

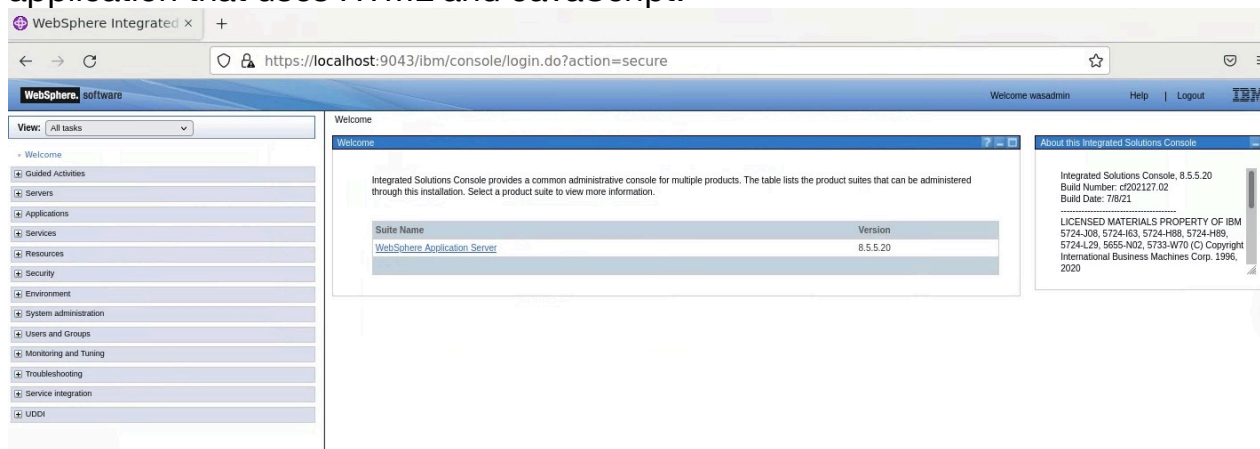
Exercise 4 - Exploring the Administrative Console

At the end of this exercise, you should be able to:

- • Verify that WebSphere Application Server is started
- • Start the administrative console
- • Explore the navigation and functions of the administrative console
- • Use the administrative console to examine configuration information, resources, and properties

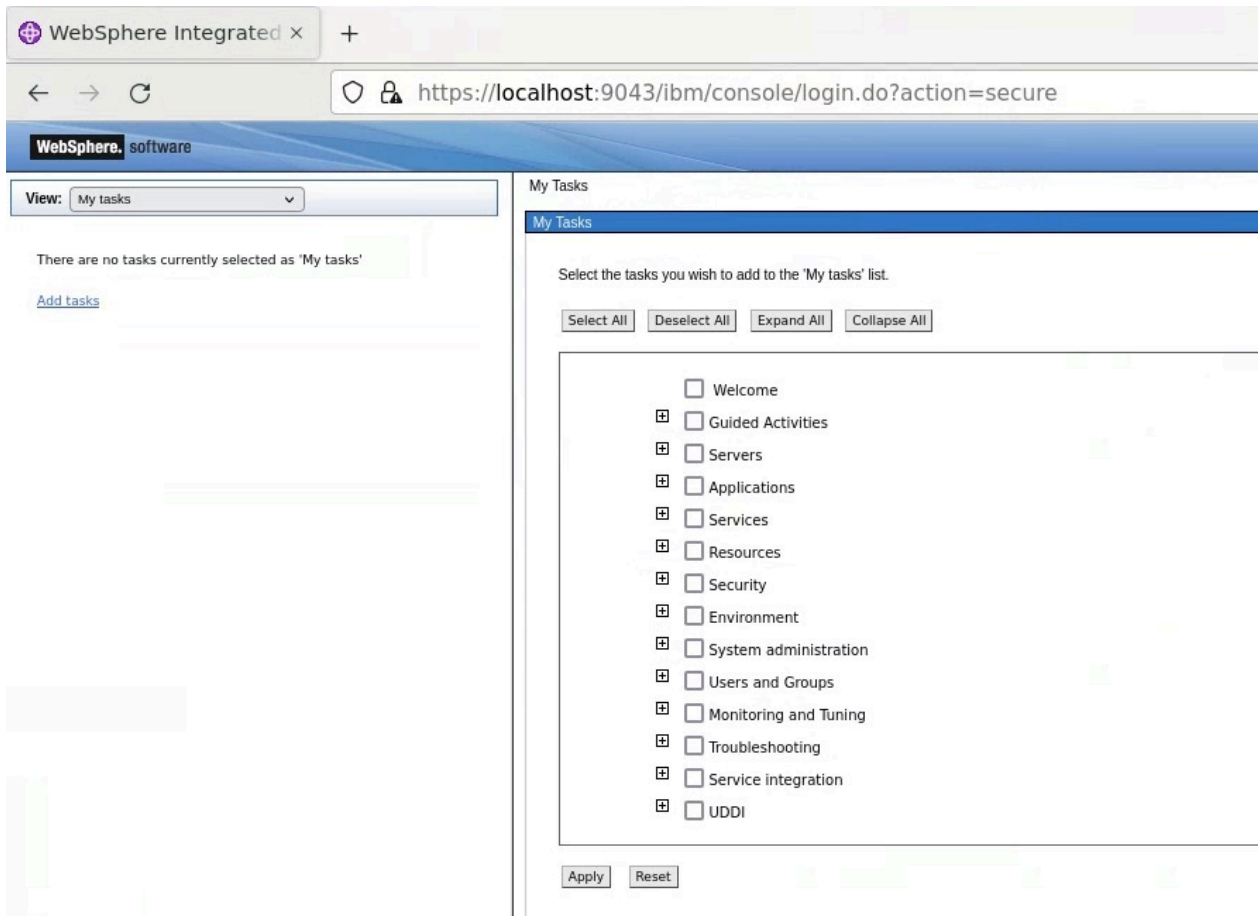
Section 1: Start the administrative console

The administrative console is the graphical user interface for managing WebSphere Application Server configuration settings for servers, applications, and other resources. The administrative console is a browser-based web application that uses HTML and JavaScript.



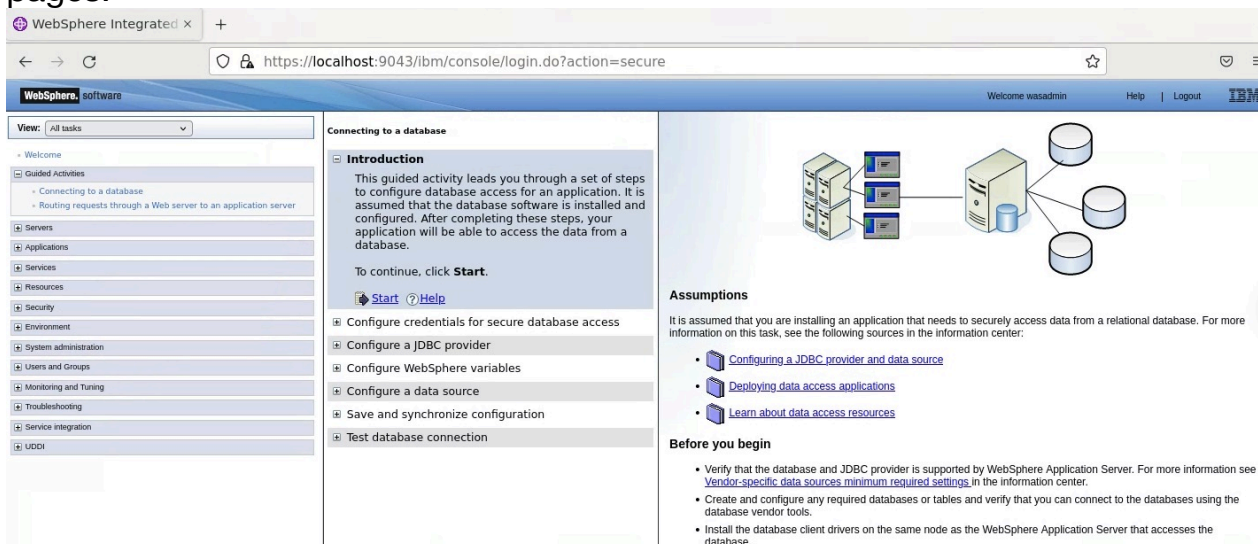
Section 2: Explore the navigation tree

The administrative console navigation tree lists the tasks available in the administrative console. Tasks are grouped into organizational nodes that represent categories of tasks.



Section 3: Explore guided activities

In this part of the exercise, you look at the guided activities for WebSphere Application Server V8.5. Guided activities lead you through common administrative tasks that require you to go to multiple administrative console pages.



Section 4: Explore server settings

In this part of the exercise, you look at some of the settings that can be configured with the administrative console. You begin by looking at the server section.

The screenshot displays the IBM WebSphere Administrative Console interface. The top navigation bar includes the 'WebSphere' logo and a 'Welcome wasadmin' message. The left sidebar contains a tree view with categories like 'Guided Activities', 'Servers', 'Applications', 'Services', 'Resources', 'Security', 'Environment', and 'System administration'. The main content area is titled 'Application servers' and shows a table of servers. Below the table, there are tabs for 'Runtime' and 'Configuration'. The 'Configuration' tab is active, showing 'General Properties' and 'Server-specific Application Settings' on the left, and 'Container Settings', 'Applications', and 'Server messaging' on the right.

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Application servers

Application servers

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

Preferences

Name	Node	Host Name	Version
You can administer the following resources:			
server1	wasnd-node01Node01	wasnd-node01.europe-west3-c.c.enhanced-casing-342608.internal	ND 8.5.5.20
Total 1			

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Application servers > server1

Use this page to configure an application server. An application server is a server that provides services required to run enterprise applications.

Runtime | **Configuration**

General Properties

Name:

Node name:

☐ Run in development mode

☒ Parallel start

☐ Start components as needed

Access to internal server classes:

Server-specific Application Settings

Classloader policy:

Class loading mode:

Container Settings

- [Session management](#)
- ☐ SIP Container Settings
- ☐ Web Container Settings
- ☐ Portlet Container Settings
- ☐ EJB Container Settings
- ☐ Container Services
- ☐ Business Process Services

Applications

- [Installed applications](#)

Server messaging

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

Application servers > server1 > Process definition > Process Logs

Use this page to view or modify settings to specify the files to which standard out and standard error streams write. The process logs are created by redirecting the standard out and standard error streams of a process to independent log files. Native code writes to the process logs. These logs can also contain information that relates to problems in native code or diagnostic information written by the JVM. One set of process logs is created for each application server and all of its applications. Process logs are also created for the deployment manager and each node manager. Changes on the Configuration panel apply when the server is restarted. Changes on the Runtime panel apply immediately.

Configuration

Runtime

General Properties

* Stdout File Name

* Stderr File Name

Apply

OK

Reset

Cancel

Communications

Ports

Port Name	Port	Details
BOOTSTRAP_ADDRESS	2809	
SOAP_CONNECTOR_ADDRESS	8880	
ORB_LISTENER_ADDRESS	9100	
SAS_SSL_SERVERAUTH_LISTENER_ADDRESS	9401	
CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS	9403	
CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS	9402	
WC_adminhost	9060	
WC_defaulthost	9080	
DCS_UNICAST_ADDRESS	9353	
WC_adminhost_secure	9043	
WC_defaulthost_secure	9443	
SIP_DEFAULTHOST	5060	
SIP_DEFAULTHOST_SECURE	5061	
SIB_ENDPOINT_ADDRESS	7276	
SIB_ENDPOINT_SECURE_ADDRESS	7286	
SIB_MQ_ENDPOINT_ADDRESS	5558	
SIB_MQ_ENDPOINT_SECURE_ADDRESS	5578	
IPC_CONNECTOR_ADDRESS	9633	
OVERLAY_UDP_LISTENER_ADDRESS	11003	
OVERLAY_TCP_LISTENER_ADDRESS	11004	

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Application servers

Application servers > server1 > Ports

Specifies the TCP/IP ports this server uses for connections.

Preferences

New... Delete

Select Port Name Host Port Transport Details

You can administer the following resources:

Select	Port Name	Host	Port	Transport Details
<input type="checkbox"/>	IPC_CONNECTOR_ADDRESS	\${LOCALHOST_NAME}	9633	No associated transports
<input type="checkbox"/>	WC_defaulthost_secure	*	9443	View associated transports
<input type="checkbox"/>	CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS	wasnd-node01.europe-west3-c.c.enhanced-casing-342608.internal	9403	No associated transports
<input type="checkbox"/>	CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS	wasnd-node01.europe-west3-c.c.enhanced-casing-342608.internal	9402	No associated transports
<input type="checkbox"/>	SAS_SSL_SERVERAUTH_LISTENER_ADDRESS	wasnd-node01.europe-west3-c.c.enhanced-casing-342608.internal	9401	No associated transports
<input type="checkbox"/>	DCS_UNICAST_ADDRESS	*	9353	View associated transports

Section 5: Examine application settings

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Enterprise Applications

Enterprise Applications

Use this page to manage installed applications. A single application can be deployed onto multiple servers.

Preferences

Start Stop Install Uninstall Update Rollout Update Remove File Export Export DDL Export File Analyze

Select Name Application Status Liberty Report

You can administer the following resources:

Select	Name	Application Status	Liberty Report
<input type="checkbox"/>	DefaultApplication	➔	⊗
<input type="checkbox"/>	ivtApp	➔	⊗
<input type="checkbox"/>	query	➔	⊗

Total 3

Section 6: Examine environment settings

WebSphere Integrated x +

← → ↻ https://localhost:9043/ibm/console/secure/securelogin.do

WebSphere software Welcome wasadmin

View: All tasks

- Welcome
- Guided Activities
- Servers
- Applications
- Services
- Resources
- Security
- Environment
 - Virtual hosts
 - Update global Web server plug-in configuration
 - WebSphere variables
 - Shared libraries
 - SIP application routers
 - Replication domains
- Naming
- OSGi bundle repositories
- System administration
- Users and Groups
- Monitoring and Tuning
- Troubleshooting
- Service integration
- UDDI

from values at other levels. When a variable has conflicting scope values, the more granular scope value overrides values at greater scope levels. Therefore, server variables override node variables, which override cluster variables, which override cell variables.

Scope: =All scopes

Scope specifies the level at which the resource definition is visible. For detailed information on what scope is and how it works, [see the scope settings help](#).

All scopes

Preferences

New... Delete

Select	Name	Value	Scope
You can administer the following resources:			
<input type="checkbox"/>	APP_INSTALL_ROOT	\${USER_INSTALL_ROOT}/installedApps	Node=wasnd-node01Node01
<input type="checkbox"/>	CONNECTJDBC_JDBC_DRIVER_PATH		Node=wasnd-node01Node01
<input type="checkbox"/>	CONNECTOR_INSTALL_ROOT	\${USER_INSTALL_ROOT}/installedConnectors	Node=wasnd-node01Node01
<input type="checkbox"/>	DB2390_JDBC_DRIVER_PATH		Node=wasnd-node01Node01
<input type="checkbox"/>	DB2UNIVERSAL_JDBC_DRIVER_NATIVEPATH		Node=wasnd-node01Node01
<input type="checkbox"/>	DB2UNIVERSAL_JDBC_DRIVER_PATH		Node=wasnd-node01Node01

Section 7: Examine resource settings

WebSphere Integrated x +

← → ↻ https://localhost:9043/ibm/console/secure/securelogin.do

WebSphere software Welcome wasadmin

View: All tasks

- Welcome
- Guided Activities
- Servers
- Applications
- Services
- Resources
 - Schedulers
 - Object pool managers
 - JMS
 - JDBC
 - JDBC providers
 - Data sources
 - Data sources (WebSphere Application Server V4)
 - Resource Adapters
 - Asynchronous beans
 - Cache instances
 - Mail
 - URL
 - Resource Environment
- Security
- Environment
- System administration
- Users and Groups
- Monitoring and Tuning
- Troubleshooting

Cell=wasnd-node01Node01Cell, Profile=profile1

JDBC providers

JDBC providers

Use this page to edit properties of a JDBC provider. The JDBC provider object encapsulates the specific JDBC driver implementation class for access to the specific vendor database of your environment. Learn more about this task in a [guided activity](#). A guided activity provides a list of task steps and more general information about the topic.

Scope: =All scopes

Scope specifies the level at which the resource definition is visible. For detailed information on what scope is and how it works, [see the scope settings help](#).

All scopes

Preferences

New... Delete

Select	Name	Scope	Description
You can administer the following resources:			
<input type="checkbox"/>	Derby JDBC Provider	Node=wasnd-node01Node01,Server=server1	Derby embedded non-XA JDBC Provider
Total 1			

Section 8: Examine troubleshooting

The Troubleshooting area shows messages about runtime events and configuration problems. This area automatically refreshes, and you can view either the runtime messages or configuration problem totals.

WebSphere Integrated Solutions console interface showing the Runtime Events configuration page. The left sidebar contains a navigation tree with categories like Welcome, Guided Activities, Servers, Applications, Services, Resources, Security, Environment, System administration, Users and Groups, Monitoring and Tuning, Troubleshooting, Service integration, and UDDI. The main content area is titled 'Runtime Events' and includes instructions on how to enable runtime events. A dropdown menu is set to 'None' with an 'Apply' button below it. Below this is a 'Preferences' section with a 'Clear All' button and a table with columns for Timestamp, Message Originator, and Message. The table currently shows 'None' and a 'Total 0' at the bottom.

Section 9: Modify the administrative console session timeout

When you are working with the administrative console, the session expires if it is idle for more than 30 minutes. To continue working, you must log in again. Many administrators find the default session idle duration too short. You can change the session idle duration to a time that works best for you. The session idle duration time cannot be modified from the administrative console. The timeout must be modified by running a script.

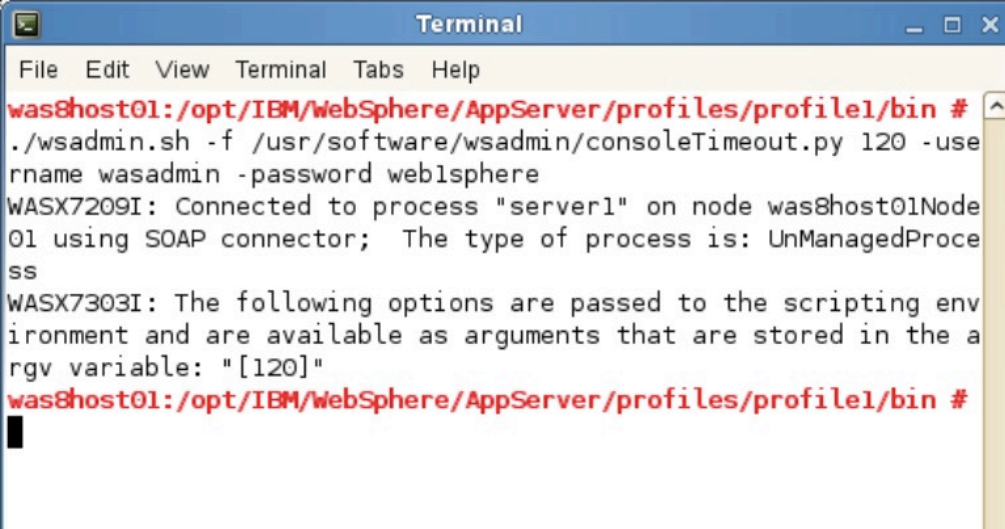
consoleTimeout.py

```
#-----
# Name: consoleTimeout.py
# Role: Display or change the AdminConsole inactivity timeout value.
# Author: Robert A. (Bob) Gibson
# Note: Based upon the Jacl script in the online documentation
# http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/index.jsp?topic=/com.ibm
#-----
import re, sys;

#-----
# Name: Usage()
# Role: Display script usage information, and exit (terminate script)
#-----
def Usage( cmdName ):
    print '''
Command: %(cmdName)s\n
Purpose: WebSphere (wsadmin) script used to display, or modify the Admin
        Console timeout value.\n
Usage: %(cmdName)s [value]\n
Where:
    value = An optional numeric value representing the number of minutes of
            inactivity that are allowed.  If no value is specified, the
            current invalidationTimeout value is displayed.\n
Examples:
    wsadmin -lang jython -f %(cmdName)s.py\n
    wsadmin -lang jython -f %(cmdName)s.py 30''' % locals()
    sys.exit( 1 )

#-----
```

```
./wsadmin.sh -f /usr/software/wsadmin/consoleTimeout.py 120  
-username wasadmin -password weblsphere
```



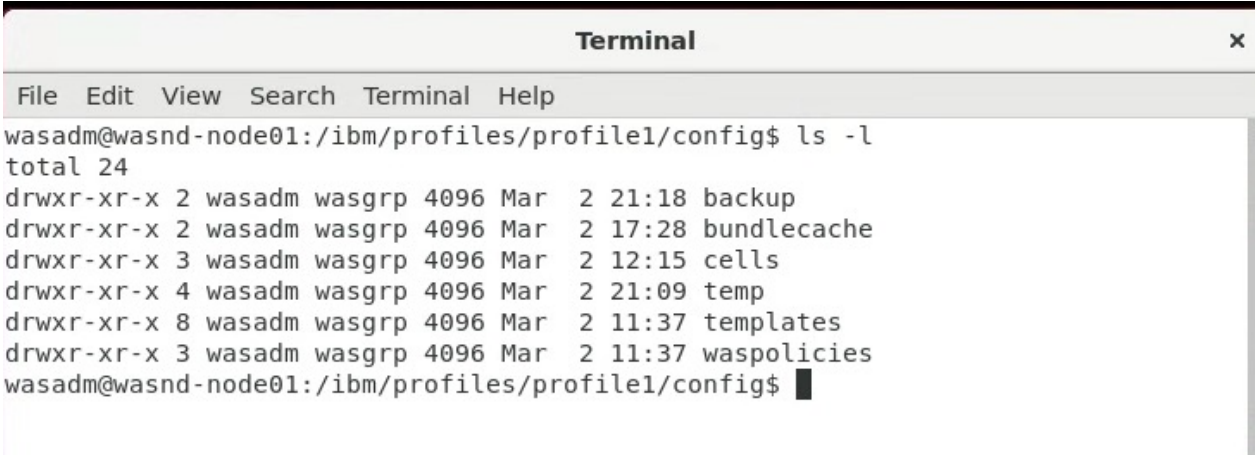
A terminal window titled "Terminal" with a menu bar (File, Edit, View, Terminal, Tabs, Help). The prompt is `was8host01:/opt/IBM/WebSphere/AppServer/profiles/profile1/bin #`. The command `./wsadmin.sh -f /usr/software/wsadmin/consoleTimeout.py 120 -username wasadmin -password weblsphere` is entered. The output shows two informational messages: `WASX7209I: Connected to process "server1" on node was8host01Node01 using SOAP connector; The type of process is: UnManagedProcess` and `WASX7303I: The following options are passed to the scripting environment and are available as arguments that are stored in the argv variable: "[120]"`. The prompt returns to `was8host01:/opt/IBM/WebSphere/AppServer/profiles/profile1/bin #`.

Section 10:Log out of the administrative console

When you are working in the administrative console, a work area is saved which includes all configuration changes you make in the session. When you log out, you can save or discard these changes. If you close the browser, the session work area is preserved. The next time you log in, you can recover the work area from the previous session.

Section 13:Explore configuration files

Examine some of the configuration files for the WebSphere Application Server.



A terminal window titled "Terminal" with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is `wasadm@wasnd-node01:/ibm/profiles/profile1/config$`. The command `ls -l` is entered. The output shows a directory listing of the config directory:

Permissions	Size	User	Group	Month	Day	Time	File
drwxr-xr-x	2	wasadm	wasgrp	4096	Mar	2 21:18	backup
drwxr-xr-x	2	wasadm	wasgrp	4096	Mar	2 17:28	bundlecache
drwxr-xr-x	3	wasadm	wasgrp	4096	Mar	2 12:15	cells
drwxr-xr-x	4	wasadm	wasgrp	4096	Mar	2 21:09	temp
drwxr-xr-x	8	wasadm	wasgrp	4096	Mar	2 11:37	templates
drwxr-xr-x	3	wasadm	wasgrp	4096	Mar	2 11:37	waspolicies

The prompt returns to `wasadm@wasnd-node01:/ibm/profiles/profile1/config$`.

