

CHAPTER 3: ADMINISTRATIVE CONSOLE

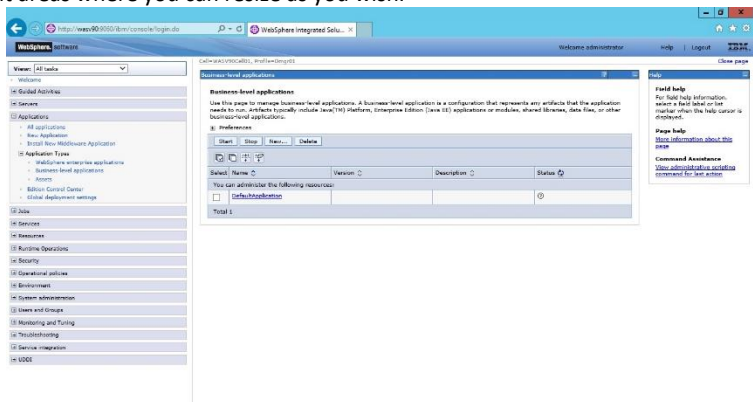
Theory

WebSphere resources can be configured and managed via web based graphical tool. Although this tool is called officially as “Websphere Integrated Solutions Console”, you can usually find resources referring this console as “administrative console” or “admin console”.

Admin console is automatically installed system application called “isclite”. This application is installed on deployment manager in a network deployment environment or on application server in a stand-alone environment. Since it is a system application, you cannot see it in the list of applications. But, in case of troubles, you can uninstall and re-install this admin console using command line tool, “wsadmin”.

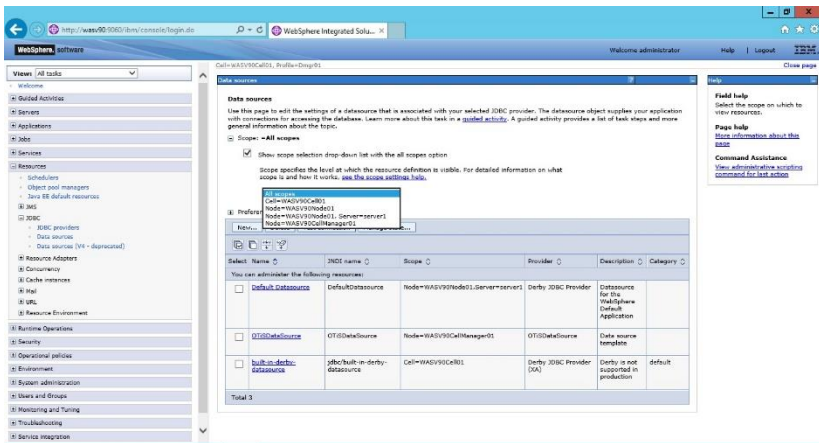
In the network deployment environment, you can perform administrative activities such as creating and managing applications and viewing logs for entire cell, where in stand-alone environment, you can take those activities only for that specific server.

Admin console has a simple layout to ease access to administrative tasks with different areas where you can resize as you wish.



Navigation tree has categorized view of all possible administrative tasks. As you click on a ‘+’, that menu item will expand and if you click on a ‘-’ that menu item will collapse. Banner area is on the top of the page and contains three parts, that are, ‘Welcome’ part showing the user logged in, ‘Help’ link which navigates to online help for WebSphere Application Server and ‘Logout’ link that ends your session and redirects you to the login page. Work area is the place you take actions add, view, and change the configurations items. It contains also Messages part where you can see the outputs of your actions. But this part is just basic information, for further information, you should check the related logs.

In WebSphere Application Server, certain configuration items should/can be defined for certain scope level. Possible scope levels from high to low are cell, cluster, node, server and application.



In admin console, you can choose the scope level as shown in the image and then click “Apply” to set the level. After that, the configuration item you changed will be effective for that level. Each scope level configuration is stored in different files (resources.xml) such as

<profile_home>/config/cells/cell_name/nodes/<node>/resources.xml for node level
or <profile_home>/config/cells/cell_name/resources.xml for cell level.

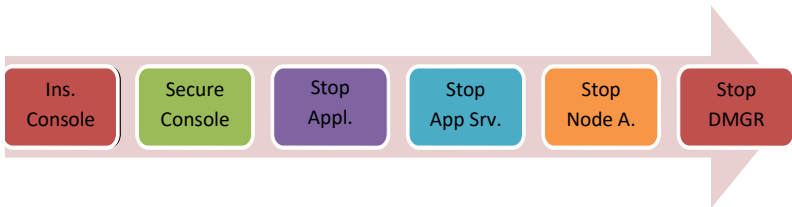
AIM

When you complete the lab exercise, you will be able to take basic operations using graphical web interface, IBM Integrated Solutions Console.

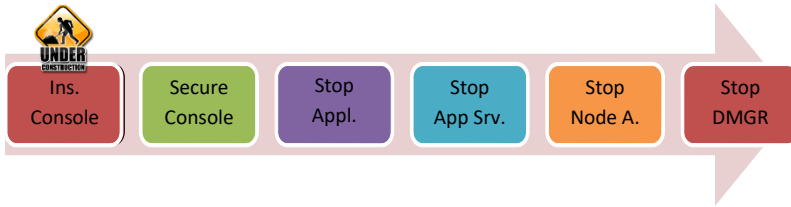
The lab exercise contains following tasks:

1. Uninstall & Install Administration Console
2. Secure Administration Console
3. Stop & Start Application
4. Stop & Start Application Server
5. Restart & Stop Node Agent
6. Stop Deployment Manager

Lab Exercise 3: ADMINISTRATIVE CONSOLE



1. **Uninstall & Install Administration Console**
2. **Start AgentNode**
3. **Stop & Start Application**
4. **Stop & Start Application Server**
5. **Restart & Stop Node Agent**
6. **Stop Deployment Manager**



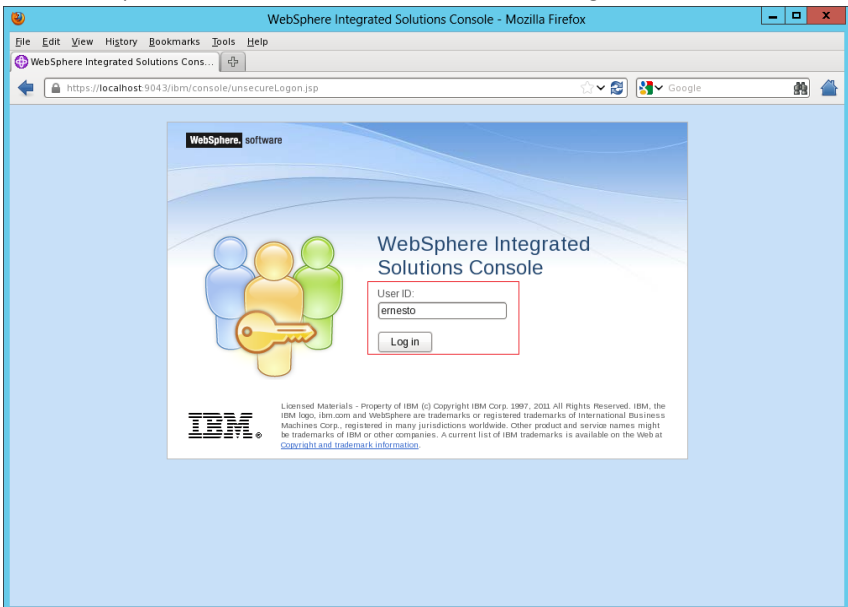
Task 1: Uninstall & Install Administration Console

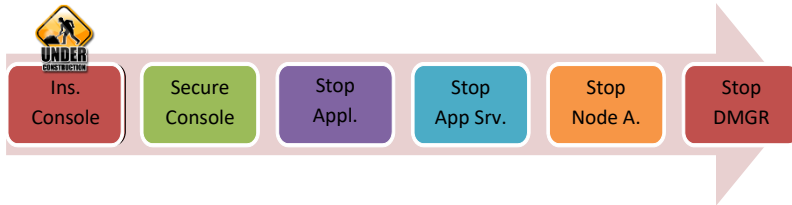
Step 1: Make sure that Deployment Manager is up and running. In case you need to start, please issue “startManager.sh” command to start it.

Note: You can run “stopManager.sh” command to stop it.

```
dmgr.fusionclouds.com - PuTTY
-bash-4.1# cd /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/
-bash-4.1# ./startManager.sh
ADMU0116I: Tool information is being logged in file
/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/startServer.log
ADMU0128I: Starting tool with the Dmgr01 profile
ADMU3100I: Reading configuration for server: dmgr
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server dmgr open for e-business; process id is 27762
-bash-4.1#
```

Step 2.1: In order to use “wsadmin” command, we need to have SOAP port. We can get this information from the administrative console or from configuration file. To check SOAP port from administrative console, we need to login.



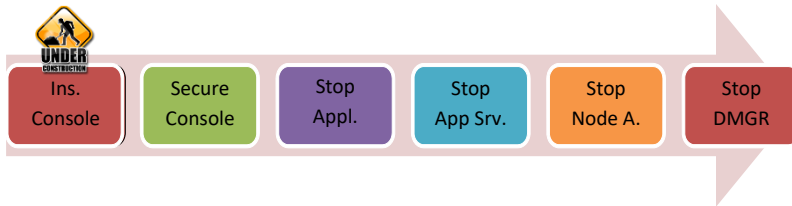


Step 2.2: Click on “System administration>Deployment manager” from left menu and then expand the “Ports” list in work area.

Port Name	Port	Details
CELL_DISCOVERY_ADDRESS	7277	
BOOKKEEPER_ADDRESS	8008	
SOAP_CONNECTOR_ADDRESS	6879	
SOAP_LISTENER_ADDRESS	9100	
SAS_SSL_SERVERAUTH_LISTENER_ADDRESS	9401	
CSOVS_SSL_MUTUALAUTH_LISTENER_ADDRESS	9402	
CSOVS_SSL_SERVERAUTH_LISTENER_ADDRESS	9403	
WC_adminhost	9040	
ECB_UNICAST_ADDRESS	9042	
WC_adminhost_secure	9043	
IPC_CONNECTOR_ADDRESS	9432	
OVERLAY_UIOJ_LISTENER_ADDRESS	11005	
OVERLAY_UIOJ_LISTENER_ADDRESS	11006	
VSAGENT_PORT	7560	
DataPowerRgr_inbound_secure	5555	
STATUS_LISTENER_ADDRESS	9420	

Step 2.3: Or, you can check the SOAP configuration in “serverindex.xml”

```
dmgr.fusionclouds.com - PuTTY
-bash-4.1# cd /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/FusionClouds_dmgrCell01/nodes
/FusionClouds_CellManager01
-bash-4.1# grep -A 1 SOAP serverindex.xml
<specialEndpoints xmi:id="NamedEndPoint_4" endPointName="SOAP_CONNECTOR_ADDRESS">
  <endpoint xmi:id="EndPoint_4" host="dmgr.fusionclouds.com" port="6879"/>
-bash-4.1#
```



Step 3: From command line, run the following command under

“/opt/IBM/WebSphere/AppServer/bin”:

“wsadmin.sh -host localhost -port 8879 -lang jython -f deployConsole.py remove”

```

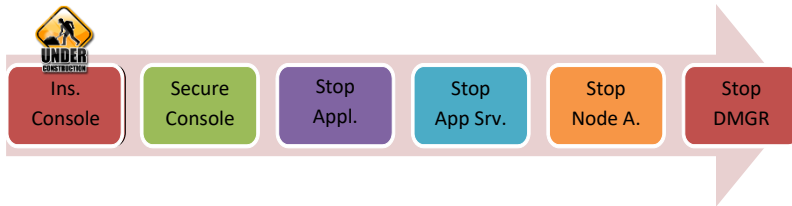
-bash-4.1# cd /opt/IBM/WebSphere/AppServer/bin/
-bash-4.1# ls -la |grep deployConsole.py
-rwxr-xr-x 1 root root 9163 May 1 2012 deployConsole.py
-bash-4.1# ./wsadmin.sh -host dmgr.fusionclouds.com -port 8879 -lang jython -f deployConsole.py remove

WASX7209I: Connected to process "dmgr" on node FusionClouds_CellManager01 using SOAP connector; The type of process is: DeploymentManager
WASX7303I: The following options are passed to the scripting environment and are available as arguments that are stored in the argv variable: "[remove]"
Removing Admin Console...
ADMA5017I: Uninstallation of isclite started.
ADMA5104I: The server index entry for WebSphere:cell=FusionClouds_dmgrCell01,node=FusionClouds_CellManager01 is updated successfully.
ADMA5102I: The configuration data for isclite from the configuration repository is deleted successfully.
ADMA5011I: The cleanup of the temp directory for application isclite is complete.
ADMA5106I: Application isclite uninstalled successfully.
-bash-4.1#
  
```

Step 3: When you try to reach the administrative console, you should get the error below.



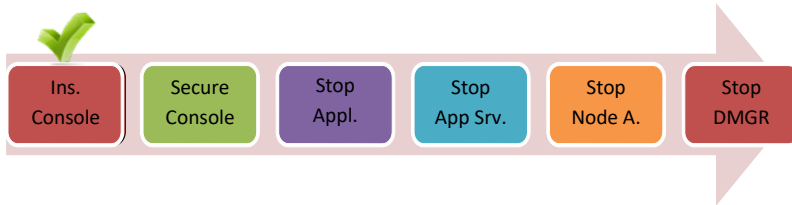
Uninstall of administrative console is completed.



Step 4: To install the Integrated Solutions Console again, issue the following command:

`"wsadmin.sh -host localhost -port 8879 -lang jython -f deployConsole.py install"`

```
dmgr.fusionclouds.com - PuTTY
-bash-4.1# cd /opt/IBM/WebSphere/AppServer/bin/
-bash-4.1# ./wsadmin.sh -host dmgr.fusionclouds.com -port 8879 -lang jython -f deployConsole.py install
WASX7209I: Connected to process "dmgr" on node FusionClouds_CellManager01 using SOAP connector; The type
of process is: DeploymentManager
WASX7303I: The following options are passed to the scripting environment and are available as arguments t
hat are stored in the argv variable: "[install]"
Installing Admin Console...
Deploying isclite.ear
ADMA5016I: Installation of isclite started.
ADMA5058I: Application and module versions are validated with versions of deployment targets.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5081I: The bootstrap address for client module is configured in the WebSphere Application Server repo
sitory.
ADMA5053I: The library references for the installed optional package are created.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5110I: The application isclite is installed as a hidden application and will not be exposed via admin
istrative interfaces such as GUI client, wsadmin or MBean Java API. In order to perform management opera
tions on this application, the application name must be known.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
EJPPC001I: Validation of the portlet.xml file is completed.
SECJ0400I: Successfully updated the application isclite with the appContextIDForSecurity information.
CULAA1007I: The help plug-in of the Integrated Solutions Console module was deployed successfully.
CULAA1001I: The Integrated Solutions Console module was deployed successfully.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5113I: Activation plan created successfully.
ADMA5011I: The cleanup of the temp directory for application isclite is complete.
ADMA5013I: Application isclite installed successfully.
Mapping isclite to admin_host
ADMA5075I: Editing of application isclite started.
ADMA5058I: Application and module versions are validated with versions of deployment targets.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5005I: The application isclite is configured in the WebSphere Application Server repository.
ADMA5011I: The cleanup of the temp directory for application isclite is complete.
ADMA5076I: Application isclite edited successfully. The application or its web modules may require a rest
art when a save is performed.
Updating deployment.xml
Setting IEHS classloader to PARENT_LAST
-bash-4.1#
```

Step 5: Restart the Deployment Manager as shown in the picture.

```
dmgr.fusionclouds.com - PuTTY
-bash-4.1# cd /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin
-bash-4.1# ./stopManager.sh
ADMU0116I: Tool information is being logged in file
/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/stopServer.log
ADMU0128I: Starting tool with the Dmgr01 profile
ADMU3100I: Reading configuration for server: dmgr
ADMU3201I: Server stop request issued. Waiting for stop status.
ADMU4000I: Server dmgr stop completed.
-bash-4.1# ./startManager.sh
ADMU0116I: Tool information is being logged in file
/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/startServer.log
ADMU0128I: Starting tool with the Dmgr01 profile
ADMU3100I: Reading configuration for server: dmgr
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server dmgr open for e-business; process id is 28918
-bash-4.1#
```

Step 6: Check if the installation of the console application is successful.



Task 1 is complete!

Task 2: Start AgentNode

Note: Run following command in the terminal first.

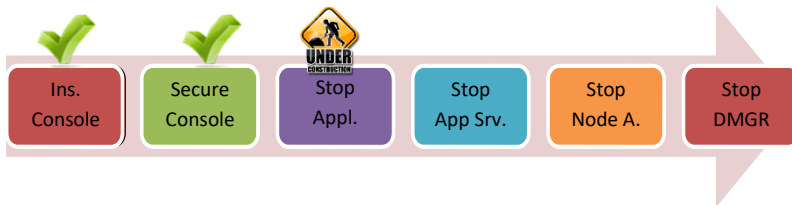
`/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/bin/startNode.sh`

```

bash-4.2# /opt/IBM/WebSphere/AppServer/profiles/AppSrv01/bin/startNode.sh
ADMU0116I: Tool information is being logged in file
/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/nodeagent/startSe
rver.log
ADMU0128I: Starting tool with the AppSrv01 profile
ADMU3100I: Reading configuration for server: nodeagent
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server nodeagent open for e-business; process id is 3780
bash-4.2# /opt/IBM/WebSphere/AppServer/profiles/AppSrv01/bin/stopNode.sh
ADMU0116I: Tool information is being logged in file
/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/nodeagent/stopSer
ver.log
ADMU0128I: Starting tool with the AppSrv01 profile
ADMU3100I: Reading configuration for server: nodeagent

```

Task 2 is complete!

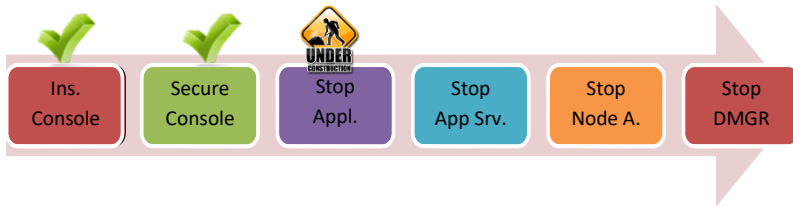


Task 3: Stop & Start Application

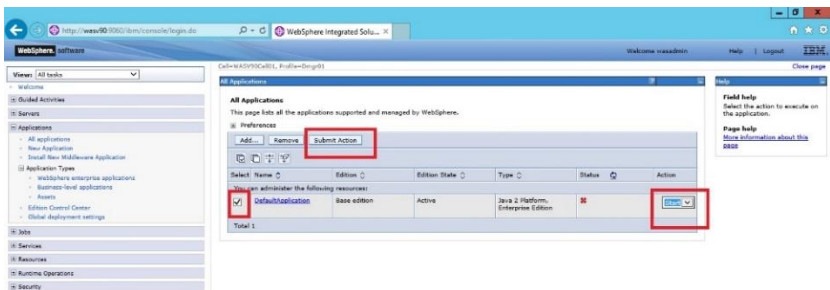
Step 1: Login to admin console. We set user “ernesto” as the user, you should use

the one you set on the previous task.

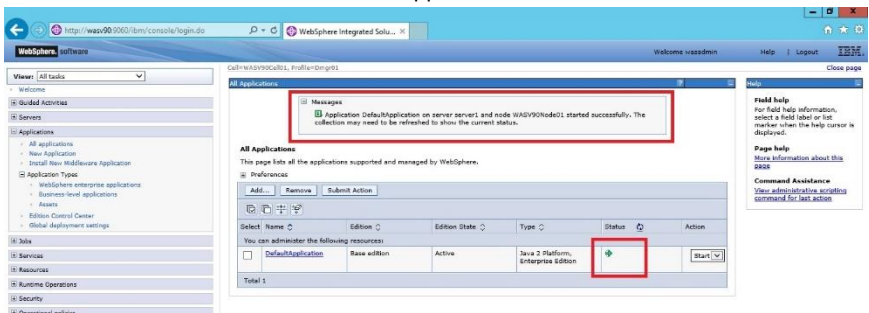


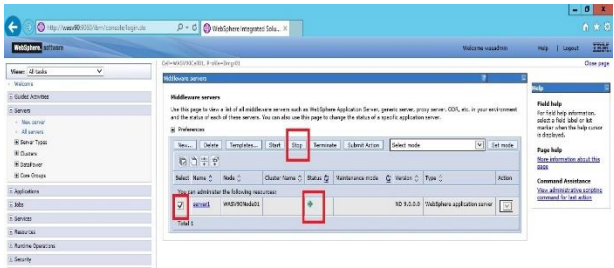


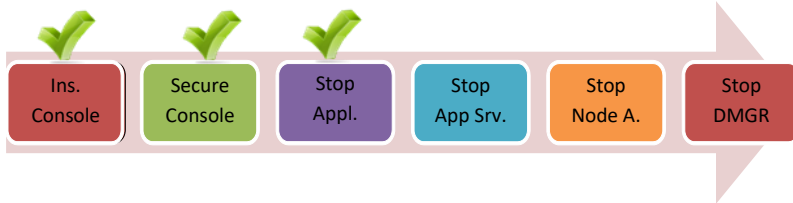
Step 2: Navigate to “Applications>All applications” to see the list of applications. Check the box next to the application you want to stop, select the option “Stop” as for “Action” and then click on “Submit Action” button.



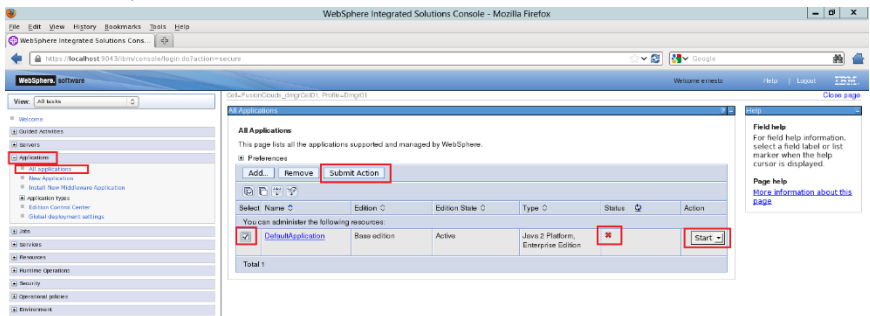
Step 3: You should see the successful message as shown below. Sometimes, it takes a while to see the change in the “Status” icon. You may click on “Refresh” button next to “Status” to see fresh state of the application.



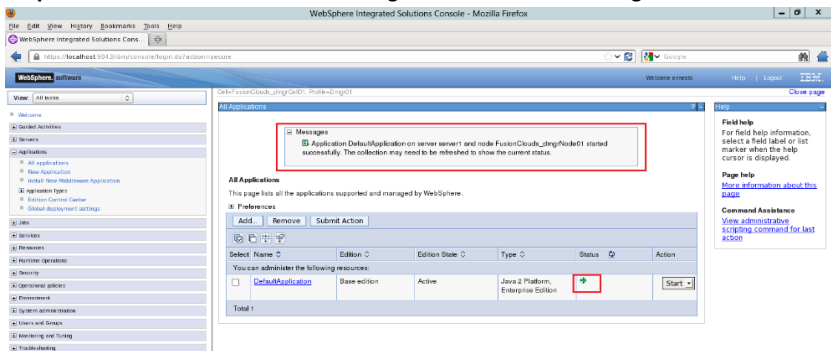




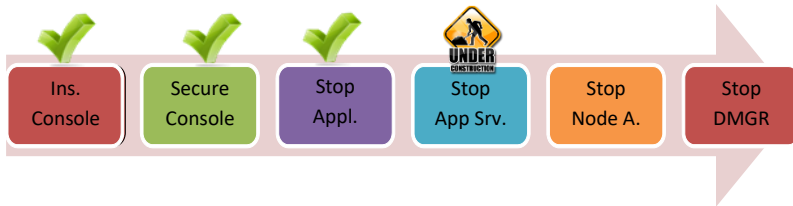
Step 4: Before starting any application, you need to be sure that the current status of the application must be stopped. Click on the check box of the application you want to start, choose the action “Start” and then click on “**Submit Action**”.



Step 5: You should see a success message as follows with status green.

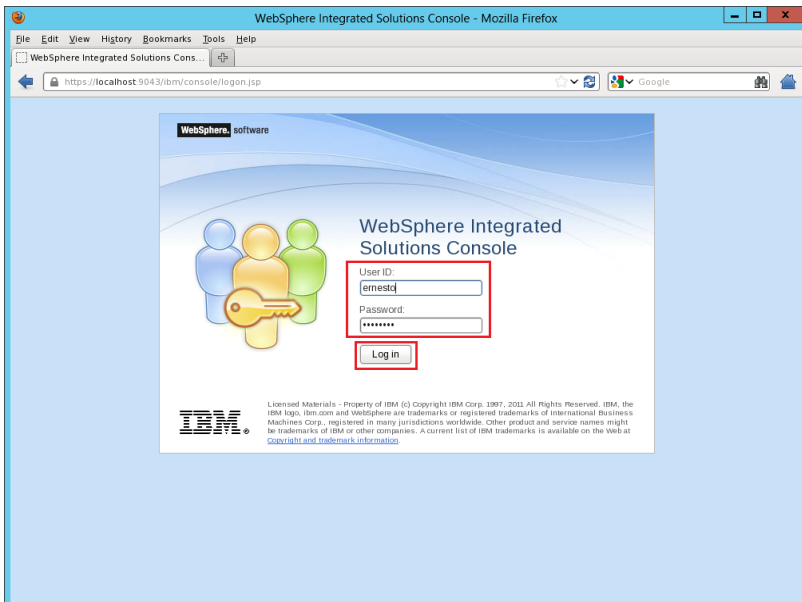


Task 3 is complete!



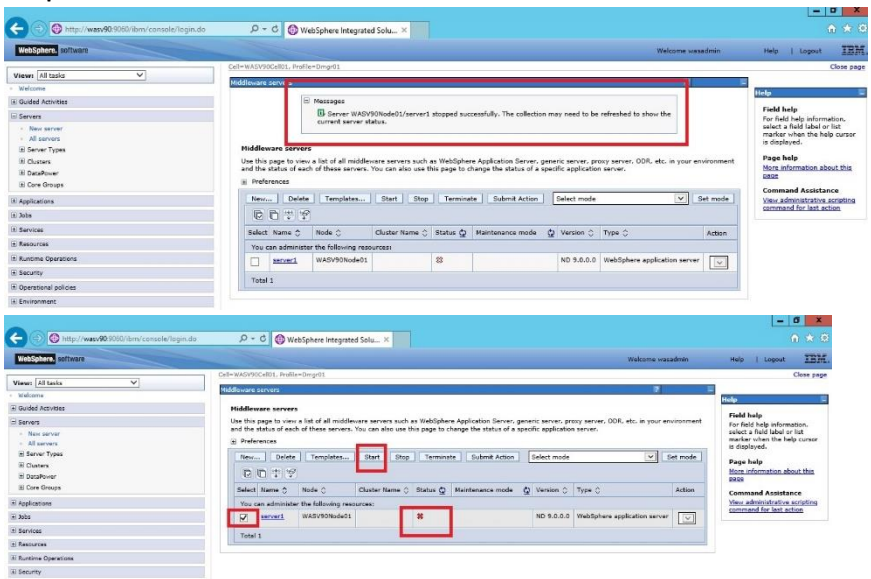
Task 4: Stop & Start Application Server

Step 1: Login to admin console using administrative user and password.

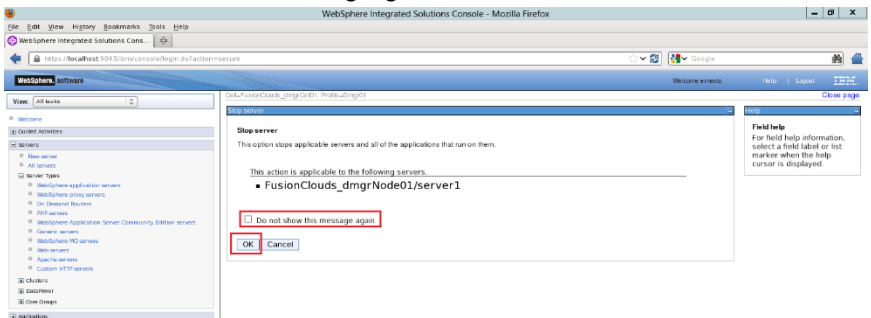


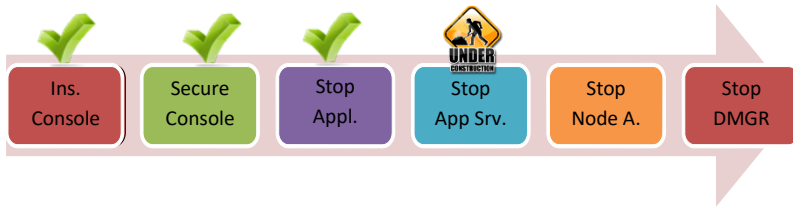


Step 2: Navigate to “Servers>Server Types>WebSphere application servers” to list the application servers. Mark the application server you want to stop and then click “Stop”.

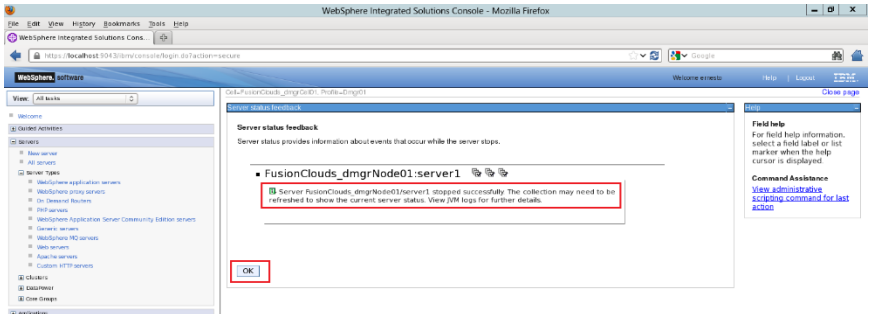


Step 3: If this is the first time, you may see a confirmation message as follows. You can check “Do not show this message again” and then click on “OK”.

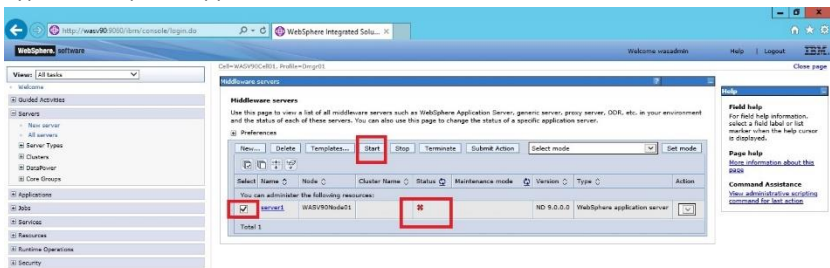


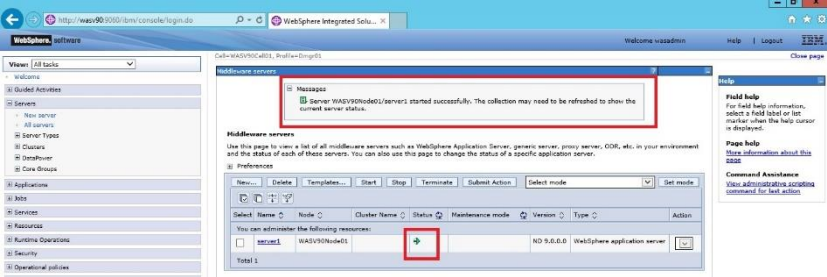
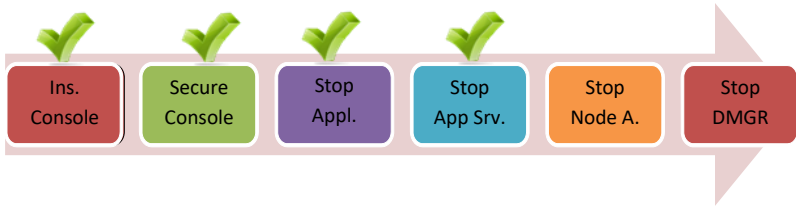


Step 4: You should see the success message as below. Click “OK” to continue.



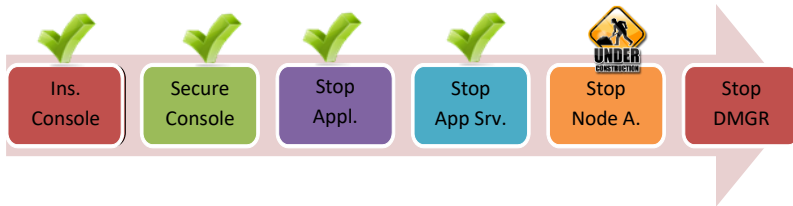
Step 5: Select the application server that you want to start under “Servers>Server Types>WebSphere application servers”, and then click on “Start”.





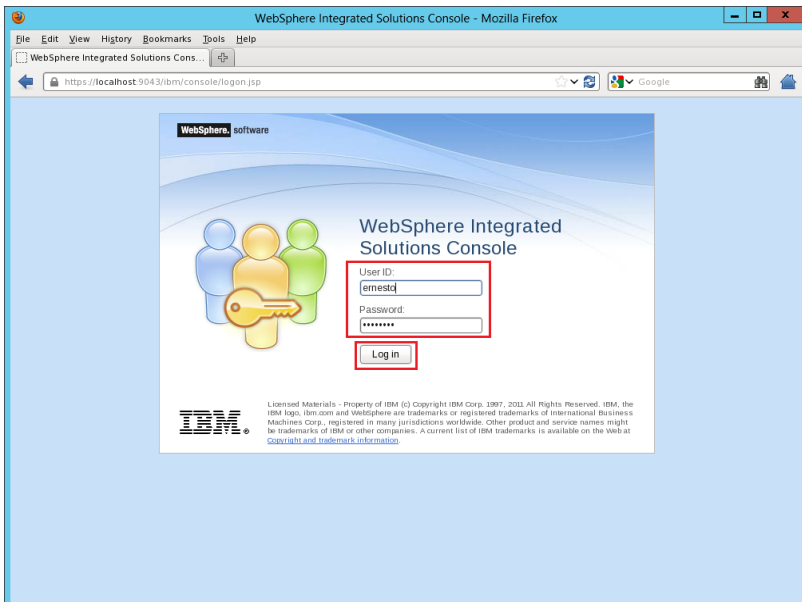
Step 6: You should see the success message.

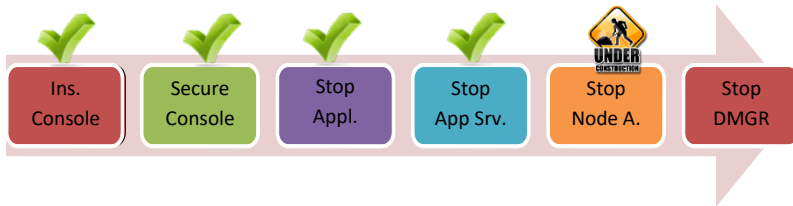
Task 4 is complete!



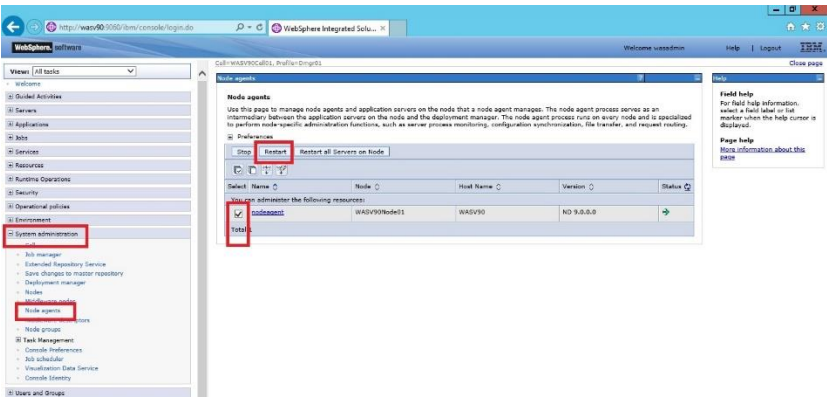
Task 5: Restart & Stop Node Agent

Step 1: Login to admin console using administrative user and password.



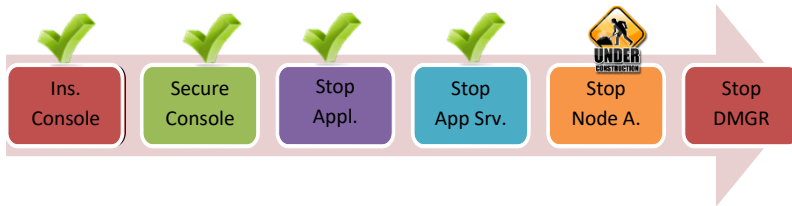


Step 2: Navigate to “System administration>Node agents” to see the list of node agents. Select the node agent you want to restart and then click on “Restart” button.



Step 3: You should see the success message as follows. You can click on status refresh button to see node agent up again.





Step 4: Select the node agent you want to stop and then click on “Submit” button.

WebSphere Integrated Solutions console

Views: All tasks

- Home
- Global Activities
- Services
- Applications
- Jobs
- Runtime Operations
- Security
- Operational policies
- Environement
- System administration
 - Cell manager
 - Extended Repository Service
 - Save changes to master repository
 - Deployment manager
 - Nodes
 - Node agents
 - Middleware descriptors
 - Node groups
 - Task Management
 - Console Preferences
 - Job scheduler
 - Validation Data Service
 - Console Identity

Cell: wasv900cell1, Profile: Default1

Node agents

Use this page to manage node agents and application servers on the node that a node agent manages. The node agent process serves as an intermediary between the application servers on the node and the deployment manager. The node agent process runs on every node and is specialized to perform node-specific administration functions, such as server process monitoring, configuration synchronization, the transfer, and request routing.

Preferences

Stop Restart Restart all Servers on Node

Select	Name	Node	Host Name	Version	Status
<input checked="" type="checkbox"/>	nodeagent	wasv900node01	wasv90	ND 9.0.0.0	

Total: 1

Field help: For field help information, select a field label or list member when the help cursor is displayed.

Page help: More information about this page.

Step 5: You should see the success message.

WebSphere Integrated Solutions console

Views: All tasks

- Home
- Global Activities
- Services
- Applications
- Jobs
- Runtime Operations
- Security
- Operational policies
- Environement
- System administration
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 - Node agents
 - Middleware descriptors
 - Node groups
 - Task Management
 - Console Preferences
 - Job scheduler
 - Validation Data Service
 - Console Identity

Cell: wasv900cell1, Profile: Default1

Node agents

Messages

The node agent on node wasv900node01 was stopped successfully.

Use this page to manage node agents and application servers on the node that a node agent manages. The node agent process serves as an intermediary between the application servers on the node and the deployment manager. The node agent process runs on every node and is specialized to perform node-specific administration functions, such as server process monitoring, configuration synchronization, the transfer, and request routing.

Preferences

Stop Restart Restart all Servers on Node

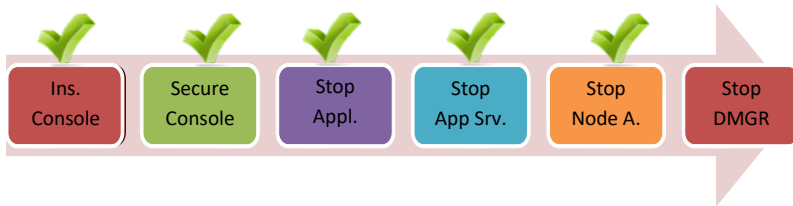
Select	Name	Node	Host Name	Version	Status
<input type="checkbox"/>	nodeagent	wasv900node01	wasv90	ND 9.0.0.0	

Total: 1

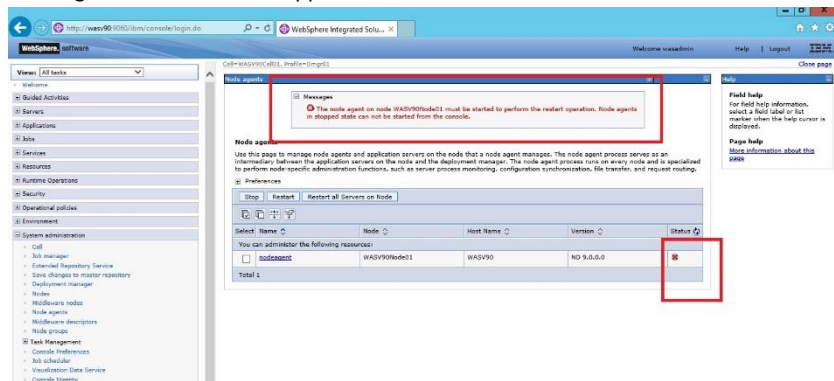
Field help: For field help information, select a field label or list member when the help cursor is displayed.

Page help: More information about this page.

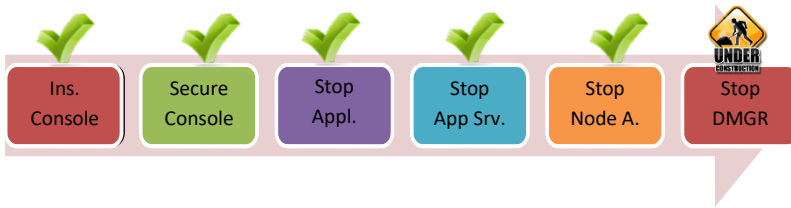
Command Assistance: View administrative actions completed for this action.



Step 6: Be careful about stopping node agent via admin console, because you have to use command line to start it again. You cannot take any further action for that node agent and servers and applications under it from admin console!

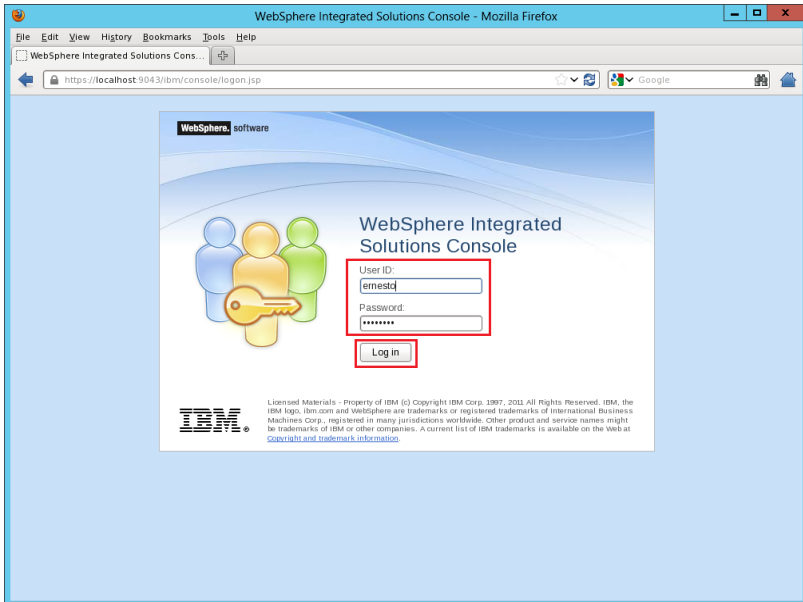


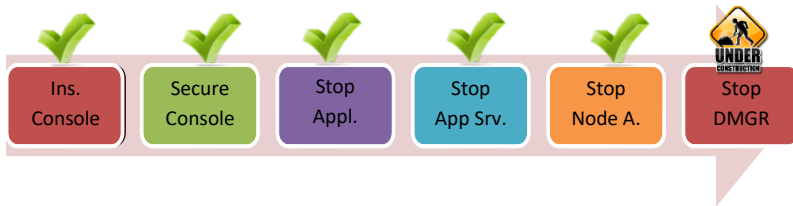
Task 5 is complete!



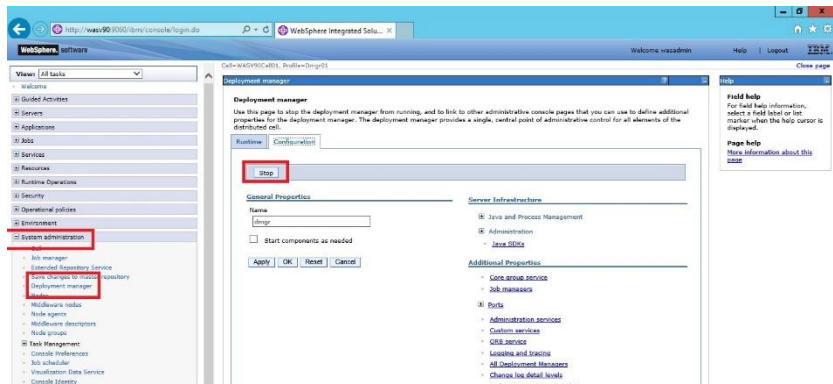
Task 6: Stop Deployment Manager

Step 1: Login to admin console using administrative user and password.



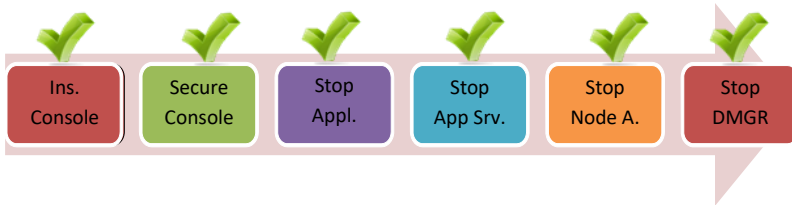


Step 2: Navigate to “System administration>Deployment manager” and click “Stop” button.

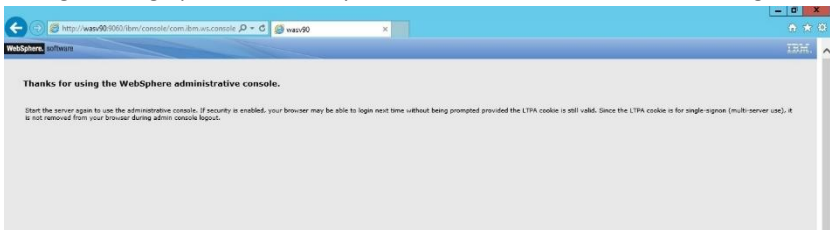


Step 3: Click on “OK” button to confirm to stop deployment manager.





Step 4: You will see the following screen. There is no way to start deployment manager from graphical interface, you have to use command line to start it again.



Task 6 is complete!

SUMMARY

IBM WebSphere Application System provides a web based graphical user interface to perform administrative tasks. The official name for this tool is “WebSphere Integrated Solutions Console” but in many resources you may see different terms such as “admin console” and “administrative console” for the same interface. You can configure to use different realms to login admin console. Integrated Solutions Console also gives you the possibility to configure items on different scopes that are cell, node, server and application.

REFERENCES

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