

Oracle® Fusion Middleware

WLST Command Reference for Oracle WebLogic Server

12c (12.1.3)

E35669-05

June 2017

This document describes all of the commands that are available to use with the WebLogic Scripting Tool (WLST). This document includes only WLST commands for Oracle WebLogic Server 12.1.3.0.

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Preface

This preface describes the document accessibility features and conversions used in this guide—*WLST Command Reference for WebLogic Server*.

Documentation Accessibility

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Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Introduction and Roadmap

This section describes the audience for and contents and organization of this guide—*WLST Command Reference for WebLogic Server*.

- [Document Scope and Audience](#)
- [Guide to This Document](#)
- [Related Documentation](#)
- [New and Changed WLST Features in This Release](#)

1.1 Document Scope and Audience

This document describes all of the commands that are available to use with the WebLogic Scripting Tool (WLST). This document includes WLST commands for WebLogic Server.

This document is written for WebLogic Server administrators and operators who deploy Java EE applications using the Java Platform, Enterprise Edition (Java EE) from Oracle. It is assumed that readers are familiar with Web technologies and the operating system and platform where WebLogic Server is installed.

1.2 Guide to This Document

This document is organized as follows:

- This chapter, Introduction and Roadmap, introduces the organization of this guide and lists related documentation.
- [WebLogic Server WLST Online and Offline Command Reference](#) summarizes WebLogic Server WLST commands alphabetically and by online/offline usage.
- [WLST Command and Variable Reference](#) provides detailed descriptions for each of the WebLogic Server WLST commands and variables.

1.3 Related Documentation

For information about how to use the WebLogic Scripting Tool, refer to *Understanding the WebLogic Scripting Tool*. For information about WLST commands for other Fusion Middleware products, see:

- *WLST Command Reference for Infrastructure Components*
- *WLST Command Reference for SOA Suite*

WLST is one of several interfaces for managing and monitoring WebLogic Server. For information about the other management interfaces, see:

- *Using Ant Tasks to Configure and Use a WebLogic Server Domain in Developing Applications for Oracle WebLogic Server*, describes using WebLogic Ant tasks for starting and stopping WebLogic Server instances and configuring WebLogic domains.
- *Deployment Tools in Deploying Applications to Oracle WebLogic Server* describes several tools that WebLogic Server provides for deploying applications and stand-alone modules.
- *WebLogic Server Administration Console Online Help* describes a Web-based graphical user interface for managing and monitoring WebLogic domains.
- *Creating WebLogic Domains Using the Configuration Wizard* describes using a graphical user interface to create a WebLogic domain or extend an existing one.
- *Creating Templates and Domains Using the Pack and Unpack Commands* describes commands that recreate existing WebLogic domains quickly and easily.
- *Developing Custom Management Utilities Using JMX for Oracle WebLogic Server* describes using Java Management Extensions (JMX) APIs to monitor and modify WebLogic Server resources.
- *Monitoring Oracle WebLogic Server with SNMP* describes using Simple Network Management Protocol (SNMP) to monitor WebLogic domains.

For information about WLST commands for Fusion Middleware components other than WebLogic Server, refer to *WLST Command Reference for Infrastructure Components*, which describes the WLST commands that are available for Oracle Fusion Middleware core components, including Java Required Files (JRF), Web services, Metadata services (MDS), Application Development Framework (ADF), Dynamic Monitoring Service (DMS), Logging, Diagnostic Framework, User Messaging Service (UMS), and Enterprise Scheduling Service (ESS).

1.4 New and Changed WLST Features in This Release

For a comprehensive listing of the new WebLogic Server features introduced in this release, see *What's New in Oracle WebLogic Server*.

WebLogic Server WLST Online and Offline Command Reference

This chapter lists and summarizes the WLST commands in alphabetical order and indicates which commands can be used in offline mode, online mode, or both.

- [WebLogic Server WLST Command Summary, Alphabetically By Command](#)
- [WebLogic Server WLST Online Command Summary](#)
- [WebLogic Server WLST Offline Command Summary](#)

Note:

You can list a summary of all online and offline commands from the command-line using the following commands, respectively:

```
help("online")
help("offline")
```

2.1 WebLogic Server WLST Command Summary, Alphabetically By Command

The following table summarizes each of the WebLogic Server WLST commands, alphabetically by command.

Table 2-1 *WebLogic Server WLST Command Summary*

This command...	Enables you to...	Use with WLST...
activate	Activate changes saved during the current editing session but not yet deployed.	Online
addHelpCommand	Adds new command help for a command to an existing command group. Once added to the group, the command (along with a brief description) is displayed in the command list for the group when you enter the <code>help('commandGroup')</code> command.	Online or Offline
addHelpCommand Group	Adds a new help command group to those shown by the WLST <code>help()</code> command.	Online or Offline
addListener	Add a JMX listener to the specified MBean.	Online
addStartupGroup	Adds a new server startup group.	Offline

Table 2-1 (Cont.) WebLogic Server WLST Command Summary

This command...	Enables you to...	Use with WLST...
addTemplate	Extend the current WebLogic domain using an application or service extension template.	Offline
assign	Assign resources to one or more destinations.	Offline
cancelEdit	Cancel an edit session, release the edit lock, and discard all unsaved changes. This operation can be called by any user with administrator privileges, even if the user did not start the edit session.	Online
captureAndSaveDiagnosticImage	Capture a diagnostic image and downloads it to the client.	Online
cd	Navigate the hierarchy of configuration or runtime beans.	Online or Offline
clone	Clones the server object.	Offline
closeDomain	Close the current WebLogic domain.	Offline
closestore	Closes a store.	Offline
closeTemplate	Close the current domain template.	Offline
compactstore	Compacts and defragments the space occupied by a file store.	Offline
configToScript	Convert an existing server configuration (<code>config</code> directory) to an executable WLST script.	Online or Offline
connect	Connect WLST to a WebLogic Server instance.	Online or Offline
create	Create a configuration bean of the specified type for the current bean.	Online or Offline
createDomain	Creates a WebLogic domain using the specified template.	Offline
createSystemResourceControl	Creates a diagnostics resource from an external descriptor file.	Online
currentTree	Return the current location in the hierarchy.	Online
custom	Navigate to the root of custom MBeans that are registered in the Runtime MBean Server.	Online
delete	Delete an instance of a configuration bean of the specified type for the current configuration bean.	Online or Offline
deleteFEHost	Delete the Frontend host for a domain.	Offline
deploy	Deploy an application to a WebLogic Server instance.	Online
destroySystemResourceControl	Destroys a Diagnostics system resource control.	Online

Table 2-1 (Cont.) WebLogic Server WLST Command Summary

This command...	Enables you to...	Use with WLST...
disableSystemResource	Deactivate a diagnostic system resource control that is activated on a server instance.	Online
disconnect	Disconnect WLST from a WebLogic Server instance.	Online
distributeApplication	Copy the deployment bundle to the specified targets.	Online
domainConfig	Navigate to the last MBean to which you navigated in the domain configuration hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .	Online
domainCustom	Navigate to the tree of custom MBeans that are registered in the Domain Runtime MBean Server.	Online
domainRuntime	Navigate to the last MBean to which you navigated in the domain runtime hierarchy or to the root of the hierarchy, <code>DomainRuntimeMBean</code> .	Online
dumpDiagnosticData	Dumps the diagnostics data from a harvester to a local file.	Online
dumpStack	Display a stack trace from the last exception that occurred while performing a WLST action, and reset the stack trace.	Online or Offline
dumpstore	Dumps store contents in human-readable format to an XML file.	Offline
dumpVariables	Display all variables used by WLST, including their name and value.	Online or Offline
edit	Navigate to the last MBean to which you navigated in the configuration edit MBean hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .	Online
editCustom	Navigate to the root of custom MBeans.	Online
encrypt	Encrypt the specified string.	Online
enableSystemResource	Activate a diagnostic system resource on a server instance	Online
exit	Exit WLST from the user session and close the scripting shell.	Online or Offline
exportDiagnosticData	Execute a query against the specified log file.	Offline
exportDiagnosticDataFromServer	Executes a query on the server side and retrieves the exported WebLogic Diagnostic Framework (WLDF) data.	Online
find	Find MBeans and attributes in the current hierarchy.	Online
get	Return the value of the specified attribute.	Online or Offline
getActivationTask	Return the latest <code>ActivationTask</code> MBean on which a user can get status.	Online

Table 2-1 (Cont.) WebLogic Server WLST Command Summary

This command...	Enables you to...	Use with WLST...
getAvailableCaptureImages	Returns a list of the previously captured diagnostic images.	Online
getConfigManager	Return the latest <code>ConfigurationManagerBean</code> MBean which manages the change process.	Online
getDatabaseDefaults	Connect to the database to retrieve schema information.	Offline
getFEHostURL	Retrieve the settings for a domain's Frontend Host.	Offline
getMBean	Return the MBean by browsing to the specified path.	Online
getMBeanInfo	Return the <code>MBeanInfo</code> for the specified <code>MBeanType</code> or the <code>cmo</code> variable.	Online
getNodeManagerHome	Gets the Node Manager home.	Offline
getNodeManagerType	Gets the Node Manager type.	Offline
getNodeManagerUpgradeOverwriteDefault	Gets the value of the Node Manager upgrade overwrite default flag.	Offline
getNodeManagerUpgradeType	Gets the Node Manager upgrade type used for Node Manager upgrade.	Offline
getOldNodeManagerHome	Gets the old Node Manager home used for Node Manager upgrade.	Offline
getOpenStores	Returns a list of opened stores (for script access).	Offline
getStoreConns	Returns a list of connections in the specified store (for script access).	Offline
getPath	Return the MBean path for the specified MBean instance.	Online
getServerGroups	Retrieves a list of the server groups of which the specified server is a member.	Offline
getStartupGroup	Retrieves the server startup group.	Offline
getTopologyProfile	Returns the domain topology profile for a domain.	Offline
getWLDM	Return the <code>WebLogicDeploymentManager</code> object.	Online
invoke	Invoke a management operation on the current configuration bean.	Online
isRestartRequired	Determine whether a server restart is required.	Online
jndi	Navigates to the JNDI tree for the server to which WLST is currently connected.	Online
listApplications	List all applications that are currently deployed in the domain.	Online
listChildTypes	List all the children MBeans that can be created or deleted for the <code>cmo</code> .	Online

Table 2-1 (Cont.) WebLogic Server WLST Command Summary

This command...	Enables you to...	Use with WLST...
listServerGroups	Retrieves a map of the config-groups.xml server groups that are user-expandable.	Offline
liststore	Lists store names, open stores or connections in a store.	Offline
listSystemResource Controls	List the diagnostic system resources that are currently deployed on a server instance.	Online
loadApplication	Load an application and deployment plan into memory.	Online or Offline
loadDB	Load SQL files into a database.	Offline
loadProperties	Load property values from a file.	Online or Offline
lookup	Look up the specified MBean.	Online
ls	List all child beans and/or attributes for the current configuration or runtime bean.	Online or Offline
man	Display help from <code>MBeanInfo</code> for the current MBean or its specified attribute.	Online
mergeDiagnosticData	Merges a set of data files.	Online
migrate	Migrate services to a target server within a cluster.	Online
nm	Determine whether WLST is connected to Node Manager.	Online
nmConnect	Connect WLST to Node Manager to establish a session.	Online or Offline
nmDisconnect	Disconnect WLST from a Node Manager session.	Online or Offline
nmEnroll	Enroll the machine on which WLST is currently running.	Online
nmGenBootStartupProps	Generates the Node Manager property files, <code>boot.properties</code> and <code>startup.properties</code> , for the specified server.	Online
nmKill	Kill the specified server instance that was started with Node Manager.	Online or Offline
nmLog	Return the Node Manager log.	Online or Offline
nmServerLog	Return the server output log of the server that was started with Node Manager.	Online or Offline
nmServerStatus	Return the status of the server that was started with Node Manager.	Online or Offline

Table 2-1 (Cont.) WebLogic Server WLST Command Summary

This command...	Enables you to...	Use with WLST...
nmSoftRestart	Restart the specified System Component server instance.	Online or Offline
nmStart	Start a server in the current domain using Node Manager.	Online or Offline
nmVersion	Return the Node Manager server version.	Online or Offline
openfilestore	Opens a file store.	Offline
openjdbcstore	Opens a JDBC store.	Offline
prompt	Toggle the display of path information at the prompt.	Online or Offline
pwd	Display the current location in the configuration or runtime bean hierarchy.	Online or Offline
readDomain	Open an existing WebLogic domain for updating.	Offline
readDomainForUpgrade	Open an existing domain for reconfiguration	Offline
readTemplate	Open an existing domain template for WebLogic domain creation.	Offline
redeploy	Reload classes and redeploy a previously deployed application.	Online
redirect	Redirect WLST output to the specified filename.	Online or Offline
removeListener	Remove a listener that was previously defined.	Online
resume	Resume a server instance that is suspended or in ADMIN state.	Online
save	Save the edits that have been made but have not yet been saved.	Online
saveDiagnosticImageCaptureFile	Downloads the specified diagnostic image capture.	Online
saveDiagnosticImageCaptureEntryFile	Downloads a specific entry from the diagnostic image capture.	Online
serverConfig	Navigate to the last MBean to which you navigated in the configuration MBean hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .	Online
serverRuntime	Navigate to the last MBean to which you navigated in the runtime MBean hierarchy or to the root of the hierarchy, <code>ServerRuntimeMBean</code> .	Online
set	Set the specified attribute value for the current configuration bean.	Online or Offline
setFEHostURL	Set the plain and SSL URLs for a domain's Frontend Host and specifies which is the default.	Offline

Table 2-1 (Cont.) WebLogic Server WLST Command Summary

This command...	Enables you to...	Use with WLST...
setOption	Set options related to a WebLogic domain creation or update	Offline
setServerGroups	Sets the server groups for the specified server.	Online or Offline
setSharedSecretStore WithPassword	Set the shared secret store and password.	Offline
setStartupGroup	Sets the server startup group.	Offline
showChanges	Show the changes made by the current user during the current edit session.	Online
showListeners	Show all listeners that are currently defined.	Online
shutdown	Gracefully shut down a running server instance, cluster, or system component.	Online
softRestart	Restart a system component server instance.	Online
start	Start a Managed Server instance, cluster, or system component using Node Manager.	Online
startApplication	Start an application, making it available to users.	Online
startEdit	Start a configuration edit session on behalf of the currently connected user.	Online
startNodeManager	Start Node Manager at default port (5556).	Online or Offline
startRecording	Record all user interactions with WLST; useful for capturing commands to replay.	Online or Offline
startServer	Start the Administration Server.	Online or Offline
state	Returns a map of servers or clusters and their state using Node Manager.	Online
stopApplication	Stop an application, making it un available to users.	Online
stopEdit	Stop the current edit session, release the edit lock, and discard unsaved changes.	Online
stopNodeManager	Stop Node Manager.	Online or Offline
stopRecording	Stop recording WLST commands.	Online or Offline
stopRedirect	Stop the redirection of WLST output to a file.	Online or Offline
storeUserConfig	Create a user configuration file and an associated key file.	Online

Table 2-1 (Cont.) WebLogic Server WLST Command Summary

This command...	Enables you to...	Use with WLST...
suspend	Suspend a running server.	Online
threadDump	Display a thread dump for the specified server.	Online or Offline
undeploy	Undeploy an application from the specified servers.	Online
updateApplication	Update an application configuration using a new deployment plan.	Online
updateDomain	Update and save the current domain.	Offline
unassign	Unassign applications or services from one or more destinations.	Offline
undeploy	Undeploy an application from the specified servers.	Online
undo	Revert all unsaved or unactivated edits.	Online
validate	Validate the changes that have been made but have not yet been saved.	Online
validateConfig	Validate a domain configuration.	Offline
viewMBean	Display information about an MBean, such as the attribute names and values, and operations.	Online
writeDomain	Write the domain configuration information to the specified directory.	Offline
writeIniFile	Convert WLST definitions and method declarations to a Python (.py) file.	Online or Offline
writeTemplate	Writes the domain configuration information to the specified domain template.	Online or Offline

2.2 WebLogic Server WLST Online Command Summary

The following table summarizes the WebLogic Server WLST online commands, alphabetically by command.

Table 2-2 WebLogic Server WLST Online Command Summary

This command...	Enables you to...
activate	Activate changes saved during the current editing session but not yet deployed.
addHelpCommand	Adds new command help for a command to an existing command group. Once added to the group, the command (along with a brief description) is displayed in the command list for the group when you enter the <code>help('commandGroup')</code> command.
addHelpCommandGroup	Adds a new help command group to those shown by the WLST <code>help()</code> command, and specifies the resource bundle in which the help information is defined for the group.
addListener	Add a JMX listener to the specified MBean.

Table 2-2 (Cont.) WebLogic Server WLST Online Command Summary

This command...	Enables you to...
<code>cancelEdit</code>	Cancel an edit session, release the edit lock, and discard all unsaved changes. This operation can be called by any user with administrator privileges, even if the user did not start the edit session.
<code>captureAndSaveDiagnosticImage</code>	Capture a diagnostic image and downloads it to the client.
<code>cd</code>	Navigate the hierarchy of configuration or runtime beans.
<code>configToScript</code>	Convert an existing server configuration (<code>config</code> directory) to an executable WLST script.
<code>connect</code>	Connect WLST to a WebLogic Server instance.
<code>create</code>	Create a configuration bean of the specified type for the current bean.
<code>createSystemResourceControl</code>	Creates a diagnostics resource from an external descriptor file.
<code>currentTree</code>	Return the current tree location.
<code>custom</code>	Navigate to the root of custom MBeans that are registered in the Runtime MBean Server.
<code>delete</code>	Delete an instance of a configuration bean of the specified type for the current configuration bean.
<code>deploy</code>	Deploy an application to a WebLogic Server instance.
<code>destroySystemResourceControl</code>	Destroys a Diagnostics system resource control.
<code>disableSystemResource</code>	Deactivate a diagnostic system resource control that is activated on a server instance.
<code>disconnect</code>	Disconnect WLST from a WebLogic Server instance.
<code>distributeApplication</code>	Copy the deployment bundle to the specified targets.
<code>domainConfig</code>	Navigate to the last MBean to which you navigated in the domain configuration hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .
<code>domainCustom</code>	Navigate to the tree of custom MBeans that are registered in the Domain Runtime MBean Server.
<code>domainRuntime</code>	Navigate to the last MBean to which you navigated in the domain runtime hierarchy or to the root of the hierarchy, <code>DomainRuntimeMBean</code> .
<code>dumpDiagnosticData</code>	Dumps the diagnostics data from a harvester to a local file.
<code>dumpStack</code>	Display a stack trace from the last exception that occurred, and reset the trace.
<code>dumpVariables</code>	Display all variables used by WLST, including their name and value.
<code>edit</code>	Navigate to the last MBean to which you navigated in the configuration edit MBean hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .
<code>editCustom</code>	Navigate to the root of custom MBeans.

Table 2-2 (Cont.) WebLogic Server WLST Online Command Summary

This command...	Enables you to...
enableSystemResource	Activate a diagnostic system resource on a server instance
encrypt	Encrypt the specified string.
exit	Exit WLST from the interactive session and close the scripting shell.
exportDiagnosticDataFromServer	Execute a query on the server side and retrieves the exported WebLogic Diagnostic Framework (WLDF) data.
find	Find MBeans and attributes in the current hierarchy.
get	Return the value of the specified attribute.
getActivationTask	Return the latest <code>ActivationTask</code> MBean on which a user can get status.
getAvailableCapturedImages	Returns a list of the previously captured diagnostic images.
getConfigManager	Return the latest <code>ConfigurationManagerBean</code> MBean which manages the change process.
getMBean	Return the MBean by browsing to the specified path.
getMBI	Return the <code>MBeanInfo</code> for the specified <code>MBeanType</code> or the <code>cmo</code> variable.
getPath	Return the MBean path for the specified MBean instance.
getWLDM	Return the WebLogic <code>DeploymentManager</code> object.
invoke	Invoke a management operation on the current configuration bean.
isRestartRequired	Determine whether a server restart is required.
jndi	Navigates to the JNDI tree for the server to which WLST is currently connected.
listApplications	List all applications that are currently deployed in the domain.
listChildTypes	List all the children MBeans that can be created or deleted for the <code>cmo</code> .
listSystemResourceControls	List the diagnostic system resources that are currently deployed on a server instance.
loadApplication	Load an application and deployment plan into memory.
loadProperties	Load property values from a file.
lookup	Look up the specified MBean.
ls	List all child beans and/or attributes for the current configuration or runtime bean.
man	Display help from <code>MBeanInfo</code> for the current MBean or its specified attribute.
mergeDiagnosticData	Merges a set of data files.
migrate	Migrate services to a target server within a cluster.

Table 2-2 (Cont.) WebLogic Server WLST Online Command Summary

This command...	Enables you to...
<code>nm</code>	Determine whether WLST is connected to Node Manager.
<code>nmConnect</code>	Connect WLST to Node Manager to establish a session.
<code>nmDisconnect</code>	Disconnect WLST from a Node Manager session.
<code>nmEnroll</code>	Enroll the machine on which WLST is currently running.
<code>nmGenBootStartupProps</code>	Generates the Node Manager property files, <code>boot.properties</code> and <code>startup.properties</code> , for the specified server.
<code>nmKill</code>	Kill the specified server instance that was started with Node Manager.
<code>nmLog</code>	Return the Node Manager log.
<code>nmServerLog</code>	Return the server output log of the server that was started with Node Manager.
<code>nmServerStatus</code>	Return the status of the server that was started with Node Manager.
<code>nmSoftRestart</code>	Restart the specified System Component server instance.
<code>nmStart</code>	Start a server in the current domain using Node Manager.
<code>nmVersion</code>	Return the Node Manager server version.
<code>prompt</code>	Toggle the display of path information at the prompt.
<code>pwd</code>	Display the current location in the configuration or runtime bean hierarchy.
<code>redeploy</code>	Reload classes and redeploy a previously deployed application.
<code>redirect</code>	Redirect WLST output to the specified filename.
<code>removeListener</code>	Remove a listener that was previously defined.
<code>resume</code>	Resume a server instance that is suspended or in ADMIN state.
<code>save</code>	Save the edits that have been made but have not yet been saved.
<code>saveDiagnosticImageCaptureFile</code>	Downloads the specified diagnostic image capture.
<code>saveDiagnosticImageCaptureEntryFile</code>	Downloads a specific entry from the diagnostic image capture.
<code>serverConfig</code>	Navigate to the last MBean to which you navigated in the configuration MBean hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .
<code>serverRuntime</code>	Navigate to the last MBean to which you navigated in the runtime MBean hierarchy or to the root of the hierarchy, <code>ServerRuntimeMBean</code> .
<code>set</code>	Set the specified attribute value for the current configuration bean.
<code>setServerGroups</code>	Sets the server groups for the specified server.

Table 2-2 (Cont.) WebLogic Server WLST Online Command Summary

This command...	Enables you to...
showChanges	Show the changes made by the current user during the current edit session.
showListeners	Show all listeners that are currently defined.
shutdown	Gracefully shut down a running server instance, cluster, or system component.
softRestart	Restart a system component server instance.
start	Start a Managed Server instance, cluster, or system component using Node Manager.
startApplication	Start an application, making it available to users.
startEdit	Start a configuration edit session on behalf of the currently connected user.
startNodeManager	Start Node Manager at default port (5556).
startRecording	Record all user interactions with WLST; useful for capturing commands to replay.
startServer	Start the Administration Server.
state	Returns a map of servers or clusters and their state using Node Manager
stopApplication	Stop an application, making it un available to users.
stopEdit	Stop the current edit session, release the edit lock, and discard unsaved changes.
stopNodeManager	Stop Node Manager.
stopRedirect	Stop the redirection of WLST output to a file.
storeUserConfig	Create a user configuration file and an associated key file.
suspend	Suspend a running server.
threadDump	Display a thread dump for the specified server.
undeploy	Undeploy an application from the specified servers.
undo	Revert all unsaved or unactivated edits.
updateApplication	Update an application configuration using a new deployment plan.
validate	Validate the changes that have been made but have not yet been saved.
viewMBean	Display information about an MBean, such as the attribute names and values, and operations.
writeIniFile	Convert WLST definitions and method declarations to a Python (.py) file.
writeTemplate	Writes the domain configuration information to the specified domain template.

2.3 WebLogic Server WLST Offline Command Summary

The following table summarizes the WebLogic Server WLST offline commands, alphabetically by command.

Table 2-3 WebLogic Server WLST Offline Command Summary

This command...	Enables you to...
addHelpCommand	Adds new command help for a command to an existing command group. Once added to the group, the command (along with a brief description) is displayed in the command list for the group when you enter the <code>help('commandGroup')</code> command.
addHelpCommandGroup	Adds a new help command group to those shown by the WLST <code>help()</code> command, and specifies the resource bundle in which the help information is defined for the group.
addStartupGroup	Adds a new server startup group.
addTemplate	Extend the current domain using an application or service extension template.
assign	Assign resources to one or more destinations.
cd	Navigate the hierarchy of configuration or runtime beans.
clone	Clones the server object.
closeDomain	Close the current domain.
closestore	Closes a store.
closeTemplate	Close the current domain template.
compactstore	Compacts and defragments the space occupied by a file store.
configToScript	Convert an existing server configuration (<code>config</code> directory) to an executable WLST script.
connect	Connect WLST to a WebLogic Server instance.
create	Create a configuration bean of the specified type for the current bean.
createDomain	Creates a WebLogic domain using the specified template.
delete	Delete an instance of a configuration bean of the specified type for the current configuration bean.
deleteFEHost	Delete the Frontend host for a domain.
dumpStack	Display stack trace from the last exception that occurred while performing a WLST action, and reset the stack trace.
dumpstore	Dumps store contents in human-readable format to an XML file.
dumpVariables	Display all variables used by WLST, including their name and value.
exit	Exit WLST from the interactive session and close the scripting shell.

Table 2-3 (Cont.) WebLogic Server WLST Offline Command Summary

This command...	Enables you to...
exportDiagnosticData	Execute a query against the specified log file.
get	Return the value of the specified attribute.
getDatabaseDefaults	Connect to the database to retrieve schema information.
getFEHostURL	Retrieve the settings for a domain's Frontend Host.
getNodeManagerHome	Gets the Node Manager home.
getNodeManagerType	Gets the Node Manager type.
getNodeManagerUpgradeOverwriteDefault	Gets the value of the Node Manager upgrade overwrite default flag.
getNodeManagerUpgradeType	Gets the Node Manager upgrade type used for Node Manager upgrade.
getOldNodeManagerHome	Gets the old Node Manager home used for Node Manager upgrade.
getopenstores	Returns a list of opened stores (for script access).
getstoreconns	Returns a list of connections in the specified store (for script access).
getServerGroups	Retrieves a list of the server groups of which the specified server is a member.
getStartupGroup	Retrieves the server startup group.
getTopologyProfile	Returns the domain topology profile for a domain.
listServerGroups	Retrieves a map of the config-groups.xml server groups that are user-expandable.
liststore	Lists store names, open stores or connections in a store.
loadApplication	Load an application and deployment plan into memory.
loadDB	Load SQL files into a database.
loadProperties	Load property values from a file.
ls	List all child beans and/or attributes for the current configuration or runtime bean.
nmConnect	Connect WLST to Node Manager to establish a session.
nmSoftRestart	Restart the specified System Component server instance.
openfilestore	Opens a file store.
openjdbcstore	Opens a JDBC store.
prompt	Toggle the display of path information at the prompt.
pwd	Display the current location in the configuration or runtime bean hierarchy.
readDomain	Open an existing WebLogic domain for updating.

Table 2-3 (Cont.) WebLogic Server WLST Offline Command Summary

This command...	Enables you to...
readDomainForUpgrade	Open an existing domain for reconfiguration
readTemplate	Open an existing domain template for domain creation.
redirect	Redirect WLST output to the specified filename.
set	Set the specified attribute value for the current configuration bean.
setFEHostURL	Set the plain and SSL URLs for a domain's Frontend Host and specifies which is the default.
setOption	Set options related to a WebLogic domain creation or update.
setServerGroups	Sets the server groups for the specified server.
setSharedSecretStoreWithPassword	Set the shared secret store and password.
setStartupGroup	Sets the server startup group.
startNodeManager	Start Node Manager at default port (5556).
startRecording	Record all user interactions with WLST; useful for capturing commands to replay.
startServer	Start the Administration Server.
stopNodeManager	Stop Node Manager.
stopRedirect	Stop the redirection of WLST output to a file.
threadDump	Display a thread dump for the specified server.
unassign	Unassign applications or services from one or more destinations.
updateDomain	Update and save the current domain.
validateConfig	Validate a domain configuration.
writeDomain	Write the domain configuration information to the specified directory.
writeIniFile	Convert WLST definitions and method declarations to a Python (.py) file.
writeTemplate	Writes the domain configuration information to the specified domain template.

WLST Command and Variable Reference

WebLogic Server includes WLST commands that are targeted to specific management and monitoring tasks, such as connecting to a WebLogic Server instance, navigating the hierarchy of configuration or runtime beans, deploying applications, controlling server life cycle, managing diagnostic data, managing JDBC stores, and more.

- [Overview of WLST Command Categories](#)
- [Browse Commands](#)
- [Control Commands](#)
- [Customization Commands](#)
- [Deployment Commands](#)
- [Diagnostics Commands](#)
- [Editing Commands](#)
- [Information Commands](#)
- [Life Cycle Commands](#)
- [Node Manager Commands](#)
- [Tree Commands](#)
- [Store Administration Commands](#)
- [WLST Variable Reference](#)

3.1 Overview of WLST Command Categories

Learn about the categories of WLST commands that are available for managing and monitoring Oracle WebLogic Server.

Note:

Refer to Syntax for WLST Commands in *Understanding the WebLogic Scripting Tool* for command syntax requirements.

WLST commands are divided into the following categories.

Table 3-1 WLST Command Categories

Command Category	Description
Browse Commands	Navigate the hierarchy of configuration or runtime beans and control the prompt display.
Control Commands	<ul style="list-style-type: none"> • Connect to or disconnect from a server. • Create and configure a WebLogic domain or domain template. • Exit WLST.
Customization Commands	Add the command group help and command help that is displayed by the WLST <code>help()</code> and <code>help('commandGroup')</code> commands.
Deployment Commands	<ul style="list-style-type: none"> • Deploy, undeploy, and redeploy applications and standalone modules to a WebLogic Server instance. • Update an existing deployment plan. • Interrogate the WebLogic Deployment Manager object. • Start and stop a deployed application.
Diagnostics Commands	Export diagnostic data.
Editing Commands	Interrogate and edit configuration beans.
Information Commands	Interrogate WebLogic domains, servers, and variables, and provide configuration bean, runtime bean, and WLST-related information.
Life Cycle Commands	Manage the life cycle of a server instance or system component instance.
Node Manager Commands	Start, shut down, restart, and monitor WebLogic Server instances and system component instances using Node Manager.
Tree Commands	Navigate among MBean hierarchies.
Store Administration Commands	Manage JDBC stores and file stores.

3.2.1 Browse Commands

Use the WLST browse commands to navigate the hierarchy of configuration or runtime beans and control the prompt display. These commands are listed and summarized in [Table 3-2](#).

Table 3-2 Browse Commands for WLST Configuration

Use this command...	To...	Use with WLST...
cd	Navigate the hierarchy of configuration or runtime beans.	Online or Offline
currentTree	Return the current location in the hierarchy.	Online

Table 3-2 (Cont.) Browse Commands for WLST Configuration

Use this command...	To...	Use with WLST...
<code>prompt</code>	Toggle the display of path information at the prompt.	Online or Offline
<code>pwd</code>	Display the current location in the hierarchy.	Online or Offline

3.2.1.1 cd

Command Category: Browse Commands

Use with WLST: Online or Offline

Description

Navigates the hierarchy of configuration or runtime beans. This command uses a model that is similar to navigating a file system in a Windows or UNIX command shell. For example, to navigate back to a parent configuration or runtime bean, enter `cd('.. ')`. The character string `..` (dot-dot) refers to the directory immediately above the current directory. To get back to the root bean after navigating to a bean that is deep in the hierarchy, enter `cd('/')`.

You can navigate to beans in the current hierarchy and to any child or instance.

The `cd` command returns a stub of the configuration or runtime bean instance, if one exists. If you navigate to a type, this command returns a stub of the configuration or runtime bean instance from which you navigated. In the event of an error, the command returns a `WLSTException`.

Note:

The `cmo` variable is initialized to the root of all domain configuration beans when you first connect WLST to a server instance. It reflects the parent configuration bean type until you navigate to an instance. For more information about the `cmo` variable, see *Changing the Current Management Object in Understanding the WebLogic Scripting Tool*.

Syntax

```
cd(mbeanName)
```

Argument	Definition
<code>mbeanName</code>	Path to the bean in the namespace.

Examples

The following example navigates the hierarchy of configuration beans. The first command navigates to the `Servers` configuration bean type, the second, to the

myserver configuration bean instance, and the last back up two levels to the original directory location.

```
wls:/mydomain/serverConfig> cd('Servers')
wls:/mydomain/serverConfig/Servers> cd('myserver')
wls:/mydomain/serverConfig/Servers/myserver> cd('../..')
wls:/mydomain/serverConfig>
```

3.2.1.2 currentTree

Command Category: Browse Commands

Use with WLST: Online

Description

Returns the current location in the hierarchy. It enables you to store the current location in the hierarchy and easily return to it after browsing. In the event of an error, the command returns a `WLSTException`.

Syntax

```
currentTree()
```

Example

The following example stores the current location in the hierarchy in `myTree` and uses it to navigate back to the Edit MBean hierarchy from the runtime MBean hierarchy on an Administration Server instance.

```
wls:/mydomain/edit> myTree=currentTree()
wls:/mydomain/edit> serverRuntime()
Location changed to serverRuntime tree. This is a read-only tree with
ServerRuntimeMBean as the root.
For more help, use help('serverRuntime')

wls:/mydomain/serverRuntime> myTree()
wls:/mydomain/edit>
```

3.2.1.3 prompt

Command Category: Browse Commands

Use with WLST: Online or Offline

Description

Toggles the display of path information at the prompt when entered without an argument. This command is useful when the prompt becomes too long due to the length of the path.

You can also explicitly specify `on` or `off` as an argument to the command. When you specify `off`, WLST hides the WLST prompt and defaults to the Jython prompt. By default, the WLST prompt displays the configuration or runtime navigation path information.

When you disable the prompt details, to determine your current location in the hierarchy, you can use the `pwd` command, as described in [pwd](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
prompt(myPrompt)
```

Argument	Definition
<i>myPrompt</i>	<p>Optional. Hides or displays WLST prompt. Valid values include <code>off</code> or <code>on</code>.</p> <ul style="list-style-type: none"> The <code>off</code> argument hides the WLST prompt. If you run <code>prompt('off')</code>, when using WLST online, the prompt defaults to the Jython prompt. You can create a new prompt using Jython syntax. For more information about programming using Jython, see http://www.jython.org. In this case, if you subsequently enter the <code>prompt</code> command without arguments, WLST displays the WLST command prompt without the path information. To redisplay the path information, enter <code>prompt()</code> again, or enter <code>prompt('on')</code>. The <code>on</code> argument displays the default WLST prompt, including the path information.

Examples

The following example hides and then redisplay the path information at the prompt.

```
wls:/mydomain/serverConfig/Servers/myserver> prompt()
wls:/> prompt()
wls:/mydomain/serverConfig/Servers/myserver>
```

The following example hides the prompt and defaults to the Jython prompt (since the command is run using WLST online), changes the Jython prompt, and then redisplay the WLST prompt. This example also demonstrates the use of the `pwd` command.

Note:

For more information about programming using Jython, see <http://www.jython.org>.

```
wls:/mydomain/serverConfig/Servers/myserver> prompt('off')
>>>sys.ps1="myprompt>"
myprompt> prompt()
wls:> pwd()
'serverConfig:Servers/myserver'
wls:> prompt()
wls:/mydomain/serverConfig/Servers/myserver>
```

3.2.1.4 pwd

Command Category: Browse Commands

Use with WLST: Online or Offline

Description

Displays the current location in the configuration or runtime bean hierarchy.

This command is useful when you have turned off the prompt display of the path information using the `prompt` command, as described in [prompt](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
pwd()
```

Example

The following example displays the current location in the configuration bean hierarchy.

```
wls:/mydomain/serverConfig/Servers/myserver/Log/myserver> pwd()
'serverConfig:/Servers/myserver/Log/myserver'
```

3.3.1 Control Commands

Use the WLST control commands, listed in [Table 3-3](#), to perform the following tasks:

- Connect to or disconnect from a server (`connect` and `disconnect` commands)
- Create a new WebLogic domain from a domain template, similar to the Configuration Wizard (`createDomain`, `readTemplate`, `writeDomain`, and `closeTemplate` commands)
- Update an existing WebLogic domain, offline (`readDomain`, `addTemplate`, `updateDomain`, and `closeDomain` commands)
- Write a domain template (`writeTemplate` command)
- Exit WLST

[Table 3-3](#) lists the control commands for WLST configuration.

Table 3-3 Control Commands for WLST Configuration

Use this command...	To...	Use with WLST...
connect	Connect WLST to a WebLogic Server instance.	Online or Offline
disconnect	Disconnect WLST from a WebLogic Server instance.	Online
createDomain	Create a new WebLogic domain using the specified template.	Offline
readTemplate	Open an existing domain template for domain creation.	Offline
getTopologyProfile	Returns the domain topology profile for a domain.	Offline
writeDomain	Write the domain configuration information to the specified directory.	Offline
closeTemplate	Close the current domain template.	Offline
readDomain	Open an existing WebLogic domain for updating.	Offline

Table 3-3 (Cont.) Control Commands for WLST Configuration

Use this command...	To...	Use with WLST...
readDomainForUpgrade	Open an existing domain for reconfiguration.	Offline
addTemplate	Extend the current WebLogic domain using an application or service extension template.	Offline
listServerGroups	Retrieves a map of the config-groups.xml server groups that are user-expandable.	Offline
setServerGroups	Sets the server groups for the specified server.	Offline
getServerGroups	Retrieves a list of the server groups of which the specified server is a member.	Offline
getStartupGroup	Retrieves the server startup group.	Offline
addStartupGroup	Adds a new server startup group.	Offline
setStartupGroup	Sets the server startup group.	Offline
clone	Clones the server object.	Offline
updateDomain	Updates and save the current domain.	Offline
closeDomain	Closes the current domain.	Offline
writeTemplate	Writes the configuration information to the specified domain template file.	Online and Offline
exit	Exit WLST from the interactive session and close the scripting shell.	Online or Offline
setSharedSecretStoreWithPassword	Sets the shared secret store and password.	Offline
getDatabaseDefaults	Connect to the database to retrieve schema information.	Offline
validateConfig	Validate a domain configuration.	Offline
getFEHostURL	Retrieve the plain, SSL or default URL for the domain Frontend Host.	Offline
setFEHostURL	Set the plain, SSL and default URLs for the domain Frontend Host.	Offline

3.3.1.1 addStartupGroup

Command Category: Control Commands

Use with WLST: Offline

Description

Adds a new server startup group based on an existing server group. In the event of an unsupported operation, the command returns a `WLSTException`.

For information about startup groups, see `config-groups.xml` and `startup-plan.xml` in *Domain Template Reference*.

Syntax

```
addStartupGroup(server_startup_group_name, server_group_name)
```

Argument	Definition
<code>server_startup_group_name</code>	Name of the new server startup group.
<code>server_group_name</code>	Name of an existing server group within the domain.

Example

The following example creates a startup group called `startup_group_1` from an existing server group called `server_group_1`.

```
addStartupGroup('startup_group_1', 'server_group_1')
```

3.3.1.2 addTemplate

Command Category: Control Commands

Use with WLST: Offline

Description

Extends the current WebLogic domain using an application or service extension template. Use the Template Builder to create an application or service extension template. See *Oracle WebLogic Server Creating Templates Using the Domain Template Builder*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
addTemplate(templateFileName)
```

Argument	Definition
<code>templateFileName</code>	Name of the application or service extension template.

Example

The following example opens a WebLogic domain and extends it using the specified extension template, `DefaultWebApp.jar`.

```
wls:/offline> readDomain('c:/Oracle/Middleware/user_projects/domains/wlw')
wls:/offline/wlw> addTemplate('c:/Oracle/Middleware/wlserver
/common/templates/wls/DefaultWebApp.jar')
wls:/offline/wlw>
```

3.3.1.3 closeDomain

Command Category: Control Commands

Use with WLST: Offline

Description

Closes the current domain. The domain is no longer available for editing once it is closed. In the event of an error, the command returns a `WLSTException`.

Syntax

```
closeDomain()
```

Example

The following example closes the current domain:

```
wls:/offline> readDomain('c:/Oracle/Middleware/user_projects/domains/medrec')
...
wls:/offline/medrec> updateDomain()
wls:/offline/medrec> closeDomain()
wls:/offline>
```

3.3.1.4 closeTemplate

Command Category: Control Commands

Use with WLST: Offline

Description

Closes the current domain template. The domain template is no longer available once it is closed. In the event of an error, the command returns a `WLSTException`.

Syntax

```
closeTemplate()
```

Example

The following example opens an existing domain template, performs some operations, and then closes the current domain template.

```
wls:/offline> readTemplate('c:/Oracle/Middleware/wlserver
/common/templates/wls/wls.jar')
...
wls:/offline/wls> closeTemplate()
wls:/offline>
```

3.3.1.5 clone

Command Category: Control Commands

Use with WLST: Offline

Description

Clones the original server. In the event of an unsupported operation, the command returns a `WLSTException`.

Syntax

```
clone('originalServerName', 'cloneServerName', 'type')
```

Argument	Definition
<code>originalServerName</code>	The name of the server to clone.
<code>cloneServerName</code>	The name of the new cloned server.
<code>type</code>	The type of object to clone. Currently, the only supported type is <code>Server</code> .

Example

The following example creates a server called `server1_clone` by cloning the `server1` server.

```
wls:/offline/base_domain>clone('server1', 'server1_clone', 'Server')
```

3.3.1.6 connect

Command Category: Control Commands

Use with WLST: Online or Offline

Description

Connects WLST to a WebLogic Server instance.

It requires you to provide the credentials (user name and password) of a user who has been defined in the active WebLogic security realm. Once you are connected, a collection of security policies determines the configuration attributes that you can view or modify. (See "[Default Security Policies for MBeans](#)" in the *MBean Reference for Oracle WebLogic Server*.)

You can supply user credentials by doing any of the following:

- Enter the credentials on the command line. This option is recommended only if you are using WLST in interactive mode.
- Enter the credentials on the command line, and then use the `storeUserConfig` command to create a user configuration file that contains your credentials in an encrypted form and a key file that WebLogic Server uses to unencrypt the credentials. On subsequent WLST sessions (or in WLST scripts), supply the name of the user configuration file and key file instead of entering the credentials on the command line. This option is recommended if you use WLST in script mode because it prevents you from storing unencrypted user credentials in your scripts.
- Use the credentials that are stored in the Administration Server's `boot.properties` file. By default, when you create an Administration Server in

development mode, WebLogic Server encrypts the credentials that were used to create the server and stores them in a `boot.properties` file. When you create an Administration Server in production mode, no `boot.properties` file is created. If your production domain does not contain a `boot.properties` file, you can create one manually; see "Creating a Boot Identify File for an Administration Server" in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

When you run the `connect` command, if there is a `boot.properties` file containing the encrypted username and password for the domain, you do not have to enter the username and password to connect to the Administration Server. You do, however, have to specify the name of the Administration Server in the `connect` command.

Please note:

- If you run the `connect` command in a script without specifying the username and password or user configuration file and key file, a `WSLTEXception` occurs. In interactive mode, you are prompted for the username and password.
- Oracle strongly recommends that you connect WLST to the server through the SSL port or administration port. If you do not, the following warning message is displayed:

```
Warning: An insecure protocol was used to connect to the server. To ensure
on-the-wire security, the SSL port or Admin port should be used instead.
```

- If you are connecting to a WebLogic Server instance through an SSL listen port on a server that is using the demonstration SSL keys and certificates, invoke WLST using the following command:

```
java -Dweblogic.security.SSL.ignoreHostnameVerification=true
-Dweblogic.security.TrustKeyStore=DemoTrust weblogic.WLST
```

For more information about invoking WLST, see "Main Steps for Using WLST in Interactive or Script Mode" in *Understanding the WebLogic Scripting Tool*.

- If you are connecting to a WebLogic Server instance via HTTP, ensure that the `TunnelingEnabled` attribute is set to `true` for the WebLogic Server instance. For more information, see "[TunnelingEnabled](#)" in *MBean Reference for Oracle WebLogic Server*.
- When trying to connect to the WebLogic Server Administration Server from WLST using `localhost` as the host name, the following message may be displayed if the `listen-address` attribute of the Administration Server has been restricted to certain IP addresses:

```
javax.naming.CommunicationException [Root exception is
java.net.ConnectException : <t3://HOST:PORT> : Destination unreachable;
nested exception is: java.net.ConnectException: Connection refused; No
available router to destination
```

You can use either of the following workarounds for this issue:

- Check that the `listen-address` attribute of the Administration Server has been set correctly. For example, in the domain configuration file, comment out the `<listen-address>` line:

```
<server>
  <name>AdminServer</name>
```

```

    <ssl>
    .
    .
    .
  </ssl>
  <machine>your_machine</machine>
  <!-- listen-address><your_ip_address></listen-address -->
</server>

```

- Instead of localhost, use the hostname of the Administration Server in the WLST connect command.

After successfully connecting to a WebLogic Server instance, all the local variables are initialized.

In the event of an error, the command returns a `WLSTException`.

Syntax

```

connect([username, password], [adminServerName], [url], [timeout])
connect([userConfigFile, userKeyFile], [adminServerName], [url], [timeout])
connect([url], [adminServerName], [timeout])

```

Argument	Definition
<i>username</i>	Optional. Username of the operator who is connecting WLST to the server. If not specified, WLST processes the command as described above.
<i>password</i>	Optional. Password of the operator who is connecting WLST to the server. If not specified, WLST processes the command as described above.
<i>url</i>	Optional. Listen address and listen port of the server instance, specified using the following format: <code>[protocol://]listen-address:listen-port</code> . If not specified, this argument defaults to <code>t3://localhost:7001</code> .
<i>userConfigFile</i>	Optional. Name and location of a user configuration file which contains an encrypted username and password. Use the following syntax for this argument: <pre>userConfigFile='file-system-path'</pre> If not specified, WLST processes the command as described above. When you create a user configuration file, the <code>storeUserConfig</code> command uses a key file to encrypt the username and password. Only the key file that encrypts a user configuration file can decrypt the username and password. (See storeUserConfig .)
<i>userKeyFile</i>	Optional. Name and location of the key file that is associated with the specified user configuration file and is used to decrypt it. Use the following syntax for this argument: <pre>userKeyFile='file-system-path'</pre> If not specified, WLST processes the command as described above. See storeUserConfig .

Argument	Definition
<i>adminServerName</i>	<p>Optional. Name of the Administration Server for the domain. Causes the connect command to use the credentials that are stored in the Administration Server's <code>boot.properties</code> file. Use the following syntax for this argument:</p> <pre>adminServerName='server-name'</pre> <p>This argument is valid only when you start WLST from a domain directory. If the <code>boot.properties</code> file for the Administration Server is located in the domain directory, then you do not need to specify this argument.</p> <p>If not specified, WLST processes the command as described above.</p>
<i>timeout</i>	<p>Optional. The number of milliseconds that WLST waits for online commands to complete (return).</p> <p>When you invoke a WLST online command, WLST connects to an MBean Server, invokes an MBean server method, and returns the results of the invocation. If the MBean server method does not return within the timeout period, WLST abandons its invocation attempt. Use the following syntax for this argument:</p> <pre>timeout='milliseconds'</pre> <p>The default value is 0, which indicates that the operation will not time out. Note, however, that a timeout of 5 minutes may occur at a different layer.</p>

Examples

The following example connects WLST to a WebLogic Server instance. In this example, the Administration Server name defaults to `AdminServer`. Note that a warning is displayed if the SSL or administration port is not used to connect to the server.

```
wls:/offline> connect('adminusername','adminpassword','t3://localhost:7001')
Connecting to weblogic server instance running at t3://localhost:7001 as
username adminusername...
```

```
Successfully connected to Admin Server 'AdminServer' that belongs to domain
'mydomain'.
```

```
Warning: An insecure protocol was used to connect to the server. To ensure
on-the-wire security, the SSL port or Admin port should be used instead.
```

```
wls:/mydomain/serverConfig>
```

The following example connects WLST to a WebLogic Server instance at the specified URL. In this example, the username and password are passed as variables. This example uses a secure protocol.

```
wls:/offline> username = 'adminusername'
wls:/offline> password = 'adminpassword'
wls:/offline> connect(username,password,'t3s://myhost:7001')
Connecting to weblogic server instance running at t3://myhost:7001 as
username adminusername...
```

```
Successfully connected to Admin Server 'AdminServer' that belongs to domain
'mydomain'.
```

```
wls:/mydomain/serverConfig>
```

The following example connects WLST to a WebLogic Server instance using a user configuration and key file to provide user credentials.

```
wls:/offline> connect(userConfigFile='c:/myfiles/myuserconfigfile.secure',
userKeyFile='c:/myfiles/myuserkeyfile.secure')
Connecting to t3://localhost:7001 with userid username ...

Successfully connected to Admin Server 'AdminServer' that belongs to domain
'mydomain'.
wls:/mydomain/serverConfig>
```

The following example shows the prompts that are displayed in interactive mode if you run the command without parameters:

```
wls:/offline> connect()
Please enter your username :username
Please enter your password :
Please enter your server URL [t3://localhost:7001] :
Connecting to t3://localhost:7001 with userid username
```

3.3.1.7 createDomain

Command Category: Control Commands

Use with WLST: Offline

Description

Creates a WebLogic domain using the specified template.

Note:

The `createDomain` command is similar in functionality to the `unpack` command, as described in *The Unpack Command in Creating Templates and Domains Using the Pack and Unpack Commands*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
createDomain(domainTemplate, domainDir, user, password, topologyProfile)
```

Argument	Definition
<i>domainTemplate</i>	Name and location of the domain template from which you want to create a domain.
<i>domainDir</i>	Name of the directory to which you want to write the domain configuration information. Oracle recommends that you create all domains for your environment outside of the Middleware home directory. This makes it easier for you to remove an existing installation or install a new version of WebLogic Server without having to recreate your domains and applications.
<i>user</i>	Name of the default user.

Argument	Definition
<i>password</i>	Password of the default user.
<i>topologyProfile</i>	Set the topology profile for the domain, either Compact or Expanded. See Domain Topology Profiles in <i>Domain Template Reference</i> .

Example

The following example creates a new WebLogic domain using the Avitek MedRec template and sets the default username and password. The domain is saved to the following directory: `c:/Oracle/Middleware/wlserver/user_projects/domains/medrec`.

```
wls:/offline> createDomain('c:/Oracle/Middleware/wlserver/common
/templates/wls/wls_medrec.jar','c:/Oracle/Middleware/user_projects/domains/medrec',
'adminusername','adminpassword')
```

3.3.1.8 disconnect

Command Category: Control Commands

Use with WLST: Online

Description

Disconnects WLST from a WebLogic Server instance. The `disconnect` command does not cause WLST to exit the interactive scripting shell; it closes the current WebLogic Server instance connection and resets all the variables while keeping the interactive shell alive.

In the event of an error, the command returns a `WLSTException`.

You can connect to another WebLogic Server instance using the `connect` command, as described in [connect](#).

Syntax

```
disconnect(force)
```

Argument	Definition
<i>force</i>	Optional. Boolean value specifying whether WLST should disconnect without waiting for the active sessions to complete. This argument defaults to <code>false</code> , indicating that all active sessions must complete before disconnect.

Example

The following example disconnects from a running server:

```
wls:/mydomain/serverConfig> disconnect()
Disconnected from weblogic server: myserver
wls:/offline>
```

3.3.1.9 exit

Command Category: Control Commands

Use with WLST: Online or Offline

Description

Exits WLST from the user session and closes the scripting shell.

If there is an edit session in progress, WLST prompts you for confirmation. To skip the prompt, set the *defaultAnswer* argument to *y*.

By default, WLST calls `System.exit(0)` for the current WLST JVM when exiting WLST. If you would like the JVM to exit with a different exit code, you can specify a value using the *exitCode* argument.

Note:

When the WLST exit command is issued within an Ant script, it may also exit the execution of the Ant script. It is recommended that when invoking WLST within an Ant script, you fork a new JVM by specifying `fork="true"`.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
exit([defaultAnswer], [exitcode])
```

Argument	Definition
<i>defaultAnswer</i>	Optional. Default response, if you would prefer not to be prompted at the command line. Valid values are <i>y</i> and <i>n</i> . This argument defaults to null, and WLST prompts you for a response.
<i>exitcode</i>	Optional. Exit code to set when exiting WLST.

Example

The following example disconnects from the user session and closes the scripting shell.

```
wls:/mydomain/serverConfig> exit()  
Exiting WebLogic Scripting Tool ...  
c:\>
```

The following example disconnects from the user session, closes the scripting shell, and sets the error code to 101.

```
wls:/mydomain/serverConfig> exit(exitcode=101)  
Exiting WebLogic Scripting Tool ...  
c:\>
```

3.3.1.10 getDatabaseDefaults

Command Category: Control Commands

Use with WLST: Offline

Description

Connects `LocalSvcTblDataSource` to the database server to retrieve schema information and automatically bind these retrieved parameters with local schema components. Data source `LocalSvcTblDataSource` must be configured with the necessary connection parameters before calling `getDatabaseDefaults()`.

Note:

This command can be used only if the domain being created or modified includes Fusion Middleware components that require the use of the Oracle Fusion Middleware Repository Creation Utility (RCU) to load database schemas. The `LocalSvcTblDataSource` connects to the schema corresponding to the `ServiceTable` component in RCU.

`getDatabaseDefaults()` retrieves the schema password that was set when the schema was first created using RCU. If the schema password was changed after running RCU and before domain creation, you must specify the password again after calling `getDatabaseDefaults()` and before calling `writeDomain()` in a WLST script. For example:

```
getDatabaseDefaults()
cd('/JDBCSystemResource/LocalSvcTblDataSource/JdbcResource/
LocalSvcTblDataSource/JDBCDriverParams/NO_NAME_0')
set('PasswordEncrypted', 'new_password')
writeDomain(DOMAIN_HOME)
```

Syntax

```
getDatabaseDefaults()
```

Example

The following example retrieves schema information for a domain called `fmwdomain`.

```
wls:/offline/fmwdomain>cd('JDBCSystemResource/LocalSvcTblDataSource/JdbcResource/
LocalSvcTblDataSource')
wls:/offline/fmwdomain>cd('JDBCDriverParams/NO_NAME_0')
wls:/offline/fmwdomain>set('DriverName','oracle.jdbc.OracleDriver')
wls:/offline/fmwdomain>set('URL','jdbc:oracle:thin:@localhost:1522/xe')
wls:/offline/fmwdomain>set('PasswordEncrypted','password')
wls:/offline/fmwdomain>cd('Properties/NO_NAME_0')
wls:/offline/fmwdomain>cd('Property/user')
wls:/offline/fmwdomain>cmo.setValue('DEV_STB')
wls:/offline/fmwdomain>getDatabaseDefaults()
```

3.3.1.11 getFEHostURL

Command Category: Control Commands

Use with WLST: Offline

Description

Retrieves the plain, SSL, or default URL for the domain Frontend Host from the service table.

Syntax

```
getFEHostURL(type)
```

Argument	Definition
<i>type</i>	Specify one of the following types. <code>default</code> returns either the plain or SSL URL, depending on which was set as the default when the Frontend Host URL was set. <ul style="list-style-type: none"> <code>plain</code> <code>ssl</code> <code>default</code>

Example

The following example returns the SSL URL for the Frontend Host in the domain `mydomain`.

```
wls:/offline> readDomain("/domains/mydomain")
wls:/offline> getFEHostURL("ssl")
wls:/offline> https://myhost.com:7070
```

3.3.1.12 getServerGroups

Command Category: Control Commands

Use with WLST: Offline

Description

Retrieves a list of the server groups in which the specified server is a member. In the event of an unsupported operation, the command returns a `WLSTException`.

Syntax

```
getServerGroups(server_name)
```

Argument	Definition
<i>server_name</i>	The server name for which associated server groups, if any, will be returned.

Example

The following example gets the server group for the server `my_server`.

```
wls:/offline/base_domain> getServerGroups('my_server')
['SERVER-GROUP1-NAME', 'SERVER-GROUP2-NAME']
```

3.3.1.13 getStartupGroup

Command Category: Control Commands

Use with WLST: Offline

Description

Retrieves the server startup group associated with a server. In the event of an unsupported operation, the command returns a `WLSTException`.

Syntax

```
getStartupGroups(server_name)
```

Argument	Definition
<code>server_name</code>	The server name for which a server startup group, if any, will be returned.

Example

The following example gets the server startup group for the server `my_server`.

```
wls:/offline/base_domain> getStartupGroup('my_server')
'Startup_Group_1'
```

3.3.1.14 getTopologyProfile

Returns the domain topology profile for a domain.

Syntax

```
getTopologyProfile()
```

Example

The following example reads the domain `mydomain` and then retrieves the topology profile for the domain (either Compact or Expanded).

```
wls:/offline> readDomain('C:/domains/mydomain')
wls:/mydomain> getTopologyProfile()
'Expanded'
wls:/mydomain>
```

3.3.1.15 listServerGroups

Command Category: Control Commands

Use with WLST: Offline

Description

Retrieves a map of the `config-groups.xml` server groups that are user-expandable. In the event of an unsupported operation, the command returns a `WLSTException`.

For information about server groups, see `config-groups.xml` and `startup-plan.xml` in *Domain Template Reference*.

Syntax

```
listServerGroups([printout])
```

Argument	Definition
<i>printout</i>	Optional. If <code>false</code> (the default) the output will be formatted for programmatic consumption with the server group names returned in a Jython dictionary type that uses the server group name as its key and the server group description as the value. If <code>true</code> , the output will be formatted in an easy-to-read table that contains columns for the server group name and that server group's corresponding description.

Example

The following example outputs server groups for programmatic use:

```
wls:/offline> listServerGroups()
{"SERVER-GROUP1-NAME" : "Server Group 1 Description", "SERVER-GROUP2-NAME" :
"Server Group 2 Description"}
```

The following example outputs server groups for programmatic use:

```
wls:/offline> print listServerGroups('true')
Server Group      | Description
-----|-----
SERVER-GROUP1-NAME | Server Group 1 Description
SERVER-GROUP2-NAME | Server Group 2 Description
wls:/offline>
```

3.3.1.16 readDomain

Command Category: Control Commands

Use with WLST: Offline

Description

Opens an existing WebLogic domain for updating.

WLST offline provides read and write access to the configuration data that is persisted in the `config` directory for the WebLogic domain, or in a domain template JAR created using Template Builder. This data is a collection of XML documents and expresses a hierarchy of management objects.

When you open a template or WebLogic domain, WLST is placed at the root of the configuration hierarchy for that domain, and the prompt is updated to reflect the current location in the configuration hierarchy. For example:

```
wls:/offline/base_domain>
```

For more information, see Navigating and Interrogating MBeans in *Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
readDomain(domainDirName)
```


Argument	Definition
<i>domainDirName</i>	Name of the WebLogic domain directory that you want to open.

Example

The following example opens the medrec domain for editing.

```
wls:/offline> readDomain('c:/Oracle/Middleware/user_projects/domains/medrec')
wls:/offline/medrec>
```

3.3.1.17 readDomainForUpgrade

Command Category: Control Commands

Use with WLST: Offline

Description

The `readDomainForUpgrade()` function performs three basic tasks:

- Upgrades the core WebLogic Server configuration to the new version
- Reads the resulting domain into memory similarly to the existing [readDomain](#) function
- Selects the required reconfiguration templates and adds them to the domain similarly to the existing [addTemplate](#) function.

Note that if the core WebLogic Server upgrade portion of this is successful, it cannot be undone. The addition of the reconfiguration templates must be committed via the [updateDomain](#) function later in the session in order to take effect.

Syntax

```
readDomainForUpgrade(domain_dir), [properties]
```

Argument	Definition
<i>domain_dir</i>	The path of the domain directory that you want to open for reconfiguration.
<i>properties</i>	Optional. WebLogic Server defined properties for core WebLogic Server infrastructure upgrade. This may be a <code>java.util.Properties</code> object, a Python Directory object, or a semicolon delimited string of name=value pairs.

Example

The following example opens the domain located at C:\domains\medrec for upgrade:

```
>wls:/offline> readDomainForUpgrade('c:/domains/medrec')
```

3.3.1.18 readTemplate

Command Category: Control Commands

Use with WLST: Offline

Description

Opens an existing domain template for domain creation and optionally specifies the config-groups topology to use (full WebLogic Server only).

When you open a domain template, WLST is placed into the configuration bean hierarchy for that domain template, and the prompt is updated to reflect the current location in the configuration hierarchy. For example:

```
wls:/offline/base_domain>
```

WebLogic Server configuration beans exist within a hierarchical structure. In the WLST file system, the hierarchies correspond to drives; types and instances are directories; attributes and operations are files. WLST traverses the hierarchical structure of configuration beans using commands such as `cd`, `ls`, and `pwd` in a similar way that you would navigate a file system in a UNIX or Windows command shell. After navigating to a configuration bean instance, you interact with the bean using WLST commands. For more information, see "Navigating and Interrogating MBeans" in *Understanding the WebLogic Scripting Tool*.

Note:

Using WLST and a domain template, you can only create and access security information when you are creating a new WebLogic domain. When you are updating a WebLogic domain, you cannot access security information through WLST.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
readTemplate(templateFileName), [topologyprofile]
```

Argument	Definition
<i>templateFileName</i>	Name of the JAR file corresponding to the domain template.
<i>topologyprofile</i>	Optional. The name of the config-groups topology profile to use (Compact or Expanded). This argument can be used only in a full WebLogic Server installation and applies only if the template defines these topologies. If omitted, the Expanded topology is used. Note: This argument does not apply in standalone system component (for example, OHS) installations, in which a restricted WLST tool is provided.

Example

The following example opens the `medrec.jar` domain template for WebLogic domain creation.

```
wls:/offline> readTemplate('c:/Oracle/Middleware/wlserver/common/templates
/wls/wls_medrec.jar')
wls:/offline/wls_medrec>
```

3.3.1.19 setFEHostURL

Command Category: Control Commands

Use with WLST: Offline

Description

Sets the plain and SSL URLs for the domain Frontend Host and specifies whether the plain or SSL URL is the default.

Syntax

```
setFEHostURL(plain, ssl, isDefaultPlain)
```

Argument	Definition
<i>plain</i>	Sets the plain URL for the Frontend Host in the following format: <code>http://host:port</code>
<i>ssl</i>	Sets the SSL URL for the Frontend Host in the following format: <code>https://host:port</code> Note: If you are using the plain URL for the frontend host, you must still specify a default SSL URL. If you have only set up a plain connection to the Frontend Host, you can use the same URL for both plain and SSL. Otherwise, they must be different.
<i>isPlainDefault</i>	Boolean. If set to <code>true</code> , the plain URL is the default for the Frontend Host. If set to <code>false</code> , the SSL URL is the default for the Frontend Host.

Example

The following example sets the plain and SSL URLs for the Frontend Host of the domain `mydomain`, and specifies that the default is the SSL URL.

```
wls:/offline> readDomain("/domains/mydomain")
wls:/offline> setFEHostURL("http://www.myhost.com:7733", "http://www.myhost.com:
7733"4455",
false)
```

3.3.1.20 setServerGroups

Command Category: Control Commands

Use with WLST: Online and Offline

Description

Sets the user-expandable server groups to which you want the specified server to belong. After executing this function, the server belongs only to the specified server groups.

In the event of an unsupported operation, the command returns a `WLSTException`.

Syntax

```
setServerGroups(serverName, serverGroups, [timeout], [skipEdit])
```

Argument	Definition
<i>serverName</i>	The server name that you want to associate with the specified user-configurable server groups.
<i>serverGroups</i>	A Python list of the user-configurable server groups to associate with the specified server.
<i>timeout</i>	Optional. Applies only when using <code>setServerGroups</code> in online mode. Specifies the amount of time the connection can be inactive before the connection times out. The default is 120000 milliseconds.
<i>skipEdit</i>	Optional. Applies only when using <code>setServerGroups</code> in online mode. If set to <code>true</code> , the <code>setServerGroups</code> online operation does not start and activate a new WLST <code>edit()</code> session and instead relies on an existing <code>edit()</code> session. The default is <code>false</code> .

Example

The following example associates the server `my_server` with user-expandable server groups `server_group_1` and `server_group_2`.

```
wls:/offline/base_domain> groups="server_group_1, server_group_2"
wls:/offline/base_domain> setServerGroups('my_server', groups)
```

3.3.1.21 setStartupGroup

Command Category: Control Commands

Use with WLST: Offline

Description

Sets the server startup group for a server. In the event of an unsupported operation, the command returns a `WLSTException`.

Syntax

```
setStartupGroup(server_name, server_startup_group_name)
```

Argument	Definition
<i>server_name</i>	The name of the server for which you want to set the startup group.

Argument	Definition
<i>server_startup_group_name</i>	The name of an existing server startup group within the domain.

Example

The following example sets the startup group for the server `my_server` to `startup_group_1`.

```
wls:/offline/base_domain> setStartupGroup('my_server', 'startup_group_1')
```

3.3.1.22 setSharedSecretStoreWithPassword

Command Category: Control Commands

Use with WLST: Offline

Description

Sets the shared secret store and password for a shared database in a domain which includes Fusion Middleware products. In the event of an unsupported operation, the command returns a `WLSTException`.

For information about using a shared database, see *Sharing a Database Instance in Securing Applications with Oracle Platform Security Services*.

Syntax

```
setSharedSecretStoreWithPassword(sharedSecretStore, secretStorePassword)
```

Argument	Definition
<i>sharedSecretStore</i>	The name of the shared secret store.
<i>secretStorePassword</i>	The password for the shared secret store.

Example

The following example sets the password for secret store `store1` to `password` for the domain `base_domain`.

```
wls:/offline/base_domain>setSharedSecretStoreWithPassword(store1, password)
```

3.3.1.23 updateDomain

Command Category: Control Commands

Use with WLST: Offline

Description

Updates and saves the current WebLogic domain. The domain continues to be editable after you update and save it.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
updateDomain()
```

Example

The following example opens the `medrec` domain, performs some operations, and updates and saves the current domain:

```
wls:/offline> readDomain('c:/Oracle/Middleware/user_projects/domains/medrec')
...
wls:/offline/medrec> updateDomain()
```

3.3.1.24 writeDomain

Command Category: Control Commands

Use with WLST: Offline

Description

Writes the domain configuration information to the specified directory.

Once you write the WebLogic domain to file system, you can continue to update the domain template object that exists in memory, and reissue the `writeDomain` command to store the domain configuration to a new or existing file.

By default, when you write a WebLogic domain, the associated applications are written to `WL_HOME/user_projects/applications/domainname`, where `WL_HOME` specifies the WebLogic Server home directory and `domainname` specifies the name of the WebLogic domain. This directory must be empty; otherwise, WLST displays an error.

When you have finished using the domain template object in memory, close it using the `closeTemplate` command. If you want to edit the WebLogic domain that has been saved to disk, you can open it using the [readDomain](#) command.

Note:

The name of the WebLogic domain is derived from the name of the domain directory. For example, for a domain saved to `c:/Oracle/Middleware/user_projects/domains/myMedrec`, the domain name is `myMedrec`.

When updating an existing domain, you must use [updateDomain](#) in place of `writeDomain()`.

Before writing the domain, you must define a password for the default user, if it is not already defined. For example:

```
cd('/Security/base_domain/User/adminusername')
cmo.setPassword('adminpassword')
```

In the event of an error, the command returns a `WLSTException`.

Syntax

```
writeDomain(domainDir)
```

Argument	Definition
<i>domainDir</i>	Name of the directory to which you want to write the domain configuration information.

Example

The following example reads the medrec.jar domain templates, performs some operations, and writes the domain configuration information to the `c:/Oracle/Middleware/user_projects/domains/medrec` directory.

```
wls:/offline> readTemplate('c:/Oracle/Middleware/wlserver/common/templates
/wls/wls.jar')
...
wls:/offline/base_domain> writeDomain('c:/Oracle/Middleware/user_projects/domains/
base_domain')
```

3.3.1.25 writeTemplate

Command Category: Control Commands

Use with WLST: Online and Offline

Description

Writes the domain configuration information to the specified domain template. You can use the domain configuration template to recreate the WebLogic domain.

Once you write the configuration information to the domain configuration template, you can continue to update the WebLogic domain or domain template object that exists in memory, and reissue the `writeDomain` or `writeTemplate` command to store the domain configuration to a new or existing WebLogic domain or domain template file. See [writeDomain](#) or [writeTemplate](#).

In the event of an error, the command returns a `WLSTException`.

Note:

The `writeTemplate` command is similar in functionality to the `pack` command. See *The Pack Command in Creating Templates and Domains Using the pack and unpack Commands*.

Syntax

```
writeTemplate(templateName, [timeout])
```

Argument	Definition
<i>templateName</i>	Name of the domain template to store the domain configuration information.
<i>timeout</i>	Optional. Applies only when using <code>writeTemplate</code> in online mode. Specifies the amount of time the connection to the remote server can be inactive before the connection times out.

Example

The following example writes the current domain configuration to the domain template named `c:/Oracle/Middleware/user_projects/templates/myTemplate.jar`.

```
wls:/offline> readDomain('c:/Oracle/Middleware/user_projects/domains/mydomain')
...
wls:/offline/base_domain> writeTemplate('c:/Oracle/Middleware/user_projects
/templates/myTemplate.jar')
```

3.3.1.26 validateConfig

Command Category: Control Commands

Use with WLST: Online or Offline

Description

Validates a domain configuration using the supplied option. In the event of a validation error, the command returns a `WLSTException`.

Syntax

```
validateConfig(option)
```

Argument	Definition
<i>option</i>	<p>Specify one of the following options:</p> <p>InternalPortConflict—Validate Administration Server and Managed Server listen port conflicts in the current domain configuration.</p> <p>ExternalPortConflict—Validate Administration Server and Managed Server listen port conflicts against ports in use by active processes on the current machine (host).</p> <p>KeyStorePasswords—Checks whether any selected template that contains a valid metadata does not yet have the credential store created for it.</p> <p>ClusterFrontEnd—Validates whether the format of the configured front-end host and front-end http (or https) values. It also validates whether the front-end http (or https) value is missing when front-end host is set, or whether the front-end host value is missing when the front-end http (or https) value is set.</p>

Example

The following example validates the internal listen port configuration in the domain `base_domain`:

```
wlst:/offline/base_domain>validateConfig('InternalPortConflict')
```

3.4.1 Customization Commands

Use the WLST customization commands to add the command group help and command help that is listed by the WLST `help()` and `help('commandGroup')` commands. [Table 3-4](#) lists and summarizes these commands. For more information about adding command help to WLST, see [Adding Integrated Help for Custom Commands in *Understanding the WebLogic Scripting Tool*](#).

Table 3-4 Customization Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
<code>addHelpCommandGroup</code>	Adds a new help command group to those shown by the WLST <code>help()</code> command.	Online or Offline
<code>addHelpCommand</code>	Adds new command help for a command to an existing command group. Once added to the group, the command (along with a brief description) is displayed in the command list for the group when you enter the <code>help('commandGroup')</code> command.	Online or Offline

3.4.1.1 addHelpCommandGroup

Command Category: Customization Commands

Use with WLST: Online or Offline

Description

Adds a new command help group to those shown by the WLST `help()` command, and specifies the resource bundle in which the help information is defined for the group.

Syntax

```
addHelpCommandGroup(commandGroup, resourceBundleName)
```

Argument	Definition
<i>commandGroup</i>	Use a unique name for the command group. Do not use a command group name that is already shown by the WLST <code>help()</code> command.
<i>resourceBundleName</i>	<p>Represents either a class name or property resource file name. The resource bundle contains help text for entries for the command group using a standard pattern. The resource bundle name will be passed to <code>ResourceBundle.getBundle(...)</code>. Multiple command groups can use the same resource bundle.</p> <p>The resource bundle must be present in the classpath.</p> <p>See Adding Integrated Help for Custom Commands in <i>Understanding the WebLogic Scripting Tool</i> for information on how to define the help text for each command group and command.</p> <p>For more information on resourceBundles and localization, refer to http://docs.oracle.com/javase/8/docs/api/java/util/ResourceBundle.html.</p>

Examples

The following example adds the `boot` command group to the list of groups shown by the `help()` command, and specifies that the help text is located in the property resource file 'myhelp':

```
wls:/offline> addHelpCommandGroup('boot','myhelp')
```

The following example adds the `boot` command group to the list of groups shown by the `help()` command, and specifies that the help text is located in the class `foo.bar.MyResourceBundleClass`:

```
wls:/offline> addHelpCommandGroup('boot','foo.bar.MyResourceBundleClass')
```

3.4.1.2 addHelpCommand

Command Category: Customization Commands

Use with WLST: Online or Offline

Description

Adds new command help for a command to an existing command group. Once added to the group, the command (along with a brief description) is displayed in the command list for the group when you enter the `help('commandGroup')` command. You can also specify whether or not the command is listed by the `help('online')` and `help('offline')` commands.

Syntax

```
addHelpCommand(commandName,commandGroup,[offline=false, online=false])
```

Argument	Definition
<i>commandName</i>	The name of the command as defined in the command group specified by <i>commandGroup</i> .
<i>commandGroup</i>	The <i>commandGroup</i> to which the command belongs.
<i>online</i>	Optional. Boolean value that determines whether or not the command shows up in the <code>help('online')</code> output. The default value is <code>'false'</code> .
<i>offline</i>	Optional. Boolean value that determines whether or not the command shows up in the <code>help('offline')</code> output. The default value is <code>'false'</code> .

Example

The following example shows how to add the online command `bootDB` to the listing output by the `help('boot')` and `help('online')` commands:

```
wls:/offline> addHelpCommand('bootDB','boot',online='true',offline='false')
```

3.5.1 Deployment Commands

Use the WLST deployment commands, listed in [Table 3-5](#), to:

- Deploy, undeploy, and redeploy applications and standalone modules to a WebLogic Server instance.
- Update an existing deployment plan.

- Interrogate the WebLogic Deployment Manager object.
- Start and stop a deployed application.

For more information about deploying applications, see *Deploying Applications to Oracle WebLogic Server*.

Table 3-5 Deployment Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
<code>deploy</code>	Deploy an application to a WebLogic Server instance.	Online
<code>distributeApplication</code>	Copy the deployment bundle to the specified targets.	Online
<code>getWLDM</code>	Return the WebLogic DeploymentManager object.	Online
<code>listApplications</code>	List all applications that are currently deployed in the WebLogic domain.	Online
<code>loadApplication</code>	Load an application and deployment plan into memory.	Online and Offline
<code>redeploy</code>	Redeploy a previously deployed application.	Online
<code>startApplication</code>	Start an application, making it available to users.	Online
<code>stopApplication</code>	Stop an application, making it unavailable to users.	Online
<code>undeploy</code>	Undeploy an application from the specified servers.	Online
<code>updateApplication</code>	Update an application configuration using a new deployment plan.	Online

3.5.1.1 deploy

Command Category: Deployment Commands

Use with WLST: Online

Description

Deploys an application to a WebLogic Server instance.

The `deploy` command returns a `WLSTProgress` object that you can access to check the status of the command. For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*. In the event of an error, the command returns a `WLSTException`.

Note:

If there is an edit session in progress, the `deploy` command does not block user interaction.

Syntax

```
deploy(appName, path, [targets], [stageMode], [planPath], [options])
```

Argument	Definition
<i>appName</i>	Name of the application or standalone Java EE module to be deployed.
<i>path</i>	Name of the application directory, archive file, or root of the exploded archive directory to be deployed.
<i>targets</i>	Optional. Comma-separated list of the targets. Each target may be qualified with a Java EE module name (for example, <i>module1@server1</i>) enabling you to deploy different modules of the application archive on different servers. This argument defaults to the server to which WLST is currently connected.
<i>stageMode</i>	Optional. Staging mode for the application you are deploying. Valid values are <i>stage</i> , <i>nostage</i> , and <i>external_stage</i> . For information about the staging modes, see "Controlling Deployment File Copying with Staging Modes" in <i>Deploying Applications to Oracle WebLogic Server</i> . If you do not specify a stage mode, the default stage mode is used. On the Administration Server, the default stage mode is <i>nostage</i> and on Managed Servers, it is <i>stage</i> .
<i>planPath</i>	Optional. Name of the deployment plan file. The filename can be absolute or relative to the application directory. This argument defaults to the <i>plan/plan.xml</i> file in the application directory, if one exists.

Argument	Definition
<i>options</i>	<p data-bbox="656 279 1455 338">Optional. Comma-separated list of deployment options, specified as name-value pairs. Valid options include:</p> <ul data-bbox="656 352 1455 1801" style="list-style-type: none"> <li data-bbox="656 352 1455 411">• adminMode—Boolean value specifying whether to start the Web application with restricted access. This option defaults to <code>false</code>. <li data-bbox="656 422 1455 480">• altDD—Location of the alternate application deployment descriptor on the Administration Server. <li data-bbox="656 491 1455 550">• altWlsDD—Location of the alternate WebLogic application deployment descriptor on the Administration Server. <li data-bbox="656 560 1455 579">• archiveVersion—Archive version number. <li data-bbox="656 590 1455 842">• block—Boolean value specifying whether WLST should block user interaction until the command completes. This option defaults to <code>true</code>. If set to <code>false</code>, WLST returns control to the user after issuing the command; you can query the <code>WLSTProgress</code> object to determine the status of the command. If you are importing WLST as a Jython module, as described in "Importing WLST as a Jython Module" in <i>Understanding the WebLogic Scripting Tool</i>, <code>block</code> is always set to <code>true</code>. <li data-bbox="656 852 1455 911">• clusterDeploymentTimeout—Time, in milliseconds, granted for a cluster deployment task on this application. <li data-bbox="656 921 1455 980">• createPlan—Boolean value indicating that user would like to create a default plan. This option defaults to <code>false</code>. <li data-bbox="656 991 1455 1113">• defaultSubmoduleTargets—Boolean value indicating that targeting for qualifying JMS submodules should be derived by the system, see "Using Sub-Module Targeting with JMS Application Modules" in <i>Deploying Applications to Oracle WebLogic Server</i>. Default value is <code>true</code>. <li data-bbox="656 1123 1455 1274">• deploymentPrincipalName—String value specifying the principal for deploying the file or archive during server starts (static deployment; it does not affect the current deployment task). Make sure the user exists. This option adds <code><deployment-principal-name></code> to the <code><app-deployment></code> element in the <code>config.xml</code> file. <li data-bbox="656 1285 1455 1373">• deploymentOrder—Integer. Specify the deployment order of the application. The application with the lowest deployment order value is deployed first. <li data-bbox="656 1383 1455 1442">• forceUndeployTimeout—Time (in seconds) to wait for in-flight work to complete before undeploying the application. <li data-bbox="656 1453 1455 1575">• gracefulIgnoreSessions—Boolean value specifying whether the graceful production to admin mode operation should ignore pending HTTP sessions. This option defaults to <code>false</code> and only applies if <code>gracefulProductionToAdmin</code> is set to <code>true</code>. <li data-bbox="656 1585 1455 1673">• gracefulProductionToAdmin—Boolean value specifying whether the production to Admin mode operation should be graceful. This option defaults to <code>false</code>. <li data-bbox="656 1684 1455 1743">• libImplVersion—Implementation version of the library, if it is not present in the manifest. <li data-bbox="656 1753 1455 1801">• libraryModule—Boolean value specifying whether the module is a library module. This option defaults to <code>false</code>.

Argument	Definition
<i>options</i> (Continued)	<ul style="list-style-type: none"> • libSpecVersion—Specification version of the library, if it is not present in the manifest. • planStageMode—Staging mode for the deployment plan. Valid values are stage, nostage, or external_stage. • planVersion—Plan version number. • remote—Boolean value specifying whether the operation will be remote from the file system that contains the source. Use this option when you are on a different machine from the Administration Server and the deployment files are already at the specified location where the Administration Server is located. This option defaults to false. • retireGracefully—Retirement policy to gracefully retire an application only after it has completed all in-flight work. This policy is only meaningful for stop and redeploy operations and is mutually exclusive to the retire timeout policy. • retireTimeout—Time (in seconds) WLST waits before retiring an application that has been replaced with a newer version. This option default to -1, which specifies graceful timeout. • rmiGracePeriod—Time (in seconds) WLST waits for RMI requests before retiring an application that has been replaced with a newer version. RMI requests arriving within a grace period of prior request scheduled within the grace period will be accepted, and otherwise rejected. This option default to -1, which specifies no grace period. • securityModel—Security model. Valid values include: DDOnly, CustomRoles, CustomRolesAndPolicies, and Advanced. • securityValidationEnabled—Boolean value specifying whether security validation is enabled. • subModuleTargets—Submodule level targets for JMS modules. For example, submod@mod-jms.xml@target submoduleName@target. • timeout—Time (in milliseconds) that WLST waits for the deployment process to complete before canceling the operation. A value of 0 indicates that the operation will not time out. This argument defaults to 300,000 ms (or 5 minutes). • upload—Boolean value specifying whether the application files are uploaded to the WebLogic Server Administration Server's upload directory prior to deployment. Use this option when the Administration Server cannot access the application files through the file system. This option defaults to false. • versionIdentifier—Version identifier.

Examples

The following example deploys the `businessApp` application located at `c:/myapps/business`, A default deployment plan is created.

The `deploy` command returns a `WLSTProgress` object that you can access to check the status of the command. The `WLSTProgress` object is captured in a user-defined variable, in this case, `progress`.

```
wls:/mydomain/serverConfig/Servers> progress= deploy(appName='businessApp',
path='c:/myapps/business',createplan='true')
```

The previous example stores the `WLSTProgress` object returned in a user-defined variable, in this case, `progress`. You can then use the `progress` variable to print the status of the `deploy` command. For example:

```
wls:/mydomain/serverConfig/Servers> progress.printStatus()
Current Status of your Deployment:
Deployment command type: deploy
Deployment State       : completed
Deployment Message    : null
wls:/mydomain/serverConfig/Servers>
```

For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

The following example deploys the `demoApp` application in the archive file located at `c:/myapps/demos/app/demoApp.ear`, targeting the application modules to `myserver`, and using the deployment plan file located in `c:/myapps/demos/app/plan/plan.xml`. `WLST` waits 120,000 ms for the process to complete.

```
wls:/mydomain/serverConfig/Servers> deploy('demoApp',
'c:/myapps/demos/app/demoApp.ear', targets='myserver',
planPath='c:/myapps/demos/app/plan/plan.xml', timeout=120000)
```

The following example deploys the `jmsApp` application located at `c:/myapps/demos/jmsApp/demo-jms.xml`, targeting the application module to a specific target.

```
wls:/mydomain/serverConfig/Servers> deploy('jmsApp',path=
'c:/myapps/demos/jmsApps/demo-jms.xml', submoduleTargets='jmsApp@managed1')
```

The following example shows how to set the application version (`appVersion`) to a unique identifier to support production (side-by-side) redeployment. This example deploys the `demoApp` application in the archive file located at `c:/myapps/demos/app/demoApp.ear`, and sets the application and archive version numbers to the specified values.

```
wls:/mydomain/serverConfig> deploy('demoApp', 'c:/myapps/demos/app/demoApp.ear',
archiveVersion='901-101', appVersion='901-102')
```

For more information about production redeployment strategies, see "Redeploying Applications in a Production Environment" in *Deploying Applications to Oracle WebLogic Server*.

The following example shows how to deploy `myapp.ear` in `nostage` mode using the deployment plan `plan.xml`.

```
wls:/mydomain/serverConfig/Servers> progress=deploy('myApp',
'c:/myapps/myapp.ear', 'mywar@webserver,myjar@ejbserver',
'c:/myapps/plan.xml')
...Deployment of 'myApp' is successful
```

3.5.1.2 distributeApplication

Command Category: Deployment Commands

Use with WLST: Online

Description

Copies the deployment bundle to the specified targets. The deployment bundle includes module, configuration data, and any additional generated code. The `distributeApplication` command does not start deployment.

The `distributeApplication` command returns a `WLSTProgress` object that you can access to check the status of the command. For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*. In the event of an error, the command returns a `WLSTException`.

Syntax

```
distributeApplication(appPath, [planPath], [targets], [options])
```

Argument	Definition
<i>appPath</i>	Name of the archive file or root of the exploded archive directory to be deployed.
<i>planPath</i>	Optional. Name of the deployment plan file. The filename can be absolute or relative to the application directory. This argument defaults to the <code>plan/plan.xml</code> file in the application directory, if one exists.
<i>targets</i>	Optional. Comma-separated list of targets. Each target may be qualified with a Java EE module name (for example, <code>module1@server1</code>) enabling you to deploy different modules of the application archive on different servers. This argument defaults to the server to which WLST is currently connected.
<i>options</i>	Optional. Comma-separated list of deployment options, specified as name-value pairs. For a list of valid deployment options, see the <i>options</i> argument description in deploy .

Example

The following example loads the `BigApp` application located in the `c:/myapps` directory, and stores the `WLSTProgress` object in a user-defined variable, in this case, `progress`.

The following example distributes the `c:/myapps/BigApp` application to the `myserver`, `oamserver1`, and `oamcluster` servers, using the deployment plan defined at `c:/deployment/BigApp/plan.xml`.

```
wls:/offline> progress=distributeApplication('c:/myapps/BigApp',
'c:/deployment/BigApp/plan.xml', 'myserver,oamserver1,oamcluster')
Distributing Application and Plan ...
Successfully distributed the application.
```

The previous example stores the `WLSTProgress` object in a user-defined variable, in this case, `progress`. You can then use the `progress` variable to determine if the `distributeApplication` command has completed. For example:

```
wls:/mydomain/serverConfig/Servers> progress.isCompleted()
1
wls:/mydomain/serverConfig/Servers>
```


For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

3.5.1.3 getWLDM

Command Category: Deployment Commands

Use with WLST: Online

Description

Returns the `WebLogicDeploymentManager` object. You can use the object methods to configure and deploy applications. WLST must be connected to an Administration Server to run this command. In the event of an error, the command returns a `WLSTException`.

Syntax

```
getWLDM()
```

Example

The following example gets the `WebLogicDeploymentManager` object and stores it in the `wldm` variable.

```
wls:/mydomain/serverConfig> wldm=getWLDM()  
wls:/mydomain/serverConfig> wldm.isConnected()  
1  
wls:/mydomain/serverConfig>
```

3.5.1.4 listApplications

Command Category: Deployment Commands

Use with WLST: Online

Description

Lists all applications that are currently deployed in the WebLogic domain.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
listApplications()
```

Example

The following example lists all the applications currently deployed in `mydomain`.

```
wls:/mydomain/serverConfig> listApplications()  
SamplesSearchWebApp  
asyncServletEar  
jspSimpleTagEar  
ejb30  
webservicesJwsSimpleEar  
ejb20BeanMgedEar  
xmlBeanEar  
extServletAnnotationsEar  
examplesWebApp  
apache_xbean.jar
```

```
mainWebApp
jdbcRowSetsEar
```

3.5.1.5 loadApplication

Command Category: Deployment Commands

Use with WLST: Online and Offline

Description

Loads an application and deployment plan into memory. When used in online mode, you can connect only to the Administration Server; you cannot connect to a Managed Server.

The `loadApplication` command returns a `WLSTPlan` object that you can access to make changes to the deployment plan. For more information about the `WLSTPlan` object, see "WLSTPlan Object" in *Understanding the WebLogic Scripting Tool*. In the event of an error, the command returns a `WLSTException`.

Syntax

```
loadApplication(appPath, [planPath], [createPlan])
```

Argument	Definition
<code>appPath</code>	Name of the top-level parent application directory, archive file, or root of the exploded archive directory containing the application to be loaded.
<code>planPath</code>	Optional. Name of the deployment plan file. The filename can be absolute or relative to the application directory. This argument defaults to the <code>plan/plan.xml</code> file in the application directory, if one exists.
<code>createPlan</code>	Optional. Boolean value specifying whether WLST should create a plan in the application directory if the specified plan does not exist. This argument defaults to <code>true</code> .

Example

The following example loads the `c:/myapps/myejb.jar` application using the plan file at `c:/myplans/myejb/plan.xml`.

```
wls:/offline> myPlan=loadApplication('c:/myapps/myejb.jar', 'c:/myplans/myejb/
plan.xml')
Loading application from c:/myapps/myejb.jar and deployment plan from c:/myplans/
myejb/plan.xml ...
Successfully loaded the application.
```

The previous example stores the `WLSTPlan` object returned in the `myPlan` variable. You can then use `myPlan` variable to display information about the plan, such as the variables. For example:

```
wls:/offline> myPlan.showVariables()
MyEJB jndi.ejb
MyWAR app.foo
```

For more information about the `WLSTPlan` object, see "WLSTPlan Object" in *Understanding the WebLogic Scripting Tool*.

3.5.1.6 redeploy

Command Category: Deployment Commands

Use with WLST: Online

Description

Reloads classes and redeploys a previously deployed application.

The `redeploy` command returns a `WLSTProgress` object that you can access to check the status of the command. For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

For more information about redeploying applications, see "Overview of Common Deployment Scenarios" in *Deploying Applications to Oracle WebLogic Server*.

Syntax

```
redeploy(appName, [planPath], [options])
```

Argument	Definition
<i>appName</i>	Name of the application to be redeployed.
<i>planPath</i>	Optional. Name of the deployment plan file. The filename can be absolute or relative to the application directory. This argument defaults to the <code>plan/plan.xml</code> file in the application directory, if one exists.
<i>options</i>	<p>Optional. Comma-separated list of deployment options, specified as name-value pairs. For a list of valid deployment options, see <i>options</i> argument description in deploy.</p> <p>In addition, the following deployment option can be specified for the <code>redeploy</code> command:</p> <ul style="list-style-type: none"> • appPath—Name of the archive file or root of the exploded archive directory to be redeployed. • delta—A list of file paths or names relative to the root of the staged application that are to be replaced. • deploymentPrincipalName—String value specifying the principal for redeploying the file or archive during server starts. You can use this option to overwrite the current <code><deployment-principal-name></code> in the <code>config.xml</code> file.

Example

The following example redeploys `myApp` application using the `plan.xml` file located in the `c:/myapps` directory.

```
wls:/mydomain/serverConfig> progress=redeploy('myApp' 'c:/myapps/plan.xml')
Redeploying application 'myApp' ...
Redeployment of 'myApp' is successful
wls:/mydomain/serverConfig>
```

The previous example stores the `WLSTProgress` object returned in a user-defined variable, in this case, `progress`. You can then use the `progress` variable to access the state of the `redeploy` command. For example:

```
wls:/mydomain/serverConfig/Servers> progress.getState()
'completed'
wls:/mydomain/serverConfig/Servers>
```

For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

3.5.1.7 startApplication

Command Category: Deployment Commands

Use with WLST: Online

Description

Starts an application, making it available to users. The application must be fully configured and available in the WebLogic domain.

The `startApplication` command returns a `WLSTProgress` object that you can access to check the status of the command. For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*. In the event of an error, the command returns a `WLSTException`.

Syntax

```
startApplication(appName, [options])
```

Argument	Definition
<code>appName</code>	Name of the application to start, as specified in the <code>plan.xml</code> file.
<code>options</code>	Optional. Comma-separated list of deployment options, specified as name-value pairs. For a list of valid deployment options, see <code>options</code> argument description in deploy .

Example

The following example starts the `BigApp` application with the specified deployment options.

```
wls:/mydomain/serverConfig/Servers> progress=startApplication('BigApp',
stageMode='NOSTAGE', adminMode='false')
Starting the application...
Successfully started the application.
```

The previous example stores the `WLSTProgress` object returned in a user-defined variable, in this case, `progress`. You can then use the `progress` variable to access the state of the `startApplication` command. For example:

```
wls:/mydomain/serverConfig/Servers> progress.getState()
'completed'
wls:/mydomain/serverConfig/Servers>
```

For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

3.5.1.8 stopApplication

Command Category: Deployment Commands

Use with WLST: Online

Description

Stops an application, making it unavailable to users. The application must be fully configured and available in the WebLogic domain.

The `stopApplication` command returns a `WLSTProgress` object that you can access to check the status of the command. For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
stopApplication(appName, [options])
```

Argument	Definition
<code>appName</code>	Name of the application to stop, as specified in the <code>plan.xml</code> file.
<code>options</code>	Optional. Comma-separated list of deployment options, specified as name-value pairs. For a list of valid deployment options, see <code>options</code> argument description in deploy .

Example

The following example stops the `BigApp` application.

```
wls:/offline> progress=stopApplication('BigApp')
Stopping the application...
Successfully stopped the application.
```

The previous example stores the `WLSTProgress` object returned in a user-defined variable, in this case, `progress`. You can then use the `progress` variable to check whether `stopApplication` command is running. For example:

```
wls:/mydomain/serverConfig/Servers> progress.isRunning()
0
wls:/mydomain/serverConfig/Servers>
```

For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

3.5.1.9 undeploy

Command Category: Deployment Commands

Use with WLST: Online

Description

Undeploys an application from the specified servers.

The `undeploy` command returns a `WLSTProgress` object that you can access to check the status of the command. For more information about the `WLSTProgress` object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*. In the event of an error, the command returns a `WLSTException`.

For more information about deploying and undeploying applications, see "Overview of Common Deployment Scenarios" in *Deploying Applications to Oracle WebLogic Server*.

Syntax

```
undeploy(appName,[targets],[options])
```

Argument	Definition
<code>appName</code>	Deployment name for the deployed application.
<code>targets</code>	Optional. List of the target servers from which the application will be removed. If not specified, defaults to all current targets.
<code>options</code>	Optional. Comma-separated list of deployment options, specified as name-value pairs. For a list of valid deployment options, see <code>options</code> argument description in deploy .

Example

The following example removes the `businessApp` application from all target servers. WLST waits 60,000 ms for the process to complete.

```
wls:/mydomain/serverConfig> undeploy('businessApp', timeout=60000)
Undeploying application businessApp ...
<Jul 20, 2005 9:34:15 AM EDT> <Info> <J2EE Deployment SPI> <BEA-260121>
<Initiating undeploy operation for application, businessApp [archive: null],
to AdminServer.>
Completed the undeployment of Application with status
Current Status of your Deployment:
Deployment command type: undeploy
Deployment State       : completed
Deployment Message    : no message
wls:/mydomain/serverConfig>
```

3.5.1.10 updateApplication

Command Category: Deployment Commands

Use with WLST: Online

Description

Updates an application configuration using a new deployment plan. The application must be fully configured and available in the WebLogic domain.

The `updateApplication` command returns a `WLSTProgress` object that you can access to check the status of the command. For more information about the

WLSTProgress object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*. In the event of an error, the command returns a WLSTException.

Syntax

```
updateApplication(appName, [planPath], [options])
```

Argument	Definition
<i>appName</i>	Name of the application, as specified in the current <code>plan.xml</code> file.
<i>planPath</i>	Optional. Name of the new deployment plan file. The filename can be absolute or relative to the application directory.
<i>options</i>	Optional. Comma-separated list of deployment options, specified as name-value pairs. For a list of valid deployment options, see <i>options</i> argument description in deploy .

Example

The following example updates the application configuration for BigApp using the `plan.xml` file located in `c:/myapps/BigApp/newPlan`.

```
wls:/offline> progress=updateApplication('BigApp',
'c:/myapps/BigApp/newPlan/plan.xml', stageMode='STAGE', adminMode='false')
Updating the application...
Successfully updated the application.
```

The previous example stores the WLSTProgress object returned in a user-defined variable, in this case, `progress`. You can then use the `progress` variable to access the state of the `updateApplication` command. For example:

```
wls:/mydomain/serverConfig/Servers> progress.getState()
'completed'
wls:/mydomain/serverConfig/Servers>
```

For more information about the WLSTProgress object, see "WLSTProgress Object" in *Understanding the WebLogic Scripting Tool*.

3.6.1 Diagnostics Commands

Use the WLST diagnostics commands, listed in [Table 3-6](#), to retrieve diagnostics data by executing queries against the WebLogic Diagnostics Framework (WLDF) data stores. For more information about WLDF, see *Configuring and Using the Diagnostics Framework for Oracle WebLogic Server*.

Table 3-6 Diagnostic Command for WLST Configuration

This command...	Enables you to...	Use with WLST...
captureAndSaveDiagnosticsImage	Capture a diagnostic image and download it to the client.	Online
createSystemResourceControl	Create a diagnostics system resource control using specified descriptor file.	Online

Table 3-6 (Cont.) Diagnostic Command for WLST Configuration

This command...	Enables you to...	Use with WLST...
destroySystemResourceControl	Destroy a diagnostics system resource control.	Online
disableSystemResource	Deactivate a diagnostic system resource control that is activated on a server instance.	Online
dumpDiagnosticData	Poll for live data matching the Harvester configuration for a particular WLDF system resource and dump it to a local file.	Online
enableSystemResource	Activate a diagnostic system resource on a server instance	Online
exportDiagnosticData	Execute a query against the specified log file.	Offline
exportDiagnosticDataFromServer	Execute a query on the server side and retrieves the exported WebLogic Diagnostic Framework (WLDF) data.	Online
getAvailableCapturedImages	Return a list of the previously captured diagnostic images.	Online
listSystemResourceControls	List the diagnostic system resources that are currently deployed on a server instance.	Online
mergeDiagnosticData	Merges a set of data files.	Online
saveDiagnosticImageCaptureFile	Download the specified diagnostic image capture.	Online
saveDiagnosticImageCaptureEntryFile	Download a specific entry from the diagnostic image capture.	Online

3.6.1.1 captureAndSaveDiagnosticImage

Command Category: Diagnostics Commands

Use with WLST: Online

Descriptions

Captures a diagnostic image and download it to the client.

Syntax

```
captureAndSaveDiagnosticImage([options])
```


Argument	Description
<i>options</i>	<p>This command supports the following options:</p> <ul style="list-style-type: none"> • Server—Administration Server only. The name of the target server. The default value is <code>None</code>. This option has been replaced by the <code>Target</code> option; all WLST scripts should be updated to use <code>Target</code> instead. • Target—Administration Server only. A comma-separated list of server names, cluster names, or both. The default value is <code>None</code>. • outputFile—The file in which to save the image. • outputDir—The destination directory into which image files will be copied if multiple files are retrieved. The default value is the current directory.

Example

The following example captures a diagnostic image on the server `myserver` and downloads it to the client:

```
wls:/mydomain/serverRuntime>captureAndSaveDiagnosticImage(Server='myserver')
Connecting to http://localhost:7001 with userid weblogic ...
Diagnostic Image captures.
Diagnostic Image retrieved.
```

3.6.1.2 createSystemResourceControl

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Creates a diagnostics resource from a diagnostic descriptor file without changing the domain configuration. Note that the resource remains in memory only until the server is shut down; the resource is not deployed the next time the server is booted. That is, this command effects a run-time change only, not a configuration change.

Syntax

```
createSystemResourceControl(resourceName, descriptorFile, [options])
```

Argument	Definition
<i>resourceName</i>	<p>Name of the diagnostic resource.</p> <p>Note: The resource must be enabled separately through the <code>enableSystemResource()</code> function, and the features in the resource itself must be enabled.</p>
<i>descriptorFile</i>	Local path to the diagnostic descriptor file.

Argument	Definition
<i>options</i>	<p>Server—Administration Server only. The target server name. The default value is <code>None</code>. This option has been replaced by the <code>Target</code> option; all WLST scripts should be updated to use <code>Target</code> instead.</p> <p>Target—A comma-separated list of server names, cluster names, or both. The default value is <code>None</code>.</p> <p>enabled—If set to <code>true</code>, the system resource is enabled after it has been created. The default value is <code>false</code>. Note that the resource can be enabled or disabled separately by using the <code>enableSystemResource</code> and <code>disableSystemResource</code> commands. Note also that the features in the resource must be enabled in order to be active.</p>

Examples

The following example creates a system resource control called `myExternalResource` from the diagnostic descriptor file `mywldf.xml` with a server target `myserver` and a cluster target `mycluster`. The resource control is not enabled.

```
wls:/mydomain/serverRuntime>createSystemResourceControl('myExternalResource',
'C:/temp/mywldf.xml', Target='myserver,mycluster')
```

The following example creates and enables a system resource control called `myExternalResource` from the diagnostic descriptor file `mywldf.xml` with a server target `myserver` and a cluster target `mycluster`.

```
wls:/mydomain/serverRuntime>createSystemResourceControl('myExternalResource',
'C:/temp/mywldf.xml', Target='myserver,mycluster', enabled='true')
```

The following example creates and enables a system resource control called `myExternalResource` from the diagnostic descriptor file `mywldf.xml`. Because no targets are specified, the target defaults to the currently connected server.

```
wls:/mydomain/serverRuntime>createSystemResourceControl('myExternalResource',
'C:/temp/mywldf.xml', enabled='true')
```

3.6.1.3 destroySystemResourceControl

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Destroys a diagnostics resource that was deployed from an external descriptor using the `createSystemResourceControl()` function.

Note:

To disable a diagnostics resource without destroying it, use the `disableSystemResource()` command.

Syntax

```
destroySystemResourceControl(resourceName, [options])
```

Argument	Definition
<i>resourceName</i>	Name of the diagnostic resource. Note: The resource must be enabled separately through the <code>enableSystemResource()</code> function, and the features in the resource itself must be enabled.
<i>options</i>	Server —Administration Server only. The name of the server on which the resource is currently deployed. The default value is <code>None</code> . This option has been replaced by the <code>Target</code> option; all WLST scripts should be updated to use <code>Target</code> instead. Target —A comma-separated list of server names, cluster names, or both on which the resource is currently deployed. The default value is <code>None</code> .

Example

The following example destroys a diagnostics system resource control called `myExternalResource` that was deployed on the `myserver` server.

```
wls:/mydomain/serverRuntime>destroySystemResourceControl('myExternalResource',
Target='myserver')
```

3.6.1.4 disableSystemResource

Command Category: Diagnostic Commands

Use with WLST: Online

Descriptions

Deactivates a diagnostic system resource that is enabled on a server instance.

Syntax

```
disableSystemResource(resourceName, [options])
```

Argument	Definition
<i>resourceName</i>	Name of the diagnostic resource. Note: The resource must be enabled separately through the <code>enableSystemResource()</code> function, and the features in the resource itself must be enabled.
<i>options</i>	Server —Administration Server only. The target server name. The default value is <code>None</code> . This option has been replaced by the <code>Target</code> option; all WLST scripts should be updated to use <code>Target</code> instead. Target —A comma-separated list of server names, cluster names, or both. The default value is <code>None</code> .

Example

The following example deactivates a diagnostics system resource called `mySystemResource` that is activated on the `myserver` server.

```
wls:/mydomain/
serverRuntime>disableSystemResource('mySystemResource',Target='myserver')
```

3.6.1.5 dumpDiagnosticData

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Polls for live diagnostics data matching the Harvester configuration for a particular WLDF system resource at the specified frequency and duration, and dumps it to a local file. The data is written in CSV format.

If WLDF detects a change in the set of data collected between successive sampling periods, a new output file is created and an informational message is displayed. The creation of multiple output files can result if the sampling interval is particularly long. You can merge these data files using the [mergeDiagnosticData](#) command.

Syntax

```
dumpDiagnosticData(resourceName, filename, frequency, duration, [options])
```

Argument	Definition
<i>resourceName</i>	The name of the system resource from which the data is polled. Note: The resource must be enabled separately through the <code>enableSystemResource()</code> function, and the features in the resource itself must be enabled.
<i>filename</i>	The name of the file into which the data is to be dumped.
<i>frequency</i>	The frequency (in milliseconds) at which data is polled from the system resource Harvester.
<i>duration</i>	The total duration (in milliseconds) for which the data will be collected and saved.
<i>options</i>	Server —Administration Server only. The name of the server on which the system resource is running. dateFormat —A SimpleDateFormat pattern. The default is "EEE MM/dd/YY k:mm:ss:SSS z".

Example

The following example dumps diagnostic Harvester data for `mySystemResource` on the server `myserver` to the local file `C:\temp\temp.dat`, and sets the date format to `HH:mm:ss:SSS`.

```
wls:/mydomain/serverRuntime>dumpDiagnosticData('mySystemResource',
'C:/temp/temp.dat',1000,6000,Server='myserver',dateFormat='HH:mm:ss:SSS')
```

```
Connecting to http://localhost:7001 with userid weblogic ...
Dumping data for system resource mySystemResource in file temp.data every second
for 6 seconds.
```

3.6.1.6 enableSystemResource

Command Category: Diagnostics Commands

Use with WLST: Offline

Description

Activates a diagnostic system resource on a server instance.

Syntax

```
enableSystemResource(resourceName, [options])
```

Argument	Definition
<i>resourceName</i>	Name of the diagnostic system resource.
<i>options</i>	<p>Server—Administration Server only. The target server name. The default value is None. This option has been replaced by the Target option; all WLST scripts should be updated to use Target instead.</p> <p>Target—A comma-separated list of server names, cluster names, or both. The default value is None.</p>

Example

The following example activates the diagnostic system resource `mySystemResource` on the `myServer` server.

```
wls:/mydomain/  
serverRuntime>enableSystemResource('mySystemResource',Target='myserver')
```

3.6.1.7 exportDiagnosticData

Command Category: Diagnostics Commands

Use with WLST: Offline

Description

Executes a query against the specified log file. The results are saved to an XML file.

For more information about the WebLogic Server Diagnostic Service, see *Configuring and Using the Diagnostics Framework for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
exportDiagnosticData([options])
```

Argument	Definition
<i>options</i>	<p>Optional. Comma-separated list of export diagnostic options, specified as name-value pairs. Valid options include:</p> <ul style="list-style-type: none"> • beginTimestamp—Timestamp (inclusive) of the earliest record to be added to the result set. This option defaults to 0. • endTimestamp—Timestamp (exclusive) of the latest record to be added to the result set. This option defaults to <code>Long.MAX_VALUE</code>. • exportFileName—Name of the file to which the data is exported. This option defaults to <code>export.xml</code>. • logicalName—Logical name of the log file being read. Valid values include: <code>HarvestedDataArchive</code>, <code>EventsDataArchive</code>, <code>ServerLog</code>, <code>DomainLog</code>, <code>HTTPAccessLog</code>, <code>WebAppLog</code>, <code>ConnectorLog</code>, and <code>JMSMessageLog</code>. This option defaults to <code>ServerLog</code>. • logName—Base log filename containing the log data to be exported. This option defaults to <code>myserver.log</code> in the current directory. • logRotationDir—Directory containing the rotated log files. This option defaults to <code>"."</code> (which is the same directory in which the log file is stored). • query—Expression specifying the filter condition for the data records to be included in the result set. This option defaults to <code>""</code> (empty string), which returns all data. For more information, see "WLDF Query Language" in <i>Configuring and Using the Diagnostics Framework for Oracle WebLogic Server</i>. • storeDir—Location of the diagnostic store for the server. This option defaults to <code>../data/store/diagnostics</code>.

Example

The following example executes a query against the `ServerLog` named `myserver.log` and stores the results in the file named `myExport.xml`.

```
wls:/offline/mydomain>exportDiagnosticData(logicalName='ServerLog',
logName='myserver.log', exportFileName='myExport.xml')
Input parameters: {'elfFields': '', 'logName': 'myserver.log', 'logRotationDir':
'..', 'endTimestamp': 9223372036854775807L, 'exportFileName': 'export.xml',
'storeDir': '../data/store/diagnostics', 'logicalName': 'ServerLog',
'query': '', 'beginTimestamp': 0}
```

```
Exporting diagnostic data to export.xml
<Aug 2, 2005 6:58:21 PM EDT> <Info> <Store> <BEA-280050> <Persistent store
"WLS_DIAGNOSTICS" opened: directory="c:\Oracle\Middleware
\wlserver\server\data\store\diagnostics"
writePolicy="Disabled" blockSize=512 directIO=false driver="wlfileio2">
```

3.6.1.8 exportDiagnosticDataFromServer

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Execute a query on the server side and retrieves the exported WebLogic Diagnostic Framework (WLDF) data. The results are saved to an XML file. This command requires that you have a secure connection to the Managed Server.

For more information about the WebLogic Server Diagnostic Service, see *Configuring and Using the Diagnostics Framework for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
exportDiagnosticDataFromServer([options])
```

Argument	Definition
<i>options</i>	<p>Optional. Comma-separated list of export diagnostic options, specified as name-value pairs. Valid options include:</p> <ul style="list-style-type: none"> • beginTimestamp—Timestamp (inclusive) of the earliest record to be added to the result set. This option defaults to 0. • endTimestamp—Timestamp (exclusive) of the latest record to be added to the result set. This option defaults to <code>Long.MAX_VALUE</code>. • exportFileName—Name of the file to which the data is exported. This option defaults to <code>export.xml</code>. • logicalName—Logical name of the log file being read. Valid values include: <code>HarvestedDataArchive</code>, <code>EventsDataArchive</code>, <code>ServerLog</code>, <code>DomainLog</code>, <code>HTTPAccessLog</code>, <code>WebAppLog</code>, <code>ConnectorLog</code>, and <code>JMSMessageLog</code>. This option defaults to <code>ServerLog</code>. • query—Expression specifying the filter condition for the data records to be included in the result set. This option defaults to "" (empty string), which returns all data. • server—The name of the Managed Server from which to retrieve the data. This option can be used only if you are currently connected to the Administration Server. By default, data is retrieved only from the server to which WLST is connected.

Example

The following example executes a query against the `HTTPAccessLog` and stores the results in the file named `myExport.xml`.

```
wls:/mydomain/serverRuntime>
exportDiagnosticDataFromServer(logicalName="HTTPAccessLog",
exportFileName="myExport.xml")
```

3.6.1.9 getAvailableCapturedImages

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Returns, as an array of strings, a list of the previously captured diagnostic images that are stored in the image destination directory configured on the server. The default directory is `SERVER\logs\diagnostic_images`.

This command is useful for identifying a diagnostic image capture that you want to download, or for identifying a diagnostic image capture from which you want to download a specific entry.

For more information about the WebLogic Server Diagnostic Service, see *Configuring and Using the Diagnostics Framework for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
getAvailableCapturedImages([options])
```

Argument	Definition
<i>options</i>	server —(Administration Server only) The server from which to obtain the list of available images. The default value is <code>None</code> .

Examples

The following example returns an array of strings named `images`, which contains a list of the diagnostic image capture files available in the image destination directory, and prints the entries contained in the diagnostic image named `diagnostic_image_myserver_2009_06_15_14_58_36.zip`.

```
wls:/mydomain/serverRuntime>images=getAvailableCapturedImages()
Connecting to http://localhost:7001 with userid weblogic ...
wls:/mydomain/serverRuntime>print images
'diagnostic_image_myserver_2009_06_15_14_58_36.zip'
]
```

The following example returns an array of strings named `images`, which contains a list of the diagnostic image capture files available in the image destination directory, for the Managed Server `MS1` and prints the entries contained in the diagnostic images named `diagnostic_image_MS1_2013_09_18_15_59_31.zip` and `diagnostic_image_MS1_2013_09_18_16_02_58.zip`.

```
wls:/mydomain/serverRuntime>images=getAvailableCapturedImages(Server='MS1')
Connecting to http://localhost:7001 with userid weblogic ...
wls:/mydomain/serverRuntime>print images
['diagnostic_image_MS1_2013_09_18_15_59_31.zip',
'diagnostic_image_MS1_2013_09_18_16_02_58.zip']
```

3.6.1.10 listSystemResourceControls

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Lists all the System Resource Control MBeans that are available on the current server or specified targets.

Syntax

```
listSystemResourceControls([options])
```


Argument	Definition
<i>options</i>	<p>Server—Administration Server only. The target server name from which system resource controls will be listed. The default value is <code>None</code>. This option has been replaced by the <code>Target</code> option; all WLST scripts should be updated to use <code>Target</code> instead.</p> <p>Target—A comma-separated list of server names, cluster names, or both from which system resource controls will be listed. The default value is <code>None</code>.</p>

Example

The following example lists the diagnostic system resources deployed on `myServer` server.

- The column labeled `External` identifies whether the diagnostic system resource is defined by an external resource descriptor.
- The column labeled `Enabled` identifies whether the diagnostic resource is activated on the server on which it is configured.

```
wls:/mydomain/serverConfig> listSystemResourceControls('myServer')
External  Enabled  Name
-----  -
false    false   Module-0
false    false   allprofiles
true     true    MyExternal
false    true    Low
false    false   FPP-module
```

3.6.1.11 mergeDiagnosticData

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Merges the set of data files previously generated by the `dumpDiagnosticData()` command and creates a single merged file in the directory specified by the `inputDir` argument. The data from all files in the specified directory is consolidated and written in CSV format.

Syntax

```
mergeDiagnosticData([inputDir], [options])
```

Argument	Definition
<i>inputDir</i>	The name of the source directory that contains the diagnostic data files.
<i>options</i>	toFile —The name of the target merged data file. The default is <code>merged.csv</code> .

Example

This example merges all the data files in the `/home/mydir/data` directory into a single data file called `mymergedata.csv`.

```
wls:/mydomain/serverRuntime>mergeDiagnosticData('/home/mydir/data',
toFile='mymergedata.csv')
```

3.6.1.12 saveDiagnosticImageCaptureFile

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Downloads the specified diagnostic image capture from the server to which WLST is currently connected.

For more information about the WebLogic Server Diagnostic Service, see *Configuring and Using the Diagnostics Framework for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
saveDiagnosticImageCaptureFile(imageName, [Server], [outputFile])
```

Argument	Definition
<i>imageName</i>	The name of the diagnostic image capture to download.
<i>options</i>	<p>Server—Administration Server only. Name of the server from which the image is retrieved. Note that while connected to the Administration Server and retrieving an image from a Managed Server, the appropriate Server argument must be specified. If not specified, it defaults to <code>None</code>.</p> <p>outputFile—Local path and file name in which the retrieved diagnostic image capture is to be stored. If not specified, this argument defaults to the value of <i>imageName</i> and the current working directory. If not specified, it defaults to <code>None</code>.</p>

Example

The following example retrieves the list of the diagnostic image captures that are stored in the image destination directory on the server. It then shows two uses of the `saveDiagnosticImageCaptureFile` command. In the first use, the first diagnostic image capture in the list is downloaded to the local machine using the default output file name. In the second use, the first diagnostic image capture in the list is downloaded to the local machine in the file `mylocalimg.zip`.

```
wls:/mydomain/serverRuntime>images=getAvailableCapturedImages()
Connecting to http://localhost:7001 with userid weblogic ...
wls:/mydomain/serverConfig> saveDiagnosticImageCaptureFile(images[0])
Retrieving diagnostic_image_myserver_2009_06_25_12_12_50.zip to local
path diagnostic_image_myserver_2009_06_25_12_12_50.zip
Connecting to http://localhost:7001 with userid weblogic ...
wls:/mydomain/serverConfig> saveDiagnosticImageCaptureFile(images[0],
'mylocalimg.zip')
```

```
Retrieving diagnostic_image_myserver_2009_06_25_12_12_50.zip to local
path mylocalimg.zip
Connecting to http://localhost:7001 with userid weblogic ...
```

3.6.1.13 saveDiagnosticImageCaptureEntryFile

Command Category: Diagnostics Commands

Use with WLST: Online

Description

Downloads a specific entry from the diagnostic image capture that is located on the server to which WLST is currently connected.

For more information about the WebLogic Server Diagnostic Service, see *Configuring and Using the Diagnostics Framework for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
saveDiagnosticImageCaptureEntryFile(imageName, imageEntryName, [Server],
[outputFile])
```

Argument	Definition
<i>imageName</i>	Name of the diagnostic image capture containing the desired entry.
<i>imageEntryName</i>	Name of the specific entry to be retrieved from the diagnostic image capture. This can be one of the following: <ul style="list-style-type: none"> image.summary JTA.xml FlightRecording.jfr WatchSource.xml configuration.zip WORK_MANAGER.txt JNDI_IMAGE_SOURCE.xml APPLICATION.xml InstrumentationImageSource.xml SAF.xml Logging.txt PERSISTENT_STORE.xml JDBC.txt PathService.xml JMS.xml Deployment.xml JVM.xml CONNECTOR.xml
<i>outputFile</i>	Optional. Local path and file name in which the entry retrieved from the diagnostic image capture is to be stored. If not specified, this argument defaults to the value of <code>imageEntryName</code> and the current working directory.

Argument	Definition
<i>options</i>	<p>Server—Administration Server only. Server from which image entry is retrieved. Note that while connected to the Administration Server and retrieving an image entry from a Managed Server, the appropriate <code>Server</code> argument must be specified. If not specified, it defaults to <code>None</code>.</p> <p>outputFile—Local path and file name in which the entry retrieved from the diagnostic image capture is to be stored. If not specified, this argument defaults to the value of <code>imageEntryName</code> and the current working directory. If not specified, it defaults to <code>None</code>.</p>

Example

The following example gets the list of diagnostic image captures, then uses the `saveDiagnosticImageCaptureEntryFile` twice. In the first use, this example retrieves the image summary to the local machine using the default output file name. In the second use, it retrieves the image summary to the local machine in the file `myimage.summary`.

```
wls:/mydomain/serverRuntime>images=getAvailableCapturedImages()
Connecting to http://localhost:7001 with userid weblogic ...
wls:/mydomain/serverConfig> saveDiagnosticImageCaptureEntryFile(images[0],
'image.summary')
Retrieving entry image.summary from
diagnostic_image_myserver_2009_06_25_12_12_50.zip to local path image.summary
Connecting to http://localhost:7001 with userid weblogic ...
wls:/mydomain/serverConfig> saveDiagnosticImageCaptureEntryFile(images[0],
'image.summary', 'myimage.summary')
Retrieving entry image.summary from
diagnostic_image_myserver_2009_06_25_12_12_50.zip to local path myimage.summary
Connecting to http://localhost:7001 with userid weblogic ...
```

3.7.1 Editing Commands

Use the WLST editing commands, listed in [Table 3-7](#), to interrogate and edit configuration beans.

Note:

To edit configuration beans, you must be connected to an Administration Server, and you must navigate to the edit tree and start an edit session, as described in [edit](#) and [startEdit](#), respectively.

If you connect to a Managed Server, WLST functionality is limited to browsing the configuration bean hierarchy. While you cannot use WLST to change the values of MBeans on Managed Servers, it is possible to use the Management APIs to do so. Oracle recommends that you change only the values of configuration MBeans on the Administration Server. Changing the values of MBeans on Managed Servers can lead to an inconsistent domain configuration.

For more information about editing configuration beans, see "Using WLST Online to Update an Existing Domain" in *Understanding the WebLogic Scripting Tool*.

Table 3-7 Editing Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
activate	Activate changes saved during the current editing session but not yet deployed.	Online or Offline
assign	Assign resources to one or more destinations.	Offline
cancelEdit	Cancel an edit session, release the edit lock, and discard all unsaved changes. This operation can be called by any user with administrator privileges, even if the user did not start the edit session.	Online
create	Create a configuration bean of the specified type for the current bean.	Online or Offline
delete	Delete an instance of a configuration for the current configuration bean.	Online or Offline
deleteFEHost	Delete the Frontend host for a domain.	Offline
encrypt	Encrypt the specified string.	Online
get	Return the value of the specified attribute.	Online or Offline
getActivationTask	Return the latest ActivationTask MBean on which a user can get status.	Online
invoke	Invokes a management operation on the current configuration bean.	Online
isRestartRequired	Determine whether a server restart is required.	Online
loadDB	Load SQL files into a database.	Offline
loadProperties	Load property values from a file.	Online or Offline
save	Save the edits that have been made but have not yet been saved.	Online
set	Set the specified attribute value for the current configuration bean.	Online or Offline
setOption	Set options related to a WebLogic domain creation or update.	Offline
showChanges	Show the changes made to the configuration by the current user during the current edit session.	Online
startEdit	Starts a configuration edit session on behalf of the currently connected user.	Online
stopEdit	Stop the current edit session, release the edit lock, and discard unsaved changes.	Online

Table 3-7 (Cont.) Editing Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
<code>unassign</code>	Unassign applications or resources from one or more destinations.	Offline
<code>undo</code>	Revert all unsaved or unactivated edits.	Online
<code>validate</code>	Validate the changes that have been made but have not yet been saved.	Online

3.7.1.1 activate

Command Category: Editing Commands

Use with WLST: Online

Description

Activates changes saved during the current editing session but not yet deployed. This command prints a message if a server restart is required for the changes that are being activated.

The `activate` command returns the latest `ActivationTask` MBean which reflects the state of changes that a user is currently making or has made recently. You can then invoke methods to get information about the latest Configuration Manager `activate` task in progress or just completed. In the event of an error, the command returns a `WLSTException`.

Note the following locking mechanism behaviors when using `activate`:

- When running concurrent edit sessions under the same user account using an exclusive lock, activating changes using `activate()` in one session releases the lock for that session, allowing the next session to obtain the lock. Therefore, there is no need to use `cancelEdit()` after `activate()` in the first session to release the lock. Doing so will actually cancel the edit session for the next session in the queue, potentially causing an exception.
- There is only ever one lock in a domain and only a single user can have it at any given time. Unless it is an exclusive lock, that user can acquire a lock from any number of sessions. Each session will add its changes to the existing set of changes. When `activate()` is called in any session, all changes made up to that point by all sessions are activated. Similarly, when `cancelEdit()` is called in any session, all changes made up to that point by all sessions are cancelled, the lock will be released by that user, and an edit lock can then be acquired by another user.

Syntax

```
activate([timeout], [block])
```

Argument	Definition
<i>timeout</i>	Optional. Time (in milliseconds) that WLST waits for the activation of configuration changes to complete before canceling the operation. A value of -1 indicates that the operation will not time out. This argument defaults to 300,000 ms (or 5 minutes).
<i>block</i>	Optional. Boolean value specifying whether WLST should block user interaction until the command completes. This argument defaults to <code>false</code> , indicating that user interaction is not blocked. In this case, WLST returns control to the user after issuing the command and assigns the task MBean associated with the current task to a variable that you can use to check its status. If you are importing WLST as a Jython module, as described in "Importing WLST as a Jython Module" in <i>Understanding the WebLogic Scripting Tool</i> , <i>block</i> is always set to <code>true</code> .

Example

The following example activates the changes made during the current edit session that have been saved to disk, but that have not yet been activated. The WLST waits 200,000 ms for the activation of configuration changes to complete.

```
wls:/mydomain/edit !> activate(200000, block='true')
Activating all your changes, this may take a while ...
The edit lock associated with this edit session is released once the activation is
completed.
Action completed.
wls:/mydomain/edit>
```

3.7.1.2 assign

Command Category: Editing Commands

Use with WLST: Offline

Description

Assigns resources to one or more destinations.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
assign(sourceType, sourceName, destinationType, destinationName)
```

Argument	Definition
<i>sourceType</i>	<p>Type of configuration bean to be assigned. This value can be set to one of the following values:</p> <ul style="list-style-type: none"> • <code>AppDeployment</code> • <code>Library</code> • <code>securityType</code> (such as <code>User</code>) • <code>Server</code> • <code>service</code> (such as <code>JDBCSystemResource</code>) • <code>service.SubDeployment</code>, where <code>service</code> specifies the service type of the <code>SubDeployment</code> (such as <code>JMSSystemResource.SubDeployment</code>); you can also specify nested subdeployments (such as <code>AppDeployment.SubDeployment.SubDeployment</code>) <p>Guidelines for setting this value are provided below.</p>
<i>sourceName</i>	<p>Name of the resource to be assigned. Multiple names can be specified, separated by commas, or you can use the wildcard (*) character to specify all resources of the specified type.</p> <p>Specify subdeployments using the following format: <code>service.subDeployment</code>, where <code>service</code> specifies the parent service and <code>subDeployment</code> specifies the name of the subdeployment. For example, <code>myJMSResource.myQueueSubDeployment</code>. You can also specify nested subdeployments, such as <code>MedRecEAR.MedRecAppScopedJMS.MedRecJMSServer</code>.</p> <p>Note: A given subdeployment name cannot contain a dot (.), as the <code>assign</code> command will interpret it as a nested subdeployment.</p>
<i>destinationType</i>	<p>Type of destination. Guidelines for setting this value are provided below.</p>
<i>destinationName</i>	<p>Name of the destination. Multiple names can be specified, separated by commas.</p> <p>To specify a migratable target, such as when assigning JMS services to a migratable Managed Server, include <code>migratable</code> after the destination name. For example: <code>managed1 (migratable)</code></p>

Use the following guidelines for setting the `sourceType` and `destinationType`:

- When assigning **application deployments**, set the values as follows:
 - `sourceType`: `AppDeployment`
 - `destinationType`: `Target`
- When assigning **libraries**, set the values as follows:
 - `sourceType`: `Library`
 - `destinationType`: `Target`
- When assigning **services**, set the values as follows:

- *sourceType*: Name of the specific server, such as `JDBCSystemResource`
- *destinationType*: `Target`
- When assigning **servers** to **clusters**, set the values as follows:
 - *sourceType*: `Server`
 - *destinationType*: `Cluster`
- When assigning **subdeployments**, set the values as follows:
 - *sourceType*: `service.SubDeployment`, where *service* specifies the parent of the `SubDeployment`, such as `JMSSystemResource.SubDeployment`; you can also specify nested subdeployments (such as `AppDeployment.SubDeployment.SubDeployment`)
 - *destinationType*: `Target`
- When assigning **security types**, set the values as follows:
 - *sourceType*: Name of the security type, such as `User`
 - *destinationType*: Name of the destination security type, such as `Group`

Example

The following examples:

- Assign the servers `myServer` and `myServer2` to the cluster `myCluster`.


```
wls:/offline/mydomain> assign("Server", "myServer,myServer2", "Cluster", "myCluster")
```
- Assign all servers to the cluster `myCluster`.


```
wls:/offline/mydomain> assign("Server", "*", "Cluster", "myCluster")
```
- Assign the application deployment `myAppDeployment` to the target server `newServer`.


```
wls:/offline/mydomain> assign("AppDeployment", "myAppDeployment", "Target", "newServer")
```
- Assign the user `newUser` to the group `Monitors`.


```
wls:/offline/mydomain> assign("User", "newUser", "Group", "Monitors")
```
- Assign the `SubDeployment` `myQueueSubDeployment`, which is a child of the JMS resource `myJMSResource`, to the target server `newServer`.


```
wls:/offline/mydomain> assign('JMSSystemResource.SubDeployment', 'myJMSResource.myQueueSubDeployment', 'Target', 'newServer')
```
- Assign the nested `SubDeployment` `MedRecAppScopedJMS.MedRecJMSServer`, which is a child of the `AppDeployment` `AppDeployment`, to the target server `AdminServer`.


```
wls:/offline/mydomain>assign('AppDeployment.SubDeployment.SubDeployment', 'MedRecEAR.MedRecAppScopedJMS.MedRecJMSServer', 'Target', 'AdminServer')
```

- Assign the JMS file store `myFileStore` to a migratable target Managed Server called `managed1`.

```
wls:/offline/mydomain>assign('FileStore', 'myFileStore', 'Target',
'managed1 (migratable)')
```

3.7.1.3 cancelEdit

Command Category: Editing Commands

Use with WLST: Online

Description

Cancels an edit session, releases the edit lock, and discards all unsaved changes.

The user issuing this command does not have to be the current editor; this allows an administrator to cancel an edit session, if necessary, to enable other users to start an edit session.

In the event of an error, the command returns a `WLSTException`.

For additional information about `cancelEdit`, see the [activate](#) command.

Syntax

```
cancelEdit([defaultAnswer])
```

Argument	Definition
<i>defaultAnswer</i>	Optional. Default response, if you would prefer not to be prompted at the command line. Valid values are <code>y</code> and <code>n</code> . This argument defaults to null, and WLST prompts you for a response.

Example

The following example cancels the current editing session. WLST prompts for verification before canceling.

```
wls:/mydomain/edit !> cancelEdit()
Sure you would like to cancel the edit session? (y/n)y
Edit session is cancelled successfully
wls:/mydomain/edit>
```

3.7.1.4 create

Command Category: Editing Commands

Use with WLST: Online or Offline

Description

Creates a configuration bean of the specified type for the current bean.

The `create` command returns a stub for the newly created configuration bean. In the event of an error, the command returns a `WLSTException`.

Note:

Child types must be created under an instance of their parent type. You can only create configuration beans that are children of the current Configuration Management Object (cmo) type. For more information about the cmo variable, see *Changing the Current Management Object in Understanding the WebLogic Scripting Tool*.

Please note the following when using the `create` command with **WLST online**:

- You must be connected to an Administration Server. You cannot use the `create` command for runtime MBeans or when WLST is connected to a Managed Server instance.
- You must navigate to the edit configuration MBean hierarchy using the `edit` command before issuing this command. See [edit](#).
- You can use the `create` command to create a WebLogic Server configuration MBean that is a child of the current MBean type.

Please note the following when using the `create` command with **WLST offline**:

- When using WLST offline, the following characters are not valid in object names: period (.), forward slash (/), or backward slash (\).

For more information about:

- Creating MBeans, see *Understanding WebLogic Server MBeans in Developing Custom Management Utilities with JMX*.
- Examples of creating specific types of MBean resources, for example, a JMS or JDBC system resource, refer to the WLST sample scripts installed with your product, as described in *WLST Sample Scripts in Understanding the WebLogic Scripting Tool*.
- MBeans, their child types, attributes, and operations, see *MBean Reference for Oracle WebLogic Server*.

Syntax

```
create(name, childMBeanType, [baseProviderType])
```

Argument	Definition
<i>name</i>	Name of the configuration bean that you are creating.
<i>childMBeanType</i>	Type of configuration bean that you are creating. You can create instances of any type defined in the <code>config.xml</code> file except custom security types. For more information about valid configuration beans, see <i>MBean Reference for Oracle WebLogic Server</i> .
<i>baseProviderType</i>	When creating a security provider, specifies the base security provider type, for example, <code>AuthenticationProvider</code> . This argument defaults to <code>None</code> .

Example

The following example creates a child configuration bean of type `Server` named `newServer` for the current configuration bean, storing the stub as `server1`:

```
wls:/mydomain/edit !> server1=create('newServer','Server')
Server with name 'newServer' has been created successfully.
wls:/mydomain/edit !> server1.getName()
'newServer'
wls:/mydomain/edit !>
```

The following example creates an authentication provider security provider called `myProvider`:

```
wls:/mydomain/edit !> cd('SecurityConfiguration/mydomain/Realms/myrealm')
wls:/mydomain/edit !>
create('myProvider','weblogic.security.providers.authentication.SQLAuthenticator'
,'AuthenticationProvider')
wls:/mydomain/edit !> cd('AuthenticationProviders/myProvider')
wls:/mydomain/edit !> set('ControlFlag','REQUIRED')
```

The following example creates a machine named `highsec_nm` and sets attributes for the associated Node Manager.

```
wls:/mydomain/edit !> create('highsec_nm','Machine')
wls:/mydomain/edit !> cd('Machine/highsec_nm/NodeManager/highsec_nm')
wls:/mydomain/edit !> set('DebugEnabled','true')
wls:/mydomain/edit !> set('ListenAddress','innes')
wls:/mydomain/edit !> set('NMType','SSL')
wls:/mydomain/edit !> set('ShellCommand','')
```

3.7.1.5 delete

Command Category: Editing Commands

Use with WLST: Online or Offline

Description

Deletes an instance of a configuration bean of the specified type for the current configuration bean.

In the event of an error, the command returns a `WLSTException`.

Note:

You can only delete configuration beans that are children of current Configuration Management Object (cmo) type. For more information about the `cmo` variable, see *Changing the Current Management Object in Understanding the WebLogic Scripting Tool*.

Syntax

```
delete(name, childMBeanType)
```

Argument	Definition
<i>name</i>	Name of the child configuration bean to delete.
<i>childMBeanType</i>	Type of the configuration bean to be deleted. You can delete instances of any type defined in the <code>config.xml</code> file. For more information about valid configuration beans, see <i>MBean Reference for Oracle WebLogic Server</i> .

Example

The following example deletes the configuration bean of type `Server` named `newServer`:

```
wls:/mydomain/edit !> delete('newServer','Server')
Server with name 'newServer' has been deleted successfully.
wls:/mydomain/edit !>
```

3.7.1.6 deleteFEHost

Command Category: Editing Commands

Use with WLST: Offline

Description

Deletes the plain, SSL and default URL values for the domain Frontend Host from the service table.

Syntax

```
deleteFEHost()
```

Example

The following example deletes the domain Frontend Host URL values for the domain `mydomain`.

```
wls:/offline> readDomain("/domains/mydomain")
wls:/offline> deleteFEHost()
```

3.7.1.7 encrypt

Command Category: Editing Commands

Use with WLST: Online

Description

Encrypts the specified string. You can then use the encrypted string in your configuration file or as an argument to a command.

You must invoke this command once for each WebLogic domain in which you want to use the encrypted string. The string can be used only in the WebLogic domain for which it was originally encrypted.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
encrypt(obj, [domainDir])
```

Argument	Definition
<i>obj</i>	String that you want to encrypt.
<i>domainDir</i>	Optional. Absolute path name of a WebLogic domain directory. The encrypted string can be used only by the WebLogic domain that is contained within the specified directory. If you do not specify this argument, the command encrypts the string for use in the WebLogic domain to which WLST is currently connected.

Example

The following example encrypts the specified string using the `security/SerializedSystemIni.dat` file in the specified WebLogic domain directory.

```
wls:/mydomain/serverConfig> es=encrypt('myPassword','c:/Oracle/Middleware/domains/mydomain')
```

3.7.1.8 get

Command Category: Editing Commands

Use with WLST: Online or Offline

Description

Returns the value of the specified attribute. For more information about the MBean attributes that can be viewed, see *Oracle WebLogic Server MBean Reference*. In the event of an error, the command returns a `WLSTException`.

Note:

You can list all attributes and their current values by entering `ls('a')`. For more information, see [ls](#).

Alternatively, you can use the `cmo` variable to perform any `get` method on the current configuration bean. For example:

```
cmo.getListenPort()
```

For more information about the `cmo` variable, see *Changing the Current Management Object* in *Understanding the WebLogic Scripting Tool*.

Syntax

```
get(attrName)
```

Argument	Definition
<i>attrName</i>	Name of the attribute to be displayed. You can specify the full pathname of the attribute. If no pathname is specified, the attribute is displayed for the current configuration object.

Example

The following example returns the value of the `AdministrationPort` for the current configuration bean.

```
wls:/mydomain/serverConfig> get('AdministrationPort')
9002
```

Alternatively, you can use the `cmo` variable:

```
cmo.getAdministrationPort()
```

3.7.1.9 getActivationTask

Command Category: Editing Commands

Use with WLST: Online

Description

Return the latest `ActivationTask` MBean on which a user can get status. The `ActivationTask` MBean reflects the state of changes that a user has made recently in WLST. You can then invoke methods to get information about the latest Configuration Manager activate task in progress or just completed. In the event of an error, the command returns a `WLSTException`.

Note:

If you have activated changes outside of WLST, use the [ConfigurationManagerMBean](#) `getActivationTasks()` method to get access to Activation Tasks created in other tools.

Syntax

```
getActivationTask()
```

Example

The following example returns the latest `ActivationTask` MBean on which a user can get status and stores it within the task variable.

```
wls:/mydomain/edit> task=getActivationTask()
wls:/mydomain/edit> if task!=None:
...   task.getState()
...
4
```

3.7.1.10 invoke

Command Category: Editing Commands

Use with WLST: Online

Description

Invokes a management operation on the current configuration bean. Typically, you use this command to invoke operations other than the `get` and `set` operations that most WebLogic Server configuration beans provide. The class objects are loaded through the same class loader that is used for loading the configuration bean on which the action is invoked.

You cannot use the `invoke` command when WLST is connected to a Managed Server instance.

If successful, the `invoke` command returns the object that is returned by the operation invoked. In the event of an error, the command returns a `WLSTException`.

Syntax

```
invoke(methodName, parameters, signatures)
```

Argument	Definition
<i>methodName</i>	Name of the method to be invoked.
<i>parameters</i>	An array of parameters to be passed to the method call.
<i>signatures</i>	An array containing the signature of the action.

Example

The following example invokes the `lookupServer` method on the current configuration bean.

```
wls:/mydomain/config> objs =
jarray.array([ java.lang.String("oamserver") ], java.lang.Object)
wls:/mydomain/edit> strs = jarray.array(["java.lang.String"], java.lang.String)
wls:/mydomain/edit> invoke('lookupServer', objs, strs)
true
wls:/mydomain/edit>
```

3.7.1.11 isRestartRequired

Command Category: Editing Commands

Use with WLST: Online

Description

Determines whether a server restart is required.

If you invoke this command while an edit session is in progress, the response is based on the edits that are currently in progress. If you specify the name of an attribute, WLST indicates whether a server restart is required for that attribute only.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
isRestartRequired([attributeName])
```

Argument	Definition
<i>attributeName</i>	Optional. Name of a specific attribute for which you want to check if a server restart is required.

Example

The following example specifies whether a server restart is required for all changes made during the current WLST session.

```
wls:/mydomain/edit !> isRestartRequired()
Server re-start is REQUIRED for the set of changes in progress.
```

The following attribute(s) have been changed on MBeans that require server re-start.
MBean Changed : mydomain:Name=mydomain,Type=Domain
Attributes changed : AutoConfigurationSaveEnabled

The following example specifies whether a server restart is required if you edit the ConsoleEnabled attribute.

```
wls:/mydomain/edit !> isRestartRequired("ConsoleEnabled")
Server re-start is REQUIRED if you change the attribute ConsoleEnabled wls:/mydomain/
edit !>
```

3.7.1.12 loadDB

Command Category: Editing Commands

Use with WLST: Offline

Description

Loads SQL files into a database.

The `loadDB` command loads the SQL files from a template file. This command can only be issued after a domain template or extension template has been loaded into memory (see [readDomain](#) and [readTemplate](#)).

Before executing this command, ensure that the following conditions are true:

- The appropriate database is running.
- SQL files exist for the specified database and version.

To verify that the appropriate SQL files exist, open the domain template and locate the relevant SQL file list, `jdbc.index`, in the `_jdbc_` directory. For example, for Oracle 9i, the SQL file list is located at `_jdbc_\Oracle\9i\jdbc.index`.

The command fails if the above conditions are not met.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
loadDB(dbVersion, datasourceName, dbCategory)
```

Argument	Definition
<i>dbVersion</i>	Version of the database for which the SQL files are intended to be used.
<i>datasourceName</i>	Name of the JDBC data source to be used to load SQL files.
<i>dbCategory</i>	Optional. Database category associated with the specified data source. For more information about the <code>jdbc.index</code> file and database categories, see Files Typically Included in a Template in the <i>Oracle WebLogic Server Domain Template Reference</i> .

Example

The following example loads SQL files related to Drop/Create P13N Database Objects intended for version 5.1 of the database, using the `p13nDataSource` JDBC data source.

```
wls:/offline/mydomain> loadDB('5.1', 'p13nDataSource', 'Drop/Create P13N Database Objects')
```

3.7.1.13 loadProperties

Command Category: Editing Commands

Use with WLST: Online and Offline

Description

Loads property values from a file and makes them available in the WLST session.

This command cannot be used when you are importing WLST as a Jython module, as described in Importing WLST as a Jython Module in *Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
loadProperties(fileName)
```

Argument	Definition
<i>fileName</i>	Properties file pathname.

Example

This example gets and sets the properties file values.

```
wls:/mydomain/serverConfig> loadProperties('c:/temp/myLoad.properties')
```

3.7.1.14 save

Command Category: Editing Commands

Use with WLST: Online

Description

Saves the edits that have been made but have not yet been saved. This command is only valid when an edit session is in progress. For information about starting an edit session, see [startEdit](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
save()
```

Example

The following example saves the edits that have not yet been saved to disk.

```
wls:/mydomain/edit !> save()
Saving all your changes ...
Saved all your changes successfully.
wls:/mydomain/edit !>
```

3.7.1.15 set

Command Category: Editing Commands

Use with WLST: Online or Offline

Description

Sets the value of a specified attribute in the current management object. When using WLST offline, this command writes the attribute value to the domain configuration files. When using WLST online, this command sets the value of an MBean attribute. Online changes are written to the domain configuration file when you activate your edits.

In the event of an error, the command returns a `WLSTException`.

For information about setting encrypted attributes (all encrypted attributes have names that end with `Encrypted`), see *Writing and Reading Encrypted Configuration Values* in *Understanding the WebLogic Scripting Tool*.

Note the following when using **WLST online**:

- You must be in an edit session to use this command. See [startEdit](#).
- You cannot use this command when WLST is connected to a Managed Server.
- As an alternative to this command, you can use the `cmo` variable with the following syntax:

```
cmo.setAttrName(value)
```

For example, instead of using `set('ListenPort', 7011)`, you can use:

```
cmo.setListenPort(7011)
```

For more information about the `cmo` variable, see *Changing the Current Management Object* in *Understanding the WebLogic Scripting Tool*.

Syntax

```
set(attrName, value)
```

Argument	Definition
<i>attrName</i>	Name of the attribute to be set.
<i>value</i>	Value of the attribute to be set. Note: This value should <i>not</i> be enclosed in single or double quotes. See the examples.

Example

The following example sets the `ArchiveConfigurationCount` attribute of `DomainMBean` to 10:

```
wls:/mydomain/serverConfig> set('ArchiveConfigurationCount', 10)
```

The following example sets the long value of the `T1TimerInterval` attribute of a custom Mbean to 123:

```
wls:/mydomain/serverConfig> set('T1TimerInterval', Long(123))
```

The following example sets the boolean value of the `MyBooleanAttribute` attribute of a custom Mbean to true:

```
wls:/mydomain/serverConfig> set('MyBooleanAttribute', Boolean(true))
```

3.7.1.16 setOption

Command Category: Editing Commands

Use with WLST: Offline

Description

Sets options related to a WebLogic domain creation or update. In the event of an error, the command returns a `WLSTException`.

Syntax

```
setOption(optionName, optionValue)
```

Argument	Definition
<i>optionName</i>	Name of the option to set. See the following table for possible values.
<i>optionValue</i>	Value for the option. Note: Boolean values can be specified as a String (<code>true</code> , <code>false</code>) or integer (<code>0</code> , <code>1</code>).

Option Name	Used for	Description
DomainName	domain creation	Name of the WebLogic domain. By default, the name of the WebLogic domain is derived from the name of the domain directory. For example, for a WebLogic domain saved to <code>c:\Oracle\Middleware\user_projects\domains\myMedrec</code> , the domain name is <code>myMedrec</code> . By setting <code>DomainName</code> , the name of the created domain will be independent of the domain directory name.
JavaHome	domain creation	Home directory for the JVM to be used when starting the server. The default for this option depends on the platform on which you install WebLogic Server.
NodeManagerType	domain creation	<p>The Node Manager type to be used to create a Node Manager for the domain. This option defaults to <code>PerDomainNodeManager</code>.</p> <ul style="list-style-type: none"> <code>PerDomainNodeManager</code>—if you specify this option, the Node Manager home is predefined within the domain as <code><domain_name>/nodemanager</code> and you cannot edit the Node Manager home. The Node Manager for each domain can have a different configuration, as determined by the files in this directory. <code>CustomLocationNodeManager</code>—specify this option if you want the per-domain Node Manager configuration files to be created in a specific location. The specified directory must be empty. <code>ManualNodeManagerSetup</code>—specify this option if you want to manually set up the Node Manager configuration. If selected, the Node Manager configuration for the domain is ignored, and you must manually configure any required changes to the existing Node Manager configuration. <p>Note: When upgrading a domain and changing from a per-host Node Manager configuration to a per-domain Node Manager configuration, if you are using custom scripts to start and stop the WebLogic Server environment, you must manually update the scripts to change the Node Manager home location to the new domain-based location.</p> <p>For more information about Node Manager types, see <i>Configuring Java Node Manager in Administering Node Manager for Oracle WebLogic Server</i>.</p> <p>For information on per-domain and per-host Node Manager configurations, see <i>Default Node Manager Configuration in Administering Node Manager for Oracle WebLogic Server</i></p>
NodeManagerHome	domain creation	Node Manager home is the Node Manager directory to be created for the domain. This option is used only when <code>CustomLocationNodeManager</code> is specified for <code>NodeManagerType</code> .
OldNodeManagerHome	domain reconfiguration	A Node Manager home directory from which the existing configuration is taken for Node Manager upgrade during domain reconfiguration. This option applies only when the Node Manager upgrade type is <code>Migrate</code> .

Option Name	Used for	Description
NodeManagerUpgradeType	domain reconfiguration	Node Manager upgrade can be <i>New</i> or <i>Migrate</i> . <i>New</i> does not use an existing Node Manager configuration and creates the specified type of Node Manager. <i>Migrate</i> migrates the Node Manager configuration from the Node Manager home specified by the <code>OldNodeManagerHome</code> option. This option is used for upgrading Node Manager during domain reconfiguration when the Node Manager type is either <code>PerDomainNodeManager</code> or <code>CustomLocationNodeManager</code> .
NodeManagerUpgradeOverwriteDefault	domain reconfiguration	A boolean flag that is used to overwrite the Oracle-recommended default values for mandatory Node Manager configuration. This option is used only when Node Manager upgrade type is <i>Migrate</i> . The default value is <code>false</code> .
OverwriteDomain	domain creation	Boolean value specifying whether to allow an existing WebLogic domain to be overwritten. This option defaults to <code>false</code> .
ServerStartMode	domain creation	Mode to use when starting the server for the newly created WebLogic domain. This value can be <code>dev</code> (development) or <code>prod</code> (production). This option defaults to <code>dev</code> .
AllowCasualUpdate	domain upgrade	Boolean value specifying whether to allow a WebLogic domain to be updated without adding an extension template. This option defaults to <code>true</code> .
ReplaceDuplicates	domain upgrade	Boolean value specifying whether to keep original configuration elements in the WebLogic domain or replace the elements with corresponding ones from an extension template when there is a conflict. This option defaults to <code>true</code> .
AppDir	domain creation and domain upgrade	Application directory to be used when a separate directory is desired for applications, as specified by the template. This option defaults to <code>WL_HOME/user_projects/applications/domainname</code> , where <code>WL_HOME</code> specifies the WebLogic Server home directory and <code>domainname</code> specifies the name of the WebLogic domain.
AutoAdjustSubDeploymentTarget	domain creation and domain upgrade	Boolean value specifying whether WLST automatically adjusts targets for the subdeployments of AppDeployments. This option defaults to <code>true</code> . To deactivate this feature, set the option to <code>false</code> and explicitly set the targeting for AppDeployment subdeployments before writing or updating the WebLogic domain or domain template.
AutoDeploy	domain creation and domain upgrade	Boolean value specifying whether to activate auto deployment when a cluster or multiple Managed Servers are created. This option defaults to <code>true</code> . To deactivate this feature, set the option to <code>false</code> on the first line of your script.

Example

The following example sets the `AutoDeploy` option to `false`:

```
wls:/offline> setOption('AutoDeploy', 'false')
```

3.7.1.17 showChanges

Command Category: Editing Commands

Use with WLST: Online

Description

Shows the changes made to the configuration by the current user during the current edit session. In the event of an error, the command returns a `WLSTException`.

Syntax

```
showChanges([onlyInMemory])
```

Argument	Definition
<i>onlyInMemory</i>	Optional. Boolean value specifying whether to display only the changes that have not yet been saved. This argument defaults to <code>false</code> , indicating that all changes that have been made from the start of the session are displayed.

Example

The following example shows all of the changes made by the current user to the configuration since the start of the current edit session.

```
wls:/mydomain/edit !> showChanges()
Changes that are in memory and saved to disc but not yet activated are:

MBean Changed           : com.bea:Name=basicWLSDomain,Type=Domain
Operation Invoked       : add
Attribute Modified      : Machines
Attributes Old Value    : null
Attributes New Value    : Mach1
Server Restart Required : false

MBean Changed           : com.bea:Name=basicWLSDomain,Type=Domain
Operation Invoked       : add
Attribute Modified      : Servers
Attributes Old Value    : null
Attributes New Value    : myserver
Server Restart Required : false
```

3.7.1.18 startEdit

Command Category: Editing Commands

Use with WLST: Online

Description

Starts a configuration edit session on behalf of the currently connected user. You must navigate to the edit configuration MBean hierarchy using the `edit` command before issuing this command. For more information, see [edit](#).

This command must be called prior to invoking any command to modify the WebLogic domain configuration.

In the event of an error, the command returns a `WLSTException`.

Note:

WLST automatically starts an edit session if it detects that there is an edit session that is already in progress by the same user, which may have been started via the WebLogic Server Administration Console or another WLST session.

Syntax

```
startEdit([waitTimeInMillis], [timeoutInMillis], [exclusive])
```

Argument	Definition
<i>waitTimeInMillis</i>	Optional. Time (in milliseconds) that WLST waits until it gets a lock, in the event that another user has a lock. This argument defaults to 0 ms.
<i>timeoutInMillis</i>	Optional. Timeout (in milliseconds) that WLST waits to release the edit lock. This argument defaults to -1 ms, indicating that this edit session never expires.
<i>exclusive</i>	Optional. Specifies whether the edit session should be an exclusive session. If set to <code>true</code> , if the same owner enters the <code>startEdit</code> command, WLST waits until the current edit session lock is released before starting the new edit session. The exclusive lock times out according to the time specified in <i>timeoutInMillis</i> . This argument defaults to <code>false</code> .

Example

The following example starts an edit session with a 1-minute timeout waiting for a lock and a 2-minute timeout waiting to release the edit lock:

```
wls:/mydomain/edit> startEdit(60000, 120000)
Starting an edit session ...
Started edit session, please be sure to save and activate your changes once you are
done.
wls:/mydomain/edit !>
```

3.7.1.19 stopEdit

Command Category: Editing Commands

Use with WLST: Online

Description

Stops the current edit session, releases the edit lock, and discards unsaved changes.

In the event of an error, the command returns a `WLSTException`.

Note:

`stopEdit()` cannot cancel the edit session of a different user, nor can it stop the exclusive edit sessions acquired via other sessions. `stopEdit()` can only stop the non-exclusive edit sessions for the same user.

Syntax

```
stopEdit([defaultAnswer])
```

Argument	Definition
<i>defaultAnswer</i>	Optional. Default response, if you would prefer not to be prompted at the command line. Valid values are <code>y</code> and <code>n</code> . This argument defaults to null, and WLST prompts you for a response.

Example

The following example stops the current editing session. WLST prompts for verification before canceling.

```
wls:/mydomain/edit !> stopEdit()
Sure you would like to stop your edit session? (y/n)
y
Edit session has been stopped successfully.
wls:/mydomain/edit>
```

3.7.1.20 unassign

Command Category: Editing Commands

Use with WLST: Offline

Description

Unassign applications or resources from one or more destinations.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
unassign(sourceType, sourceName, destinationType, destinationName)
```

Argument	Definition
<i>sourceType</i>	Type of configuration bean to be unassigned. This value can be set to one of the following values: <ul style="list-style-type: none"> • <code>AppDeployment</code> • <code>Library</code> • <code>securityType</code> (such as <code>User</code>) • <code>Server</code> • <code>service</code> (such as <code>JDBCSystemResource</code>) • <code>service.SubDeployment</code>, where <code>service</code> specifies the service type of the <code>SubDeployment</code> (such as <code>JMSSystemResource.SubDeployment</code>); you can also specify nested subdeployments (such as <code>AppDeployment.SubDeployment.SubDeployment</code>)
<i>sourceName</i>	Name of the application or resource to be unassigned. Multiple names can be specified, separated by commas, or you can use the wildcard (*) character to specify all resources of the specified type. Specify subdeployments using the following format: <code>service.subDeployment</code> , where <code>service</code> specifies the parent service and <code>subDeployment</code> specifies the name of the subdeployment. For example, <code>myJMSResource.myQueueSubDeployment</code> . You can also specify nested subdeployments, such as <code>MedRecEAR.MedRecAppScopedJMS.MedRecJMSServer</code> .
<i>destinationType</i>	Type of destination. Guidelines for setting this value are provided below.
<i>destinationName</i>	Name of the destination. Multiple names can be specified, separated by commas.

Use the following guidelines for setting the `sourceType` and `destinationType`:

- When unassigning **application deployments**, set the values as follows:
 - `sourceType`: `AppDeployment`
 - `destinationType`: `Target`
- When unassigning **libraries**, set the values as follows:
 - `sourceType`: `Library`
 - `destinationType`: `Target`
- When unassigning **security types**, set the values as follows:
 - `sourceType`: Name of the security type, such as `User`
 - `destinationType`: Name of the destination security type, such as `Group`
- When unassigning **servers from clusters**, set the values as follows:
 - `sourceType`: `Server`

- *destinationType*: Cluster
- When unassigning **services**, set the values as follows:
 - *sourceType*: Name of the specific server, such as `JDBCSystemResource`
 - *destinationType*: Target
- When unassigning **subdeployments**, set the values as follows:
 - *sourceType*: `service.SubDeployment`, where *service* specifies the parent of the SubDeployment, such as `JMSSystemResource.SubDeployment`; you can also specify nested subdeployments (such as `AppDeployment.SubDeployment.SubDeployment`)
 - *destinationType*: Target

Example

The following examples:

- Unassign the servers `myServer` and `myServer2` from the cluster `myCluster`.


```
wls:/offline/medrec> unassign("Server", "myServer,myServer2", "Cluster", "myCluster")
```
- Unassign all servers from the cluster `myCluster`.


```
wls:/offline/mydomain> unassign("Server", "*", "Cluster", "myCluster")
```
- Unassign the user `newUser` from the group `Monitors`.


```
wls:/offline/medrec> unassign("User", "newUser", "Group", "Monitors")
```
- Unassign the application deployment `myAppDeployment` from the target server `newServer`.


```
wls:/offline/mydomain> unassign("AppDeployment", "myAppDeployment", "Target", "newServer")
```
- Unassign the nested SubDeployment `MedRecAppScopedJMS.MedRecJMSServer`, which is a child of the AppDeployment `AppDeployment`, from the target server `AdminServer`.


```
wls:/offline/mydomain> assign('AppDeployment.SubDeployment.SubDeployment', 'MedRecEAR.MedRecAppScopedJMS.MedRecJMSServer', 'Target', 'AdminServer')
```

3.7.1.21 undo

Command Category: Editing Commands

Use with WLST: Online

Description

Reverts all unsaved or unactivated edits.

You specify whether to revert all unactivated edits (including those that have been saved to disk), or all edits made since the last save operation. This command does not release the edit session.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
undo([unactivatedChanges], [defaultAnswer])
```

Argument	Definition
<i>unactivatedChanges</i>	Optional. Boolean value specifying whether to undo all unactivated changes, including edits that have been saved to disk. This argument defaults to <code>false</code> , indicating that all edits since the last save operation are reverted.
<i>defaultAnswer</i>	Optional. Default response, if you would prefer not to be prompted at the command line. Valid values are <code>y</code> and <code>n</code> . This argument defaults to null, and WLST prompts you for a response.

Example

The following example reverts all changes since the last `save` operation. WLST prompts for verification before reverting.

```
wls:/mydomain/edit !> undo()
Sure you would like to undo your changes? (y/n)
y
Discarded your in-memory changes successfully.
wls:/mydomain/edit>
```

The following example reverts all unactivated changes. WLST prompts for verification before reverting.

```
wls:/mydomain/edit !> undo('true')
Sure you would like to undo your changes? (y/n)
y
Discarded all your changes successfully.
wls:/mydomain/edit>
```

3.7.1.22 validate

Command Category: Editing Commands

Use with WLST: Online

Description

Validates the changes that have been made but have not yet been saved. This command enables you to verify that all changes are valid before saving them.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
validate()
```

Example

The following example validates all changes that have been made but have not yet been saved.

```
wls:/mydomain/edit !> validate()
Validating changes ...
Validated the changes successfully
```

3.8.1 Information Commands

Use the WLST information commands, listed in [Table 3-8](#), to interrogate domains, servers, and variables, and provide configuration bean, runtime bean, and WLST-related information.

Table 3-8 Information Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
addListener	Add a JMX listener to the specified MBean.	Online
configToScript	Convert an existing server configuration (<code>config</code> directory) to an executable WLST script	Online or Offline
dumpStack	Display stack trace from the last exception that occurred while performing a WLST action, and reset the stack trace.	Online or Offline
dumpVariables	Display all variables used by WLST, including their name and value.	Online or Offline
find	Find MBeans and attributes in the current hierarchy.	Online
getConfigManager	Return the latest <code>ConfigurationManagerBean</code> MBean which manages the change process.	Online
getMBean	Return the MBean by browsing to the specified path.	Online
getMBeanInfo	Return the <code>MBeanInfo</code> for the specified <code>MBeanType</code> or the <code>cmo</code> variable.	Online
getPath	Return the MBean path for the specified MBean instance.	Online
listChildTypes	List all the children MBeans that can be created or deleted for the <code>cmo</code> type.	Online
lookup	Look up the specified MBean.	Online
ls	List all child beans and/or attributes for the current configuration or runtime bean.	Online or Offline
man	Display help from <code>MBeanInfo</code> for the current MBean or its specified attribute.	Online
redirect	Redirect WLST output to the specified filename.	Online
removeListener	Remove a listener that was previously defined.	Online
showListeners	Show all listeners that are currently defined.	Online
startRecording	Record all user interactions with WLST; useful for capturing commands to replay.	Online or Offline

Table 3-8 (Cont.) Information Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
<code>state</code>	Returns a map of servers or clusters and their state using Node Manager.	Online
<code>stopRecording</code>	Stop recording WLST commands.	Online or Offline
<code>stopRedirect</code>	Stop redirection of WLST output to a file.	Online or Offline
<code>storeUserConfig</code>	Create a user configuration file and an associated key file.	Online
<code>threadDump</code>	Display a thread dump for the specified server.	Online or Offline
<code>viewMBean</code>	Display information about an MBean, such as the attribute names and values, and operations.	Online
<code>writeIniFile</code>	Convert WLST definitions and method declarations to a Python (.py) file.	Online or Offline

3.8.1.1 addListener

Command Category: Information Commands

Use with WLST: Online

Description

Adds a JMX listener to the specified MBean. Any changes made to the MBean are reported to standard out and/or are saved to the specified configuration file.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
addListener(mbean, [attributeNames], [logFile], [listenerName])
```

Argument	Definition
<code>mbean</code>	Name of the MBean or MBean object to listen on.
<code>attributeNames</code>	Optional. Comma-separated list of all attribute names on which you would like to add a JMX listener. This argument defaults to null, and adds a JMX listener for all attributes.
<code>logFile</code>	Optional. Name and location of the log file to which you want to write listener information. This argument defaults to standard out.
<code>listenerName</code>	Optional. Name of the JMX listener. This argument defaults to a WLST-generated name.

Example

The following example defines a JMX listener on the `cmo` MBean for the `Notes` and `ArchiveConfigurationCount` attributes. The listener is named `domain-listener` and is stored in `./listeners/domain.log`.

```
wls:/mydomain/serverConfig> addListener(cmo, "Notes,ArchiveConfigurationCount",
"./listeners/domain.log","domain-listener")
```

3.8.1.2 configToScript

Command Category: Information Commands

Use with WLST: Online or Offline

Converts an existing server configuration (`config` directory) to an executable WLST script. You can use the resulting script to re-create the resources on other servers.

Note:

If you use `configToScript` for a domain that contains other Fusion Middleware components in addition to WebLogic Server, be aware that `configToScript` does not include the configuration for those components in the resulting WLST script. Only the WebLogic Server configuration is included in the script.

Oracle strongly recommends that you use `pack` and `unpack` to create the domain on remote servers. See *Overview of the Pack and Unpack Commands* in *Creating Templates and Domains Using the Pack and Unpack Commands*.

The `configToScript` command creates the following files:

- A WLST script that contains the commands needed to recreate the configuration.
- A properties file that contains domain-specific values. You can update the values in this file to create new domains that are similar to the original configuration.
- A user configuration file and an associated key file to store encrypted attributes. The user configuration file contains the encrypted information. The key file contains a secret key that is used to encrypt and decrypt the encrypted information.

When you run the generated script:

- If a server is currently running, WLST will try to connect using the values in the properties file and then run the script commands to create the server resources.
- If no server is currently running, WLST will start a server with the values in the properties file, run the script commands to create the server resources, and shutdown the server. This may cause WLST to exit from the command shell.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
configToScript([configPath], [pyPath], [overwrite], [propertiesFile],
[createDeploymentScript])
```

Argument	Definition
<i>configPath</i>	Optional. Path to the domain directory that contains the configuration that you want to convert. This argument defaults to the directory from which you start WLST (. /).
<i>pyPath</i>	Optional. Path and filename to which you want to write the converted WLST script. This argument defaults to ./config/config.py.
<i>overwrite</i>	Optional. Boolean value specifying whether the script file should be overwritten if it already exists. This argument defaults to true, indicating that the script file is overwritten.
<i>propertiesFile</i>	Optional. Path to the directory in which you want WLST to write the properties files. This argument defaults to the pathname specified for the scriptPath argument.
<i>createDeploymentScript</i>	Optional. Boolean value specifying whether WLST creates a script that performs deployments only. This argument defaults to false, indicating that a deployment script is not created.

Example

The following example converts the configuration to a WLST script `config.py`. By default, the configuration file is loaded from `./config`, the script file is saved to `./config/config.py`, and the properties files is saved to `./config/config.py.properties`.

```
wls:/offline> configToScript()
configToScript is loading configuration from c:\Oracle\Middleware
\user_projects\domains\wls\config\config.xml ...
Completed configuration load, now converting resources to wlst script...
configToScript completed successfully
The WLST script is written to c:\Oracle\Middleware
\user_projects\domains\wls\config\config.py
and the properties file associated with this script is written to c:\Oracle\
Middleware\user_projects\domains\wls\config\config.py.properties
wls:/offline>
```

The following example converts server resources configured in the file `c:\Oracle\Middleware\user_projects\domains\mydomain\config` directory to a WLST script `c:\Oracle\Middleware\myscripts\config.py`.

```
wls:/offline> configToScript('c:/Oracle/Middleware/user_projects/domains
/mydomain','c:/Oracle/Middleware/myscripts')
configToScript is loading configuration from c:\Oracle\Middleware
\user_projects\domains\mydomain\config\config.xml ...
Completed configuration load, now converting resources to wlst script...
configToScript completed successfully
The WLST script is written to c:\Oracle\Middleware\myscripts\config.py
and the properties file associated with this script is written to
c:\Oracle\Middleware\mydomain\config.py.properties
wls:/offline>
```


3.8.1.3 dumpStack

Command Category: Information Commands

Use with WLST: Online or Offline

Description

Displays the stack trace from the last exception that occurred while performing a WLST action, and resets the stack trace.

If successful, the `dumpstack` command returns the `Throwable` object. In the event of an error, the command returns a `WLSTException`.

Syntax

```
dumpStack()
```

Example

This example displays the stack trace.

```
wls:/myserver/serverConfig> dumpStack()
com.bea.plateng.domain.script.jython.WLSTException: java.lang.reflect.Invocation
TargetException
...
```

3.8.1.4 dumpVariables

Command Category: Information Commands

Use with WLST: Online or Offline

Description

Displays all the variables used by WLST, including their name and value. In the event of an error, the command returns a `WLSTException`.

Syntax

```
dumpVariables()
```

Example

This example displays all the current variables and their values.

```
wls:/mydomain/serverConfig> dumpVariables()
adminHome weblogic.rmi.internal.BasicRemoteRef - hostID:
'-1 108080150904263937S:localhost:[7001,8001,-1,-1,-1,-1,-1]:
mydomain:AdminServer', oid: '259', channel: 'null'
cmgr [MBeanServerInvocationHandler]com.bea:Name=ConfigurationManager,
Type=weblogic.management.mbeanservers.edit.ConfigurationManagerMBean
cmo [MBeanServerInvocationHandler]com.bea:Name=mydomain,Type=Domain
connected true
domainName mydomain
...
wls:/mydomain/serverConfig>
```

3.8.1.5 find

Command Category: Information Commands

Use with WLST: Online

Description

Finds MBeans and attributes in the current hierarchy.

WLST returns the pathname to the MBean that stores the attribute and/or attribute type, and its value. If `searchInstancesOnly` is set to `false`, this command also searches the MBeanType paths that are not instantiated in the server, but that can be created. In the event of an error, the command returns a `WLSTException`.

Syntax

```
find([name], [type], [searchInstancesOnly])
```

Argument	Definition
<i>name</i>	Optional. Name of the attribute to find.
<i>type</i>	Optional. Type of the attribute to find.
<i>searchInstancesOnly</i>	Optional. Boolean value specifying whether to search registered instances only or to also search MBeanTypes paths that are not instantiated in the server, but that can be created. This argument defaults to <code>true</code> , indicating only the registered instances will be searched.

Example

The following example searches for an attribute named `javaCompiler` in the current configuration hierarchy.

```
wls:/mydomain/serverConfig> find(name = 'JavaCompiler')
Finding 'JavaCompiler' in all registered MBean instances ...
/Servers/AdminServer          JavaCompilerPreClassPath    null
/Servers/AdminServer          JavaCompiler                 java
/Servers/AdminServer          JavaCompilerPostClassPath   null
wls:/mydomain/serverConfig>
```

The following example searches for an attribute of type `JMSRuntime` in the current configuration hierarchy.

```
wls:/mydomain/serverRuntime> find(type='JMSRuntime')
Finding MBean of type 'JMSRuntime' in all the instances ...
/JMSRuntime/AdminServer.jms
wls:/mydomain/serverRuntime>
```

The following example searches for an attribute named `execute` in the current configuration hierarchy. The `searchInstancesOnly` argument is set to `false`, indicating to also search MBeanTypes that are not instantiated in the server.

```
wls:/mydomain/serverConfig> find(name='execute', searchInstancesOnly='false')
Finding 'execute' in all registered MBean instances ...
/Servers/AdminServer      ExecuteQueues [Ljavax.management.ObjectName;@1aa7dbc
/Servers/AdminServer      Use81StyleExecuteQueues                false
Now finding 'execute' in all MBean Types that can be instantiated ...
/Servers                   ExecuteQueues
/Servers                   Use81StyleExecuteQueues
wls:/mydomain/serverConfig>
```

3.8.1.6 getConfigManager

Command Category: Information Commands

Use with WLST: Online

Description

Returns the latest `ConfigurationManager` MBean, which manages the change process. You can then invoke methods to manage configuration changes across a WebLogic domain. In the event of an error, the command returns a `WLSTException`.

Syntax

```
getConfigManager()
```

Example

The following example returns the latest `ConfigurationManagerBean` MBean and stores it in a `cm` variable.

```
wls:/mydomain/serverConfig> cm=getConfigManager()
wls:/mydomain/serverConfig> cm.getType()
'weblogic.management.mbeanservers.edit.ConfigurationManagerMBean'
```

3.8.1.7 getMBean

Command Category: Information Commands

Use with WLST: Online

Description

Returns an MBean by browsing to the specified path. In the event of an error, the command returns a `WLSTException`.

Note:

No exception is thrown if the MBean is not found.

Syntax

```
getMBean(mbeanPath)
```

Argument	Definition
<i>mbeanPath</i>	Path name to the MBean in the current hierarchy.

Example

The following example returns the MBean specified by the path.

```
wls:/mydomain/edit !> com=getMBean('Servers/myserver/COM/myserver')
wls:/mydomain/edit !> com.getType()
'Server'
```

3.8.1.8 getMBI

Command Category: Information Commands

Use with WLST: Online

Description

Returns the MBeanInfo for the specified MBeanType or the cmo variable. In the event of an error, the command returns a WLSTException.

Syntax

```
getMBI([mbeanType])
```

Argument	Definition
<i>mbeanType</i>	Optional. MBeanType for which the MBeanInfo is displayed.

Example

The following example gets the MBeanInfo for the specified MBeanType and stores it in the variable svrMbi.

```
wls:/mydomain/serverConfig>
svrMbi=getMBI('weblogic.management.configuration.ServerMBean')
```

3.8.1.9 getPath

Command Category: Information Commands

Use with WLST: Online

Description

Returns the MBean path for the specified MBean instance or ObjectName for the MBean in the current tree. In the event of an error, the command returns a WLSTException.

Syntax

```
getPath(mbean)
```

Argument	Definition
<i>mbean</i>	MBean instance or ObjectName for the MBean in the current tree for which you want to return the MBean path.

Example

The following example returns the MBean specified by the path.

```
wls:/mydomain/edit !> path=getPath('com.bea:Name=myserver,Type=Server')
wls:/mydomain/edit !> print path
'Servers/myserver'
```

3.8.1.10 listChildTypes

Command Category: Information Commands

Use with WLST: Online

Description

Lists all of the child MBeans that can be created or deleted for the `cmo`. The `cmo` variable specifies the configuration bean instance to which you last navigated using WLST. For more information about the `cmo` variable, see *Changing the Current Management Object in Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
listChildTypes([parent])
```

Argument	Definition
<i>parent</i>	Optional. Parent type for which you want the children types listed.

Example

The following example lists the children MBeans that can be created or deleted for the `cmo` type.

```
wls:/mydomain/serverConfig> listChildTypes()
AppDeployments
BridgeDestinations
CachingRealms
Clusters
...
wls:/mydomain/serverConfig>
```

3.8.1.11 lookup

Command Category: Information Commands

Use with WLST: Online

Description

Looks up the specified MBean. The MBean must be a child of the current MBean. In the event of an error, the command returns a `WLSTException`.

Syntax

```
lookup(name, [childMBeanType])
```

Argument	Definition
<i>name</i>	Name of the MBean that you want to lookup.
<i>childMBeanType</i>	Optional. The type of the MBean that you want to lookup.

Example

The following example looks up the specified server, `myserver`, and stores the returned stub in the `sbean` variable.

```
wls:/mydomain/serverConfig> sbean=lookup('myserver','Server')
wls:/mydomain/serverConfig> sbean.getType()
'Server'
wls:/mydomain/serverConfig>
```

3.8.1.12 ls

Command Category: Information Commands

Use with WLST: Online or Offline

Description

Lists all of the child beans and/or attributes for the current configuration or runtime bean. You can optionally control the output by specifying an argument. If no argument is specified, the command lists all of the child beans and attributes in the domain. The output is returned as a string.

Note:

Because WLST offline enables you to access and update the configuration objects that appear in the configuration files only, if you want to view and/or change attribute values for a configuration object that is not already persisted in the configuration files as an XML element, you must first create the configuration object.

Because WLST online caches child beans for performance reasons, an `ls()` may not return child beans that were created in another process after the initial `ls()` was issued for the current bean. If a child bean is not present, then `cd` to the parent directory and then back to refresh the cache.

In the event of an error, the command returns a `WLSTException`.

By default, the output is returned as a string and is arranged in three columns.

Note:

By default, the `ls()` function echoes its output so that it appears on the console in which you are running WLST. You can disable this by including the following command in your WLST script:

```
WLS.setShowLSResult(flag)
```

`flag` is a Boolean value. If it is 0 (false), then output from `ls()` to stdout is disabled and will not appear on the console. If it is set to 1 (true), then output from `ls()` to stdout is enabled.

- The first column displays a set of codes that describe the listed item. See [Table 3-9](#).
- The second column displays the item name.
- When the item is an attribute, the third column displays the attribute value. If an attribute is encrypted, the third column displays asterisks instead of the value. (See [Writing and Reading Encrypted Configuration Values in *Understanding the WebLogic Scripting Tool*](#).)
- When the item is an operation, the third column uses the following pattern to display the operation's return type and input parameters: `returnType : parameterType (parameterName)`

Table 3-9 *Is Command Output Information*

Code	Description
d	Indicates that the item is a child management object. As with a directory in a UNIX or Windows file system, you can use the <code>cd</code> command to make the child object the current management object.
r	Indicates that the item is a child management object or an attribute that is readable, assuming that current user has been given read permission by the security realm's policies. (See Default Security Policies for MBeans in the <i>MBean Reference for Oracle WebLogic Server</i> .)
w	Indicates that the item is an attribute that is writable, assuming that current user has been given write permission by the security realm's policies. (See Default Security Policies for MBeans in the <i>Oracle WebLogic Server MBean Reference</i> .)
x	Indicates that the item is an operation that can be executed, assuming that current user has been given execute permission by the security realm's policies. (See Default Security Policies for MBeans in the <i>MBean Reference for Oracle WebLogic Server</i> .)

By default, the output lists all attributes, operations, and child management objects of the current management object. To filter the output or to see a list for a different management object, you can specify a command argument.

Note:

As a performance optimization, when using WLST offline, WebLogic Server does not store most of its default values in the configuration files for the WebLogic domain. In some cases, this optimization prevents entire management objects from being displayed by WLST offline (because WebLogic Server has never written the corresponding XML elements to the domain configuration files). For example, if you never modify the default logging severity level for a WebLogic domain while the domain is active, WLST offline will not display the Log management object for the domain.

If you want to change the default value of attributes whose management object is not displayed by WLST offline, you must first use the `create` command to create the management object. Then you can `cd` to the management object and change the attribute value. See [create](#).

Syntax

```
ls( [ a | c | o ] [ moPath ] )
```

```
ls( [ moPath ] [returnMap] [ returnType ] [inheritance])
```

Argument	Definition
a	Optional. Displays only the attributes of the specified management object (suppresses the display of other items).
c	Optional. Displays only the child management objects of the specified management object (suppresses the display of other items).
o	Optional. Displays only the operations that can be invoked on the specified management object (suppresses the display of other items). This argument is only applicable for WLST online.
<i>moPath</i>	Optional. Path name to the management object for which you want to list attributes, operations, and child management objects. You can specify a pathname that is relative to your current location in the hierarchy or an absolute pathname. With WLST offline, use the forward-slash character (/) to specify the root of the configuration document. With WLST online, you can list the contents of MBeans in any management hierarchy (see Tree Commands). Use the following syntax to specify the root of a hierarchy: <code>root-name : /</code> For example, to list the root of the server runtime hierarchy: <code>ls('serverRuntime:/')</code> If you do not specify this argument, the command lists items for the current management object.
<i>returnMap</i>	Optional. Boolean value that determines whether the command returns values as a map. This argument defaults to <code>false</code> , which causes this command to return a String.

Argument	Definition
<i>returnType</i>	Optional. Controls the output returned in the map. Specify <i>a</i> , <i>c</i> , or <i>o</i> , which filter the output as described at the top of this table. This argument is valid only if <code>returnMap</code> is set to <code>true</code> . This argument defaults to <i>c</i> .
<i>inheritance</i>	Optional. Boolean value that specifies whether to include inheritance information for each attribute value. If specified, then WLST will identify attribute values that are inherited from a server template by appending the value with an (Inherited) suffix. This argument defaults to <code>false</code> . It can be used only in WLST online mode. For information about server templates, see <i>Server Templates in Understanding Domain Configuration for Oracle WebLogic Server</i> .

Example

The following example displays all of the child configuration beans, and attribute names and values for the examples domain, which has been loaded into memory, in WLST offline mode:

```
wls:/offline/mydomain > ls()
dr-- AppDeployments
dr-- BridgeDestinations
dr-- Clusters
dr-- CustomResources
dr-- DeploymentConfiguration
dr-- Deployments
dr-- EmbeddedLDAP
dr-- ErrorHandlings
dr-- FileStores
dr-- InternalAppDeployments
dr-- InternalLibraries
dr-- JDBCDataSourceFactories
dr-- JDBCStores
dr-- JDBCSystemResources
dr-- JMSBridgeDestinations
dr-- JMSInteropModules
dr-- JMSServers
dr-- JMSSystemResources
dr-- JMX
...
wls:/offline/examples>
```

The following example displays all of the attribute names and values in DomainMBean:

```
wls:/mydomain/serverConfig> ls('a')
-r-- AdminServerName                AdminServer
-r-- AdministrationMBeanAuditingEnabled  false
-r-- AdministrationPort              9002
-r-- AdministrationPortEnabled        false
-r-- AdministrationProtocol           t3s
-r-- ArchiveConfigurationCount        0
-r-- ClusterConstraintsEnabled         false
-r-- ConfigBackupEnabled              false
-r-- ConfigurationAuditType           none
```

```

-r-- ConfigurationVersion          9.0.0.0
-r-- ConsoleContextPath           console
-r-- ConsoleEnabled                true
-r-- ConsoleExtensionDirectory     console-ext
-r-- DomainVersion                 9.0.0.0
-r-- LastModificationTime         0
-r-- Name                          basicWLSDomain
-r-- Notes                         null
-r-- Parent                       null
-r-- ProductionModeEnabled        false
-r-- RootDirectory                 .
-r-- Type                          Domain
wls:/mydomain/serverConfig>

```

The following example displays all of the child beans, and attribute names and values in Servers MBean:

```

wls:/mydomain/serverConfig> ls('Servers')
dr-- AdminServer

```

The following example displays the attribute names and values for the specified MBean path and returns the information in a map:

```

wls:/mydomain/serverConfig> svrAttrList = ls('edit:/Servers/myserver', 'true', 'a')
-rw- AcceptBacklog                50
-rw- AdminReconnectIntervalSeconds 10
-rw- AdministrationPort           9002
-rw- AdministrationProtocol       t3s
-rw- AutoKillIfFailed             false
-rw- AutoMigrationEnabled         false
-rw- AutoRestart                  true
-rw- COMEnabled                   false
-rw- ClasspathServletDisabled     false
-rw- ClientCertProxyEnabled       false
-rw- Cluster                      null
-rw- ClusterRuntime               null
-rw- ClusterWeight                100
wls:/mydomain/serverConfig>

```

The following command shows the output of `ls()` for the server `server1`, which inherits the `RestartIntervalSeconds` and `RestartMax` attributes from a defined server template:

```

wls:/domain1/serverConfig/Servers> ls('new_ManagedServer_1', 'true', 'a', 'true')

-r-- AcceptBacklog                300
.
.
.
-r-- RestartIntervalSeconds (Inherited) 3000
-r-- RestartMax (Inherited)           5
.
.
.
-r-- XMLRegistry                  null

wls:/domain1/serverConfig/Servers>

```

3.8.1.13 man

Command Category: Information Commands

Use with WLST: Online

Description

Displays help from `MBeanInfo` for the current MBean or its specified attribute. In the event of an error, the command returns a `WLSTException`.

Syntax

```
man([a | c | o | attrName])
```

Argument	Definition
a	Optional. Displays help for all the attributes for the current MBean.
c	Optional. Displays help for all the child configuration beans that are contained in the current MBean.
o	Optional. Displays help for all operations that can be invoked on the current MBean.
<i>attrName</i>	Optional. MBean attribute name for which you would like to display help. If not specified, WLST displays help for the current MBean.

Example

The following example displays help from `MBeanInfo` for the `ServerMBean` bean.

```
wls:/mydomain/serverConfig> man('Servers')
dynamic : true
creator : createServer
destroyer : destroyServer
description : <p>Returns the ServerMBeans representing the servers that have been
configured to be part of this domain.</p>
descriptorType : Attribute
Name : Servers
interfaceClassName : [Lweblogic.management.configuration.ServerMBean;
displayName : Servers
relationship : containment
```

3.8.1.14 redirect

Command Category: Information Commands

Use with WLST: Online

Description

Redirects WLST information, error, and debug messages to the specified filename. Also redirects the output of the `dumpStack()` and `dumpVariables()` commands to the specified filename.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
redirect(outputFile, [toStdOut])
```

Argument	Definition
<i>outputFile</i>	Name of the file to which you want to record the WLST commands. The filename can be absolute or relative to the directory from which you started WLST.
<i>toStdOut</i>	Optional. Boolean value specifying whether the output should be sent to <code>stdout</code> . This argument defaults to <code>true</code> , indicating that the output will be sent to <code>stdout</code> .

Example

The following example begins redirecting WLST output to the `logs/wlst.log` file:

```
wls:/mydomain/serverConfig> redirect('./logs/wlst.log')
```

3.8.1.15 removeListener

Command Category: Information Commands

Use with WLST: Online

Description

Removes a previously defined listener. If you do not specify an argument, WLST removes all listeners defined for all MBeans. For information about setting a listener, see [addListener](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
removeListener([mbean], [listenerName])
```

Argument	Definition
<i>mbean</i>	Optional. Name of the MBean or MBean object for which you want to remove the previously defined listeners.
<i>listenerName</i>	Optional. Name of the listener to be removed.

Example

The following example removes the listener named `mylistener`.

```
wls:/mydomain/serverConfig> removeListener(listenerName="mylistener")
```

3.8.1.16 showListeners

Command Category: Information Commands

Use with WLST: Online

Description

Shows all currently defined listeners. For information about setting a listener, see [addListener](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
showListeners()
```

Example

The following example shows all listeners that are currently defined.

```
wls:/mydomain/serverConfig> showListeners()
```

3.8.1.17 startRecording

Command Category: Information Commands

Use with WLST: Online or Offline

Description

Records all user interactions with WLST. This command is useful for capturing commands for replay.

In the event of an error, the command returns a `WLSTException`.

This command cannot be used when you are importing WLST as a Jython module, as described in Importing WLST as a Jython Module in *Understanding the WebLogic Scripting Tool*.

Syntax

```
startRecording(recordFile, [recordAll])
```

Argument	Definition
<code>recordFile</code>	Name of the file to which you want to record the WLST commands. The filename can be absolute or relative to the directory from which you invoked WLST.
<code>recordAll</code>	Optional. Boolean value specifying whether to capture all user interactions in the file. This argument defaults to <code>false</code> , indicating that only WLST commands are captured, and not WLST command output.

Example

The following example begins recording WLST commands in the `record.py` file:

```
wls:/mydomain/serverConfig> startRecording('c:/myScripts/record.py')
Starting recording to c:/myScripts/record.py
wls:/mydomain/serverConfig>
```

3.8.1.18 state

Command Category: Information Commands

Use with WLST: Online

Description

Uses Node Manager to return a map of servers, clusters, or system components and their state. Node Manager must be running.

For more information about server states, see *Understanding Server Life Cycle in Administering Server Startup and Shutdown for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
state(name, [type], [returnMap])
```

Argument	Definition
<i>name</i>	Name of the server, cluster, or system component for which you want to retrieve the current state.
<i>type</i>	Optional. Type is <code>Server</code> , <code>Cluster</code> , or <code>SystemComponent</code> . If not specified, WLST will look for a server, cluster, or system component with the specified name.
<i>returnMap</i>	Optional. Boolean value that specifies whether or not to return a map containing the return values. If <code>returnMap</code> is <code>true</code> , the <code>state</code> command returns a map of all states. The default is <code>false</code> .

Example

The following example returns the state of the Managed Server, `managed1`.

```
wls:/mydomain/serverConfig> state('managed1','Server')
Current state of "managed1": SUSPENDED
wls:/mydomain/serverConfig>
```

The following example returns the state of the cluster, `mycluster`. The optional `type` argument is excluded.

```
wls:/mydomain/serverConfig> state('mycluster')
There are 3 server(s) in cluster: mycluster

States of the servers are
MServer1---SHUTDOWN
MServer2---SHUTDOWN
MServer3---SHUTDOWN
wls:/mydomain/serverConfig>
```

The following example shows the return map that is printed to standard output when `returnMap` is set to `false`.

```
wls:/mydomain/serverConfig> retMap=state('managed1')
Current state of "managed1": SUSPENDED
wls:/mydomain/serverConfig> print retMap
None
```

The following example shows the return map that is printed to standard output when `returnMap` is set to `true`.

```
wls:/mydomain/serverConfig> retMap=state('managed1', returnMap='true')
Current state of "managed1": SUSPENDED
wls:/mydomain/serverConfig> print retMap
[managed1=SUSPENDED]
```

3.8.1.19 stopRecording

Command Category: Information Commands

Use with WLST: Online or Offline

Description

Stops recording WLST commands. For information about starting a recording, see [startRecording](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
stopRecording()
```

Example

The following example stops recording WLST commands.

```
wls:/mydomain/serverConfig> stopRecording()
Stopping recording to c:\myScripts\record.py
wls:/mydomain/serverConfig>
```

3.8.1.20 stopRedirect

Command Category: Information Commands

Use with WLST: Online or Offline

Description

If redirection is in progress, stops the redirection of WLST output to a file.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
stopRedirect()
```

Example

The following example stops the redirection of WLST output to a file:

```
wls:/mydomain/serverConfig> stopRedirect()
WLST output will not be redirected to myfile.txt any more
```

3.8.1.21 storeUserConfig

Command Category: Information Commands

Use with WLST: Online

Description

Creates a user configuration file and an associated key file. The user configuration file contains an encrypted username and password. The key file contains a secret key that is used to encrypt and decrypt the username and password.

Only the key file that originally encrypted the username and password can be used to decrypt the values. If you lose the key file, you must create a new user configuration and key file pair.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
storeUserConfig([userConfigFile], [userKeyFile], [nm])
```

Argument	Definition
<i>userConfigFile</i>	<p>Optional. Name of the file to store the user configuration. The pathname can be absolute or relative to the file-system directory from which you started WLST.</p> <p>If you do not specify this argument, the command stores the file in your home directory as determined by your JVM. The location of the home directory depends on the SDK and type of operating system on which WLST is running. The default filename is based on the following pattern, where <i>username</i> is the user name that you used to log in to the operating system.</p> <p><i>username-WebLogicConfig.properties</i></p> <p>The command also prints to standard out the location in which it created the file.</p>
<i>userKeyFile</i>	<p>Optional. Name of the file to store the key information that is associated with the user configuration file that you specify. The pathname can be absolute or relative to the file-system directory from which you started WLST.</p> <p>If you do not specify this argument, the command stores the file in your home directory as determined by your JVM. The location of the home directory depends on the SDK and type of operating system on which WLST is running. The default filename is based on the following pattern, where <i>username</i> is the user name that you used to log in to the operating system.</p> <p><i>username-WebLogicKey.properties</i></p> <p>The command also prints to standard out the location in which it created the file.</p>
<i>nm</i>	<p>Optional. Boolean value that specifies whether to store the username and password for Node Manager. If set to true, the Node Manager username and password is stored. This argument defaults to false.</p>

Example

The following example creates and stores a user configuration file and key file in the default location.

```
wls:/mydomain/serverConfig> storeUserConfig()  
Creating the key file can reduce the security of your system if it is not kept in
```


a secured location after it is created. Do you want to create the key file? y or n
y

The username and password that were used for this current WLS connection are stored in C:\Documents and Settings\pat\pat-WebLogicConfig.properties and C:\Documents and Settings\pat\pat-WebLogicKey.properties.

The following example creates and stores a user configuration file and key file in the specified locations.

```
wls:/mydomain/serverConfig> storeUserConfig('c:/myFiles/myuserconfigfile.secure',
'c:/myFiles/myuserkeyfile.secure')
```

Creating the key file can reduce the security of your system if it is not kept in a secured location after it is created. Do you want to create the key file? y or n
y

The username and password that were used for this current WLS connection are stored in c:/myFiles/mysuserconfigfile.secure and c:/myFiles/myuserkeyfile.secure
wls:/mydomain/serverConfig>

3.8.1.22 threadDump

Command Category: Information Commands

Use with WLST: Online or Offline

Description

Displays a thread dump for the specified server. In the event of an error, the command returns a `WLSTException`.

Syntax

```
threadDump([writeToFile], [fileName], [serverName])
```

Argument	Definition
<i>writeToFile</i>	Optional. Boolean value specifying whether to save the output to a file. This argument defaults to <code>true</code> , indicating that output is saved to a file.
<i>fileName</i>	Optional. Name of the file to which the output is written. The filename can be absolute or relative to the directory where WLST is running. This argument defaults to <code>Thread_Dump_serverName</code> file, where <i>serverName</i> indicates the name of the server. This argument is valid only if <i>writeToFile</i> is set to <code>true</code> .
<i>serverName</i>	Optional. Server name for which the thread dump is requested. This argument defaults to the server to which WLST is connected. If you are connected to an Administration Server, you can display a thread dump for the Administration Server and any Managed Server that is running in the WebLogic domain. If you are connected to a Managed Server, you can only display a thread dump for that Managed Server.

Example

The following example displays the thread dump for the current server and saves the output to the `Thread_Dump_serverName` file.

```
wls:/mydomain/serverConfig> threadDump()
```

The following example displays the thread dump for the server managedServer. The information is not saved to a file.

```
wls:/mydomain/serverConfig> threadDump(writeToFile='false',
serverName='managedServer')
```

3.8.1.23 viewMBean

Command Category: Information Commands

Use with WLST: Online

Description

Displays information about an MBean, such as the attribute names and values, and operations. In the event of an error, the command returns a `WLSTException`.

Syntax

```
viewMBean(mbean)
```

Argument	Definition
<i>mbean</i>	MBean for which you want to display information.

Example

The following example displays information about the current MBean, `cmo`.

```
wls:/mydomain/serverConfig> cmo.getType()
'Domain'
wls:/mydomain/serverConfig> viewMBean(cmo)
Attribute Names and Values
-----
XMLEntityCaches    null
Targets            javax.management.ObjectName[com.bea
:Name=MedRecJMSServer,Type=JMSServer,
com.bea:Name=WSStoreForwardInternalJMSServerMedRecServer,Type=JMSServer,
com.bea:Name=MedRecWseeJMSServer,Type=JMSServer,
com.bea:Name=PhysWSEEJMSServer,Type=JMSServer,
com.bea:Name=MedRecSAFAgent,Type=SAFAgent,
com.bea:Name=AdminServer,Type=Server]
RootDirectory      .
EmbeddedLDAP       com.bea:Name=OOTB_medrec,Type=EmbeddedLDAP
RemoteSAFContexts  null
Libraries           javax.management.ObjectName[com.bea
...
wls:/mydomain/serverConfig>
```

3.8.1.24 writeIniFile

Command Category: Information Commands

Use with WLST: Online

Description

Converts WLST definitions and method declarations to a Python (.py) file to enable advanced users to import them as a Jython module. After importing, the definitions and method declarations are available to other Jython modules and can be accessed directly using Jython syntax. For more information, see *Importing WLST as a Jython Module* in *Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
writeIniFile(filePath)
```

Argument	Definition
<code>filePath</code>	Full pathname to the file that you want to save the converted information.

Example

The following example converts WLST to a Python file named `wl.py`.

```
wls:/offline> writeIniFile("wl.py")
The Ini file is successfully written to wl.py
wls:/offline>
```

3.9.1 Life Cycle Commands

Use the WLST life cycle commands, listed in [Table 3-10](#), to manage the life cycle of a server instance.

For more information about the life cycle of a server instance, see "Understanding Server Life Cycle" in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

Table 3-10 Life Cycle Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
<code>migrate</code>	Migrate services to a target server within a cluster.	Online
<code>resume</code>	Resume a server instance that is suspended or in ADMIN state.	Online
<code>shutdown</code>	Gracefully shut down a running server instance, cluster, or system component.	Online
<code>softRestart</code>	Restart a system component server instance.	Online
<code>start</code>	Start a Managed Server instance or a cluster using Node Manager.	Online
<code>startServer</code>	Start the Administration Server.	Online or Offline
<code>suspend</code>	Suspend a running server.	Online

3.9.1.1 migrate

Command Category: Life Cycle Commands

Use with WLST: Online

Description

Migrates the specified services (JTA, JMS, or Server) to a targeted server within a cluster. In the event of an error, the command returns a `WLSTException`.

For information about migrating services, see *Service Migration in Administering Clusters for Oracle WebLogic Server*.

Syntax

```
migrate(sname, destinationName, [sourceDown], [destinationDown], [migrationType])
```

Argument	Definition
<i>sname</i>	Name of the migratable target that should be migrated.
<i>destinationName</i>	Name of the machine or server to which you want to migrate the services.
<i>sourceDown</i>	Optional. Boolean value specifying whether the source server is down. This argument defaults to <code>true</code> , indicating that the source server is not running. When migrating JTA services, the <i>sourceDown</i> argument is ignored, if specified, and defaults to <code>true</code> . The source server must be down in order for the migration of JTA services to succeed.
<i>destinationDown</i>	Optional. Boolean value specifying whether the destination server is down. This argument defaults to <code>false</code> , indicating that the destination server is running. If the destination is not running, and you do not set this argument to <code>true</code> , WLST returns a <code>MigrationException</code> . When migrating JMS-related services to a non-running server instance, the server instance will activate the JMS services upon the next startup. When migrating the JTA Transaction Recovery Service to a non-running server instance, the target server instance will assume recovery services when it is started.
<i>migrationType</i>	Optional. Type of service(s) that you want to migrate. Valid values include: <ul style="list-style-type: none"> <code>jms</code>—Migrate JMS-related services (JMS server, SAF agent, path service, and the WebLogic persistent store) only. <code>jta</code>—Migrate JTA services only. <code>server</code>—Migrate Server services only. <code>all</code>—Migrate all JTA and JMS services. This argument defaults to <code>all</code> .

Example

The following example migrates all JMS and JTA services on `server1` to the server `server2`. The boolean arguments specify that the source server is down and the destination server is running.

```
wls:/mydomain/edit !> migrate('server1','server2', 'true', 'false', 'all')
Migrating all JMS and JTA services from 'server1' to destination 'server2' ...
wls:/mydomain/edit !>
```

The following example migrates all Server services on `server1` to the server `server2`. The boolean arguments specify that the source server is down and the destination server is running.

```
wls:/mydomain/edit !> migrate('server1','server2', 'true', 'false', 'Server')
Migrating singleton server services from 'server1' to machine 'server2'...
wls:/mydomain/edit !>
```

3.9.1.2 resume

Command Category: Life Cycle Commands

Use with WLST: Online

Description

Resumes a server instance that is suspended or in ADMIN state. This command moves a server to the RUNNING state. For more information about server states, see *Understanding Server Life Cycle in Administering Server Startup and Shutdown for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
resume([sname], [block])
```

Argument	Definition
<i>sname</i>	Name of the server to resume. This argument defaults to the server to which WLST is currently connected.
<i>block</i>	Optional. Boolean value specifying whether WLST should block user interaction until the server is resumed. This argument defaults to <code>false</code> , indicating that user interaction is not blocked. In this case, WLST returns control to the user after issuing the command and assigns the task MBean associated with the current task to a variable that you can use to check its status. If you are importing WLST as a Jython module, as described in <i>Importing WLST as a Jython Module in Understanding the WebLogic Scripting Tool</i> , <i>block</i> is always set to <code>true</code> .

Example

The following example resumes a Managed Server instance.

```
wls:/mydomain/serverConfig> resume('managed1', block='true')
Server 'managed1' resumed successfully.
wls:/mydomain/serverConfig>
```

3.9.1.3 shutdown

Command Category: Life Cycle Commands

Use with WLST: Online

Description

Gracefully shuts down a running server instance, cluster, or system component. The `shutdown` command waits for all the in-process work to be completed before shutting down the server, cluster, or system component.

You shut down a server to which WLST is connected by entering the `shutdown` command without any arguments.

When connected to a Managed Server instance, you only use the `shutdown` command to shut down the Managed Server instance to which WLST is connected; you cannot shut down another server while connected to a Managed Server instance.

Note:

To shut down a system component (for example, OHS or ODI system component), WLST must be connected to the Administration Server.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
shutdown([name], [entityType], [ignoreSessions], [timeOut], [force], [block],
[properties])
```

Argument	Definition
<i>name</i>	Optional. Name of the server, cluster, or system component to shut down. This argument defaults to the server to which WLST is currently connected.
<i>entityType</i>	Optional. <code>Type</code> , <code>Server</code> , <code>Cluster</code> , or <code>SystemComponent</code> . If not specified, WLST will look for a server, cluster, or system component with the specified name.
<i>ignoreSessions</i>	Optional. Boolean value specifying whether WLST should drop all HTTP sessions immediately or wait for HTTP sessions to complete or timeout while shutting down. This argument defaults to <code>false</code> , indicating that all HTTP sessions must complete or timeout.
<i>timeOut</i>	Optional. Time (in seconds) that WLST waits for subsystems to complete in-process work and suspend themselves before shutting down the server. This argument defaults to 0 seconds, indicating that there is no timeout.
<i>force</i>	Optional. Boolean value specifying whether WLST should terminate a server instance or a cluster without waiting for the active sessions to complete. This argument defaults to <code>false</code> , indicating that all active sessions must complete before shutdown.

Argument	Definition
<i>block</i>	Optional. Boolean value specifying whether WLST should block user interaction until the server is shutdown. This argument defaults to <code>true</code> , indicating that user interaction is blocked until the operation completes. If set to <code>false</code> , WLST returns control to the user after issuing the command and assigns the task MBean associated with the current task to a variable that you can use to check its status. If you are importing WLST as a Jython module, as described in Importing WLST as a Jython Module in Understanding the WebLogic Scripting Tool , <i>block</i> is always set to <code>true</code> .
<i>properties</i>	Optional. Applies only if <code>entityType</code> is <code>SystemComponent</code> . Properties value specifying properties to pass to the system component.

Example

The following example instructs WLST to shutdown the server to which you are connected:

```
wls:/mydomain/serverConfig> shutdown()
Shutting down the admin server that you are currently connected to .....
Disconnected from weblogic server: AdminServer
```

The following example instructs WLST to wait 1000 seconds for HTTP sessions to complete or timeout (at 1000 seconds) before shutting down myserver:

```
wls:/mydomain/serverConfig> shutdown('myserver','Server','false',1000,
block='false')
```

The following example instructs WLST to drop all HTTP sessions immediately while connected to a Managed Server instance:

```
wls:/mydomain/serverConfig> shutdown('MServer1','Server','true',1200)
Shutting down a managed server that you are connected to ...
Disconnected from weblogic server: MServer1
```

The following example instructs WLST to shutdown the cluster mycluster:

```
wls:/mydomain/serverConfig> shutdown('mycluster','Cluster')
Shutting down the cluster with name mycluster
Shutdown of cluster mycluster has been issued, please
refer to the logs to check if the cluster shutdown is successful.
Use the state(<server-name>) or state(<cluster-name>,"Cluster")
to check the status of the server or cluster
wls:/mydomain/serverConfig> state('mycluster','Cluster')
There are 3 server(s) in cluster: mycluster

States of the servers are
MServer1---SHUTDOWN
MServer2---SHUTDOWN
MServer3---SHUTDOWN
wls:/mydomain/serverConfig>
```

3.9.1.4 softRestart

Command Category: Life Cycle Commands

Use with WLST: Online

Description

Restarts a running system component. WLST must be connected to the Administration Server to restart a system component.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
softRestart(name, [block], [properties])
```

Argument	Definition
<i>name</i>	Name of the system component to restart.
<i>block</i>	Optional. Boolean value specifying whether WLST should block user interaction until the server is restarted. This argument defaults to <code>true</code> , indicating that user interaction is blocked until the operation completes. If set to <code>false</code> , WLST returns control to the user after issuing the command and assigns the task MBean associate with the current task to a variable that you can use to check its status. If you are importing WLST as a Jython module, as described in Importing WLST as a Jython Module in Understanding the WebLogic Scripting Tool , <i>block</i> is always set to <code>true</code> .
<i>properties</i>	Optional. Properties value specifying properties to pass to the system component.

Example

The following example restarts a system component call `ohs1`.

```
wls:/mydomain/serverConfig> softRestart('ohs1', block='true')
Restarting the system component with name ohs1 ...
System component with name ohs1 restarted successfully
wls:/mydomain/serverConfig>
```

3.9.1.5 start

Command Category: Life Cycle Commands

Use with WLST: Online

Description

Starts a Managed Server instance, cluster, or system component using Node Manager. WLST must be connected to the Administration Server. If only starting Managed Servers then WLST can just be connected to the Node Manager.

For more information about WLST commands used to connect to and use Node Manager, see [Node Manager Commands](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
start(name, [type], [url], [block], [properties])
```


Argument	Definition
<i>name</i>	Name of the Managed Server, cluster, or system component to start.
<i>type</i>	Optional. Type is <code>Server</code> , <code>Cluster</code> , or <code>SystemComponent</code> . If not specified, WLST will look for a server, cluster, or system component with the specified name.
<i>url</i>	Optional. Listen address and listen port of the server instance, specified using the following format: <code>[protocol://]listen-address:listen-port</code> . If not specified, this argument defaults to <code>t3://localhost:7001</code> . This is ignored if type <code>Cluster</code> or <code>SystemComponent</code> is specified.
<i>block</i>	Optional. Boolean value specifying whether WLST should block user interaction until the server or cluster is started. This argument defaults to <code>true</code> , indicating that user interaction is blocked until the operation completes. If set to <code>false</code> , WLST returns control to the user after issuing the command and assigns the task MBean associated with the current task to a variable that you can use to check its status. If you are importing WLST as a Jython module, as described "Importing WLST as a Jython Module" in <i>Understanding the WebLogic Scripting Tool</i> , <i>block</i> is always set to <code>true</code> .
<i>properties</i>	Optional. Applies only if <i>type</i> is <code>SystemComponent</code> . Properties value specifying properties to pass to the system component.

Example

The following example instructs Node Manager to start a Managed Server instance; the listen address is `localhost` and listen port is `8801`. WLST returns control to the user after issuing this command, as `block` is set to `false`.

```
wls:/mydomain/serverConfig> start('myserver', 'Server', block='false')
Starting server myserver ...
The server start status task for server myserver is assigned to variable
myserverTask
You can call the getStatus(), getError(), getDescription() or isRunning()
methods on this variable to determine the status of your server start
wls:/mydomain/serverConfig>
```

The following example instructs Node Manager to start a cluster. WLST block user interaction until the cluster is started, as `block` defaults to `true`.

```
wls:/mydomain/serverConfig> start('mycluster', 'Cluster')
Starting the following servers in Cluster, mycluster: MS1, MS2, MS3...
.....
All servers in the cluster mycluster are started successfully.
wls:/mydomain/serverConfig>
```

3.9.1.6 startServer

Command Category: Life Cycle Commands

Use with WLST: Online or Offline

Description

Starts the Administration Server. In the event of an error, the command returns a `WLSTException`.

Note:

You can use `startServer` only to start a WebLogic Administration Server, by running `WLST` from the `MW_HOME/oracle_common/common/bin` directory. You cannot use `startServer` to start an integrated WebLogic Administration Server (that is, an Administration Server for a Fusion Middleware Suite product installed in an `ORACLE_HOME` directory).

To start the Administration server for a Fusion Middleware Suite product other than WebLogic Server, use either of the following methods:

- Execute the server startup script for the associated WebLogic domain.
 - Start the server using Node Manager. If you use this method, make sure that the `startScriptEnabled` property is set to `true` in Node Manager.
-

Syntax

```
startServer([adminServerName], [domainName], [url], [username], [password],
[domainDir], [block], [timeout], [serverLog], [systemProperties], [jvmArgs]
[spaceAsJvmArgsDelimiter])
```

Argument	Definition
<code>adminServerName</code>	Optional. Name of the Administration Server to start. This argument defaults to <code>myserver</code> .
<code>domainName</code>	Optional. Name of the WebLogic domain to which the Administration Server belongs. This argument defaults to <code>mydomain</code> .
<code>url</code>	Optional. URL of the Administration Server. The URL supplied with the <code>startServer</code> command will override the listen address and port specified in the <code>config.xml</code> file. If not specified on the command line or in the <code>config.xml</code> file, this argument defaults to <code>t3://localhost:7001</code> .
<code>username</code>	Optional. Username used to connect WLST to the server.
<code>password</code>	Optional. Password used to connect WLST to the server.
<code>domainDir</code>	Optional. Domain directory in which the Administration Server is being started. This argument defaults to the directory from which you started WLST.

Argument	Definition
<i>block</i>	Optional. Boolean value specifying whether WLST blocks user interaction until the server is started. When <i>block</i> is set to <i>false</i> , WLST returns control to the user after issuing the command. This argument defaults to <i>true</i> , indicating that user interaction is blocked. If you are importing WLST as a Jython module, as described in Importing WLST as a Jython Module in <i>Understanding the WebLogic Scripting Tool</i> , <i>block</i> is always set to <i>true</i> .
<i>timeout</i>	Optional. Time (in milliseconds) that WLST waits for the server to start before canceling the operation. The default value is 60000 milliseconds. This argument is only applicable when <i>block</i> is set to <i>true</i> .
<i>serverLog</i>	Optional. Location of the server log file. This argument defaults to <i>stdout</i> .
<i>systemProperties</i>	Optional. System properties to pass to the server process. System properties should be specified as comma-separated name-value pairs, and the name-value pairs should be separated by equals sign (=).
<i>jvmArgs</i>	Optional. JVM arguments to pass to the server process. Multiple arguments can be specified, separated by commas.
<i>spaceAsJvmArgsDelimiter</i>	Optional. Boolean value specifying whether JVM arguments are space delimited. The default value is <i>false</i> .

Example

The following example starts the Administration Server named *demoServer* in the *demoDomain*.

```
wls:/offline> startServer('demoServer','demoDomain','t3://localhost:8001',
'myweblogic','wlstdomain','c:/mydomains/wlst','false', 60000,
jvmArgs='-XX:MaxPermSize=75m, -Xmx512m, -XX:+UseParallelGC')
wls:/offline>
```

3.9.1.7 suspend

Command Category: Life Cycle Commands

Use with WLST: Online

Description

Suspends a running server. This command moves a server from the *RUNNING* state to the *ADMIN* state. For more information about server states, see *Understanding Server Life Cycle* in *Administering Server Startup and Shutdown for Oracle WebLogic Server*.

In the event of an error, the command returns a *WLSTException*.

Syntax

```
suspend([sname], [ignoreSessions], [timeOut], [force], [block])
```

Argument	Definition
<i>sname</i>	Optional. Name of the server to suspend. The argument defaults to the server to which WLST is currently connected.
<i>ignoreSessions</i>	Optional. Boolean value specifying whether WLST should drop all HTTP sessions immediately or wait for HTTP sessions to complete or time out while suspending. This argument defaults to <code>false</code> , indicating that HTTP sessions must complete or time out.
<i>timeOut</i>	Optional. Time (in seconds) the WLST waits for the server to complete in-process work before suspending the server. This argument defaults to 0 seconds, indicating that there is no timeout.
<i>force</i>	Optional. Boolean value specifying whether WLST should suspend the server without waiting for active sessions to complete. This argument defaults to <code>false</code> , indicating that all active sessions must complete before suspending the server.
<i>block</i>	Optional. Boolean value specifying whether WLST blocks user interaction until the server is started. This argument defaults to <code>false</code> , indicating that user interaction is not blocked. In this case, WLST returns control to the user after issuing the command and assigns the task MBean associated with the current task to a variable that you can use to check its status. If you are importing WLST as a Jython module, as described in <i>Importing WLST as a Jython Module</i> in <i>Understanding the WebLogic Scripting Tool</i> , <i>block</i> is always set to <code>true</code> .

Example

The following example suspends a Managed Server instance:

```
wls:/mydomain/serverConfig> suspend('managed1')
Server 'managed1' suspended successfully.
wls:/mydomain/serverConfig>
```

3.10.1 Node Manager Commands

Use the WLST Node Managers commands, listed in [Table 3-11](#), to start, shut down, restart, and monitor WebLogic Server instances.

Note:

Unless otherwise indicated, Node Manager must be running before you can execute the commands within this category.

For more information about Node Manager, see "Using Node Manager" in the *Administering Node Manager for Oracle WebLogic Server*.

Table 3-11 Node Manager Commands for WLST Configuration

This command...	Enables you to...	Use with WLST...
<code>getNodeManagerHome</code>	Gets the Node Manager home.	Offline
<code>getNodeManagerType</code>	Gets the Node Manager type.	Offline
<code>getNodeManagerUpgradeOverwriteDefault</code>	Gets the value of the Node Manager upgrade overwrite default flag.	Offline
<code>getNodeManagerUpgradeType</code>	Gets the Node Manager upgrade type used for Node Manager upgrade.	Offline
<code>getOldNodeManagerHome</code>	Gets the old Node Manager home used for Node Manager upgrade.	Offline
<code>nm</code>	Determine whether WLST is connected to Node Manager.	Online
<code>nmConnect</code>	Connect WLST to Node Manager to establish a session.	Online or Offline
<code>nmDisconnect</code>	Disconnect WLST from a Node Manager session.	Online or Offline
<code>nmEnroll</code>	Enable the Node Manager on the current computer to manage servers in a specified WebLogic domain.	Online
<code>nmGenBootStartupProps</code>	Generates the Node Manager property files, <code>boot.properties</code> and <code>startup.properties</code> , for the specified server.	Online
<code>nmKill</code>	Kill the specified server instance that was started with Node Manager.	Online or Offline
<code>nmLog</code>	Return the Node Manager log.	Online or Offline
<code>nmServerLog</code>	Return the server output log of the server that was started with Node Manager.	Online or Offline
<code>nmServerStatus</code>	Return the status of the server that was started with Node Manager.	Online or Offline
<code>nmSoftRestart</code>	Restart the specified System Component server instance.	Online or Offline
<code>nmStart</code>	Start a server in the current WebLogic domain using Node Manager.	Online or Offline
<code>nmVersion</code>	Return the Node Manager server version.	Online or Offline
<code>startNodeManager</code>	Starts Node Manager on the same computer that is running WLST.	Online or Offline
<code>stopNodeManager</code>	Stops Node Manager.	Online or Offline

3.10.1.1 getNodeManagerHome

Command Category: Control Commands

Use with WLST: Offline

Description

Gets the Node Manager home directory for a domain. In the event of an unsupported operation, the command returns a `WLSTException`. Node Manager does not have to be running in order to execute this command.

Syntax

```
getNodeManagerHome()
```

Example

The following example returns the Node Manager home directory:

```
wls:/offline/base_domain>getNodeManagerHome()  
'C:\domains\my_domain\nodemanager'
```

3.10.1.2 getNodeManagerType

Command Category: Control Commands

Use with WLST: Offline

Description

Gets the Node Manager type for a domain (`PerDomainNodeManager`, `CustomLocationNodeManager`, or `ManualNodeManagerSetup`). In the event of an unsupported operation, the command returns a `WLSTException`. Node Manager does not have to be running in order to execute this command.

For information on Node Manager types, see *Default Node Manager Configuration in Administering Node Manager for Oracle WebLogic Server*.

Syntax

```
getNodeManagerType()
```

Example

The following example returns the Node Manager type for the domain. In this case, it is a `PerDomainNodeManager`.

```
wls:/offline/base_domain>getNodeManagerType()  
'PerDomainNodeManager'
```

3.10.1.3 getNodeManagerUpgradeOverwriteDefault

Command Category: Control Commands

Use with WLST: Offline

Description

Gets the value of the Node Manager upgrade overwrite default flag. In the event of an unsupported operation, the command returns a `WLSTException`. Node Manager does not have to be running in order to execute this command.

Syntax

```
getNodeManagerUpgradeOverwriteDefault()
```

Example

The following command returns a value of true or false.

```
wls:/offline/base_domain>getNodeManagerUpgradeOverwriteDefault()
```

3.10.1.4 getNodeManagerUpgradeType

Command Category: Control Commands

Use with WLST: Offline

Description

Gets the Node Manager upgrade type to be used for Node Manager upgrade during domain reconfiguration. In the event of an unsupported operation, the command returns a `WLSTException`. Node Manager does not have to be running in order to execute this command.

Syntax

```
getNodeManagerUpgradeType()
```

Example

The following example returns a value of New or Migrate.

```
wls:/offline/base_domain>getNodeManagerUpgradeType()
```

3.10.1.5 getOldNodeManagerHome

Command Category: Control Commands

Use with WLST: Offline

Description

Gets the old Node Manager home to be used for Node Manager upgrade during domain reconfiguration. In the event of an unsupported operation, the command returns a `WLSTException`. Node Manager does not have to be running in order to execute this command.

Syntax

```
getOldNodeManagerHome
```

Example

In this example, the command returns the Node Manager home directory (/scratch/domain/nodemanager) that was used when the domain was reconfigured during an upgrade.

```
wls:/offline/base_domain>getOldNodeManagerHome()  
/scratch/domains/nodemanager
```

3.10.1.6 nm

Command Category: Node Manager Commands

Use with WLST: Online or Offline

Description

Determines whether WLST is connected to Node Manager. Returns `true` or `false` and prints a descriptive message. Node Manager must be running before you can execute this command.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nm()
```

Example

The following example indicates that WLST is currently connected to Node Manager that is monitoring `mydomain`.

```
wls:/mydomain/serverConfig> nm()  
Currently connected to Node Manager that is monitoring the domain "mydomain"  
wls:/mydomain/serverConfig>
```

The following example indicates that WLST is not currently connected to Node Manager.

```
wls:/mydomain/serverConfig> nm()  
Not connected to any Node Manager  
wls:/mydomain/serverConfig>
```

3.10.1.7 nmConnect

Command Category: Node Manager Commands

Use with WLST: Online or Offline

Description

Connects WLST to Node Manager to establish a session. After connecting to Node Manager, you can invoke any Node Manager commands via WLST. Node Manager must be running before you can execute this command.

Note:

If you have previously used the `connect` command in the current WLST session, `nmconnect` uses the same user credentials as were used for the `connect` command, unless you specify otherwise.

Once connected, the WLST prompt displays as follows, where *domainName* indicates the name of the WebLogic domain that is being managed: `wls:/nm/domainName>`. If you then connect WLST to a WebLogic Server instance, the prompt is changed to reflect the WebLogic Server instance. You can use the `nm` command to determine whether WLST is connected to Node Manager, as described in [nm](#).

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmConnect(username, password, [host], [port], [domainName], [domainDir] [nmType], [verbose])
```

```
nmConnect([userConfigFile, userKeyFile], [host], [port], [domainName], [domainDir], [nmType], [verbose])
```

Argument	Definition
<i>username</i>	Username of the operator who is connecting WLST to Node Manager. Note: When running a server in production mode, you must specify the username and password explicitly on the command line to ensure that the appropriate username and password are used when connecting to Node Manager.
<i>password</i>	Password of the operator who is connecting WLST to Node Manager. Note: When running a server in production mode, you must specify the username and password explicitly on the command line to ensure that the appropriate username and password are used when connecting to Node Manager.
<i>host</i>	Optional. Host name of Node Manager. This argument defaults to <code>localhost</code> .
<i>port</i>	Optional. Port number of Node Manager. This argument defaults to a value that is based on the Node Manager type, as follows: <ul style="list-style-type: none"> For <code>plain</code> type, defaults to 5556 For <code>rsh</code> type, defaults to 514 For <code>ssh</code> type, defaults to 22 For <code>ssl</code> type, defaults to 5556
<i>domainName</i>	Optional. Name of the WebLogic domain that you want to manage. This argument defaults to <code>mydomain</code> .
<i>domainDir</i>	Optional. Path or directory of the domain on the remote node. This argument defaults to the directory in which WLST was started.

Argument	Definition
<i>nmType</i>	<p>The Node Manager type. Valid values are:</p> <ul style="list-style-type: none"> <code>plain</code> for plain socket Java-based implementation <p>Note: If you specify <code>plain</code> for <code>nmType</code>, you must manually set the <code>SecureListener</code> parameter in <code>nodemanager.properties</code> to <code>false</code>. Otherwise, the <code>nmConnect</code> command will fail.</p> <ul style="list-style-type: none"> <code>rsh</code> for RSH implementation <code>ssh</code> for script-based SSH implementation <code>ssl</code> for Java-based SSL implementation <p>This argument defaults to <code>ssl</code>.</p>
<i>verbose</i>	<p>Optional. Boolean value specifying whether WLST connects to Node Manager in verbose mode. This argument defaults to <code>false</code>, disabling verbose mode.</p>
<i>userConfigFile</i>	<p>Optional. Name and location of a user configuration file which contains an encrypted username and password. Use the following syntax: <code>userConfigFile='file-system-path'</code>.</p> <p>When you create a user configuration file, the <code>storeUserConfig</code> command uses a key file to encrypt the username and password. Only the key file that encrypts a user configuration file can decrypt the username and password. (See storeUserConfig.)</p>
<i>userKeyFile</i>	<p>Optional. Name and location of the key file that is associated with the specified user configuration file and is used to decrypt it. Use the following syntax: <code>userKeyFile='file-system-path'</code>. (See storeUserConfig.)</p>

Example

The following example connects WLST to Node Manager to monitor the `oamdomain` domain using the default host and port numbers and `plain` Node Manager type.

```
wls:/myserver/serverConfig> nmConnect('username', 'password', 'localhost',
'5555', 'oamdomain', 'c:/Oracle/Middleware/user_projects/domains/oamdomain','ssl')
Connecting to Node Manager Server ...
Successfully connected to Node Manager.
wls:/nm/oamdomain>
```

The following example connects WLST to a Node Manager Server instance using a user configuration and key file to provide user credentials.

```
wls:/myserver/serverConfig> nmConnect(userConfigFile='
c:/myfiles/myuserconfigfile.secure',
userKeyFile='c:/myfiles/myuserkeyfile.secure',
host='172.18.137.82', port=26106, domainName='mydomain',
domainDir='c:/myfiles/mydomain', nmType='ssl')
Connecting to Node Manager Server ...
Successfully connected to Node Manager.
wls:/nm/mydomain>
```

3.10.1.8 nmDisconnect

Command Category: Node Manager Commands

Use with WLST: Online or Offline

WLST must be connected to Node Manager to run this command.

Description

Disconnects WLST from a Node Manager session.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmDisconnect()
```

Example

The following example disconnects WLST from a Node Manager session.

```
wls:/nm/oamdomain> nmDisconnect()  
Successfully disconnected from Node Manager  
wls:/myserver/serverConfig>
```

3.10.1.9 nmEnroll

Command Category: Node Manager Commands

Use with WLST: Online

Description

Enrolls the machine on which WLST is currently running. WLST must be connected to an Administration Server to run this command; WLST does not need to be connected to Node Manager.

This command downloads the following files from the Administration Server:

- Node Manager secret file (`nm_password.properties`), which contains the encrypted username and password that is used for server authentication.
- `SerializedSystemIni.dat` file.

This command also updates the `nodemanager.domains` file, under the `NodeManagerHome` directory, with the domain information. For the Java-based Node Manager, this file is typically located under `domain_home\nodemanager`. For the script-based Node Manager, this file's default location is `WL_HOME/common/nodemanager`, where `WL_HOME` is the location in which you installed WebLogic Server, for example, `ORACLE_HOME/wlserver`.

You must run this command once per WebLogic domain per machine unless that domain shares the root directory of the Administration Server.

If the machine is already enrolled when you run this command, the Node Manager secret file (`nm_password.properties`) is refreshed with the latest information from the Administration Server.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmEnroll([domainDir], [nmHome])
```

Argument	Definition
<i>domainDir</i>	Optional. Path or directory of the domain on the remote node. This argument defaults to the directory in which WLST was started.
<i>nmHome</i>	Optional. Path to the Node Manager home. The <code>nodemanager.domains</code> file, containing the domain information, is written to this directory. This argument defaults to <code>WL_HOME/common/nodemanager</code> , where <code>WL_HOME</code> refers to the top-level installation directory for WebLogic Server.

Example

The following example enrolls the current machine with Node Manager and saves the Node Manager secret file (`nm_password.properties`) and `SerializedSystemIni.dat` file to `c:/Oracle/Middleware/mydomain/common/nodemanager/nm_password.properties`. The `nodemanager.domains` file is written to `WL_HOME/common/nodemanager` by default.

```
wls:/mydomain/serverConfig> nmEnroll('c:/Oracle/Middleware/mydomain/common/
nodemanager')
Enrolling this machine with the domain directory at c:\Oracle\Middleware\mydomain
\common\nodemanager...
Successfully enrolled this machine with the domain directory at C:\Oracle\Middleware
\mydomain\common\nodemanager
wls:/mydomain/serverConfig>
```

3.10.1.10 nmGenBootStartupProps

Command Category: Node Manager Commands

Use with WLST: Online

Description

Generates the Node Manager properties files, `boot.properties` and `startup.properties`, for the specified server. The Node Manager properties files are stored relative to the root directory of the specified server. The target root directory must be on the same machine on which you are running the command.

You must specify the name of a server; otherwise, the command will fail.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmGenBootStartupProps(serverName)
```

Argument	Definition
<i>serverName</i>	Name of the server for which Node Manager property files are generated.

Example

The following example generates `boot.properties` and `startup.properties` in the root directory of the specified server, `ms1`.

```
wls:/mydomain/serverConfig> nmGenBootStartupProps('ms1')
Successfully generated boot.properties at
c:\Oracle\Middleware\mydomain\servers\ms1\data\nodemanager\boot.properties
Successfully generated startup.properties at
c:\Oracle\Middleware\mydomain\servers\ms1\data\nodemanager\startup.properties
wls:/mydomain/serverConfig>
```

3.10.1.11 nmKill

Command Category: Node Manager Commands

Use with WLST: Online or Offline

WLST must be connected to Node Manager to run this command.

Description

Kills the specified server instance that was started with Node Manager.

If you do not specify a server name using the `serverName` argument, the argument defaults to `myServer`, which must match your server name or the command will fail.

If you attempt to kill a server instance that was not started using Node Manager, the command displays an error.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmKill([serverName], [serverType], [pluginProps])
```

Argument	Definition
<code>serverName</code>	Optional. Name of the server to be killed. This argument defaults to <code>myserver</code> .
<code>serverType</code>	Optional. The type of server to kill. This argument defaults to <code>WebLogic</code> . Another valid option is <code>Coherence</code> .
<code>pluginProps</code>	Optional. The properties to use to kill the server. Defaults to <code>None</code> . Only relevant to plugin-handling system components.

Example

The following example kills the server named `oamserver`.

```
wls:/nm/oamdomain> nmKill('oamserver')
Killing server 'oamserver' ...
Server oamServer killed successfully.
wls:/nm/oamdomain>
```

3.10.1.12 nmLog

Command Category: Node Manager Commands

Use with WLST: Online or Offline

WLST must be connected to Node Manager to run this command.

Description

Returns the Node Manager log.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmLog([writer])
```

Argument	Definition
<i>writer</i>	Optional. <code>java.io.Writer</code> object to which you want to stream the log output. This argument defaults to the WLST writer stream.

Example

The following example displays the Node Manager log.

```
wls:/nm/oamdomain> nmLog()  
Successfully retrieved the Node Manager log and written.  
wls:/nm/oamdomain>
```

3.10.1.13 nmServerLog

Command Category: Node Manager Commands

Use with WLST: Online or Offline

WLST must be connected to Node Manager to run this command.

Description

Returns the server output log of the server that was started with Node Manager.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmServerLog([serverName], [writer], [serverType])
```

Argument	Definition
<i>serverName</i>	Optional. Name of the server for which you want to display the server output log. This argument defaults to <code>myserver</code> .
<i>writer</i>	Optional. <code>java.io.Writer</code> object to which you want to stream the log output. This argument defaults to the WLSTInterpreter standard out, if not specified.
<i>serverType</i>	Optional. The type of server to start. This argument defaults to <code>WebLogic</code> . Another valid option is <code>Coherence</code> .

Example

The following example displays the server output log for the `oamserver` server and writes the log output to `myWriter`.

```
wls:/nm/oamdomain> nmServerLog('oamserver',myWriter)
Successfully retrieved the server log and written.
wls:/nm/oamdomain>
```

3.10.1.14 nmServerStatus

Command Category: Node Manager Commands

Use with WLST: Online or Offline

WLST must be connected to Node Manager to run this command.

Description

Returns the status of the server that was started with Node Manager.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmServerStatus([serverName], [serverType])
```

Argument	Definition
<i>serverName</i>	Optional. Name of the server for which you want to display the status. This argument defaults to <code>myserver</code> .
<i>serverType</i>	Optional. The type of server to start. This argument defaults to <code>WebLogic</code> . Another valid option is <code>Coherence</code> .

Example

The following example displays the status of the server named `oamserver`, which was started with Node Manager.

```
wls:/nm/oamdomain> nmServerStatus('oamserver')
RUNNING
wls:/nm/oamdomain>
```

3.10.1.15 nmSoftRestart

Command Category: Node Manager Commands

Use with WLST: Online or Offline

Description

Restarts the specified system component server instance that was started with Node Manager. This command can be used only with Oracle system components (such as OHS) that are currently supported by Node Manager and WLST.

If you do not specify a server name using the `serverName` argument, the argument defaults to `myServer`, which must match your server name or the command will fail.

If you attempt to restart a system component server instance that was not started using Node Manager, the command displays an error. WLST must be connected to Node Manager to run this command.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmSoftRestart([serverName], serverType, [pluginProps])
```

Argument	Definition
<i>serverName</i>	Optional. Name of the system component server to be restarted. Defaults to <code>myServer</code> .
<i>serverType</i>	Required. The type of server to start (for example, OHS). Refer to the Administration Guide or other documentation for the system component to determine the appropriate value to use for this argument.
<i>pluginProps</i>	Optional. The properties to use to kill the server. Defaults to <code>None</code> . Only relevant to plugin-handling system components.

Example

The following example starts a System Component server instance named `ohsServer`.

```
wls:/nm/oamdomain> nmSoftRestart('ohsServer', 'OHS')
Restarting server 'ohsServer' ...
Server ohsServer restarted successfully.
wls:/nm/oamdomain>
```

3.10.1.16 nmStart

Command Category: Node Manager Commands

Use with WLST: Online or Offline

WLST must be connected to Node Manager to run this command.

Description

Starts a server in the current WebLogic domain using Node Manager.

In the event of an error, the command returns a `WLSTException`.

Note:

`boot.properties` must exist in order to start a server with `nmStart`. If this is the first time you are starting a server or the first time you are using Node Manager, you must manually create it or run the [nmGenBootStartupProps](#) command to generate `boot.properties` and `startup.properties` files for the server.

Alternatively, you can use the `nmStartprops` argument to provide user credentials (after connecting to Node Manager):

```
prps = makePropertiesObject("AdminURL=http://
listen_address:listen_port;Username=username;Password=password")
nmStart("managed1",props=prps)
```

Syntax

```
nmStart([serverName], [domainDir], [props], [writer], [serverType], [pluginProps])
```

Argument	Definition
<i>serverName</i>	Optional. Name of the server to be started.
<i>domainDir</i>	Optional. Domain directory of the server to be started. This argument defaults to the directory from which you started WLST.
<i>props</i>	Optional. System properties to apply to the new server.
<i>writer</i>	Optional. <code>java.io.Writer</code> object to which the server output is written. This argument defaults to the WLST writer.
<i>serverType</i>	Optional. The type of server to start. This argument defaults to <code>WebLogic</code> . Another valid option is <code>Coherence</code> .
<i>pluginProps</i>	Optional. The properties to use to start the server. Defaults to <code>None</code> . Only relevant to plugin-handling system components.

Example

The following example starts the `managed1` server in the current WebLogic domain using Node Manager. In this example, the `prps` variable stores the system property settings and is passed to the command using the `props` argument.

```
wls:/nm/mydomain> prps = makePropertiesObject("AdminURL=http://
listen_address:listen_port;Username=username;Password=password
;weblogic.ListenPort=8001")
wls:/nm/mydomain> nmStart("managed1",props=prps)
Starting server managed1 ...
Server managed1 started successfully
wls:/nm/mydomain>
```

The following example starts the Administration Server in the specified WebLogic domain using Node Manager.

```
wls:/nm/mydomain> nmStart("AdminServer")
Starting server AdminServer...
Server AdminServer started successfully
wls:/nm/mydomain>
```

3.10.1.17 nmVersion

Command Category: Node Manager Commands

Use with WLST: Online or Offline

WLST must be connected to Node Manager to run this command.

Description

Returns the Node Manager version.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
nmVersion()
```

Example

The following example displays the Node Manager version.

```
wls:/nm/oamdomain> nmVersion()
The Node Manager version that you are currently connected to is 9.0.0.0
wls:/nm/oamdomain>
```

3.10.1.18 startNodeManager

Command Category: Node Manager Commands

Use with WLST: Online or Offline

Description

Starts Node Manager on the same computer that is running WLST.

Note:

In production environments, Oracle recommends that you do *not* use the `startNodeManager` command to start Node Manager. The recommended approach is to install Node Manager as a service or daemon, or to use the `startNodeManager` script (`startNodeManager.sh` or `startNodeManger.cmd`).

If Node Manager is already running when you invoke the `startNodeManager` command, the following message is displayed:

```
A Node Manager has already been started.
Cannot start another Node Manager process via WLST
```

In the event of an error, the command returns a `WLSTException`.

Syntax

```
startNodeManager([verbose], [jvmArgs], [nmProperties])
```

Argument	Definition
<i>verbose</i>	Optional. Boolean value specifying whether WLST starts Node Manager in verbose mode. This argument defaults to <code>false</code> , disabling verbose mode.
<i>jvmArgs</i>	Optional. JVM arguments to pass to the server process. Multiple arguments can be specified, separated by commas. See below for a usage example for this argument.
<i>nmProperties</i>	Optional. Comma-separated list of Node Manager properties, specified as name-value pairs. Node Manager properties include, but are not limited to, the following: <code>NodeManagerHome</code> , <code>ListenAddress</code> , <code>ListenPort</code> , and <code>PropertiesFile</code> .

Example

The following example starts Node Manager using `C:/Oracle/Middleware/wlserver/common/nodemanager` as the Node Manager home and port `6666` as the Node Manager listen address on `myhost`. The JVM arguments set the JVM starting and maximum memory for Node Manager.

```
wls:/mydomain/serverConfig> startNodeManager(verbose='true',
NodeManagerHome='c:/Oracle/Middleware/wlserver/common/nodemanager',
ListenPort='6666', ListenAddress='myhost', jvmArgs='-Xms24m,-Xmx64m')
Launching Node Manager ...
Successfully launched the Node Manager.
The Node Manager process is running independent of the WLST process
Exiting WLST will not stop the Node Manager process. Please refer
to the Node Manager logs for more information.
The Node Manager logs will be under c:\Oracle\middleware\wlserver\common\nodemanager.
wls:/mydomain/serverConfig>
```

3.10.1.19 stopNodeManager

Command Category: Node Manager Commands

Use with WLST: Online or Offline

Description

Stops the Node Manager process.

Note:

In order to stop the Node Manager process, you must have either started Node Manager with `startNodeManager`, or Node Manager must have been started with the property `QuitEnabled=true`. You can configure this property in `$WLS_HOME/common/nodemanager.properties`. This allows you to connect to the Node Manager to shut it down.

If the Node Manager is not running when you invoke the `stopNodeManager` command, the following message is displayed:

Cannot stop the Node Manager unless you are connected to it.

Syntax

```
stopNodeManager()
```

Example

The following example stops the Node Manager process for the `base_domain` domain.

```
wls:/nm/base_domain> stopNodeManager()
Stopped Node Manager Process successfully
wls:/offline>
```

3.11.1 Tree Commands

Use the WLST tree commands to navigate among MBean hierarchies. [Table 3-12](#) lists and summarizes these commands.

Table 3-12 Tree Commands for WLST Configuration

Use this command...	To...	Use with WLST...
custom	Navigate to the root of custom MBeans that are registered in the server.	Online
domainConfig	Navigate to the last MBean to which you navigated in the domain configuration hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .	Online
domainCustom	Navigate to the root of custom MBeans that are registered in the Domain Runtime MBean Server	Online
domainRuntime	Navigate to the last MBean to which you navigated in the domain runtime hierarchy or to the root of the hierarchy, <code>DomainRuntimeMBean</code> .	Online
edit	Navigate to the last MBean to which you navigated in the edit configuration MBean hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .	Online
editCustom	Navigate to the root of custom MBeans.	Online
jndi	Navigates to the JNDI tree for the server to which WLST is currently connected.	Online
serverConfig	Navigate to the last MBean to which you navigated in the configuration MBean hierarchy or to the root of the hierarchy, <code>DomainMBean</code> .	Online
serverRuntime	Navigate to the last MBean to which you navigated in the runtime MBean hierarchy or to the root of the hierarchy, <code>ServerRuntimeMBean</code> .	Online

3.11.1.1 custom

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the root of custom MBeans that are registered in the Runtime MBean Server. WLST navigates, interrogates, and edits custom MBeans as it does domain MBeans; however, custom MBeans cannot use the `cmo` variable because a stub is not available.

Note:

When navigating to the `custom` tree, WLST queries all MBeans in the compatibility MBean server, the runtime MBean server, and potentially the JVM platform MBean server to locate the custom MBeans. Depending on the number of MBeans in the current WebLogic domain, this process may take a few minutes, and WLST may not return a prompt right away. Oracle recommends that you specify a JMX query Object Name Pattern to limit the amount of searching performed.

The `custom` command is available when WLST is connected to an Administration Server instance or a Managed Server instance. When connected to a WebLogic Integration or WebLogic Portal server, WLST can interact with all of the WebLogic Integration or WebLogic Portal server MBeans.

For more information about custom MBeans, see *Instrumenting and Registering Custom MBeans* in *Developing Manageable Applications Using JMX for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Note:

You can also navigate to custom MBeans on the Domain Runtime MBean Server using the `domainCustom()` command. See [domainCustom](#) for more information.

Syntax

```
custom([objectNamePattern])
```

Argument	Definition
<i>ObjectNamePattern</i>	A JMX query pattern, such as <code>sip:*</code> . The default value is null or <code>*:*</code> .

Example

The following example navigates from the configuration MBean hierarchy to the custom MBean hierarchy on an Administration Server instance.

```
wls:/mydomain/serverConfig> custom()  
Location changed to custom tree. This is a writeable tree with No root. For more  
help, use help('custom')  
wls:/mydomain/custom>
```

3.11.1.2 domainConfig

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the last MBean to which you navigated in the domain Configuration hierarchy or to the root of the hierarchy, `DomainMBean`. This read-only hierarchy stores the configuration MBeans that represent your current WebLogic domain.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
domainConfig()
```

Example

The following example navigates from the configuration MBean hierarchy to the WebLogic domain Configuration hierarchy on an Administration Server instance.

```
wls:/mydomain/serverConfig> domainConfig()  
Location changed to domainConfig tree. This is a read-only tree with DomainMBean as  
the root.  
For more help, use help('domainConfig')  
wls:/mydomain/domainConfig> ls()  
dr-- AppDeployments  
dr-- BridgeDestinations  
dr-- Clusters  
dr-- CustomResources  
dr-- DeploymentConfiguration  
dr-- Deployments  
dr-- EmbeddedLDAP  
dr-- ErrorHandlings  
dr-- FileStores  
dr-- InternalAppDeployments  
dr-- InternalLibraries  
dr-- JDBCDataSourceFactories  
dr-- JDBCStores  
dr-- JDBCSystemResources  
dr-- JMSBridgeDestinations  
dr-- JMSInteropModules  
dr-- JMSServers  
dr-- JMSSystemResources  
...  
wls:/mydomain/domainConfig>
```

3.11.1.3 domainCustom

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the domain custom tree of custom MBeans that are registered in the Domain Runtime MBean Server. WLST navigates, interrogates, and edits domain custom MBeans as it does domain MBeans; however, domain custom MBeans cannot use the `cmo` variable because a stub is not available.

Note:

When navigating to the domainCustom tree, WLST queries all MBeans in the Domain Runtime MBean Server, the Runtime MBean Servers on each server, and potentially the JVM platform MBean server to locate the custom MBeans. Depending on the number of MBeans in the current WebLogic domain, this process may take a few minutes, and WLST may not return a prompt right away. Oracle recommends that you specify a JMX query Object Name Pattern to limit the amount of searching performed.

The `domainCustom` command is available only when WLST is connected to an Administration Server instance.

For more information about the Domain Runtime MBean Server, see Understanding WebLogic Server MBeans in *Developing Custom Management Utilities Using JMX for Oracle WebLogic Server*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
domainCustom(ObjectNamePattern)
```

Argument	Definition
<i>ObjectNamePattern</i>	A JMX query pattern, such as <code>sip:*</code> . The default value is null or <code>*:*</code> .

Example

The following example navigates from the configuration MBean hierarchy to the domain custom MBean hierarchy on an Administration Server instance:

```
wls:/mydomain/serverConfig> domainCustom()
Location changed to domain custom tree. This is a writeable tree with No root. For
more help, use help('domainCustom').
```

```
wls:/mydomain/domainCustom
```

3.11.1.4 domainRuntime

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the last MBean to which you navigated in the domain Runtime hierarchy or to the root of the hierarchy, `DomainRuntimeMBean`. This read-only hierarchy stores the runtime MBeans that represent your current WebLogic domain.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
domainRuntime()
```

Example

The following example navigates from the configuration MBean hierarchy to the domain Runtime hierarchy on an Administration Server instance.

```
wls:/mydomain/serverConfig> domainRuntime()
wls:/mydomain/domainRuntime> ls()
dr-- AppRuntimeStateRuntime
dr-- DeployerRuntime
dr-- DomainServices
dr-- LogRuntime
dr-- MessageDrivenControleJBRuntime
dr-- MigratableServiceCoordinatorRuntime
dr-- MigrationDataRuntimes
dr-- SNMPAgentRuntime
dr-- ServerLifeCycleRuntimes
dr-- ServerRuntimes
dr-- ServerServices

-r-- ActivationTime                Mon Aug 01 11:41:25 EDT 2005
-r-- Clusters                      null
-r-- MigrationDataRuntimes        null
-r-- Name                          sampleMedRecDomain
-rw- Parent                       null
-r-- SNMPAgentRuntime             null
-r-- Type                          DomainRuntime
-r-x restartSystemResource        Void :
      WebLogicMBean(weblogic.management.configuration.SystemResourceMBean)
wls:/mydomain/domainRuntime>
```

3.11.1.5 edit

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the last MBean to which you navigated in the edit configuration MBean hierarchy or to the root of the hierarchy, `DomainMBean`. This writable hierarchy stores all of the configuration MBeans that represent your current WebLogic domain.

Note:

To edit configuration beans, you must be connected to an Administration Server. If you connect to a Managed Server, WLST functionality is limited to browsing the configuration bean hierarchy. While you cannot use WLST to change the values of MBeans on Managed Servers, it is possible to use the Management APIs to do so. Oracle recommends that you change only the values of configuration MBeans on the Administration Server. Changing the values of MBeans on Managed Servers can lead to an inconsistent domain configuration.

For more information about editing configuration beans, see "Using WLST Online to Update an Existing Domain" in *Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
edit()
```

Example

The following example illustrates how to navigate from the server configuration MBean hierarchy to the editable copy of the domain configuration MBean hierarchy, in an Administration Server instance.

```
wls:/myserver/serverConfig> edit()
Location changed to edit tree. This is a writeable tree with DomainMBean as the root.
For more help, use help('edit')
wls:/myserver/edit !> ls()
dr-- AppDeployments
dr-- BridgeDestinations
dr-- Clusters
dr-- DeploymentConfiguration
dr-- Deployments
dr-- EmbeddedLDAP
...
wls:/myserver/edit !>
```

3.11.1.6 editCustom

Command Category: Browse Commands

Use with WLST: Online

Description

Navigates to the root of custom MBeans that are registered in the Edit MBeanServer. WLST navigates, interrogates, and edits custom MBeans; however, MBeans that are accessed using the `editCustom` command cannot use the `cmo` variable because a stub is not available.

The `editCustom` command is available when WLST is connected to an Administration Server instance.

For more information about custom MBeans, see *Accessing Other WebLogic MBeans and Custom MBeans* in *Understanding the WebLogic Scripting Tool*.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
editCustom([ObjectNamePattern])
```

Argument	Definition
<i>ObjectNamePattern</i>	Optional. A JMX query pattern such as "sip:*". The default value is " *.* " or null.

Example

The following example changes the location to the `editCustom` tree. This is a writable tree with no root.

```
wls:/mydomain/serverConfig> editCustom()
wls:/mydomain/editCustom>
```

3.11.1.7 jndi

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the JNDI tree for the server to which WLST is currently connected. This read-only tree holds all the elements that are currently bound in JNDI.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
jndi()
```

Example

The following example navigates from the runtime MBean hierarchy to the Domain JNDI tree on an Administration Server instance.

```
wls:/myserver/runtime> jndi()
Location changed to jndi tree. This is a read-only tree with No root. For more help,
use help('jndi')
wls:/myserver/jndi> ls()
dr--  ejb
dr--  javax
dr--  jms
dr--  weblogic
...
```

3.11.1.8 serverConfig

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the last MBean to which you navigated in the configuration MBean hierarchy or to the root of the hierarchy, `DomainMBean`.

This read-only hierarchy stores the configuration MBeans that represent the server to which WLST is currently connected. The MBean attribute values include any command-line overrides that a user specified while starting the server.

In the event of an error, the command returns a `WLSTException`.

For more information, see *Navigating Among MBean Hierarchies* in *Understanding the WebLogic Scripting Tool*.

Syntax

```
serverConfig()
```

Example

The following example navigates from the domain runtime MBean hierarchy to the configuration MBean hierarchy on an Administration Server instance.

```
wls:/mydomain/domainRuntime> serverConfig()
wls:/mydomain/serverConfig>
```

3.11.1.9 serverRuntime

Command Category: Tree Commands

Use with WLST: Online

Description

Navigates to the last MBean to which you navigated in the runtime MBean hierarchy or to the root of the hierarchy, `ServerRuntimeMBean`. This read-only hierarchy stores the runtime MBeans that represent the server to which WLST is currently connected.

In the event of an error, the command returns a `WLSTException`.

Syntax

```
serverRuntime()
```

Example

The following example navigates from the configuration MBean hierarchy to the runtime MBean hierarchy on an Administration Server instance.

```
wls:/mydomain/serverConfig> serverRuntime()
Location changed to serverRuntime tree. This is a read-only tree with
ServerRuntimeMBean as the root.
For more help, use help('serverRuntime')
wls:/mydomain/serverRuntime>
```

3.12.1 Store Administration Commands

Use the WLST store administration commands to manage JDBC stores and file stores. [Table 3-13](#) lists and summarizes these commands. For more information about these

commands, see Store Administration Using WLST in *Administering the WebLogic Persistent Store*.

Table 3-13 Store Administration Commands

Use this command...	To...	Use with WLST...
<code>closestore</code>	Closes a store.	Offline
<code>compactstore</code>	Compacts and defragments the space occupied by a file store.	Offline
<code>dumpstore</code>	Dumps store contents in human-readable format to an XML file.	Offline
<code>getopenstores</code>	Returns a list of opened stores (for script access).	Offline
<code>getstoreconns</code>	Returns a list of connections in the specified store (for script access).	Offline
<code>liststore</code>	Lists store names, open stores or connections in a store.	Offline
<code>openfilestore</code>	Opens a file store.	Offline
<code>openjdbcstore</code>	Opens a JDBC store.	Offline

3.12.1.1 closestore

Command Category: Store Administration

Use with WLST: Offline

Description

Closes a previously opened file store or JDBC store. This command returns 1 when successful or a 0 if there is a failure.

Syntax

```
closestore(store)
```

Argument	Definition
<code>store</code>	The name of a previously opened JDBC or file store.

Example

The following example closes a JDBC store called `myJDBCStore`.

```
wls:/offline> closestore('myJDBCStore')
```

3.12.1.2 compactstore

Command Category: Store Administration

Use with WLST: Offline

Description

Compacts and defragments the space occupied by a file store. This command only works in WLST offline mode and does not work for JDBC stores. This command returns a 1 if successful or a 0 if there is a failure.

Note:

Running file stores are optimized for speed without regard for space. Therefore, running compact will reduce the stores size and utilize its allocated space more efficiently.

Syntax

```
compactstore(dir, [tempdir])
```

Argument	Definition
<i>dir</i>	A directory that contains a file store.
<i>tempdir</i>	Optional. A temporary directory to be used during compacting. This directory should not be under the specified file store directory and must have space sufficient for the file store.

Example

The following example compacts the space occupied by file store files in the `mystores` directory:

```
wls:/offline> compactstore('/mystores', '/tmpmystore.dir')
```

3.12.1.3 dumpstore

Command Category: Store Administration

Use with WLST: Offline

Description

Dumps store or connection contents in a human-readable format to the specified XML file. The XML file format is the same format used by the diagnostic image of the persistent store. This command returns a 1 if successful or a 0 if there is a failure.

Syntax

```
dumpstore(store, outfile, [conn], [deep])
```

Argument	Definition
<i>store</i>	The name of a previously opened JDBC or file store.

Argument	Definition
<i>outfile</i>	The name of the XML file to dump the information to, with or without the .xml suffix.
<i>conn</i>	Optional. Store connection name to which the dump should be restricted.
<i>deep</i>	Optional. If <code>true</code> , store record data contents are added as a hex dump to the dump output. This argument defaults to <code>false</code> .

Example

The following example dumps the contents of `myJDBCStore` to the file `mystoredump-out.xml`:

```
wls:/offline> dumpstore('myJDBCStore', 'mystoredump-out')
```

3.12.1.4 getopenstores

Command Category: Store Administration

Use with WLST: Offline

Description

Returns a list of opened stores (for script access). This command returns a 1 if successful or a 0 if there is a failure.

Syntax

```
getopenstores()
```

Example

The following example returns a list of open stores:

```
wls:/offline> getopenstores()  
array(java.lang.String,[])
```

3.12.1.5 getstoreconns

Command Category: Store Administration

Use with WLST: Offline

Description

Returns a list of connections in the specified store (for script access). This command returns a 1 if successful or a 0 if there is a failure.

Syntax

```
getstoreconns(store)
```

Argument	Definition
<i>store</i>	The name of a previously opened JDBC or file store.

Example

The following example returns a list of connections for the JDBC store myJDBCStore:

```
wls:/offline> getstoreconns('myJDBCStore')
array(java.lang.String,[])
```

3.12.1.6 liststore

Command Category: Store Administration

Use with WLST: Offline

Description

Lists storenames, opened stores, or connections (for interactive access). This command returns a 1 if successful or a 0 if there is a failure.

Syntax

```
liststore([store], [dir])
```

Argument	Definition
<i>store</i>	Optional. The name of a previously opened JDBC or file store.
<i>dir</i>	Optional. The directory for which to list available store names.

Example

The following example lists the connections for a JDBC store called myJDBCStore:

```
wls:/offline> liststore('myJDBCStore')
```

3.12.1.7 openfilestore

Command Category: Store Administration

Use with WLST: Offline

Description

Opens an existing file store for further operations. If a file store does not exist, a new one is created in an open state using the `-create` parameter. This command returns a 1 if successful or a 0 if there is a failure.

Syntax

```
openfilestore(store, [dir], [create])
```

Argument	Definition
<i>store</i>	The name of the store to be opened.
<i>dir</i>	Optional. The name of a file system directory containing store files. This argument defaults to '.'.
<i>create</i>	Optional. If set to <code>true</code> , the command creates a non-existing file store. The default value is <code>false</code> .

Example

The following example creates a file store called `myJDBCStore`:

```
wls:/offline> openfilestore('myJDBCStore', '', 'true')
```

3.12.1.8 openjdbcstore

Command Category: Store Administration

Use with WLST: Offline

Description

Opens an existing JDBC store for further operations. If a JDBC store does not exist, a new one is created in an open state. This command returns a 1 if successful or a 0 if there is a failure.

Syntax

```
openjdbcstore(store, [driver], [url], [propfile], [user], [password], [ddl],
tableNamePrefix])
```

Argument	Definition
<i>store</i>	The name of the store to open.
<i>driver</i>	Optional. The name of the JDBC driver class. This argument defaults to null.
<i>url</i>	Optional. URL to connect to the database.
<i>propfile</i>	Optional. JDBC properties file. This argument defaults to null.
<i>user</i>	Optional. The user name for accessing the database. This argument defaults to null.
<i>password</i>	Optional. The password for accessing the database. This argument defaults to null.

Argument	Definition
<i>ddl</i>	Optional. The name of the DDL file that defines the database table format. This argument defaults to null.
<i>tableNamePrefix</i>	Optional. The prefix for the naming database table. This argument defaults to null.

Example

The following example opens the JDBC store `myJDBCStore`. No DDL file is specified.

```
wls:/offline> openjdbcstore('myJDBCStore', 'oracle.jdbc.OracleDriver',
'jdbc:oracle:thin:@test231:1521:test123', './wlstoreadmin-dump.props',
'dbuser', 'dbpw', '', 'jdbcstoreprefix')
```

3.13.1 WLST Variable Reference

[Table 3-14](#) describes WLST variables and their common usage. All variables are initialized to default values at the start of a user session and are changed according to the user interaction with WLST.

Table 3-14 WLST Variables

Variable	Description	Example
<code>cmgr</code>	The <code>cmgr</code> variable is set to the <code>ConfigurationManagerMBean</code> . You can use this variable to get the current value of any <code>ConfigurationManagerMBean</code> attribute.	<pre>wls:/mydomain/edit> cmgr.getCurrentEditor() 'weblogic'</pre>
<code>cmo</code>	Current Management Object. The <code>cmo</code> variable is set to the bean instance to which you navigate using WLST. You can use this variable to perform any <code>get</code> , <code>set</code> , or <code>invoke</code> method on the current bean instance. WLST sets the variable to the current WLST path. For example, when you change to the <code>serverConfig</code> hierarchy, <code>cmo</code> is set to <code>DomainMBean</code> . When you change to the <code>serverRuntime</code> hierarchy, <code>cmo</code> is set to <code>ServerRuntimeMBean</code> . The variable is available in all WLST hierarchies except <code>custom</code> and <code>jndi</code> .	<pre>wls:/mydomain/edit> cmo.setAdministrationPort(9092)</pre>
<code>connected</code>	Boolean value specifying whether WLST is connected to a running server. WLST sets this variable to <code>true</code> when connected to a running server; otherwise, WLST sets it to <code>false</code> .	<pre>wls:/mydomain/serverConfig> print connected false</pre>

Table 3-14 (Cont.) WLST Variables

Variable	Description	Example
domainName	Name of the WebLogic domain to which WLST is connected.	wls:/mydomain/serverConfig> print domainName mydomain
domainRuntimeService	DomainRuntimeServiceMBean MBean. This variable is available only when WLST is connected to the Administration Server.	wls:/mydomain/serverConfig> domainRuntimeService.getServerName() 'myserver'
editService	EditServiceMBean MBean. This variable is available only when WLST is connected to the Administration Server.	wls:/mydomain/edit> dc = editService.getDomainConfiguration()
exitonerror	Boolean value specifying whether WLST terminates script execution when it encounters an exception. This variable defaults to true, indicating that script execution is terminated when WLST encounters an error. This variable is not applicable when running WLST in interactive mode.	wls:/mydomain/serverConfig> print exitonerror true
home	Represents the local MBeanHome.	wls:/mydomain/serverConfig> print home weblogic.rmi.internal.BasicRemoteRef - hostID: '-hostID: [7001,7001,-1,-1,-1,-1,-1]:mydomain:AdminServer', oid: '260', channel: 'null'
isAdminServer	Boolean value specifying whether WLST is connected to a WebLogic Administration Server instance. WLST sets this variable to true if WLST is connected to a WebLogic Administration Server; otherwise, WLST sets it to false.	wls:/mydomain/serverConfig> print isAdminServer true
mbs	MBeanServerConnection object that corresponds to the current location in the hierarchy.	wls:/mydomain/serverConfig> mbs.isRegistered(ObjectName('mydomain:Name=mydomain,Type=Domain'))
recording	Boolean value specifying whether WLST is recording commands. WLST sets this variable to true when the startRecording command is entered; otherwise, WLST sets this variable to false.	wls:/mydomain/serverConfig> print recording true
runtimeService	RuntimeServiceMBean MBean.	wls:/mydomain/serverConfig> sr=runtimeService.getServerRuntime()

Table 3-14 (Cont.) WLST Variables

Variable	Description	Example
serverName	Name of the server to which WLST is connected.	wls:/mydomain/serverConfig> print serverName myserver
typeService	TypeServiceMBean MBean.	wls:/mydomain/serverConfig> mi=typeService.getMBeanInfo('weblogic. management.configuration.ServerMBean')
username	Name of user currently connected to WLST.	wls:/mydomain/serverConfig> print username weblogic
version	Current version of the running server to which WLST is connected.	wls:/mydomain/serverConfig> print version WebLogic Server 9.0 Thu Aug 31 12:15:50 PST 2005 778899

