### Starting the ZCM services

* To start/stop the zcm service, do the following:
* Go to the server console and type the following:
* /opt/novell/zenworks/bin/novell-zenworks-configure -c Start
* A list of services will be displayed. Toggle the services to act upon.
* Select the option to start or stop the services.

Although the SLES machine might have the JRE installed, it is recommend to install it again to make sure the Orchestrate agent uses the correct version.

* In the PlateSpin Orchestrate Agent section, download:
* novell-zenworks-zos-agent-2.6.0-150059.i586.rpm
* Java 1.6.0 (32-bit) or Java 1.6.0 (64-bit) RPM
* Install the Java 1.6.0 RPM by entering the one of the following commands (as applicable):
* rpm -ivh novell-zenworks-zos-java-1.6.0\_sun\_update14-1.x86\_64.rpm
* or
* rpm -ivh novell-zenworks-zos-java-1.6.0\_sun\_update14-1.i586.rpm
* Install the Orchestrate Agent by entering the following command:
* rpm -ivh novell-zenworks-zos-agent-2.6.0-150059.i586.rpm
* Edit /opt/novell/zenworks/zos/agent/agent.properties to set the value of zos.agent.server to the IP address of the PlateSpin Orchestrate Server where the agent will be registered.
* Start the agent by entering the following command:
* /etc/init.d/novell-zosagent start
* Open the PlateSpin Orchestrate Development Client and click Resources to open the Resources

#### Starting a Virtual Machine

Follow these steps to manually start a virtual machine in Orchestrate.

* Launch the PlateSpin Orchestrate Development Client and log in to the server
* Go to the Scheduler by clicking on the “Scheduler” icon.
* Select the “vmstart” schedule from the list. Select the “Job arguments” tab.
* Enter the job arguments to specify how the VM is to be provisioned:

| Name | Type | Description |
| --- | --- | --- |
| vm\_name | String | The name of the Virtual Machine |
| vm\_guid | String | The GUID of the Virtual Machine |

* After setting the job arguments, click on “Test Schedule.”
* Switch to the job status view by clicking on the “Jobs” icon to view the status of the running job.

#### Shutting Down a Virtual Machine

* Follow these steps to manually stop a virtual machine in Orchestrate.
* Launch the PlateSpin Orchestrate Development Client and log in to the server
* Go to the Scheduler by clicking on the “Scheduler” icon.
* Select the “vmstop” schedule from the list. Select the “Job arguments” tab.
* Enter the job arguments to specify how the VM is to be provisioned:

| Name | Type | Description |
| --- | --- | --- |
| vm\_name | String | The name of the Virtual Machine |
| vm\_guid | String | The GUID of the Virtual Machine |

* After setting the job arguments, click on “Test Schedule.”
* Switch to the job status view by clicking on the “Jobs” icon to view the status of the running job.

#### How to Stop/Start BSM in UAT

* The BSM software is controlled by the userid formula with a password of formula. The reader should read and understand the BSM migration document to fully understand the overall requirements for the Operating System configuration and Java configurations necessary to run BSM.
* The user must log into the UAT BSM Server (IP 172.26.122.164) as the formula user and insure that the Virtual Frame Buffer is running (ps -ef | grep Xvfb). If the Virtual Frame Buffer is NOT running then cd to /usr/bin and issue /usr/bin/Xvfb :1 -screen 0 1024x768x8 -nolisten inet6 &. This will start the Virtual Frame Buffer as a background process.
* Next the user must start BSM by going to the BSM directory (cd /var/opt/formula/ManagedObjects/bin). Once there issue mosdaemon from the command prompt.
* To Stop BSM, simple log in as above and go to the same directory (as above) and issue mosstop -shutdown.
* Once BSM is started the user may start/restart myMO. See the myMO section for instructions.

## Start and Stop

There are two services that are running on the ESB server, ServiceMix and Tomcat. The commands to start and stop them are below. Both services are configured to start upon boot of the server.

### ServiceMix

#### Stop

ServiceMix can be stopped using the kill command. There is not an init.d stop script for ServiceMix.

* sudo ps -Af | grep servicemix (finds the currently running instance)
* sudo kill process-id (stops the current instance)

#### Start

ServiceMix is best to be restarted with a reboot of the server. This is due to how the application needs to startup.

* sudo /sbin/reboot

### Tomcat6

#### Stop

* sudo ps -Af | grep tomcat (finds the currently running instance)
* sudo kill process-id (stops the current instance)

#### Start

* /etc/init.d/tomcat6 start

## Log file Locations

The log files are located in the following locations;

|  |  |
| --- | --- |
| Application | Log File Location |
| ServiceMix | /var/opt/novell/apache-servicemix-4.2.0-fuse-02-00/data/log/servicemix.log |
| Tomcat | /var/opt/novell/tomcat6/logs/catalina.out |
| SLES 11 | /var/log/messages |

## Troubleshooting

In order to test and trouble shoot the ESB, additional software tools are needed as well as the understanding of the message flows. This section will go through creating some sample requests and showing what the expected results should be.

The software tool required is SoapUI, which does require a Windows desktop. It is available for free as an open source version from the following URL; http://www.soapui.org/. There is also an Eclipse plug-in for SoapUI that has the same functions that would run on a Linux desktop.

The message flows all start as web services requests. This is where SoapUI comes in. A request in SoapUI can be created to send to the bus, thus by passing both User App and NCM. The request is then handled by the bus and a response message is sent back to the originator of the request.

The NCM server is deployed with the rest of the core services. It communicates with the CMOS/PSO servers located in the pods. The NCM server contains two applications running on it, the NCM service, as well as the, PostgreSQL database. The PostgreSQL database is used by the NCM server to store the configuration as well as workload information.

## Log Files

The log files at located at the following locations;

|  |  |
| --- | --- |
| Application | Log File Location |
| NCM | /var/opt/novell/soaframework10/domains/NovellCloudManager/logs> |
| PostgreSQL | /var/log/messages |
| SLES 11 | /var/log/messages |

## Start & Stop

### NCM

#### Start

/var/opt/novell/soaframework10/domains/NovellCloudManager/bin/startserv

#### Stop

/var/opt/novell/soaframework10/domains/NovellCloudManager/bin/stopserv

### PostgreSQL

#### Start

/etc/init.d/postgresql start

#### Stop

/etc/init.d/postgresql stop

# Postgres (Database for ESB)

The PostgreSQL server is used by the ESB for storing data related to the History Service and the Costing service. This server is located in Core. This database will be used by all of the ESB services that might need a database.

## Log Files

The log files at located at the following locations;

|  |  |
| --- | --- |
| Application | Log File Location |
| PostgreSQL | /var/log/messages |
| SLES 11 | /var/log/messages |

## Start & Stop

#### Start

/etc/init.d/postgresql start

#### Stop

/etc/init.d/postgresql stop