



Instant Chime for IBM Sametime High Availability Server Guide



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WebSphere Deployment Manager

Disable the auto-start of the application server

1. Login in the WebSphere Console

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

WebSphere. softwa	18
	WebSphere Integrated Solutions Console User ID: Password: Log in
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2. Click on Severs, then expand Server Types and click on WebSphere application servers

View: All tasks
Welcome
Guided Activities
Servers
New server
All servers
 Server Types
WebSphere application servers
WebSphere proxy servers
On Demand Routers
PHP servers
WebSphere Application Server Concerns
Generic servers
WebSphere MQ servers
Web servers
Apache servers
Custom HTTP servers
DataPower
Applications
+ Jobs
Services

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.

🗄 Pref	ferences					
New	New Delete Templates Start Stop Restart ImmediateStop Terminate					
Q	ð 👯 📽					
Select	Name 🛟	Node 🗘	Host Name 🗘	Version \diamondsuit	Cluster Name 💲	Status ሷ
You ca	an administer ti	ne following reso	urces:			
	ChimeServer1	ChimeNode01	vWebSphereApp01.INSTANT- TECH.local	ND 8.5.0.2	ChimeCluster1	€
	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT- TECH.local	ND 8.5.0.2	ChimeCluster1	*
	server1	ChimeNode01	vWebSphereApp01.INSTANT- TECH.local	ND 8.5.0.2		*
Total	3			-		

- 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.*

Configuration	
General Properties	
* Maximum startup attempts	
3	attempts
Ping interval	
60	seconds
* Ping timeout	
300	seconds
Automatic restart	
* Node restart state	
STOPPED	
Apply OK Reset Cancel	

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

Messages
 Changes have been made to your local configuration. You can: <u>Save</u> directly to the master configuration.
<u>Review</u> changes before saving or discarding.
An option to synchronize the configuration across multiple nodes after saving can be enabled in <u>Preferences.</u> ① The server may need to be restarted for these changes to take effect.

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

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.

odes					?
Nodes					
Use thi comput nodes clicking	is page to manage ter system with a di in this cell. The first g Add Node.	nodes in the application serv stinct IP host address. The fo t node is the deployment ma	er environment. Ilowing table list nager. Add new r	A node corresponds to a to the managed and unit modes to the cell and to	a physical managed this list by
🗄 Pref	erences				
Add	Node Remove I	Node Force Delete Syn	chronize Full	Resynchronize Stop	
Q	ð # \$				
Select	Name 🗘	Host Name 🗘	Version 🗘	Discovery Protocol 🗘	Status ሷ
You ca	an administer the fo	ollowing resources:			
	CellManager01	vWebSphereApp01.INSTANT TECH.local	ND 8.5.0.2	тср	⊕
•	ChimeNode01	vWebSphereApp01.INSTANT TECH.local	ND 8.5.0.2	ТСР	⊕
	HTTP01	vWebSphereApp01.INSTANT TECH.local	Not applicable	тср	
	HTTP02	vWebSphereApp02.INSTANT TECH.local	Not applicable	ТСР	
•	chimeNode02_	vWebSphereApp02.INSTANT TECH.local	ND 8.5.0.2	ТСР	⊕
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.

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

Application security is not required to run Chime

1. Login in the WebSphere Console

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

WebSphere. software	
	WebSphere Integrated Solutions Console
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1. Click on Security, then Global Security

Runtime Operations
Security
Global security Security domains
 Administrative Authorization Groups SSL certificate and key management
Security auditing
 Bus security JAX-WS and JAX-RPC security runtime
Operational policies

 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	 <u>Administrative user roles</u> <u>Administrative group roles</u> <u>Administrative authentication</u>
Application security Enable application security	
Java 2 security Use Java 2 security to restrict app Warn if applications are gran Restrict access to resource a	plication access to local resources nted custom permissions uthentication data

- 4. Press Apply
- 5. Expand System administration, and click on "Save changes to master repository".



6. Click "Synchronize changes with Nodes"

Save	? -
Save	
Save your workspace changes to the master configuration.	
Click Save to update the master repository with your changes. Click Discard to discard your changes and begin work again using the master repository configuration. Click Cancel to continue working with your changes.	
Total changed documents: 0	
Synchronize changes with Nodes	
Save Discard Cancel	

- 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 thi compu nodes clicking	is page to manage ter system with a d in this cell. The firs g Add Node.	nodes in the application serve istinct IP host address. The fol t node is the deployment man	er environment. Ilowing table list vager. Add new r	A node corresponds to a sthe managed and un nodes to the cell and to	a physical managed this list b
± Pref	ferences				
Add	Node Remove	Node Force Delete Sync	hronize Full	Resynchronize Stop	
C	6 # #				
Select	Name 🗘	Host Name 🗘	Version 🗘	Discovery Protocol 🗘	Status 🤇
You ca	an administer the fe	ollowing resources:			
	CellManager01	vWebSphereApp01.INSTANT- TECH.local	ND 8.5.0.2	ТСР	↔
•	ChimeNode01	vWebSphereApp01.INSTANT- TECH.local	ND 8.5.0.2	тср	⊕
	HTTP01	vWebSphereApp01.INSTANT- TECH.local	Not applicable	ТСР	
	HTTP02	vWebSphereApp02.INSTANT- TECH.local	Not applicable	тср	
✓	chimeNode02_	vWebSphereApp02.INSTANT-	ND 8.5.0.2	ТСР	⊕

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

Messages

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

U 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

pplicatio	n servers					?			
Applic	Application servers								
Use th server	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.								
🗄 Pre	ferences								
Nev	v Delete	Templates	Start Stop Restart	Immediate	Stop Terminat	e			
D									
Select	Name 🛟	Node 🗘	Host Name 🗘	Version 🗘	Cluster Name 💲	Status ሷ			
You	an administer t	he following reso	ources:						
	ChimeServer1	ChimeNode01	vWebSphereApp01.INSTANT- TECH.local	ND 8.5.0.2	ChimeCluster1	€			
	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT- TECH.local	ND 8.5.0.2	ChimeCluster1	0			
	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	Local Service
🤹 Hyper-V Guest Shutdown Service	Provides a	Started	Automatic	Local System
🎇 Hyper-V Heartbeat Service	Monitors th	Started	Automatic	Network S
Apper-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		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

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.

0	Human Interface Device Access	Enables ge		Manual	Local System
2	Hyper-V Data Exchange Service	Provides a	Started	Automatic	Local Service
2	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
2	BBM HTTP Administration for WebSphere Application Server V8.0	IBM_HTTP	Started	Automatic	Local System
0	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
2	Interactive Services Detection	Enables us		Manual	Local System
	Internet Connection Sharing (ICS)	Provides n		Disabled	Local System
2	Internet Explorer ETW Collector Service	ETW Collec		Manual	Local System
2	IP Helper	Provides tu	Started	Automatic	Local System
2	IPsec Policy Agent	Internet Pr	Started	Manual	Network S
2	KtmRm for Distributed Transaction Coordinator	Coordinate		Manual	Network S
	Link-Layer Topology Discovery Mapper	Creates a		Manual	Local Service
Ò	Microsoft .NET Framework NGEN v2.0.50727 X64	Microsoft		Disabled	Local System

Verify that the app server is now accessible

Application servers 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. E Preferences Stop New... Delete Templates... Start Restart ImmediateStop Terminate 00 ** * Select Name 🛟 Node 🗘 Host Name 🗘 Version 🗘 Cluster Name 🗘 Status 🙆 You can administer the following resources: ChimeServer1 ChimeNode01 vWebSphereApp01.INSTANT-ChimeCluster1 ND TECH.local 8.5.0.2 ChimeServer2 chimeNode02 vWebSphereApp02.INSTANT-ND ChimeCluster1 * TECH.local 8.5.0.2 * server1 ChimeNode01 vWebSphereApp01.INSTANT-ND 8.5.0.2 TECH.local 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://<severname>:9043/ibm/console

WebSphere. software	
	WebSphere Integrated Solutions Console
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2. Click on Severs, then expand Server Types and click on WebSphere application servers

View: All tasks
Welcome
Guided Activities
 Servers
New server
All servers
Server Types
WebSphere application servers
WebSphere proxy servers
On Demand Routers
PHP servers
WebSphere Application Server Condition Servers
Generic servers
WebSphere MQ servers
Web servers
Apache servers
Custom HTTP servers
Clusters
DataPower
Applications
🛨 Jobs
Services

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

Application servers 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.							
± Pref	ferences						
New	Delete	Templates	Start Stop Restart	Immediate	Stop Terminat	te	
	ð 👯 🦃						
Select	Name 🗘	Node 🗘	Host Name 🗘	Version 🗘	Cluster Name 🗘	Status ሷ	
You c	an administer ti	ne following reso	urces:				
	ChimeServer1	ChimeNode01	vWebSphereApp01.INSTANT- TECH.local	ND 8.5.0.2	ChimeCluster1	*	
	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT- TECH.local	ChimeCluster1	€		
	server1	ChimeNode01	01 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 feedback Server status provides information about events that occur while the server stops.	Server status feedback Server status provides information about events that occur while the server stops.
ChimeNode01:ChimeServer1 哈哈哈	ChimeNode01:ChimeServer1 哈哈哈
ADMN1020: An attempt is made to stop the ChimeServer1 server. (User ID = defaultV/IMFileBasedRealm/wasadmin)	Server ChimeNode01/ChimeServer1 stopped successfully. The collection may need to be refreshed to show the current server status. View JVM logs for further details. v
OK	OK

3. Press OK

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

\pp	olicatio	n servers							?
	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.									
1	± Pre	ferences							
	New	Delete	Templates	Start Stop	Restart	Immediate	Stop	Terminat	e
	D	ð 👯 📽							
;	Select	Name 🛟	Node 🗘	Host Name 🗘		Version 🗘	Cluster Name 🗘		Status ሷ
	You c	an administer tl	he following reso	ources:					
		ChimeServer1	ChimeNode01	vWebSphereApp(TECH.local	01.INSTANT-	ND 8.5.0.2	Chime	Cluster1	*
		ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT- TECH.local ND 8.5.0.2			ChimeCluster1		*
		server1	ChimeNode01	vWebSphereApp(TECH.local	01.INSTANT-	ND 8.5.0.2			*
	Total 3								

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

pplication servers ? -									
	Messages								
Server ChimeNode01/ChimeServer1 started successfully. The collection may need to be refreshed to show the current server status. <u>View JVM logs</u> for further details.									
Applica	ation servers								
Use thi servers	is page to view 5. You can also	a list of the app use this page to	lication se change t	rvers in y he status	your environ s of a specif	ment and th ic application	ie statu i server	s of each o	f these
± Pref	ferences								
New	Delete	Templates	Start	Stop	Restart	Immediate	eStop	Terminat	te
	ð 👯 😤								
Select	Name 🗘	Node 🗘	Host Nan	ne 🗘		Version 🗘	Cluste	r Name 🗘	Status ሷ
You c	an administer ti	he following reso	ources:						
	ChimeServer1	meServer1 ChimeNode01 vWebSphereApp01.INSTANT- ND ChimeCluster1							
	ChimeServer2	chimeNode02	vWebSphereApp02.INSTANT- TECH.local ND ChimeCluster 8.5.0.2				Cluster1	8	
	server1	ChimeNode01	vWebSphereApp01.INSTANT- TECH.local ND 8.5.0.2					8	
Total 3									

7. Verify that the application is access via the webpage

Clustered Environment

Sample High Availability diagram



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