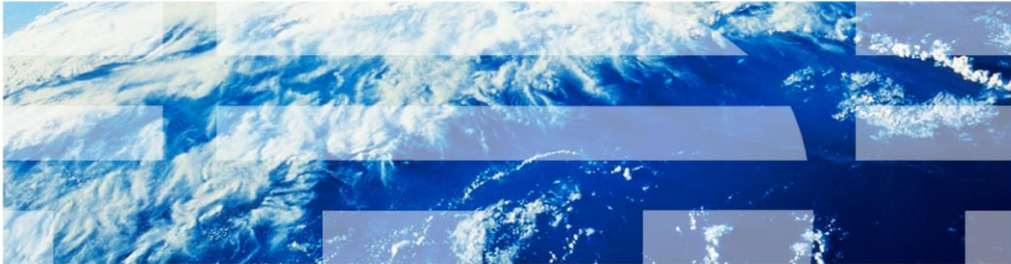


Tivoli Netcool Service Quality Manager V4.1.4

Ensuring a successful start on AIX server



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Tivoli Netcool Service Quality Manager V4.1.4, Procedure to start Tivoli Netcool Service Quality Manager and steps to ensure processes are started successfully on an AIX server.

Objectives

After completing this module, you can perform these tasks:

- Start the Tivoli Netcool Service Quality Manager related processes
- Check the procedure to ensure that all Tivoli Netcool Service Quality Manager sap processes are down before starting them
- Start all Tivoli Netcool Service Quality Manager sap processes or a specific sap process
- Describe the changes of the status when starting the processes
- Debug an issue if the processes cannot start

After completing this module, you can perform these tasks:

- Start the Tivoli Netcool Service Quality Manager related processes.
- Check the procedure to ensure that all Tivoli Netcool Service Quality Manager sap processes are down before starting them.
- Start all Tivoli Netcool Service Quality Manager sap processes or a specific sap process.
- Describe the changes of the status when starting the processes.
- Debug an issue if the processes cannot start.

The information in this module enables you to perform a clean start of the Tivoli Netcool Service Quality Manager processes on an AIX server, and gives you the ability to identify an issue if one arises when starting the processes before contacting IBM support.

Starting the Tivoli Netcool Service Quality Manager

The sequence for this action is contained in this list:

- Start Oracle databases
- Start the Tivoli Directory Server
- Start the WebSphere Message Broker
- Start the Tivoli Netcool Service Quality Manager web portal
- Start the Tivoli Netcool Service Quality Manager process monitor
- Start the Tivoli Netcool Service Quality Manager process manager
- Start Tivoli Netcool Service Quality Manager sap processes

The sequence to start the Tivoli Netcool Service Quality Manager is:

Start Oracle databases.

Start the Tivoli Directory Server.

Start the WebSphere Message Broker.

Start the Tivoli Netcool Service Quality Manager web portal.

Start the Tivoli Netcool Service Quality Manager process monitor.

Start the Tivoli Netcool Service Quality Manager process manager.

Start Tivoli Netcool Service Quality Manager sap processes.

Starting Oracle databases

Currently, sadb is the main database that Tivoli Netcool Service Quality Manager uses

- To start the Oracle listener, run this command:
`lsnrctl start`
- To start the Oracle databases, run this command as user **oracle** on the database or consolidated server:
`dbstart $ORACLE_HOME`

Currently, sadb is the main database that the Tivoli Netcool Service Quality Manager uses. In order to start the Oracle listener, run the command **lsnrctl start**. To start Oracle databases, log in as **oracle** on the database or consolidated server. To start the Oracle databases, run the command **dbstart \$ORACLE_HOME**.

Starting the Tivoli Directory Server

- To start the Tivoli Directory Server, run this command as user **root** on the application or consolidated server:

```
/etc/rc.d/init.d/tdssa start
```

- To check whether the process started, run these commands:

```
ps -ef | grep ibmslapd
```

```
ps -ef | grep ibmdiradm
```

There should be one running process for **ibmslapd**, and one running process for **ibmdiradm**

- To verify whether your process started successfully, see the logs in this location:
/appl/ldap/idsslapd-idsinst/logs/ibmslapd.log

To start the Tivoli Directory Server, log in as root on the application or consolidated server. To start the Tivoli Directory Server, run the command **/etc/rc.d/init.d/tdssa start**. To check whether the process started, run the commands: **ps -ef | grep ibmslapd** and **ps -ef | grep ibmdiradm**. These commands confirm that the Tivoli Directory Server already started when one process is returned for **ibmslapd**, and one process returned for **ibmdiradm**. To verify whether your process started successfully, see the logs in **/appl/ldap/idsslapd-idsinst/logs/ibmslapd.log**.

Starting the WebSphere Message Broker

- Log in as user **saserver** on the application or consolidated server
- To start the WebSphere Message Broker, run the command:
`/etc/rc.d/init.d/wmbasa start`
- To check whether the process started, run this command:
`ps -ef | grep wmb`
There should be one running wmb process if the WebSphere Message Broker started
- To verify whether your process started successfully, see the logs in:
`/appl/IBM/WebSphere/AppServer/profiles/wmb/logs/server1/startServer.log`

To start the WebSphere Message Broker, log in as **saserver** on the application or consolidated server. To start the WebSphere Message Broker, run the command **`/etc/rc.d/init.d/wmbasa start`**. To check whether the process started, run the command **`ps -ef | grep wmb`**. This command confirms that the WebSphere Message Broker already started when one wmb process is returned. To verify whether your process started successfully, see the logs in **`/appl/IBM/WebSphere/AppServer/profiles/wmb/logs/server1/startServer.log`**.

Starting the Tivoli Netcool Service Quality Manager web portal

- Log in as user **saserver** on the application or consolidated server
- To start the Tivoli Netcool Service Quality Manager web portal, run the command:
`/etc/rc.d/init.d/wpsa start`
- To check whether the process started, run this command:
`ps -ef | grep isc`
There should be one running WebSphere process if the Tivoli Netcool Service Quality Manager web portal started
- To verify whether your process started successfully, see the logs in this location:
`/appl/IBM/WebSphere/AppServer/profiles/isc/logs/server1/startServer.log`

To start the Tivoli Netcool Service Quality Manager web portal, log in as **saserver** on the application or consolidated server. To start the Tivoli Netcool Service Quality Manager web portal, run the command: **`/etc/rc.d/init.d/wpsa start`**. To check whether the process started, run the command: **`ps -ef | grep isc`**. This command confirms that the Tivoli Netcool Service Quality Manager web portal started when one WebSphere process is returned. To verify whether your process started successfully, see the logs in **`/appl/IBM/WebSphere/AppServer/profiles/isc/logs/server1/startServer.log`**.

Starting the Tivoli Netcool Service Quality Manager process monitor

- Log in as **saserver** on the application or consolidated server
- To start the Tivoli Netcool Service Quality Manager process monitor, run this command:
`sapmon start`
- To check whether the process started, run this command:
`ps -ef | grep sapmon`
There should be one running sapmon process that is returned if the Tivoli Netcool Service Quality Manager process monitor started
- If there is any issue starting the Tivoli Netcool Service Quality Manager process monitor, check in the logs **\$WMCROOT/logs/sapmon** directory

To start the Tivoli Netcool Service Quality Manager process monitor, log in as **saserver** on the application or consolidated server. To start the Tivoli Netcool Service Quality Manager process monitor, run the command: **sapmon start**. To check whether the process started, run the command: **ps -ef | grep sapmon**. This command confirms that the Tivoli Netcool Service Quality Manager process monitor started when one running sapmon process is returned. If there is any problem when starting the Tivoli Netcool Service Quality Manager process monitor, check the logs to identify the error in the **\$WMCROOT/logs/sapmon** directory.

Starting Tivoli Netcool Service Quality Manager process manager

- Log in as **saserver** on the application or consolidated server
- To start the Tivoli Netcool Service Quality Manager process manager, run this command:
`sapmgr start`
- To check whether the process started, run the command:
`ps -ef | grep sapmgr`
There should be one sapmgr process that is returned if the Tivoli Netcool Service Quality Manager process manager started.
- If there is any issue starting the Tivoli Netcool Service Quality Manager process manager, check the logs for errors in the **\$WMCROOT/logs/sapmgr** directory

In order to start the Tivoli Netcool Service Quality Manager process manager, login as **saserver** on the application or consolidated server. To start the Tivoli Netcool Service Quality Manager process manager, run the command: **sapmgr start**. To check if the process has started, run the command: **ps -ef | grep sapmgr**. This command will confirm that the Tivoli Netcool Service Quality Manager process manager started when one sapmgr process is returned. If there is any problem when starting the Tivoli Netcool Service Quality Manager process manager, check the logs to identify the error in the **\$WMCROOT/logs/sapmgr** directory.

Checking any sap process and whether they are running

- Before starting sap processes, verify that all sap processes are stopped, and there are no stray sap processes still running on the server
- Run `ps -ef | grep java`, and ensure that there are no sap Java processes running. For example, a sap Java process for partyom:

```
saserver 995728 827894 0 Jun 26 - 89:14 java -classpath
/appl/sa/lib/ext/server/CRDBJavabeansServer.jar:/appl/sa/lib/ext/server/CRDBJavaServerCommon.jar:/appl/sa/lib/ext/server/CRDBJavaServer.jar:/appl/sa/lib/ext/server/CRDBJDBCServer.jar:/appl/sa/lib/tp/stax-
utils.jar:/appl/sa/lib/tp/stax.jar:/appl/sa/lib/tp/jsr173_api.jar:/appl/sa/lib/tp/mail.jar:/appl/sa/lib/oraclecharsets
.jar:/appl/sa/lib/oraclejdbc.jar:/appl/sa/lib/tp/log4j.jar:/appl/sa/lib/sa-slat-mgmt-client.jar:/appl/sa/lib/sa-sla-
common.jar:/appl/sa/lib/sa-sla-mgmt-client.jar:/appl/sa/lib/wmc-gui.jar:/appl/sa/lib/wmc-
jdbc.jar:/appl/sa/lib/wmc-util.jar:/appl/sa/lib/wmc-process-mgmt-client.jar:/appl/sa/lib/wmc-
persist.jar:/appl/sa/lib/wmc-om.jar:/appl/sa/lib/sa-sla-common.jar:/appl/sa/lib/sa-party-mgmt-
client.jar:/appl/sa/lib/sa-party-mgmt-server.jar:/appl/sa/lib/wmc-provision-core.jar:/appl/sa/lib/tp/sibc.jms.jar
-verbose:gc -XX:+PrintGCDetails -XX:+PrintGCTimeStamps -XX:+DisableExplicitGC
-Xdump:heap:file=/appl/sa/logs//partyom/partyom.heapdump.%Y%m%d.%H%M%S.%pid.%seq.phd
-Xdump:java:file=/appl/sa/logs//partyom/partyom.javacore.%Y%m%d.%H%M%S.%pid.%seq.txt
-Xdump:snap:file=/appl/sa/logs//partyom/partyom.Snap.%Y%m%d.%H%M%S.%pid.%seq.trc
-Dpmtg.key=4 -Xmx1024m -Xms200m -Dcom.comnitel.om.serverdn=SLM_PARTY
-Dcom.comnitel.config.root=file:/appl/sa/conf -Duser.language=en
-Dcom.ibm.ws.sib.jfapchannel.HEARTBEAT_TIMEOUT=600 -Dapplication.name=partyom
-Dcomnitel.log.application.name=partyom -Dcom.comnitel.daemon=true
com.comnitel.bootstrap.GlobalHandler com.comnitel.slm.party.server.PartyOMServer
```

Before starting sap processes, it is important that no sap processes are still running in the system to ensure that there are no duplicate processes. Note that there are other applications that use java, for example, the WebSphere Message Broker, the Tivoli Netcool Service Quality Manager web portal, the Tivoli Netcool Service Quality Manager process monitor, and the Tivoli Netcool Service Quality Manager process manager, which has already been started and should be left running on the server when starting the sap processes.

Starting the Tivoli Netcool Service Quality Manager sap processes

- Log in as **saserver** on the application or consolidated server
- To start all the Tivoli Netcool Service Quality Manager sap processes, run this command:
`sap start`
- To start only one of the Tivoli Netcool Service Quality Manager sap processes, run this command:
`sap start <process>`
- For example, to start rmom process, you can run this command:
`sap start rmom`
- To start group of the Tivoli Netcool Service Quality Manager sap processes, run this command:
`sap start <group of processes>`
- For example, to start client processes, you can run this command:
`sap start client`

You can start a single Tivoli Netcool Service Quality Manager sap process, a group of the Tivoli Netcool Service Quality Manager sap processes, or all of the Tivoli Netcool Service Quality Manager sap processes using a single command. In the event when you want to start the Tivoli Netcool Service Quality Manager, you can run the **sap start** command to start all the Tivoli Netcool Service Quality Manager sap processes as **saserver** on the application or consolidated server. You can also start a single Tivoli Netcool Service Quality Manager sap process using the **sap start <process>** command, and a group of Tivoli Netcool Service Quality Manager sap processes using the **sap start <group of processes>** command.

Verifying that the Tivoli Netcool Service Quality Manager processes are started

- Run **sap disp -l** to display the status of a sap processes
- The Tivoli Netcool Service Quality Manager sap process changes state from stopped to exec to init to STARTED
- For example, **unix> sap start summaryom**
- **sap disp -l**

NAME	STATE	SINCE	HOST	GROUP	STIME	PID
summaryom	exec	22:30:50	server1	cem	22:30:50	10910

NAME	STATE	SINCE	HOST	GROUP	STIME	PID
summaryom	init	22:40:50	server1	cem	22:30:50	10910

NAME	STATE	SINCE	HOST	GROUP	STIME	PID
summaryom	STARTED	22:45:00	server1	cem	22:30:50	-

You can run **sap disp -l** to display the status of the Tivoli Netcool Service Quality Manager sap processes. When a Tivoli Netcool Service Quality Manager sap process is started using the **sap start <process>** command, the sap process state changes from stopped to exec, and then to init and finally to STARTED. An example is provided showing the state of summaryom process when it was started.

Process that is started with errors

- If a Tivoli Netcool Service Quality Manager sap process is started with errors, the state changes to failed

- Example:

NAME	STATE	SINCE	HOST	GROUP	STIME	PID
summaryom	failed	21:43:08	server1	cem	21:43:00	-

- If this happens, you need to review the errors in the log file for the process that failed, which is available in the **\$WMCROOT/logs/<process>** directory
- For the summaryom error listed above, the logs are available in the **\$WMCROOT/logs/summaryom** directory

If a process is started with errors, the state changes to failed. An example is shown in the slide where the summaryom process is found with a failed state. When this happens, review the errors in the log file for the process, which is available in **\$WMCROOT/logs/<process>** directory, where *<process>* is the name of the process. For the summaryom error listed above, the logs are available in the **\$WMCROOT/logs/summaryom** directory.

Sequence to start the Tivoli Netcool Service Quality Manager core

To start Tivoli Netcool Service Quality Manager 4.1.4 application on an AIX server, run these commands in sequence:

- Start the Oracle databases as user **oracle** on the database or consolidated server:
`lsnrctl start`
`dbstart $ORACLE_HOME`
- Start the Tivoli Directory Server as user **root** on the application or consolidated server:
`/etc/rc.d/init.d/tdssa start`
- Start the WebSphere Message Broker as user **saserver** on the application or consolidated server:
`/etc/rc.d/init.d/wmba start`
- Start the Tivoli Netcool Service Quality Manager web portal as user **saserver** on the application or consolidated server:
`/etc/rc.d/init.d/wpsa start`
- Start the Tivoli Netcool Service Quality Manager process monitor as user **saserver** on the application or consolidated server:
`sapmon start`
- Start the Tivoli Netcool Service Quality Manager process manager as user **saserver** on the application or consolidated server:
`sapmgr start`
- Start the Tivoli Netcool Service Quality Manager sap processes as user **saserver** on the application or consolidated server:
`sap start`

This page gives you the sequence of commands to start the Tivoli Netcool Service Quality Manager core and related processes on an AIX server.

Summary

Now that you have completed this module, you can perform these tasks:

- Start the Tivoli Netcool Service Quality Manager related processes
- Check the procedure to ensure that all Tivoli Netcool Service Quality Manager sap processes are down before starting them
- Start all Tivoli Netcool Service Quality Manager sap processes or a specific sap process
- Describe the changes of the status when starting the processes
- Debug an issue if the processes cannot start

Now that you completed this module, you can perform these tasks:

- Start the Tivoli Netcool Service Quality Manager related processes.
- Check the procedure to ensure that all Tivoli Netcool Service Quality Manager sap processes are down before starting them.
- Start all Tivoli Netcool Service Quality Manager sap processes or a specific sap process.
- Describe the changes of the status when starting the processes.
- Debug an issue if the processes cannot start.

You can perform a clean start of the Tivoli Netcool Service Quality Manager processes on an AIX server, and identify the problematic area if problem arises when starting the processes before contacting IBM support.

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