



## IBM Tivoli Training Netcool/Proviso 4.4.3

### *Re-indexing metadata tables*



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This IBM Education Assistant module demonstrates manually re-indexing metadata tables in Tivoli Netcool/Proviso 4.4.3.

## Objectives

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

- Manually re-index metadata table spaces using the **dbMgr** command
- Identify the Netcool/Proviso tool, **Database Information**, that contains information about the metadata table spaces

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## Metadata in Netcool/Proviso

Netcool/Proviso uses metadata to keep track of the topology of the network resources and the components of the Netcool/Proviso installation.

Metadata is never deleted or purged. It contains a record of the resources Netcool/Proviso reports, including changes to those resources.

As new devices are discovered and changes to existing devices are found, the metadata tables are augmented.

It is critical to monitor the free space of the table spaces. It is also critical to periodically re-index the metadata table spaces to insure proper reporting performance.

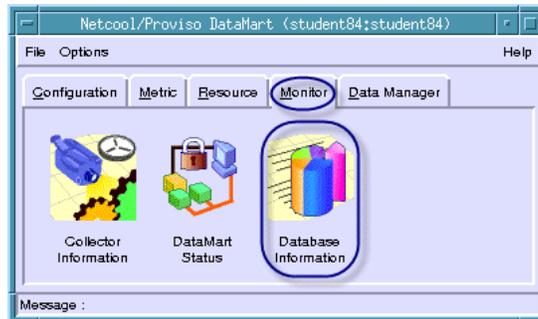
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## Monitoring metadata table space

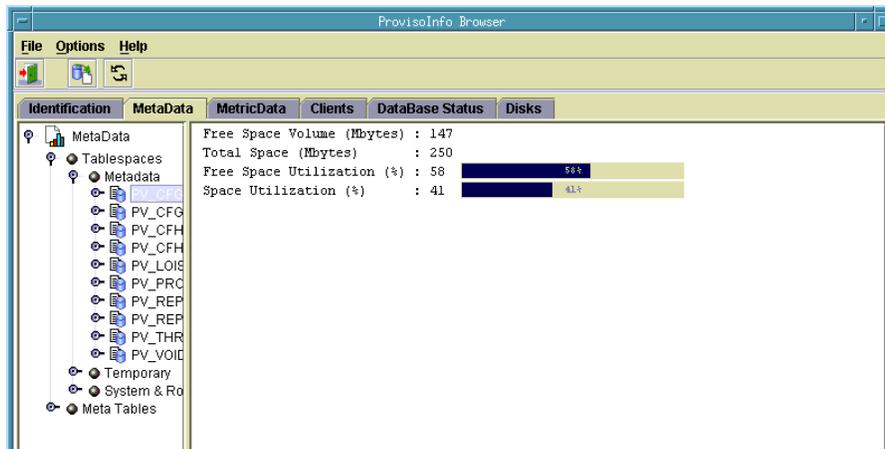


Using PVM, click Monitor and Database Information

Set the **datamart** environment variables and issue the **pvm** command at a command-line prompt. Make sure the display is set.

In the **DataMart** graphical user interface (GUI), click the **Monitor** tab and click **Database Information**.

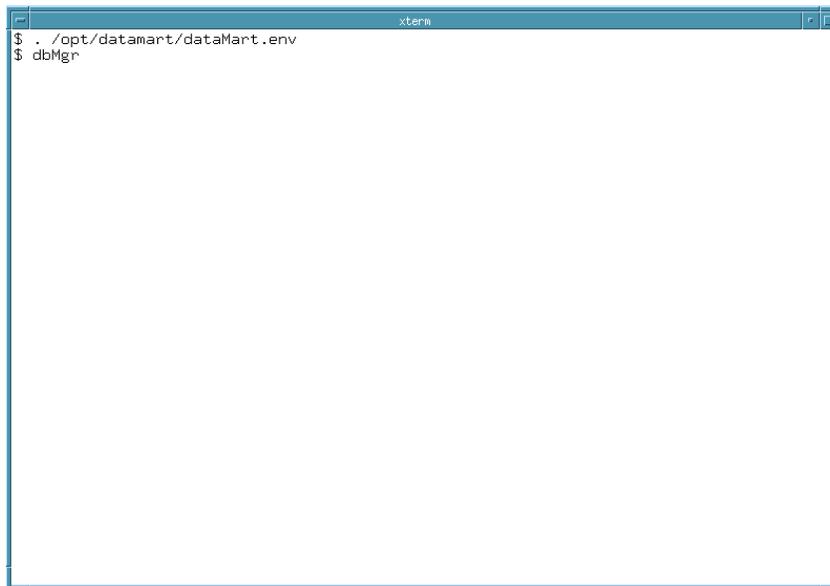
## Click the MetaData tab



The **MetaData** tab shows information about Netcool/Proviso configuration elements, metrics, and properties. Metadata represents data such as table space and table information. Metadata is grouped by topic (for example, configuration, temporary table spaces, system table spaces). Netcool/Proviso describes each resource, collection and aggregation schedules, and management information bases (MIBs).

Expand the **MetaData** directory on the left hand side of the GUI to browse the metadata detail. You can find information about the tables and their state.

## Re-index metadata

A terminal window titled 'xterm' is shown. It contains two lines of text: a shell prompt '\$' followed by the command './opt/datamart/dataMart.env', and a second shell prompt '\$' followed by the command 'dbMgr'.

```
xterm
$ ./opt/datamart/dataMart.env
$ dbMgr
```

Use the **dbMgr** command to re-index metadata table spaces. At a command-line prompt, set the **DataMart** environment variables and issue the **dbMgr** command.

## Run dbMgr

```
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List of Procedures

1. adjustDataLoadsTempTablespace
2. alterTablespaceReadOnly
3. analyzeMetaDataTables
4. deleteOffHoursPeriod
5. generateFilesColdBackup
6. insertOffHoursPeriod
7. monitorFileSystem
8. monitorTablespaces
9. purgePartitions
10. resizeTablespaceFile
11. selectOffHoursPeriod
12. showDBPackageVersions
13. showPurgeablePartitions
14. showTablespaceFiles
15. versionDeleteBySingleProvisoComp
16. versionDeleteProvisoGlobal
17. versionRptByProvisoApp
18. versionRptByProvisoComponent

Q. Quit      P. Previous  N. Next

Choice : 3
```

You can use the **dbMgr** command to perform multiple procedures. Each procedure is identified by a number. You must choose the individual procedure before running the **dbMgr** command.

The procedure to re-index the metadata tables is choice number **3** and is called **analyzeMetaDataTables**. At the Choice prompt, type **3** and press **Enter**.

## Select the Set of tables option

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Procedure : analyzeMetaDataTables

argument          value
-----          -
1. Set of tables      N
2. Force analyze

B. Back          P. Previous      N. Next          E. Execute

Choice : 1
```

You must set two arguments before re-indexing the metadata tables. The first argument is the selection of the set of tables to re-index.

The second argument is to select whether or not to **Force analyze**. The default is **N**, or no. If you do not want to force the re-index, use the default. You can set the **Force analyze** to **Y**, or yes, by choosing **2** and setting the subsequent value choice to **Y**. That choice forces the metadata tables to re-index.

Choose **1** to set the tables to re-index.

## Select tables to analyze

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Procedure      : analyzeMetaDataTables
Parameter     : Set of tables : (A)ll, (H)istory, (G)rouping, (I)nventory
Current value  :

Value : A
```

There are several choices of tables that you can set for re-indexing. You can select the history, grouping, and inventory tables individually, or you can re-index all three.

Type the value to re-index, either **A**, **H**, **G**, or **I**, and then press **Enter**.

## Analyze selected tables

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Procedure : analyzeMetaDataTables

argument                value
-----                -
1. Set of tables        A
2. Force analyze        N

B. Back          P. Previous    N. Next          E. Execute

Choice : E
procedure : analyzeMetaDataTables A N
Confirmation (y/n) :y
```

The second option that you can be choose is **Force analyze**. You can set it to **Y** or **N**, but the default is **N**. If you must force the re-index, choose **2** and set the value to **Y**.

When you have set both arguments, **Set of tables** and **Force analyze**, type **E** and confirm that you want to re-index by typing **y** at the confirmation prompt.

## Review results

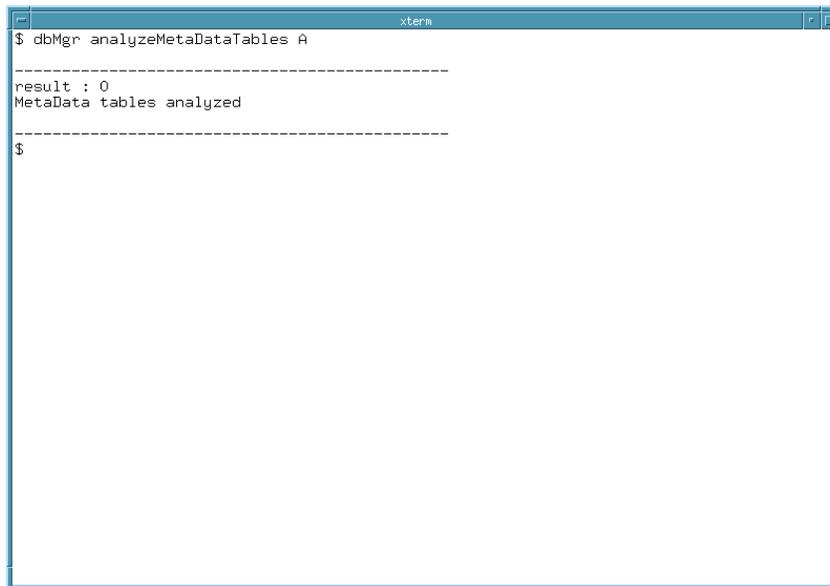
```
xterm
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-----
result : 0
MetaData tables analyzed

-----
[Enter] to quit :
```

When the re-index completes, the results are displayed. A result of **0** indicates that the re-index has completed successfully. Type enter to quit the results page.

## Command-line analyze command



```
xterm
$ dbMgr analyzeMetaDataTable A
-----
result : 0
MetaData tables analyzed
-----
$
```

You can place the re-index of metadata tables in a cron.

You can issue the **dbMgr** command with arguments. To re-index without using the interactive **dbMgr** tool, run the **dbMgr** command with the **analyzeMetaDataTable** argument and the following options:

The set of tables to run against (**A**, **H**, **I**, or **G**)

Whether to force the re-index (The default is no option specified, or **N**).

Scheduling the re-index of metadata tables in a cron ensures that metadata table indexes will not adversely affect reporting performance

## Summary

You should now be able to:

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- Identify the Netcool/Proviso tool, **Database Information**, that contains information about the metadata table spaces

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## 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 Web browser of your choice to explore the Netcool/Proviso training roadmap.

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