) ASLEEP: ServiceForm ... Elmt=192.168.14.65;Metric=Voltage Level;Inst=Voltage Sensor<2>
+ [3] ID 1004,{CAL none (peri=900)(next=2009/02/20 08:45:00)}(P2) ASLEEP: ServiceForm ... Elmt=192.168.14.65;Metric=Voltage Level;Inst=Voltage Sensor<3>
+ [4] ID 1005,{CAL none (peri=900)(next=2009/02/20 08:45:00)}(P2) ASLEEP: ServiceForm ... Elmt=192.168.14.65;Metric=Voltage Level;Inst=Voltage Sensor<1>
+ [5] ID 1006,{CAL none (peri=900)(next=2009/02/20 08:45:00)}(P2) ASLEEP: ServiceForm ... Elmt=192.168.14.65;Metric=Voltage Level;Inst=Voltage Sensor<4>
+ [6] ID 1007,{CAL none (peri=900)(next=2009/02/20 08:45:00)}(P2) ASLEEP: ServiceFormLite ... Elmt=192.168.14.65;Metrics={Inbound FECN (percent) RFC-1315 Frame Relay DLC,Inbound Volume (PDUs) RFC-1315 Frame Relay DLC,Inbound BECN (percent) RFC-1315 Frame Relay DLC,Outbound Throughput (bps) RFC-1315 Frame Relay DLC,Availability (percent) RFC-1315 Frame Relay DLC,Inbound Volume (octets) RFC-1315 Frame Relay DLC,Outbound Volume (octets) RFC-1315 Frame Relay DLC,Inbound Throughput (bps) RFC-1315 Frame Relay DLC,Inbound Discard Priority (percent) RFC-2115 Frame Relay DLC,Outbound Volume (bits) RFC-1315 Frame Relay DLC,Outbound Volume (PDUs) RFC-1315 Frame Relay DLC,Outbound Discard Priority (percent) RFC-2115 Frame
--More--(2%)
```

The statGet.requests file has been opened. Information regarding what is being requested of the SNMP resources can be observed in this file.

The statGet.stats file

```
pvuser
$ more statGet.stats.txt
DataManager:<none>:.dat files (nb) [immediate]:1
DataManager:<none>:.dat files size (KB) [immediate]:91.69335938
DataManager:<none>:Average Storage Time (ms) [last 24 hours]:1
DataManager:<none>:Average Storage Time (ms) [last hour]:1
DataManager:<none>:Congestion State (code) [immediate]:0
DataManager:<none>:Filesystem FSSL (KB) [immediate]:146484.375
DataManager:<none>:Filesystem available (KB) [immediate]:976470.80664062
DataManager:<none>:Filesystem free space (KB) [immediate]:50267792
DataManager:<none>:Filesystem quota (KB) [immediate]:976562.5
DataManager:<none>:Filesystem used (KB) [immediate]:91.69335938
DataManager:<none>:Meas. Processed Average (Nb) [last 24 hours]:269037
DataManager:<none>:Meas. Processed Average (Nb) [last hour]:17108
DataManager:<none>:Measures Lost (Nb) [cumul]:0
DataManager:<none>:Measures Lost (Nb) [last 24 hours]: -
DataManager:<none>:Measures Lost (Nb) [last hour]: -
DataManager:<none>:Measures Stored (Nb) [cumul]:286140
DataManager:<none>:Measures Stored (Nb) [last 24 hours]:269037
DataManager:<none>:Measures Stored (Nb) [last hour]:17108
DataManager:<none>:Save Availability (%) [last 24 hours]:100
DataManager:<none>:Save Availability (%) [last hour]:100
General:<none>:Channel Number (Nb) [immediate]:1
General:<none>:Server Connections (Nb) [immediate]:0
--More--(1%)
```

The statGet.stats file has been opened. This contains information regarding the impact of the collection process on specific system resources.

Summary

You should now be able to:

- Define when use of collector debug tools is necessary
- Use the dialogTest2 DebugDump command and describe its output

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Training roadmap for *Netcool/Proviso*

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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