



**Instant Chime for IBM Sametime
High Availability Server Guide**

Fall 2014

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Contents

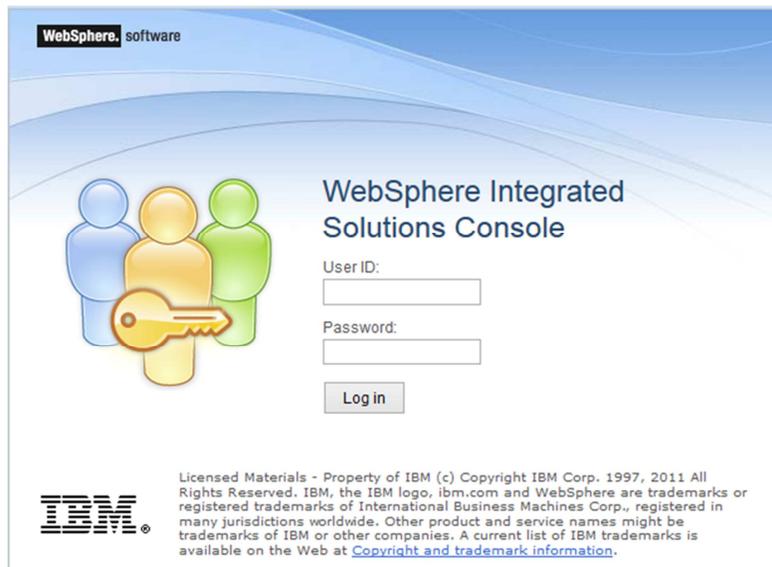
WebSphere Deployment Manager	4
Disable the auto-start of the application server	4
Sync the changes.....	7
Enable/Disable application security.....	9
Sync the changes.....	11
Application server unable to start	13
Windows	13
Linux.....	15
Manual Failover process	16
Clustered Environment	19
Sample High Availability diagram	19
Revision History	20

WebSphere Deployment Manager

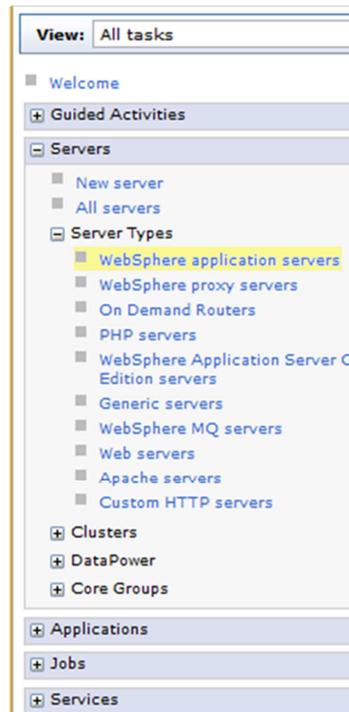
Disable the auto-start of the application server

1. Login in the WebSphere Console

https://<servername>:9043/ibm/console



2. Click on Servers, then expand Server Types and click on WebSphere application servers



3. Click on the server you want to change

Application servers

Use this page to view a list of the application servers in your environment and the status of each of these servers. You can also use this page to change the status of a specific application server.

+ Preferences

New... Delete Templates... Start Stop Restart ImmediateStop Terminate






Select	Name	Node	Host Name	Version	Cluster Name	Status
You can administer the following resources:						
<input type="checkbox"/>	ChimeServer1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	
<input type="checkbox"/>	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	
<input type="checkbox"/>	server1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2		
Total 3						

4. On the right hand side, Find Server Infrastructure and expand the “Java and Process Management”, and click on “Monitoring policy”.

Server messaging

- [Messaging engines](#)
- [Messaging engine inbound transports](#)
- [WebSphere MQ link inbound transports](#)
- [SIB service](#)

Server Infrastructure

- ▣ Java and Process Management
 - [Class loader](#)
 - [Process definition](#)
 - [Process execution](#)
 - [Monitoring policy](#)
- + Administration
 - [Java SDKs](#)

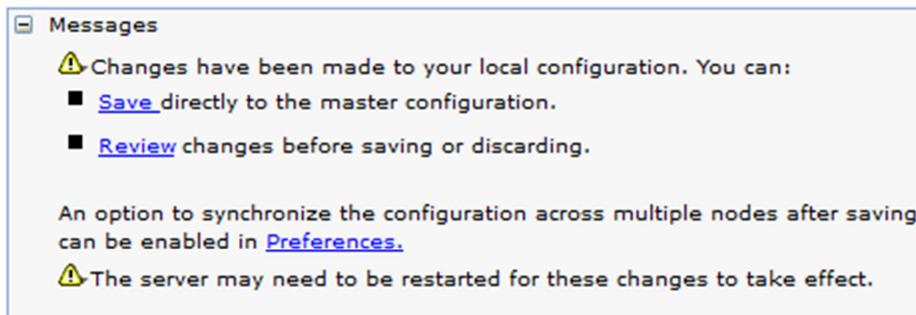
Communications

- + [Ports](#)
- + [Messaging](#)

5. Verify that the Application server is set to stopped, as required by Chime due to Sametime account restrictions. *Stopped is the default setting.*

The screenshot shows a 'Configuration' dialog box with a 'General Properties' section. The 'Maximum startup attempts' is set to 3, 'Ping interval' is 60 seconds, and 'Ping timeout' is 300 seconds. The 'Automatic restart' checkbox is checked. The 'Node restart state' dropdown menu is set to 'STOPPED'. At the bottom, there are buttons for 'Apply', 'OK', 'Reset', and 'Cancel'.

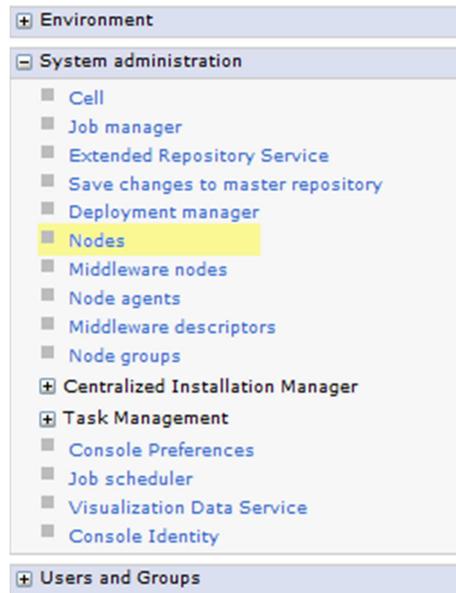
6. Press OK.
7. You will be prompted that “Changes have been made to your local configuration”



8. Verify that all other Application Servers’ “Node restart state” are set to “Stopped”, then save the configuration.

Sync the changes

- Expand System administration and click on nodes



- Select the nodes you want to synchronize, and press Full Resynchronize (DO NOT use Synchronize). This will write the settings to all the nodes.

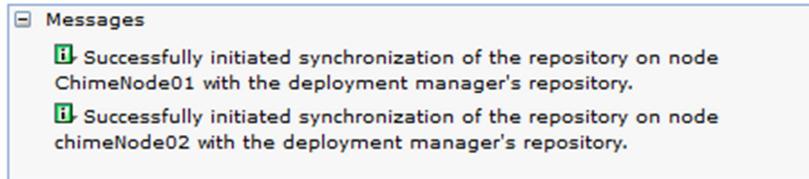
Nodes

Use this page to manage nodes in the application server environment. A node corresponds to a physical computer system with a distinct IP host address. The following table lists the managed and unmanaged nodes in this cell. The first node is the deployment manager. Add new nodes to the cell and to this list by clicking Add Node.

Preferences

Select	Name	Host Name	Version	Discovery Protocol	Status
You can administer the following resources:					
	CellManager01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	TCP	
<input checked="" type="checkbox"/>	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	TCP	
<input type="checkbox"/>	HTTP01	vWebSphereApp01.INSTANT-TECH.local	Not applicable	TCP	
<input type="checkbox"/>	HTTP02	vWebSphereApp02.INSTANT-TECH.local	Not applicable	TCP	
<input checked="" type="checkbox"/>	chimeNode02	vWebSphereApp02.INSTANT-TECH.local	ND 8.5.0.2	TCP	
Total 5					

11. You should be prompted that the synchronization was successful.

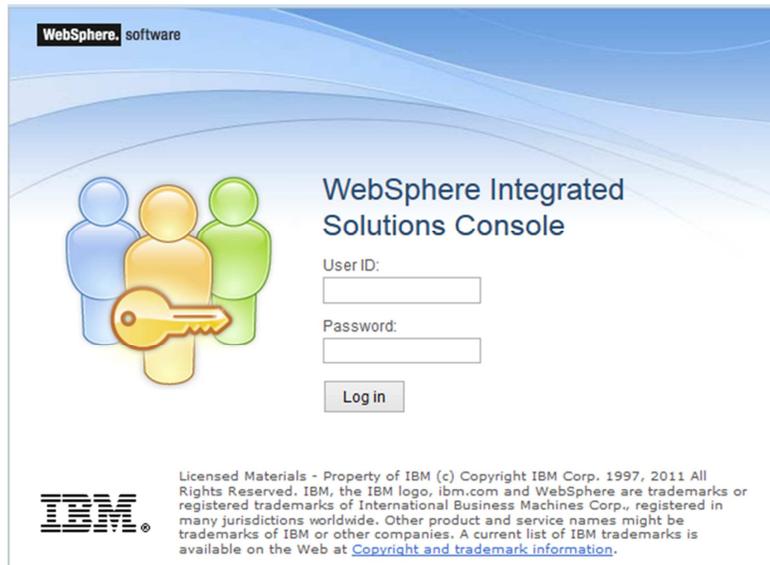


Enable/Disable application security

Application security is not required to run Chime

1. Login in the WebSphere Console

`https://<servername>:9043/ibm/console`



1. Click on Security, then Global Security



- To enable application security, check the “Enable application security” checkbox
To disable application security, uncheck the “Enable application security” checkbox

Administrative security

Enable administrative security

- [Administrative user roles](#)
- [Administrative group roles](#)
- [Administrative authentication](#)

Application security

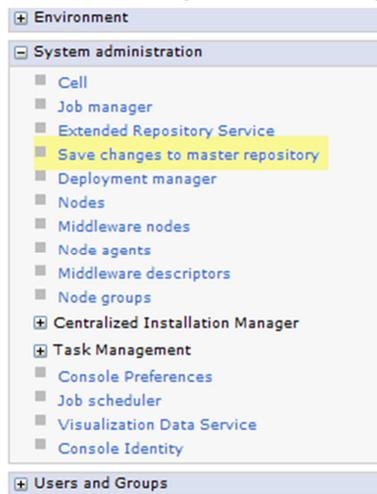
Enable application security

Java 2 security

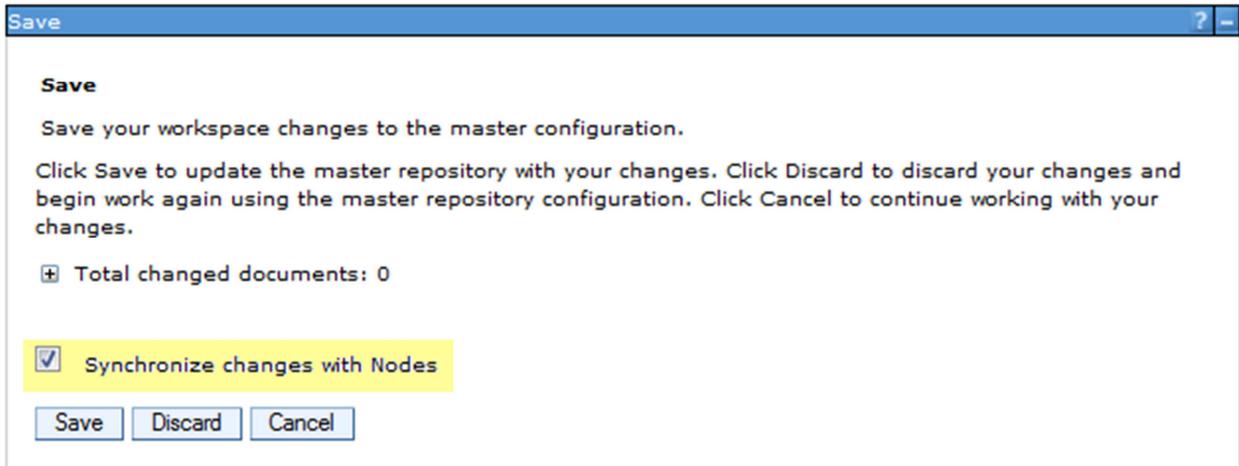
Use Java 2 security to restrict application access to local resources

- Warn if applications are granted custom permissions
- Restrict access to resource authentication data

- Press Apply
- Expand System administration, and click on “Save changes to master repository”.



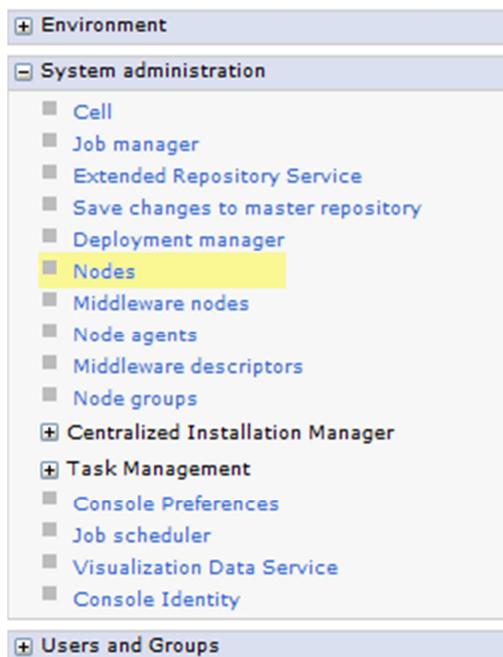
6. Click "Synchronize changes with Nodes"



7. Press Save
8. You should receive a message that you settings have been applied.

Sync the changes

9. Expand System administration and click on nodes



10. Select the nodes you want to synchronize, and press Full Resynchronize (DO NOT use Synchronize). This will write the settings to all the nodes.

Nodes

Use this page to manage nodes in the application server environment. A node corresponds to a physical computer system with a distinct IP host address. The following table lists the managed and unmanaged nodes in this cell. The first node is the deployment manager. Add new nodes to the cell and to this list by clicking Add Node.

⊞ Preferences

Select	Name	Host Name	Version	Discovery Protocol	Status
You can administer the following resources:					
	CellManager01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	TCP	↔
<input checked="" type="checkbox"/>	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	TCP	↔
<input type="checkbox"/>	HTTP01	vWebSphereApp01.INSTANT-TECH.local	Not applicable	TCP	
<input type="checkbox"/>	HTTP02	vWebSphereApp02.INSTANT-TECH.local	Not applicable	TCP	
<input checked="" type="checkbox"/>	chimeNode02	vWebSphereApp02.INSTANT-TECH.local	ND 8.5.0.2	TCP	↔
Total 5					

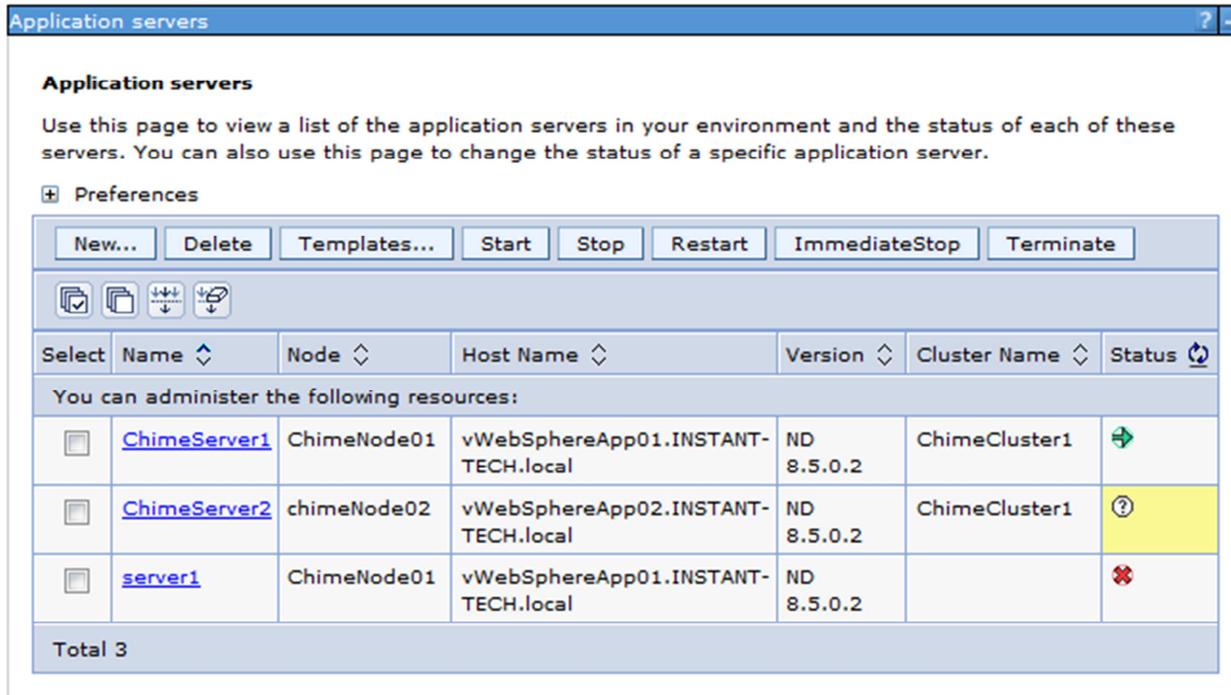
11. You should be prompted that the synchronization was successful.

⊞ Messages

- Successfully initiated synchronization of the repository on node ChimeNode01 with the deployment manager's repository.
- Successfully initiated synchronization of the repository on node chimeNode02 with the deployment manager's repository.

Application server unable to start

If the application server is showing a question mark instead of a red X or green arrow, you will want to verify and turn on the application server



Application servers

Use this page to view a list of the application servers in your environment and the status of each of these servers. You can also use this page to change the status of a specific application server.

Preferences

New... Delete Templates... Start Stop Restart ImmediateStop Terminate

Select	Name	Node	Host Name	Version	Cluster Name	Status
You can administer the following resources:						
<input type="checkbox"/>	ChimeServer1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	
<input type="checkbox"/>	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	
<input type="checkbox"/>	server1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2		

Total 3

Windows

Open Services and verify that IBM WebSphere Application Server V8.5 has been started

	Human Interface Device Access	Enables ge...	Manual	Local System
	Hyper-V Data Exchange Service	Provides a ...	Started	Automatic
	Hyper-V Guest Shutdown Service	Provides a ...	Started	Automatic
	Hyper-V Heartbeat Service	Monitors th...	Started	Automatic
	Hyper-V Time Synchronization Service	Synchroniz...	Started	Automatic
	Hyper-V Volume Shadow Copy Requestor	Coordinate...	Started	Automatic
	IBM HTTP Administration for WebSphere Application Server V8.0	IBM_HTTP...	Started	Automatic
	IBM HTTP Server V8.5	IBM_HTTP...	Started	Automatic
	IBM WebSphere Application Server V8.5 - chimeNode02	Controls th...	Manual	Local System
	IKE and AuthIP IPsec Keying Modules	The IKEEX...	Started	Automatic
	Interactive Services Detection	Enables us...	Manual	Local System
	Internet Connection Sharing (ICS)	Provides n...	Disabled	Local System
	Internet Explorer ETW Collector Service	ETW Collec...	Manual	Local System
	IP Helper	Provides tu...	Started	Automatic
	IPsec Policy Agent	Internet Pr...	Started	Manual
	KtmRm for Distributed Transaction Coordinator	Coordinate...	Manual	Network S...
	Link-Layer Topology Discovery Mapper	Creates a ...	Manual	Local Service
	Microsoft .NET Framework NGEN v2.0.50727 X64	Microsoft ...	Disabled	Local System

If it isn't started, right click on IBM WebSphere Application Server V8.5 and choose Start. Verify that the service has started in Windows services.

Human Interface Device Access	Enables ge...		Manual	Local System
Hyper-V Data Exchange Service	Provides a ...	Started	Automatic	Local Service
Hyper-V Guest Shutdown Service	Provides a ...	Started	Automatic	Local System
Hyper-V Heartbeat Service	Monitors th...	Started	Automatic	Network S...
Hyper-V Time Synchronization Service	Synchroniz...	Started	Automatic	Local Service
Hyper-V Volume Shadow Copy Requestor	Coordinate...	Started	Automatic	Local System
IBM HTTP Administration for WebSphere Application Server V8.0	IBM_HTTP...	Started	Automatic	Local System
IBM HTTP Server V8.5	IBM_HTTP...	Started	Automatic	Local System
IBM WebSphere Application Server V8.5 - chimeNode02	Controls th...	Started	Manual	Local System
IKE and AuthIP IPsec Keying Modules	The IKEEX...	Started	Automatic	Local System
Interactive Services Detection	Enables us...		Manual	Local System
Internet Connection Sharing (ICS)	Provides n...		Disabled	Local System
Internet Explorer ETW Collector Service	ETW Collec...		Manual	Local System
IP Helper	Provides tu...	Started	Automatic	Local System
IPsec Policy Agent	Internet Pr...	Started	Manual	Network S...
KtmRm for Distributed Transaction Coordinator	Coordinate...		Manual	Network S...
Link-Layer Topology Discovery Mapper	Creates a ...		Manual	Local Service
Microsoft .NET Framework NGEN v2.0.50727 X64	Microsoft		Disabled	Local System

Verify that the app server is now accessible

Application servers

Use this page to view a list of the application servers in your environment and the status of each of these servers. You can also use this page to change the status of a specific application server.

Preferences

New... Delete Templates... Start Stop Restart ImmediateStop Terminate

Select	Name	Node	Host Name	Version	Cluster Name	Status
You can administer the following resources:						
<input type="checkbox"/>	ChimeServer1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	
<input type="checkbox"/>	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	
<input type="checkbox"/>	server1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2		
Total 3						

If the service still doesn't start, check the event logs for more details

Linux

Instructions found at

http://publib.boulder.ibm.com/infocenter/wpdoc/v6r0/index.jsp?topic=/com.ibm.wp.exp.doc/wpf/inst_startstop.html

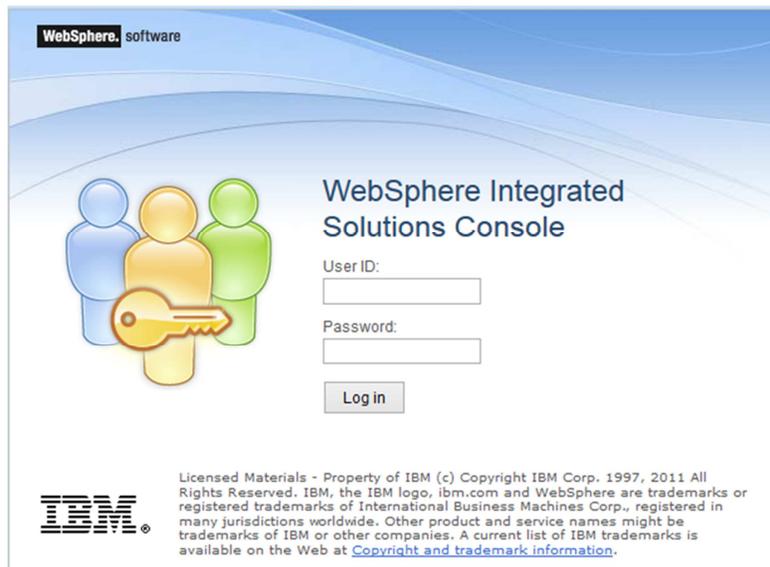
To start the administrative server:

1. Open a command prompt and change to the following directory:
 - **Linux:** was_profile_root/bin
 - **Windows:** was_profile_root\bin
 - **i5/OS:** app_server_root/bin
2. Enter the following command:
 - **Linux:** ./startServer.sh server1
 - **Windows:** startServer.bat server1
 - **i5/OS:** startServer.sh server1 -profileName profile_root
3. where profile_root is the name of the WebSphere Application Server profile where WebSphere Portal Express is installed; for example, wp_profile.
server1 is the name of your WebSphere Application Server administrative server.
4. To verify that WebSphere Application Server is running, request the following URL from a browser:
http://hostname.yourcompany.com:10038/snoop
where hostname.yourcompany.com is the fully qualified host name of the machine where WebSphere Application Server is installed and the port number is the WC_defaulthost found in the serverindex.xml file. The file is located at was_profile_root/config/cells/cell_name/nodes/node_name/serverindex.xml.
5. If you want to access the Administrative Console for WebSphere Application Server, you can do so with the following URL:
http://hostname.yourcompany.com:9060/admin/
where the port number is the WC_adminhost found in the serverindex.xml file. The file is located at was_profile_root/config/cells/cell_name/nodes/node_name/serverindex.xml.

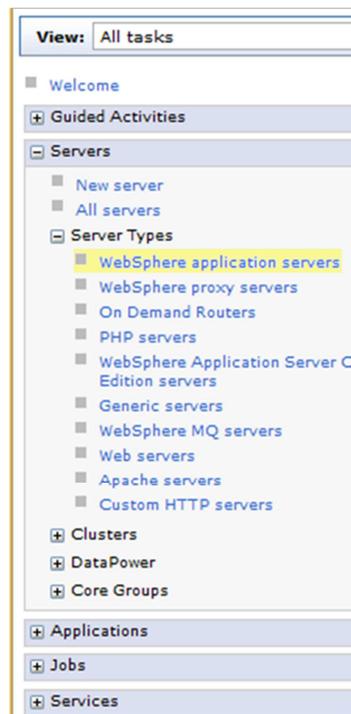
Manual Failover process

1. Login in the WebSphere Console

<https://<servername>:9043/ibm/console>



2. Click on Servers, then expand Server Types and click on WebSphere application servers



1. Check the server you wish to stop , then press the Stop button

Application servers

Use this page to view a list of the application servers in your environment and the status of each of these servers. You can also use this page to change the status of a specific application server.

+ Preferences

New... Delete Templates... Start **Stop** Restart ImmediateStop Terminate

Select	Name	Node	Host Name	Version	Cluster Name	Status
<input type="checkbox"/>	ChimeServer1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	✖
<input checked="" type="checkbox"/>	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT-TECH.local	ND 8.5.0.2	ChimeCluster1	✔
<input type="checkbox"/>	server1	ChimeNode01	vWebSphereApp01.INSTANT-TECH.local	ND 8.5.0.2		✖

Total 3

2. You will then be prompted that the server is attempting to stop and that it has been stopped.

Server status feedback

Server status provides information about events that occur while the server stops.

■ ChimeNode01:ChimeServer1

ADMIN1020: An attempt is made to stop the ChimeServer1 server. (User ID = default\WMFileBasedRealm\wasadmin)

OK

Server status feedback

Server status provides information about events that occur while the server stops.

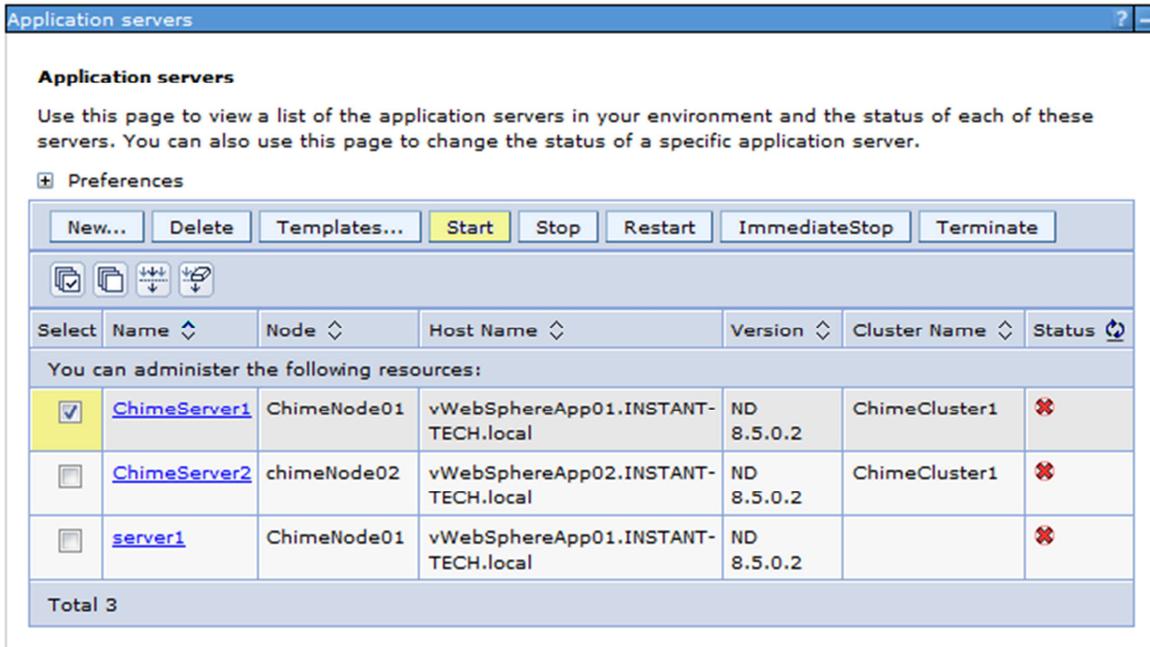
■ ChimeNode01:ChimeServer1

Server ChimeNode01/ChimeServer1 stopped successfully. The collection may need to be refreshed to show the current server status. View JVM logs for further details.

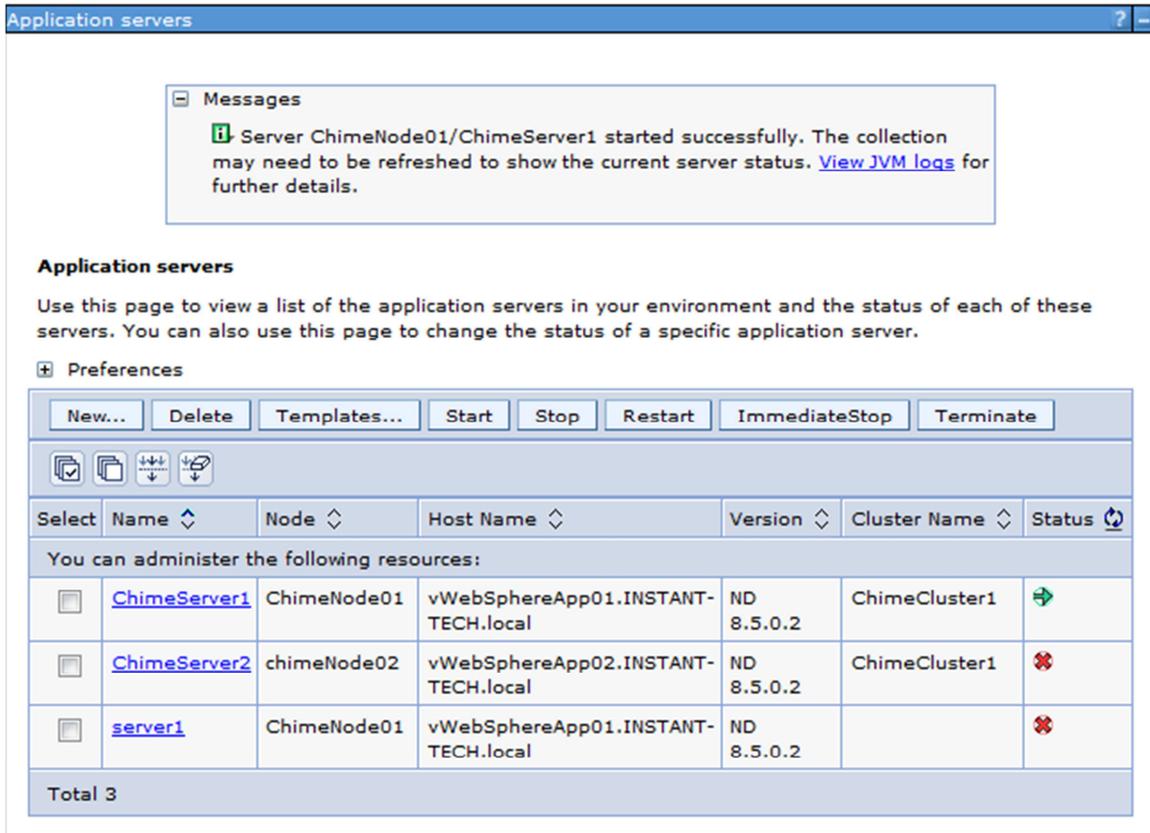
OK

3. Press OK

5. Check the server you wish to start , then press the Start button



6. You will be prompted that the app server has started

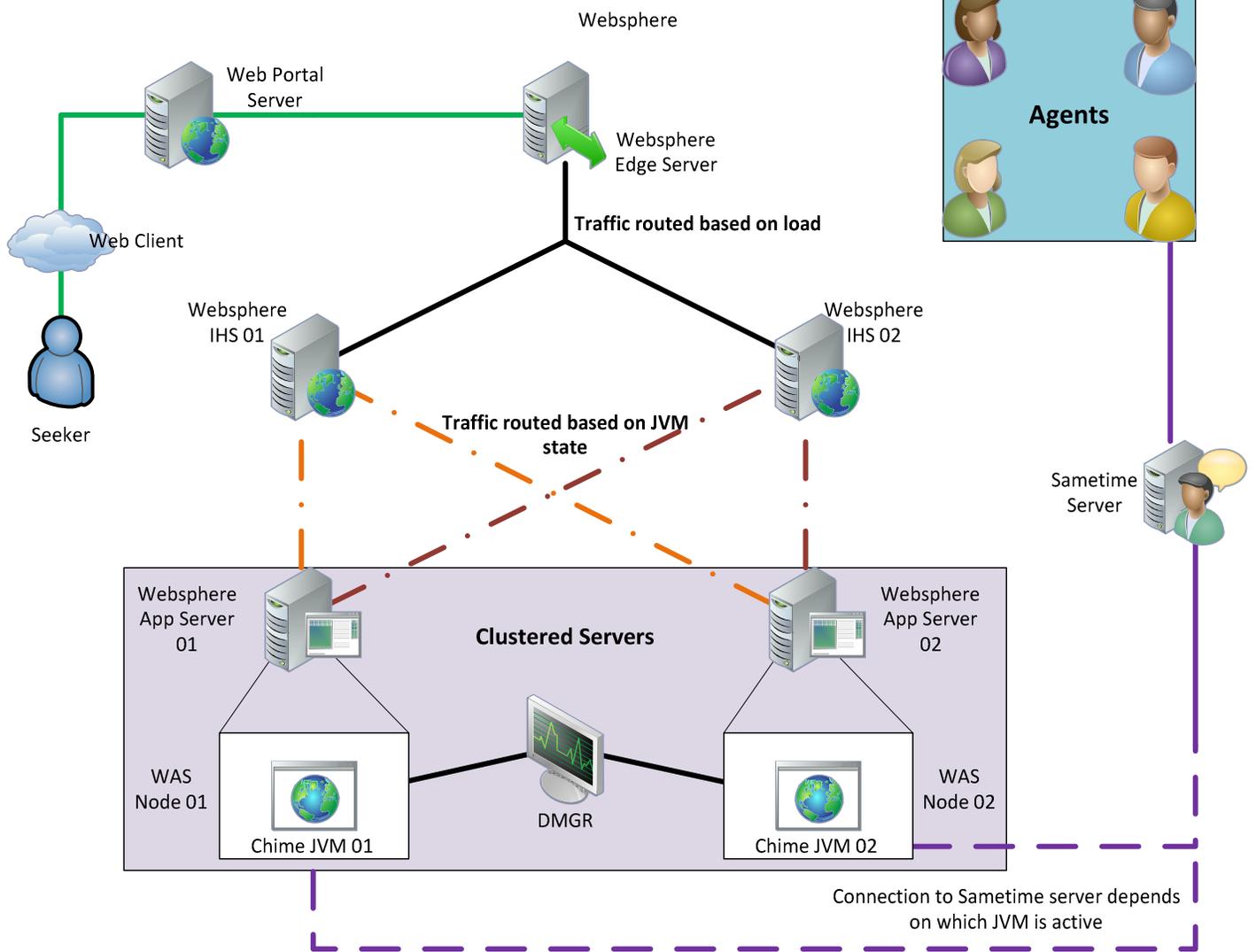


7. Verify that the application is access via the webpage

Clustered Environment

Sample High Availability diagram

Chime in a clustered environment



WebSphere Edge server

The Edge server will function as a normal load balancer, routing traffic to the IHS servers based on load.

WebSphere IHS

WebSphere IHS's will act as a secondary load balancer. They will monitor the state of the Chime JVM's and route traffic to the JVM that is active. The IHS will pole the WebSphere application cluster, to monitor the state of the Chime JVM. The Chime JVM will either be in an activated or deactivated state.

WebSphere App Server

WebSphere App Servers need to be in a cluster. Each server should have a node, in which the Chime JVM will be loaded. These nodes will be control by the DMGT.

Chime JVM

The Chime JVM will be loaded on to the App server. All Chime JVM should be configured to use the same Sametime accounts as dispatchers for the various queues. Because of this, the JVM should not be set to auto-start, but should be required to manually start when rebooted.

Revision History

Date	User	Remarks
Sept 30, 2014	SW	Initial Draft
Oct 1, 2014	SW	Updated the Visio to put the labels next to the correct boxes.
Oct 7,2014	SW	Added WebSphere Deployment Manager section