

How to clean up the SmartStor database in 9071?

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1. Shut down the Enterprise Manager.
`/EM_HOME/bin/EMCtrl.sh -stop`
2. create a temporal directory
`cd EM_HOME`
`mkdir "datanew"`
3. Go to the Smartstor tool home directory
`cd EM_HOME/Tools`
4. Use the following command to print the current metric list:

```
./SmartStorTools.sh test_regex -metrics ".*|.*|.*" -src /Introscope9.0.7.1/data
```

Debug options:

```
file:/tmp/.options not found
Enterprise Manager|Internal|AlertID:1337973317178
Alerts|ChangeDetector:Change Occurred in Last 20 Minutes
Enterprise Manager|Internal|AlertID:1337973317164
Alerts|CEM BT Stats:Defect Percent-Missing Transaction
Enterprise Manager|Internal|AlertID:1337973317179
Alerts|Supportability:Connected Collectors
Enterprise Manager|Internal|AlertID:1337973317169
Alerts|Sample:CPU Heuristic
Enterprise Manager|Internal|AlertID:1337973317152
Alerts|CEM BT Stats:Defect Percent-Unauthorized Access
Enterprise Manager|Internal|AlertID:1337973317162
Alerts|CEM BT Stats:Defect Percent-Large Size
Enterprise Manager|Internal|AlertID:1337973317147
Alerts|CEM BT Stats:Defect Percent-Small Size
Enterprise Manager|Internal|AlertID:1337973317156
Alerts|CEM BT Stats:Agg Avg Response Time
Enterprise Manager|CEM|Cache|User LRU Cache:Total Capacity
Enterprise Manager|CEM|Cache|User LRU Cache:Current Size
Enterprise Manager|CEM|Cache|User LRU Cache:Hit Count
Enterprise Manager|CEM|Cache|User LRU Cache:Miss Count
Enterprise Manager|CEM|Cache|Incident LRU Cache:Total Capacity
Enterprise Manager|CEM|Cache|Incident LRU Cache:Current Size
Enterprise Manager|CEM|Cache|Incident LRU Cache:Hit Count
Enterprise Manager|CEM|Cache|Incident LRU Cache:Miss Count
Enterprise Manager|CEM|Cache|Login Name LRU Cache:Total Capacity
Enterprise Manager|CEM|Cache|Login Name LRU Cache:Current Size
Enterprise Manager|CEM|Cache|Login Name LRU Cache:Hit Count
```

```
Enterprise Manager|CEM|Cache|Login Name LRU Cache:Miss Count
Enterprise Manager|Internal|Database|Connection Pools|cemDataSource:numBusyConnections
Enterprise Manager|Internal|Database|Connection Pools|cemDataSource:numConnections
Enterprise Manager|Internal|Database|Connection Pools|cemDataSource:numIdleConnections
Enterprise Manager|Internal|Database|Connection Pools|cemDataSource:numUnclosedOrphanedConnections
Enterprise Manager|Internal|Database|Connection Pools|cemDataSource:threadPoolNumTasksPending
Enterprise Manager|Internal|Database|Connection Pools|apmDataSource:numBusyConnections
Enterprise Manager|Internal|Database|Connection Pools|apmDataSource:numConnections
Enterprise Manager|Internal|Database|Connection Pools|apmDataSource:numIdleConnections
Enterprise Manager|Internal|Database|Connection Pools|apmDataSource:numUnclosedOrphanedConnections
Enterprise Manager|Internal|Database|Connection Pools|apmDataSource:threadPoolNumTasksPending
Enterprise Manager|Internal|AlertID:1337973317154
Alerts|CEM BT Stats:Defect Percent-Client Request Error
Enterprise Manager|Internal|AlertID:1337973317151
```

If you are using a UNIX system, the below command would give you a better view of the metrics:

```
SmartStorTools.sh test_regex -metrics ".*|.*.*" -src /Introscope9.0.7.1/data | grep '|'.* | awk -F'|' '{print $1}' |
sort | uniq -c
```

5. Select metrics from specific agents to be removed using regexes or use regexes to match metrics themselves as below:

Option 1: Remove data from using an agent name as a filter

- a) First, query data:

```
./SmartStorTools.sh test_regex -agents ".*|.*.*" -src /Introscope9.0.7.1/data
```

Debug options:

```
file:/tmp/.options not found
SuperDomain|Custom Metric Host (Virtual)|Custom Metric Process (Virtual)|Custom Metric Agent (Virtual)
SuperDomain|LODVMAPM031|Agent|UnnamedAgent
```

- b) Remove ALL data from tomcat dummayagent "UnnamedAgent":

```
./SmartStorTools.sh remove_agents -agents
"SuperDomain\\|LODVMAPM031\\|Agent\\|UnnamedAgent" -src /Introscope9.0.7.1/data -dest
/Introscope9.0.7.1/dataNEW
```

Debug options:

```
file:/tmp/.options not found
5/25/12 03:47:24 PM EDT [INFO] [Manager] Copying /Introscope9.0.7.1/data/1337973420000.data to
/Introscope9.0.7.1/dataNEW/1337973420000.data
5/25/12 03:47:24 PM EDT [INFO] [Manager] Loading metadata file: /Introscope9.0.7.1/data/metrics.metadata
5/25/12 03:47:24 PM EDT [INFO] [Manager] Pruning agent named
SuperDomain|LODVMAPM031|Agent|UnnamedAgent
```

To verify that data has been removed from the metricdata files, do a query against the new db:

```
./SmartStorTools.sh test_regex -agents ".*|.*.*" -src /Introscope9.0.7.1/dataNEW
```

Debug options:

file:/tmp/.options not found

SuperDomain|Custom Metric Host (Virtual)|Custom Metric Process (Virtual)|Custom Metric Agent (Virtual)

Option 2: Remove Socket data using an metric name as a filter

a) First query if data exist:

```
./SmartStorTools.sh test_regex -metrics ".*Socket.*" -src /Introscope9.0.7.1/data
```

Debug options:

file:/tmp/.options not found

Enterprise Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:CPU Time (ms)

Enterprise Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:User Time (ms)

Enterprise Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Blocked Time (ms)

Enterprise Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Blocked Count

Enterprise Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Wait Time (ms)

Enterprise Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Wait Count

b) If data exists, remove data:

```
./SmartStorTools.sh remove_metrics -src /Introscope9.0.7.1/data -metrics .*Socket.* -dest /Introscope9.0.7.1/dataNEW2
```

Debug options:

file:/tmp/.options not found

5/25/12 04:05:08 PM EDT [INFO] [Manager] Copying /Introscope9.0.7.1/data/1337973420000.data to /Introscope9.0.7.1/dataNEW2/1337973420000.data

5/25/12 04:05:08 PM EDT [INFO] [Manager] Loading metadata file: /Introscope9.0.7.1/data/metrics.metadata

5/25/12 04:05:08 PM EDT [INFO] [Manager] Pruning metric named Enterprise

Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Blocked Count

5/25/12 04:05:08 PM EDT [INFO] [Manager] Pruning metric named Enterprise

Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Wait Time (ms)

5/25/12 04:05:08 PM EDT [INFO] [Manager] Pruning metric named Enterprise

Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:User Time (ms)

5/25/12 04:05:08 PM EDT [INFO] [Manager] Pruning metric named Enterprise

Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Blocked Time (ms)

5/25/12 04:05:08 PM EDT [INFO] [Manager] Pruning metric named Enterprise

Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:CPU Time (ms)

5/25/12 04:05:08 PM EDT [INFO] [Manager] Pruning metric named Enterprise

Manager|Internal|Threads|btpool- - Acceptor NoNPESocketConnector@...:Wait Count

c) To verify that data has been removed from the metricdata files, do a query against the new db:

```
./SmartStorTools.sh test_regex -metrics ".*Socket.*" -src /Introscope9.0.7.1/dataNEW2
```

Debug options:

file:/tmp/.options not found

No Matching Metrics are found in Smartstor

6. Repeat the steps 4 and 5 as you need to.

NOTE: Based on our experience we found “Sockets, SQL and JMX are the most reason of a metric explosion.

7. Perform a prune:

a) create a temporal directory “datafinal”

b) `./SmartStorTools.sh prune -src EM_HOME/ dataNEW2-dest EM_HOME/datafinal`

The Windows or UNIX console displays the pruned metrics during the prune operation

8. Rename EM_HOME/datafinal to EM_HOME\data

9. Start the Introscope EM