



# Running Process

## Running Processes

This section describes the process that a healthy VM should be running. Under each component, you can see a list of running events and the procedure to validate the state.

### Prime Central Processes

#### Expected Processes

**Step 1** Log in as **root** user

**Step 2** To verify if the component is running as it should, run the `grep` command:

```
ps -ef | grep primeusr
```

**Step 3** Verify if the output is as follows:

```
primeusr 5271      1  0 Dec12 ?          00:00:00
/opt/disk2/prime/local/prime_secured/linux/prime_secured -q -f
/opt/disk2/prime/local/prime_secured/prime_config
primeusr 16308    1  0 Dec12 pts/0    00:05:34 /opt/disk2/prime/XMP_Platform/jre/bin/java
.....
primeusr 2609     1 99 14:03 ?          00:00:37
/opt/disk2/prime/utils/linux/jdk1.6//bin/java ....
```

If the proper processes are not running:

**Step 1** Log in to Prime Central as **root**.

**Step 2** Run the following commands:

```
# su - primeusr
# portalctl stop
# itgctl stop
# itgctl start
# portalctl start
```

## How to Validate

- Step 1** Log in to the Prime Central portal to verify if processes are working as expected. Alternatively, you can also log on to the machine and as `primeusr`, run these commands to verify processes are working.

```
# su - primeusr
# portalctl status
Prime Central Platform Status
Started
```

- Step 2** Run the following command

```
# itgctl status
Prime Central - Integration Layer: Started
```

Run the following command to verify if the `cfm` type reflects the hostname of Service Visualizer:

- Step 1** From Prime Central VM, log in as `root` user.

- Step 2** Run the following command:

```
# su - oracle -c '$ORACLE_HOME/bin/sqlplus primedba/\\prime-admin-password"@primedb'
```

- Step 3** From the output, verify if `cfm` type is the hostname of Service Visualizer.

```
SQL*Plus: Release 11.2.0.1.0 Production on Mon Sep 10 09:46:29 2012
Copyright (c) 1982, 2009, Oracle. All rights reserved.

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - 64bit Production
With the Partitioning, OLAP and Real Application Testing options

SQL> SELECT TYPE, HOSTNAME, DB_USER, DB_PORT FROM DMINVENTORY;

TYPE
-----
HOSTNAME
-----
DB_USER
-----
DB_PORT
-----
cfm
sv-02
primedba
1521

SQL>
```

## Event Collector Processes

### Expected Processes

Verify if the processes are running as they should. Follow the procedure below:

**Step 1** Log in as **root** user.

**Step 2** Run the grep command for the nco:

```
ps -ef | grep nco
```

**Step 3** From following output, verify if `-authenticate PAM` switch is displayed:

```
/opt/IBM/tivoli/netcool/omnibus/platform/linux2x86/bin/nco_pad -name NCO_PA -authenticate PAM -secure
```

If you do not see the `-authenticate PAM` switch in the process command line, the process may be running, but you will not be able to communicate with process control. If that is the case, you will need to restart process control using the nco script in `/etc/init.d`

**Step 4** Run the following command:

```
/etc/init.d/nco stop
/etc/init.d/nco start
```

**Step 5** Verify if process control is running, and that the objectserver is up and running:

```
/opt/IBM/tivoli/netcool/omnibus/platform/linux2x86/bin/nco_objserv -name NCOMS -pa NCO_PA
```



**Note** The objectserver runs under process control due to the presence of the `-pa NCO_PA` switch. The `-pa` indicates that it is running under process control, and the `NCO_PA` displays the name of the process control that the objectserver is running under.

**Step 6** Enter `ps-ef` to verify that the SNMP probe is running:

```
/opt/IBM/tivoli/netcool/omnibus/probes/linux2x86/nco_p_mttrapd -server NCOMS
```

For the EIF probe to run, the nonnative probe has to be up and running:

```
/opt/IBM/tivoli/netcool/omnibus/probes/linux2x86/nco_p_nonnative
/opt/IBM/tivoli/netcool/platform/linux2x86/jre_1.6.7/jre/bin/java -server -cp
/opt/IBM/tivoli/netcool/omnibus/probes/java/nco_p_tivoli_eif.jar:/opt/IBM/tivoli/netcool/o
mnibus/probes/java/NSProbe.jar:/opt/IBM/tivoli/netcool/omnibus/probes/java/IntegrationsSup
port.jar:/opt/IBM/tivoli/netcool/omnibus/java/jars/evd.jar:/opt/IBM/tivoli/netcool/omnibus
/java/jars/log.jar:/opt/IBM/tivoli/netcool/omnibus/probes/java -Xrs
-DOMNTHOME=/opt/IBM/tivoli/netcool/omnibus nco_p_tivoli_eif
```

If that is running, verify if the EIF probe is running:

```
/opt/IBM/tivoli/netcool/platform/linux2x86/jre_1.6.7/jre/bin/java -server -cp
/opt/IBM/tivoli/netcool/omnibus/probes/java/nco_p_tivoli_eif.jar:/opt/IBM/tivoli/netcool/o
mnibus/probes/java/NSProbe.jar:/opt/IBM/tivoli/netcool/omnibus/probes/java/IntegrationsSup
```

```
port.jar:/opt/IBM/tivoli/netcool/omnibus/java/jars/evd.jar:/opt/IBM/tivoli/netcool/omnibus
/java/jars/log.jar:/opt/IBM/tivoli/netcool/omnibus/probes/java -Xrs
-DOMNIHOME=/opt/IBM/tivoli/netcool/omnibus nco_p_tivoli_eif
```

Verify that the Oracle gateway is running:

```
/opt/IBM/tivoli/netcool/omnibus/bin/linux2x86/nco_g_oracle
```

**Step 7** If the above processes are not running, restart Event Collector with the following commands:

```
/etc/init.d/nco stop
/etc/init.d/nco start
```

## How to Validate

Validate the status of the process controls. Run the following command:

```
nco_pa_status -user root -password
```

The output must reflect the following:

Service Name	Process Name	Hostname	User	Status	PID
SNMPGateways	SNMPGateway1	ec-02	netcool	PENDING	0
	SNMPGateway2	ec-02	netcool	PENDING	0
	SNMPGateway3	ec-02	netcool	PENDING	0
	SNMPGateway4	ec-02	netcool	PENDING	0
	SNMPGateway5	ec-02	netcool	PENDING	0
Core	MasterObjectServer	ec-02	netcool	RUNNING	9908
	Snmprobe	ec-02	root	RUNNING	9909
	OracleGate	ec-02	netcool	RUNNING	9911
	EIFProbe	ec-02	netcool	RUNNING	9912

## Service Visualizer Processes

### Expected Processes

To check if the expected processes are running:

**Step 1** Log in as **root** user.

**Step 2** Run the following command:

```
ps -ef | grep TBSMProfile | cut -b 1-300
```

The following output appears:

```
netcool 11157      1  0 Dec13 ?          00:04:14 /opt/IBM/tivoli/tip/java/bin/java
-Declipse.security -Dwas.status.socket=53361 -Dosgi.install.area=/opt/IBM/tivoli/tip
-Dosgi.configuration.area=/opt/IBM/tivoli/tip/profiles/TBSMProfile/configuration
-Djava.awt.headless=true -Dosgi.framework.extensions
```

**Step 3** Run the following command:

```
ps -ef | grep TIPProfile | cut -b 1-300
```

The following output appears:

```
netcool 11262      1  0 Dec13 ?           00:01:53 /opt/IBM/tivoli/tip/java/bin/java
-Declipse.security -Dwas.status.socket=54605 -Dosgi.install.area=/opt/IBM/tivoli/tip
-Dosgi.configuration.area=/opt/IBM/tivoli/tip/profiles/TIPProfile/configuration
-Djava.awt.headless=true -Dosgi.framework.extensions=
```

- Step 4** Check if Service Visualizer GUI is up and running. From the above output, check if the following are displayed

```
/opt/IBM/tivoli/tip/profiles/TBSMProfile/configuration
/opt/IBM/tivoli/tip/profiles/TIPProfile/configuration
```

These show that both the TBSM and the TIP gui's are up and running.

- Step 5** If you do not the output, you must restart the Service Visualizer. Run the following commands:

```
/etc/init.d/tomcat stop
/etc/init.d/tbsm stop
/etc/init.d/tbsm start
/etc/init.d/tomcat start
```




---

**Note** Do not use `/opt/IBM/tivoli/tbsm/bin/tbsm_suite.sh`.

---

## How to Validate

After you verify that both the TBSMProfile and the TIPProfile are up and running, log on to the GUI interface to validate.

## Correlation Engine (CE) VM Processes

### Expected Processes

To check if Correlation Engine is functioning as it should, you need to verify the following processes: the eWAS server, the jrexec, and the Jmx client. Run the following commands to determine if the required processes are running.

- Step 1** Log in as **root** user.

- Step 2** Run the following command

```
ps -ef | grep nci_jrexec
```

The following output appears:

```
netcool 21142 1 0 Dec14 ? 00:00:00 /bin/sh /opt/IBM/tivoli/netcool/impact/bin/nci_jrexec
```

- Step 3** Run the following command

```
ps -ef | grep nciJmxClient
```

The following output appears

```
netcool 21189 21142 0 Dec14 ? 00:00:06 /opt/IBM/tivoli/netcool/eWAS/java/bin/java
-Dibm.tivoli.impact.propertiesDir=/opt/IBM/tivoli/impact/etc
-Dbase.directory=/opt/IBM/tivoli/impact -Dnetcool.productname=impact -classpath
/opt/IBM/tivoli/impact/lib/nciJmxClient.jar:/opt/IBM/tivoli/netcool/eWAS/lib/ext/log4j-1.2
.15.jar com.micromuse.response.client.RemoteJRExecServerImpl
```

**Step 4** Run the following command:

```
ps -ef | grep ImpactProfile | cut -b 200-253
```

The following command appears:

```
/IBM/tivoli/eWAS/profiles/ImpactProfile/configuration
```

---

If the above processes do not run as required, restart Correlation Engine run the following commands:

```
/etc/init.d/impact stop
```

```
/etc/init.d/impact stop
```

## How to Validate

Log on to Correlation Engine to validate the procedure.

## Infrastructure Monitoring Processes

### Expected Processes

To check if the appropriate processes are up and running, run the following commands:

**Step 1** Log in as **root** user.

**Step 2** Run the following command to verify if DB2 is running:

```
# ps -ef | grep db2
```

The following output appears:

```
root      10905      1  0 Dec14 ?          00:00:00 db2wdog
db2inst1 10907 10905  0 Dec14 ?          00:01:29 db2sysc
root      10908 10907  0 Dec14 ?          00:00:00 db2ckpwd
root      10909 10907  0 Dec14 ?          00:00:00 db2ckpwd
root      10910 10907  0 Dec14 ?          00:00:00 db2ckpwd
db2inst1 10920 10905  0 Dec14 ?          00:00:07 db2acd
,0,0,0,1,0,0,0,1,0,8a65b0,14,1e014,2,0,1,11fc0,0x21000000,0x21000000,1600000,4bc0005,2,2
1ab000d
db2fenc1 14819 10905  0 Dec14 ?          00:00:00 db2fmp (
,1,0,0,0,0,0,0,1,0,8a65b0,14,1e014,2,0,1,31fc0,0x21000000,0x21000000,1600000,4bc0005,2,2
1d7002a
db2fenc1 27468 10905  0 Dec14 ?          00:00:00 db2fmp (
,0,0,0,0,0,0,0,1,0,8a65b0,14,1e014,2,0,1,91fc0,0x21000000,0x21000000,1600000,4bc0005,2,2
23c002e
root      28070 24613  0 11:23 pts/1    00:00:00 grep db2
root      32586      1  0 Dec14 ?          00:00:11 /opt/ibm/db2/V9.7/bin/db2fmcld
dasadm1  32663      1  0 Dec14 ?          00:00:00 /opt/ibm/db2/V9.7/das/bin/db2fmd -i
dasadm1  -m /opt/ibm/db2/V9.7/das/lib/libdb2dasgcf.so.1
dasadm1  32665      1  0 Dec14 ?          00:00:00 /home/dasadm1/das/adm/db2dasrrm
```

**Step 3** To see what processes are running on Infrastructure Monitoring, run the following command:

```
cd /opt/IBM/ITM/bin
```

You will change directory to **ITM\_HOME/bin**.

**Step 4** Run the following command to know the agents and processes that are running:

```
./cinfo -r
```

The following output appears:

```
***** Fri Dec 16 10:48:52 EST 2011 *****
User: root Groups: root bin daemon sys adm disk wheel
Host name : itm      Installer Lvl:06.22.05.00
CandleHome: /opt/IBM/ITM
*****
Host      Prod  PID   Owner  Start  ID      ..Status
itm kf    11278 root   Dec14  None   ...running
itm cq    11405 root   Dec14  None   ...running
itm ms    26334 root   Dec14  TEMS   ...running
itm ul    6926  root   Dec14  None   ...running
itm lz    15549 root   Dec14  None   ...running
itm vm    8062  root   Dec14  cisco  ...running
itm r4    11138 root   Dec14  vcenter ...running
itm r4    13189 root   Dec14  cuom   ...running
itm r4    14871 root   Dec14  cucdm  ...running
```

- To determine if TEMS is started and is up and running, check the following:

```
itm-pet ms 26334 root Dec14 TEMS ...running
```

- To determine if the TEPS is started and is up and running, you will want to focus on the following:

```
itm-pet cq 11405 root Dec14 None ...running
```

If the processes are running as required, skip to Step 5. Else, go to Step 6.

**Step 5** After you establish that both the processes are running, you must log into Infrastructure Monitoring to either start or stop, and then configure any of the other agents, as required.

To bring up the GUI interface to allow you to manage the processes and agent, run the following command:

```
itmcmd manage
```

**Step 6** If the above processes do not run as required, restart Infrastructure Monitoring:

```
/etc/init.d/im stop
/etc/init.d/db2 stop
/etc/init.d/db2 start
/etc/init.d/im stop
```

## How to Validate

Log in to Infrastructure Monitoring to validate the processes.

