



Lotusphere

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Tips For determining ports to open Between Websphere nodes

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Agenda

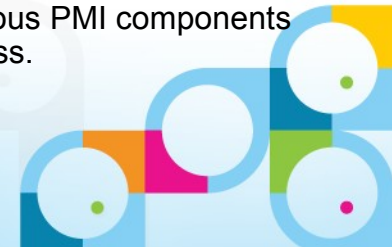
- Covering the basics
- Starting point - a typical internal Deployment
- Why not just deploy it all in the DMZ?
- Extending Community Services
- Extending Meeting Services
- Extending Audio Video Services
- **Tips For Determining ports to open between Websphere Servers**
- Security Considerations
- Reference Information
- Other Sametime Presentations



Tips for Determining ports to open between WAS Servers

■ Key Ports used between servers

- `BOOTSTRAP_ADDRESS`
 - Used to tie members of the cell together
- `SOAP_CONNECTOR_ADDRESS`
 - Used for administration of remote nodes and synchronization
- `DCS_UNICAST_ADDRESS`
 - High Availability Manager Communication Port
 - handles inbound Distribution and Consistency Services (DCS) messages.
- `IPC_CONNECTOR_ADDRESS`
 - Inter-Process Communication Protocol
 - JMX Communications and commands (start/stop server for example)
- `NODE_DISCOVERY_ADDRESS`
 - Used by the deployment manager and other nodes to 'discover' each other
- `CELL_DISCOVERY_ADDRESS`
 - Used by the nodeagents and servers to discover the deployment manager
- XDAAgent
 - Used to enable communication between the deployment manager, the node agents, and the middleware agents. The ODR uses this port to collect information from other servers, including node agents.
- `OVERLAY_UDP_LISTENER_ADDRESS` and `OVERLAY_TCP_LISTENER_ADDRESS`
 - Used for peer-to-peer (P2P) communication. The ODC (On Demand Configuration) and asynchronous PMI components use P2P as their transport. This port is required by every WebSphere Extended Deployment process.
- WebContainer and SIP Ports
 - Used when a cluster of servers is being front ended by a loadbalancer or WAS Proxy



Deployment Manager Ports

- Open to Deployment Manager from ALL nodes

Integrated Solutions Console Welcome wasadmin

View: All tasks

- Welcome
- Guided Activities
- Servers
- Applications
- Services
- Resources
- Security
- Environment
- System administration
 - Cell
 - Save changes to master repository
 - Deployment manager
 - Nodes
 - Node agents
 - Node groups
 - Centralized Installation Manager
 - Console Preferences
 - Console Identity
- Users and Groups
- Monitoring and Tuning
- Troubleshooting
- Service integration
- UDDI
- Sametime System Console

Name

Start components as needed

Apply OK Reset Cancel

- Java and Process Management
- Administration
 - Java SDKs

Additional Properties

- Core group service
- Job managers

Ports

Port Name	Port	Details
CELL_DISCOVERY_ADDRESS	8709	
BOOTSTRAP_ADDRESS	8702	
IPC_CONNECTOR_ADDRESS	8704	
SOAP_CONNECTOR_ADDRESS	8703	
ORB_LISTENER_ADDRESS	8708	
SAS_SSL_SERVERAUTH_LISTENER_ADDRESS	8705	
CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS	8707	
CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS	8706	
WC_adminhost	8700	
WC_adminhost_secure	8701	
DCS_UNICAST_ADDRESS	8710	
XDAGENT_PORT	8720	
OVERLAY_UDP_LISTENER_ADDRESS	8721	
OVERLAY_TCP_LISTENER_ADDRESS	8722	
DataPowerMgr_inbound_secure	8711	
STATUS_LISTENER_ADDRESS	8723	

Node Agent Ports

Integrated Solutions Console Welcome wasadmin

View: All tasks

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 - Node agents** ←
 - Node groups
- Centralized Installation Manager
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Node agents

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, file transfer, and request routing.

Preferences

Stop Restart Restart all Servers on Node

Select	Name	Node	Host Name	Version	Status
You can administer the following resources:					
<input type="checkbox"/>	nodeagent	tundraSTADVNode1	tundra.lexdev.ibm.com	ND 7.0.0.15	
<input type="checkbox"/>	nodeagent	tundraSTPNode1	tundra.lexdev.ibm.com	ND 7.0.0.15	
<input type="checkbox"/>	nodeagent	tundraSTMNode1	tundra.lexdev.ibm.com	ND 7.0.0.15	
<input type="checkbox"/>	nodeagent	tundraSTMNode2	tundra.lexdev.ibm.com	ND 7.0.0.15	
<input type="checkbox"/>	nodeagent	tundraSSCNode	tundra.lexdev.ibm.com	ND 7.0.0.15	
Total 5 ↑					



Node Agent Ports – continued

- Open this list between all nodes and to the Deployment Manager

The screenshot shows the configuration dialog for a Node Agent. The 'General Properties' section includes fields for 'Name' (nodeagent) and 'Node' (tpvm04SSCNode), and a checkbox for 'Start components as needed'. The 'Server Infrastructure' section shows a tree view with 'Java SDKs' expanded. The 'Additional Properties' section has 'Ports' expanded, showing a table of port configurations. Red arrows point to the following rows in the table:

Port Name	Port	Details
BOOTSTRAP_ADDRESS	2809	
ORB_LISTENER_ADDRESS	9900	
CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS	9202	
CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS	9201	
DCS_UNICAST_ADDRESS	9354	
NODE_DISCOVERY_ADDRESS	7272	
NODE_IPV6_MULTICAST_DISCOVERY_ADDRESS	5001	
NODE_MULTICAST_DISCOVERY_ADDRESS	5000	
SAS_SSL_SERVERAUTH_LISTENER_ADDRESS	9901	
SOAP_CONNECTOR_ADDRESS	8878	
IPC_CONNECTOR_ADDRESS	9629	
XDAGENT_PORT	7062	
OVERLAY_TCP_LISTENER_ADDRESS	11005	
OVERLAY_UDP_LISTENER_ADDRESS	11006	

The 'Additional Properties' section also includes 'Core group service' and 'File synchronization service'.

Tips for Determining ports to open for clients

- Key Ports used by clients
 - Web Container collection
 - WC_adminhost
 - WC_adminhost_secure
 - WC_defaulthost
 - WC_defaulthostsecure
 - PROXY_HTTP_ADDRESS
 - PROXY_HTTPS_ADDRESS
 - SIP Container collection
 - SIP_DEFAULTHOST
 - SIP_DEFAULTHOST_SECURE
 - PROXY_SIP_ADDRESS
 - PROXY_SIPS_ADDRESS



Application Server Ports

Integrated Solutions Console Welcome wasadmin

- Welcome
- Guided Activities
- Servers
 - New server
 - Server Types
 - WebSphere application servers
 - WebSphere proxy servers
 - Generic servers
 - Version 5 JMS servers
 - WebSphere MQ servers
 - Web servers
- Clusters
- DataPower
- Core Groups

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.

Preferences

New Delete Templates... Start Stop Restart ImmediateStop Terminate

Copy Paste Refresh Help

Select	Name	Node	Host Name	Version	Cluster Name	Status
You can administer the following resources:						
<input type="checkbox"/>	STAdvancedServer	tundraSTADVNode1	tundra.lexdev.ibm.com	ND 7.0.0.15		➔
<input type="checkbox"/>	STConsoleServer	tundraSSCNode	tundra.lexdev.ibm.com	ND 7.0.0.15		➔
<input type="checkbox"/>	STMeetingServer	tundraSTMNode1	tundra.lexdev.ibm.com	ND 7.0.0.15	MeetingCluster	➔
<input type="checkbox"/>	STMeetingServer1	tundraSTMNode2	tundra.lexdev.ibm.com	ND 7.0.0.15	MeetingCluster	?
<input type="checkbox"/>	STMeetingServer2	tundraSTMNode1	tundra.lexdev.ibm.com	ND 7.0.0.15		✘
<input type="checkbox"/>	STProxyServer	tundraSTPNode1	tundra.lexdev.ibm.com	ND 7.0.0.15	STProxyCluster	➔
<input type="checkbox"/>	clsutermember1	tundraSTMNode1	tundra.lexdev.ibm.com	ND 7.0.0.15	testclsuter	✘
<input type="checkbox"/>	clustermemeber2	tundraSSCNode	tundra.lexdev.ibm.com	ND 7.0.0.15	testclsuter	✘

Total 8

Application Server Ports

- BOOTSTRAP_ADDRESS
SOAP_CONNECTOR_ADDRESS
DCS_UNICAST_ADDRESS
IPC_CONNECTOR_ADDRESS
OVERLAY_UDP_LISTENER_ADDRESS
OVERLAY_TCP_LISTENER_ADDRESS
 - open between all nodes and to Deployment Manager

- WC_Defaulthost
WC_defaulthost_secure
SIP_DEFAULTHOST
SIP_DEFAULTHOST_SECURE
 - open to end user(s) or nodes that are hosting the WAS Proxy for that service.

Ports

Port Name	Port	Details
→ BOOTSTRAP_ADDRESS	9810	
→ SOAP_CONNECTOR_ADDRESS	8880	
ORB_LISTENER_ADDRESS	9100	
SAS_SSL_SERVERAUTH_LISTENER_ADDRESS	9401	
CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS	9403	
CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS	9402	
WC_adminhost	9060	
→ WC_defaulthost	9080	
→ DCS_UNICAST_ADDRESS	9353	
WC_adminhost_secure	9043	
→ WC_defaulthost_secure	9443	
→ SIP_DEFAULTHOST	5060	
→ SIP_DEFAULTHOST_SECURE	5061	
SIB_ENDPOINT_ADDRESS	7276	
SIB_ENDPOINT_SECURE_ADDRESS	7286	
SIB_MQ_ENDPOINT_ADDRESS	5558	
SIB_MQ_ENDPOINT_SECURE_ADDRESS	5578	
→ IPC_CONNECTOR_ADDRESS	9633	
→ OVERLAY_UDP_LISTENER_ADDRESS	11003	
→ OVERLAY_TCP_LISTENER_ADDRESS	11004	

Websphere Proxy Ports

Integrated Solutions Console Welcome wasadmin

- ▢ Welcome
- ▢ Guided Activities
- ▢ Servers
 - ▢ New server
 - ▢ Server Types
 - ▢ WebSphere application servers
 - ▢ **WebSphere proxy servers** ←
 - ▢ Generic servers
 - ▢ Version 5 JMS servers
 - ▢ WebSphere MQ servers
 - ▢ Web servers
- ▢ Clusters
- ▢ DataPower
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WebSphere proxy servers ?

WebSphere proxy servers

A server that acts as an intermediary for HTTP requests that are serviced by application servers or Web servers. The proxy server acts as a surrogate for the application servers in the enterprise and can enhance the overall experience by providing services such as workload management, cross-cell routing, and other services that offload the application server.

▢ Preferences

Select	Name	Node	Host Name	Version	Current security level	Protocol	Status
You can administer the following resources:							
<input type="checkbox"/>	testProxy	tundraSSCNode	tundra.lexdev.ibm.com	ND 7.0.0.15	Not applicable	HTTP	✘
<input type="checkbox"/>	testsip	tundraSTPNode1	tundra.lexdev.ibm.com	ND 7.0.0.15	Not applicable	HTTP, SIP	✘
Total 2 ←							



Websphere Proxy Ports

- BOOTSTRAP_ADDRESS
SOAP_CONNECTOR_ADDRESS
DCS_UNICAST_ADDRESS
IPC_CONNECTOR_ADDRESS
OVERLAY_UDP_LISTENER_ADDRESS
OVERLAY_TCP_LISTENER_ADDRESS
 - open between all nodes and to Deployment Manager

- PROXY_HTTP_ADDRESS
PROXY_HTTPS_ADDRESS
PROXY_SIP_ADDRESS
PROXY_SIPS_ADDRESS
 - open to end user(s) as appropriate for the service the WAS Proxy is providing

Ports

Port Name	Port	Details
→ BOOTSTRAP_ADDRESS	9811	
→ SOAP_CONNECTOR_ADDRESS	8882	
→ IPC_CONNECTOR_ADDRESS	9635	
DRS_CLIENT_ADDRESS	7873	
SAS_SSL_SERVERAUTH_LISTENER_ADDRESS	0	
CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS	0	
CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS	0	
WC_defaulthost	9082	
→ DCS_UNICAST_ADDRESS	9357	
WC_defaulthost_secure	9445	
→ OVERLAY_UDP_LISTENER_ADDRESS	11011	
→ OVERLAY_TCP_LISTENER_ADDRESS	11012	
ORB_LISTENER_ADDRESS	0	
→ PROXY_HTTP_ADDRESS	80	
→ PROXY_HTTPS_ADDRESS	443	
→ PROXY_SIP_ADDRESS	5064	
→ PROXY_SIPS_ADDRESS	5065	