

WebSphere Application Server administrative console

Unit objectives

After completing this unit, you should be able to:

- Describe how to access the administrative console
- Describe the administrative console in a cell topology
- Describe the administrative console interface
- Describe the use of the following administrative tools:
 - Help
 - Preferences
 - Filters
 - Guided activities
 - Troubleshooting
- Describe user and group administrative roles
- Describe the Tivoli Performance Viewer

Administrative console

The screenshot shows the WebSphere Integrated Solutions Console administrative interface. The top navigation bar includes the 'WebSphere. software' logo, a user greeting 'Welcome wasadmin', and links for 'Help' and 'Logout'. The left sidebar contains a 'View: All tasks' dropdown and a list of expandable menu items: 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 'Welcome' and contains a descriptive paragraph about the console's purpose. Below the text is a table with two columns: 'Suite Name' and 'Version'. The table lists 'WebSphere Application Server' with version '8.5.5.0'. To the right of the main content is a panel titled 'About this Integrated Solutions Console' which displays version information (8.5.5.0), build number (gm1319.01), build date (5/14/13), and a license notice: 'LICENSED MATERIALS PROPERTY OF IBM 5724-J08, 5724-I63, 5724-H88, 5724-H89, 5655-W65 (C)'.

WebSphere. software

Welcome wasadmin

Help | Logout

IBM

View: All tasks

- Welcome
- Guided Activities
- Servers
- Applications
- Services
- Resources
- Security
- Environment
- System administration
- Users and Groups
- Monitoring and Tuning
- Troubleshooting
- Service integration
- UDDI

Welcome

Integrated Solutions Console provides a common administrative console for multiple products. The table lists the product suites that can be administered through this installation. Select a product suite to view more information.

Suite Name	Version
WebSphere Application Server	8.5.5.0

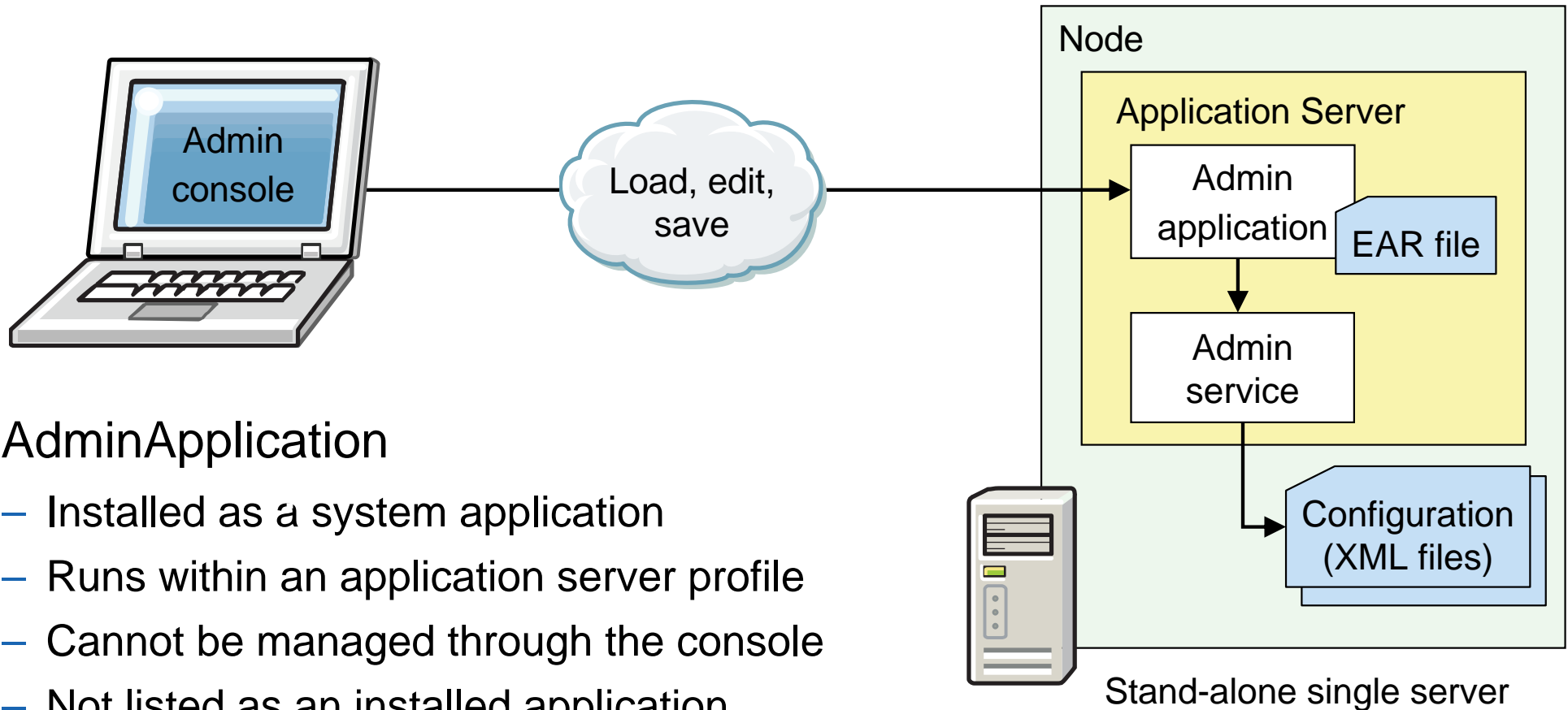
About this Integrated Solutions Console

Integrated Solutions Console, 8.5.5.0
 Build Number: gm1319.01
 Build Date: 5/14/13

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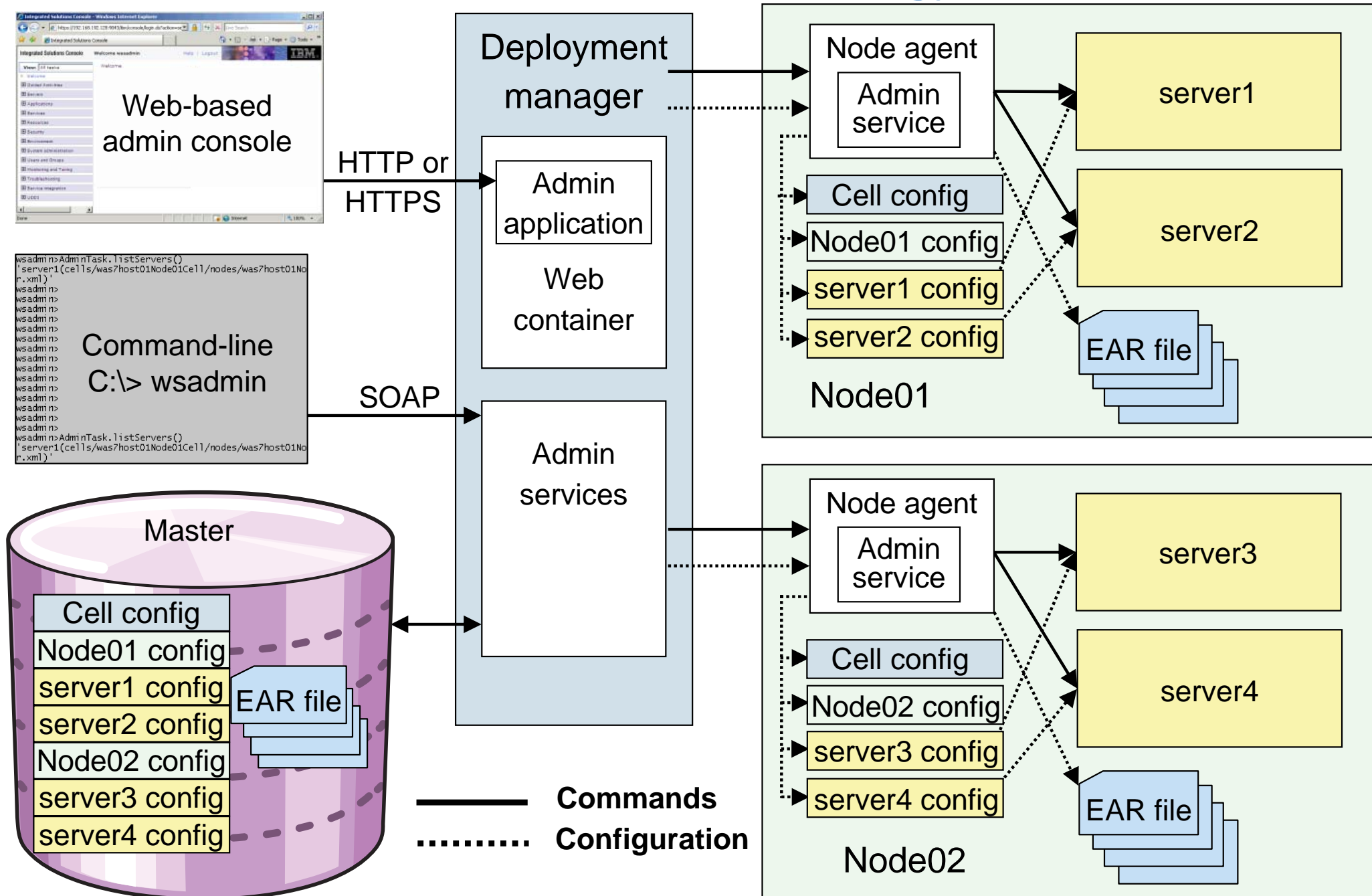
- Web browser-based tool that manages WebSphere Application Server
- Supports a full range of product administrative activities

Starting the administrative console



- AdminApplication
 - Installed as a system application
 - Runs within an application server profile
 - Cannot be managed through the console
 - Not listed as an installed application
 - WebSphere Security protects it
- Accessed through `http://localhost:9060/ibm/console`
 - 9060 is the default port

Administrative console in a cell topology



Console login

1

Log on to the console

- **User ID**
 - A string that identifies the user
 - Is used to track changes that the user makes
 - User ID must be **unique**
- **Password**
 - If security is set, specify a password



WebSphere. software

WebSphere Integrated Solutions Console

User ID:

Password:

Log in

2

User ID conflict

- Shown when another user is logged in with the same user ID



WebSphere Integrated Solutions Console

Another user is currently logged in with the same user ID. Select from the following options:

☒ Log out the other user with the same user ID. You can recover changes made during the other user's session.

☐ Return to the Login page and enter a different user ID.

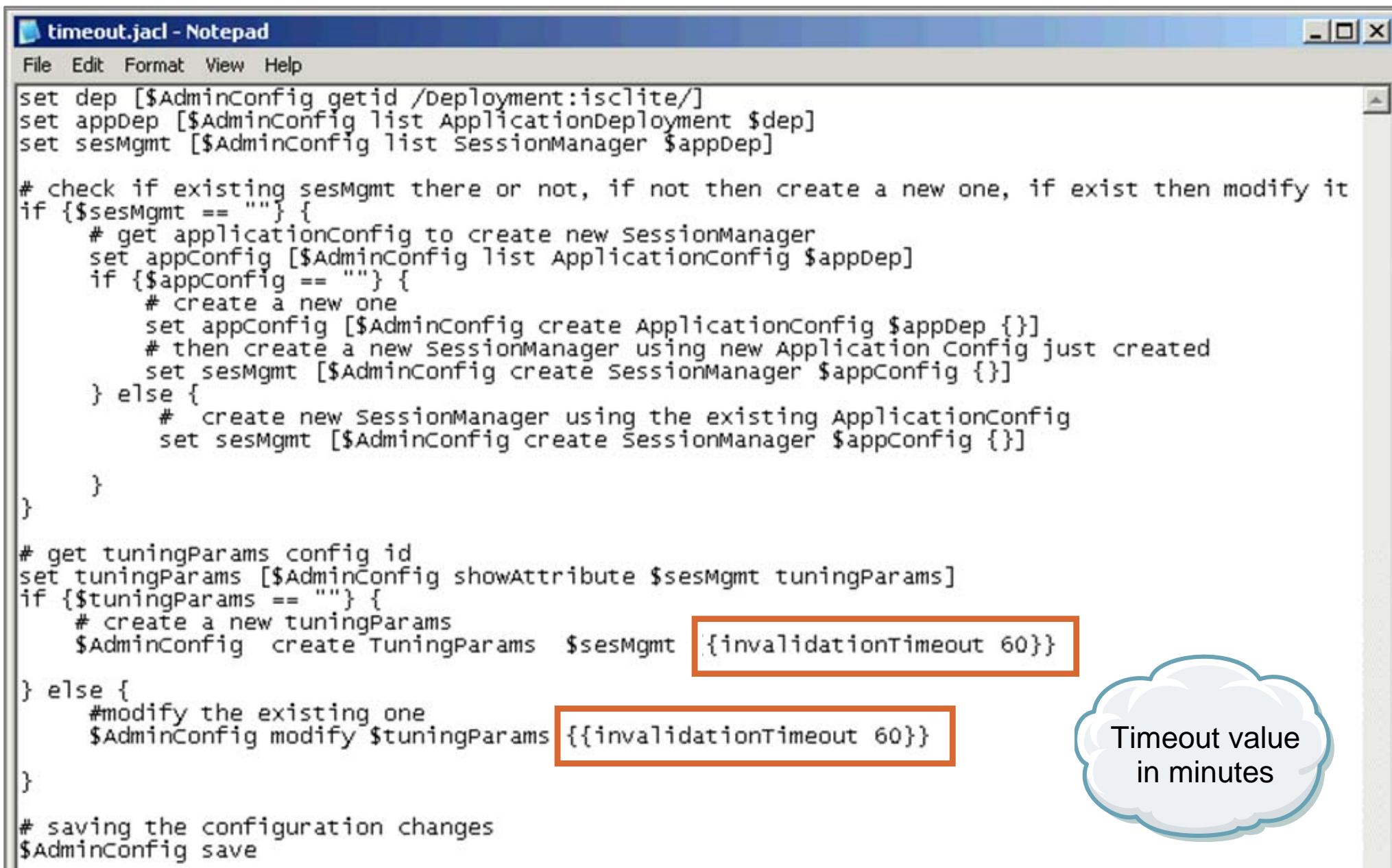
OK

Recovering prior changes



- You can recover prior changes if your prior session times out
- Two options are available:
 - Work with the default administrative configuration
 - Work with the administrative configuration from the prior session

Administrative console session timeout



```
timeout.jacl - Notepad
File Edit Format View Help

set dep [$AdminConfig getid /Deployment:isclite/]
set appDep [$AdminConfig list ApplicationDeployment $dep]
set sesMgmt [$AdminConfig list SessionManager $appDep]

# check if existing sesMgmt there or not, if not then create a new one, if exist then modify it
if {$sesMgmt == ""} {
    # get applicationConfig to create new SessionManager
    set appConfig [$AdminConfig list ApplicationConfig $appDep]
    if {$appConfig == ""} {
        # create a new one
        set appConfig [$AdminConfig create ApplicationConfig $appDep {}]
        # then create a new SessionManager using new Application Config just created
        set sesMgmt [$AdminConfig create SessionManager $appConfig {}]
    } else {
        # create new SessionManager using the existing ApplicationConfig
        set sesMgmt [$AdminConfig create SessionManager $appConfig {}]
    }
}

# get tuningParams config id
set tuningParams [$AdminConfig showAttribute $sesMgmt tuningParams]
if {$tuningParams == ""} {
    # create a new tuningParams
    $AdminConfig create TuningParams $sesMgmt {invalidationTimeout 60}
} else {
    # modify the existing one
    $AdminConfig modify $tuningParams {invalidationTimeout 60}
}

# saving the configuration changes
$AdminConfig save
```

- Issue `wsadmin -f <path to timeout script>/timeout.jacl`

Administrative console panels

Enterprise Applications

Enterprise Applications

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

+ Preferences

StartStopInstallUninstallUpdateRollout UpdateRemove FileExportExport DDLExport File

Select	Name
You can administer the following resources:	
<input type="checkbox"/>	DefaultApplication
<input type="checkbox"/>	ivtApp
<input type="checkbox"/>	query
Total 3	

Enterprise Applications

[Enterprise Applications](#) > DefaultApplication

Use this page to configure an enterprise application. Click the links to access pages for further configuration.

Configuration

General Properties

* Name
DefaultApplication

Application reference validation
Issue warnings

Detail Properties

Target specific application status

Modules

☐ [Manage Modules](#)
☐ [Display module build ids](#)

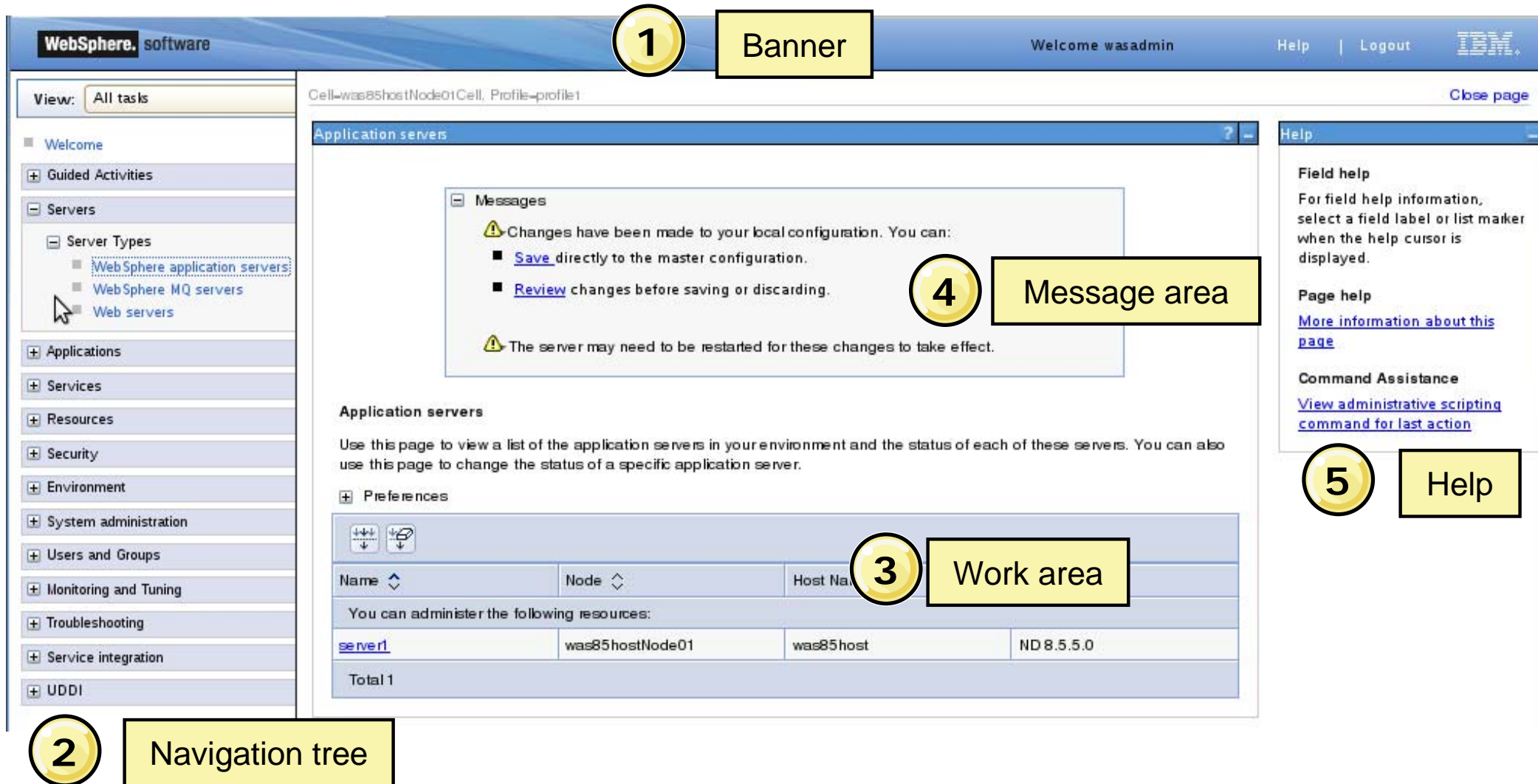
Web Module Properties

☐ [Session management](#)
☐ [Context Root For Web Modules](#)
☐ [JSP and JSF options](#)

3 Wizard pages

- JDBC wizard is an example of a wizard page.

Administrative console areas



1 Banner

2 Navigation tree

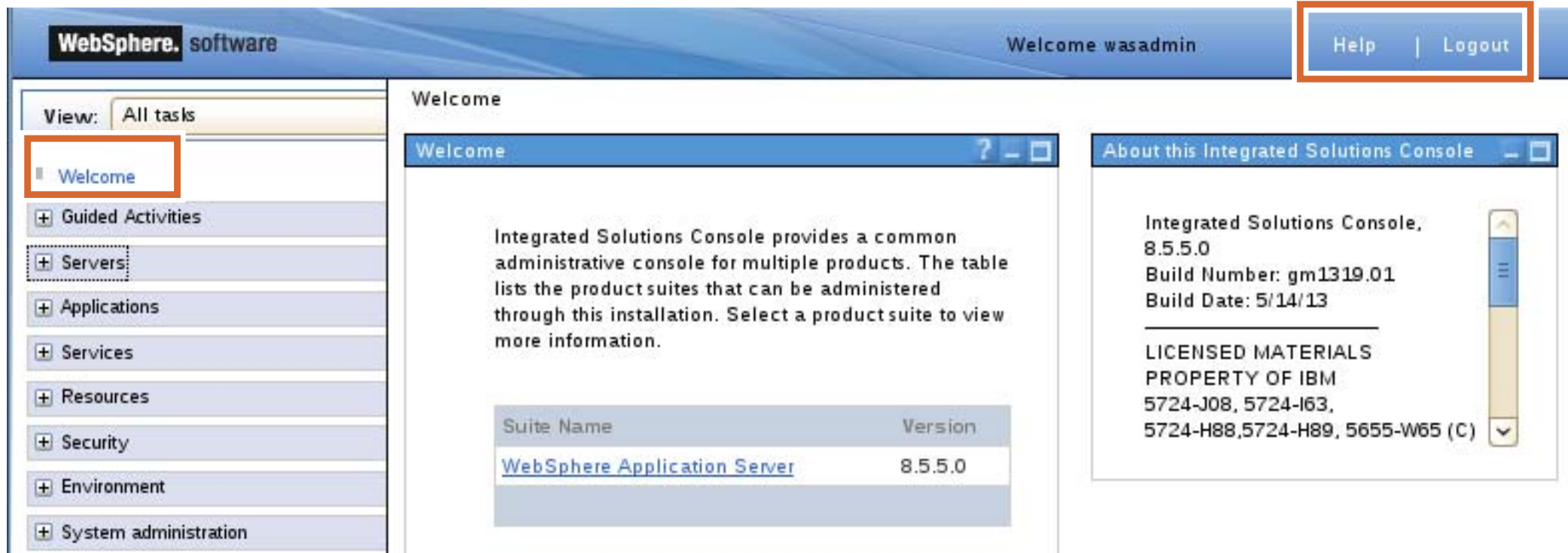
3 Work area

4 Message area

5 Help

The screenshot shows the WebSphere Administrative Console interface. The top banner (1) includes the 'WebSphere. software' logo, a 'Welcome wasadmin' message, and links for 'Help' and 'Logout'. The left navigation tree (2) lists various administrative tasks like 'Guided Activities', 'Servers', 'Applications', and 'Security'. The main work area (3) displays the 'Application servers' page, which includes a 'Messages' section (4) with configuration change notifications and a table of application servers. The table lists one server named 'server1' on 'was85hostNode01' with host 'was85host' and version 'ND 8.5.5.0'. A 'Help' sidebar (5) is located on the right, providing field, page, and command assistance.

Administrative console banner



WebSphere. software Welcome wasadmin **Help | Logout**

View: All tasks

- Welcome
- Guided Activities
- Servers
- Applications
- Services
- Resources
- Security
- Environment
- System administration

Welcome

Integrated Solutions Console provides a common administrative console for multiple products. The table lists the product suites that can be administered through this installation. Select a product suite to view more information.

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WebSphere Application Server	8.5.5.0

About this Integrated Solutions Console

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Item	Description
Welcome	<ul style="list-style-type: none"> The administrative console home page Contains links to information sources
Logout	<ul style="list-style-type: none"> Logs you out of the administrative console session Shows the Login page after successfully logging out If changes were made and not saved, the Save page is shown
Help	<ul style="list-style-type: none"> Opens a new web browser with detailed online help for the administrative console Note: This Help is not the information center

Administrative console navigation tree (1 of 2)



Tasks	Description
Guided activities	Step-by-step guidance for certain configuration tasks such a connecting to a database
Servers	Configuration of application servers and web servers
Applications	Installation and management of applications
Services	Configuration of service providers, clients, policy sets, trust service, security, cache, and reliable message state
Resources	Configuration of application resources and management of those resources
Security	Configuration and management of WebSphere security, SSL, and web services security
Environment	Configuration of hosts, replication domains, environment variables, naming, and others

Administrative console navigation tree (2 of 2)



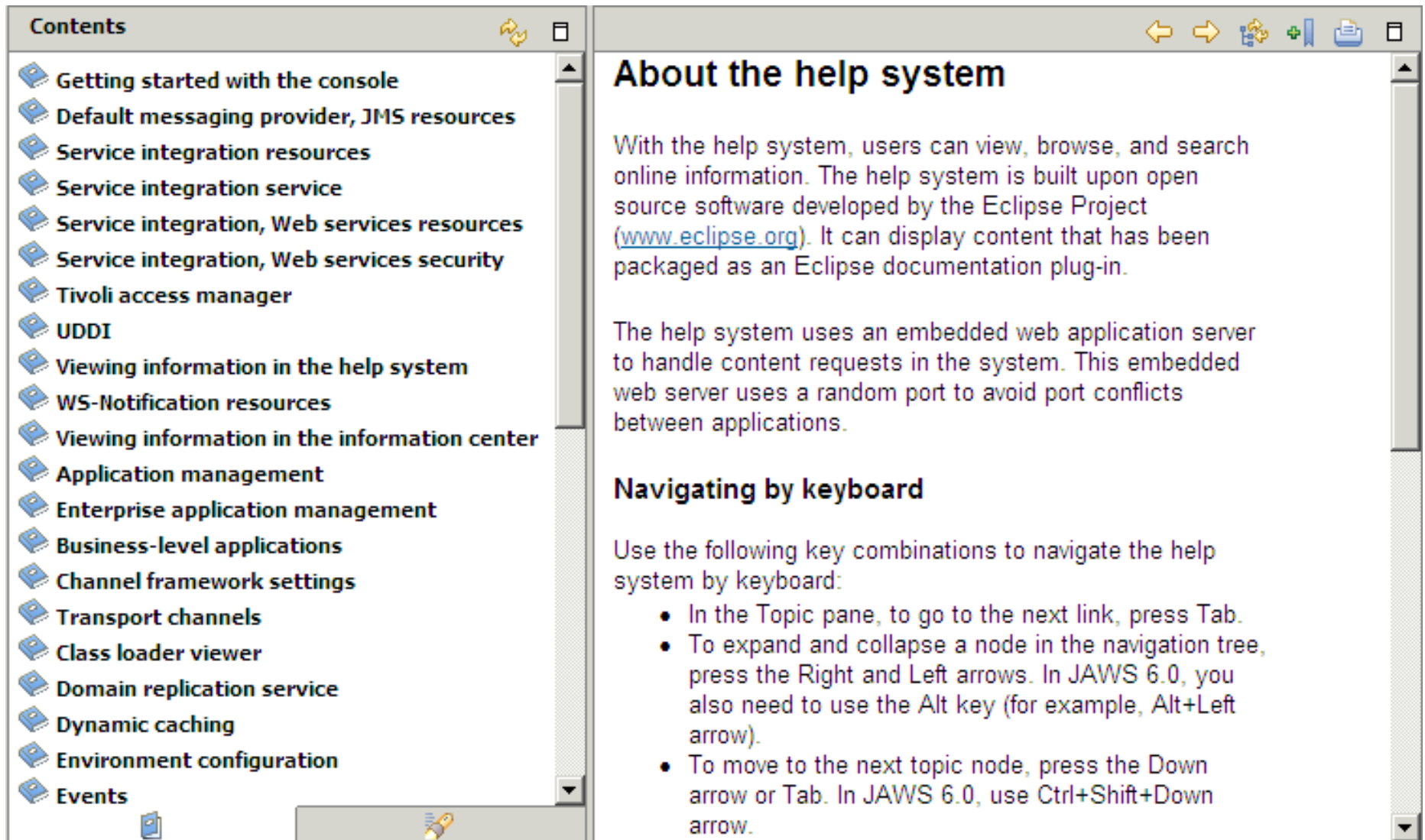
Tasks	Description
System administration	Configuration and management of components, users, and preferences
Users and Groups	Configuration of users and groups
Monitoring and Tuning	Configuration of the Performance Monitoring Infrastructure and Tivoli Performance Viewer
Troubleshooting	Tracking and verification of configuration errors and problems
Service integration	Configuration for service integration buses, messaging engines, and messages destinations
UDDI	Configuration of UDDI nodes

Administrative console help (1 of 2)

1

Console help

- Click **Help** from console banner
- Select from list of references



Administrative console help (2 of 2)

2 Page help

- Click **More information about this page** from help workspace

Contents

- Class loader collection
- Class loader settings
- CORBA object binding settings
- EJB binding settings
- Foreign cell binding collection
- Foreign cell binding settings
- Host alias collection
- Host alias settings
- Indirect lookup binding settings
- Message-driven bean deployment descriptor p
- MIME type collection
- MIME type settings
- Name space binding collection
- Other context properties settings
- Shared library collection
- Shared library settings
- Specify binding type settings
- String binding settings
- Update the global Web server plug-in configur
- Virtual host collection**

Environment configuration

Virtual host collection

Use this page to create and manage configurations that each let a single host machine resemble multiple host machines. Such configurations are known as *virtual hosts*.

To view this administrative console page, click **Environment > Virtual hosts**.

Each virtual host has a logical name (which you define on this panel) and is known by its list of one or more domain name system (DNS) aliases. A DNS alias is the TCP/IP host name and port number used to request the servlet, for example yourHostName:80. (Port 80 is the default.)

You define one or more alias associations by clicking an existing virtual host or by adding a new virtual host.

When a servlet request is made, the server name and port number entered into the browser are compared to a list of all known aliases in an effort to locate the correct virtual host to

Help

Field help
For field help information, select a field label or list marker when the help cursor is displayed.

Page help
[More information about this page](#)

Command Assistance
[View administrative scripting command for last action](#)

Administrative console preferences

The screenshot displays the WebSphere Administrative Console interface. On the left, a navigation pane shows a tree structure. Under 'System administration', 'Console Preferences' is selected and highlighted with a red rectangle. The main content area is titled 'Console preferences' and contains the following elements:

- Console preferences**
- Specify user preferences for the administrative console workspace.
- Checkboxes for the following preferences:
 - ☒ Turn on workspace automatic refresh
 - ☐ No confirmation on workspace discard
 - ☐ Use default scope
 - ☒ Show the help portlet
 - ☐ Enable command assistance notifications
 - ☐ Log command assistance commands
- [Bidirectional support options](#)
-

- Specify how features of the administrative console workspace behave

Administrative console preferences, filters, and scope

- Some administrative console pages include fields to customize how much data is shown
- Select options in the following fields:
 - Preferences
 - Filter
 - Scope

Enterprise Applications

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

1 Set preferences

2 Select resources

3 Set filters

You can administer the following resources:

<input type="checkbox"/>	DefaultApplication	➡
<input type="checkbox"/>	ivtApp	➡
<input type="checkbox"/>	query	➡

Total 3

Guided Activities

Integrated Solutions Console

Welcome wasadmin

Help | Logout

IBM

View: All tasks

- Welcome
- Guided Activities**
 - Connecting to a database
 - Routing requests through a Web s to an application server
- Servers
- Applications
- Services
- Resources
- Security
- Environment
- System administration
- Users and Groups
- Monitoring and Tuning
- Troubleshooting
- Service integration
- UDDI

Connecting to a database

Introduction

This guided activity leads you through a set of steps to configure database access for an application. It is assumed that the database software is installed and configured. After completing these steps, your application will be able to access the data from a database.

To continue, click **Start**.

[Start](#) [Help](#)

- Configure credentials for secure database access
- Configure a JDBC provider
- Configure WebSphere variables
- Configure a data source
- Save and synchronize configuration
- Test database connection

Assumptions

It is assumed that you are installing an application that needs to securely access data from a relational database. For more information on this task, see the following sources in the information center:

- [Configuring a JDBC provider and data source](#)
- [Deploying data access applications](#)
- [Learn about data access resources](#)

- Structured steps through common administrative tasks
- Otherwise, must know exactly what pages to use and where to find them within the console

My tasks

- 1 Select My tasks from the navigation view selection list

Integrated Solutions Console Welcome wasadmin

View: My tasks

There are no tasks currently selected as 'My tasks'

[Add tasks](#)

- 3 The tasks are shown in My tasks list

View: My tasks

[Edit 'My tasks'](#)

- WebSphere application servers
- Web servers
- New Application
- WebSphere enterprise applications

- 2 Select tasks to add to My tasks list

My Tasks

My Tasks

Select the tasks you wish to add to the 'My tasks' list.

[Select All](#) [Deselect All](#) [Expand All](#) [Collapse All](#)

- ☐ Welcome
- ☒ Guided Activities
- ☒ Servers
 - ☒ Server Types
 - ☒ WebSphere application servers
 - ☐ WebSphere MQ servers
 - ☒ Web servers
- ☒ Applications
 - ☒ New Application
- ☒ Application Types
 - ☒ WebSphere enterprise applications
 - ☐ Business-level applications
 - ☐ Assets

[Apply](#) [Reset](#)

Users and groups

- ☐ Guided Activities
- ☐ Servers
- ☐ Applications
- ☐ Services
- ☐ Resources
- ☐ Security
- ☐ Environment
- ☐ System administration
- ☒ **Users and Groups**
 - ☐ Administrative user roles
 - ☐ Administrative group roles
 - ☐ Manage Users
 - ☐ Manage Groups

1

User and group management

- Administer user and group roles
- Manage users and groups

Administrative user roles

Administrative user roles > User

Use this page to add, update or to remove administrative roles to users. Assigning administrative enables them to administer application servers through the administrative console or through wsadmin.

* Role(s)

- Admin Security Manager
- Administrator**
- Auditor
- Configurator

Search and Select Users

Decide how many results to display, enter a search string (use * for wildcard), and click Search. See the Available list and add them to the Mapped to role list. Users which have already been mapped will be returned in the search results.

Search string

Maximum results to display

Available

wasadmin3

Select All

Deselect All

Mapped to role

wasadmin2

Select All

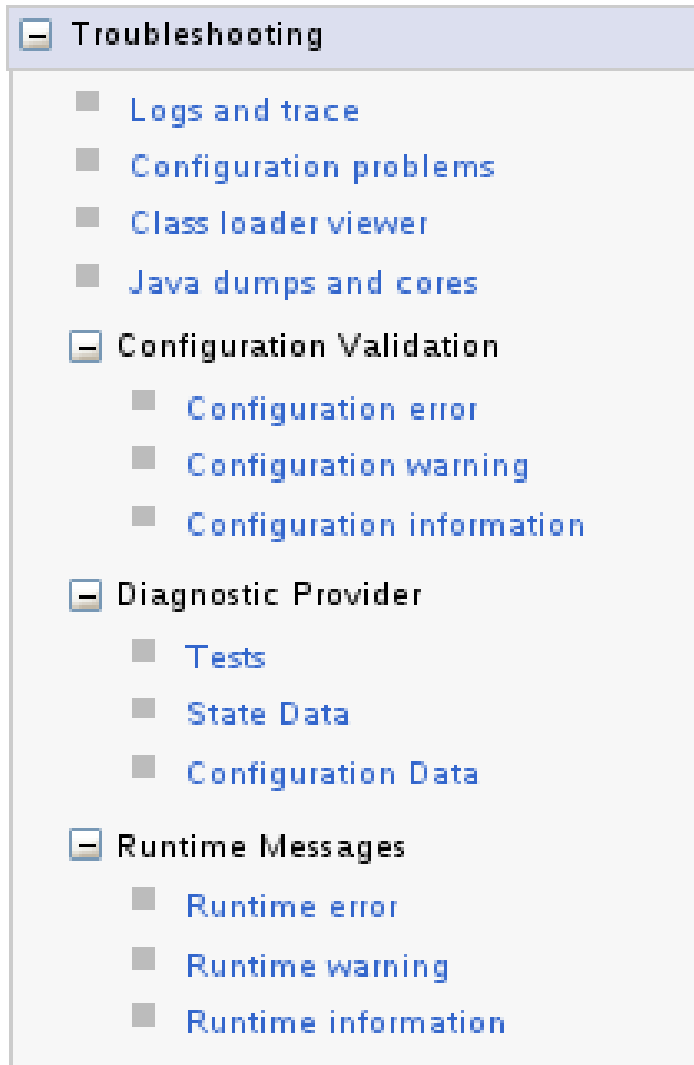
Deselect All

2

Administrative roles

- Monitor
- Configurator
- Operator
- Administrator
- ISC Admins
- Deployer
- Admin Security Manager
- Auditor

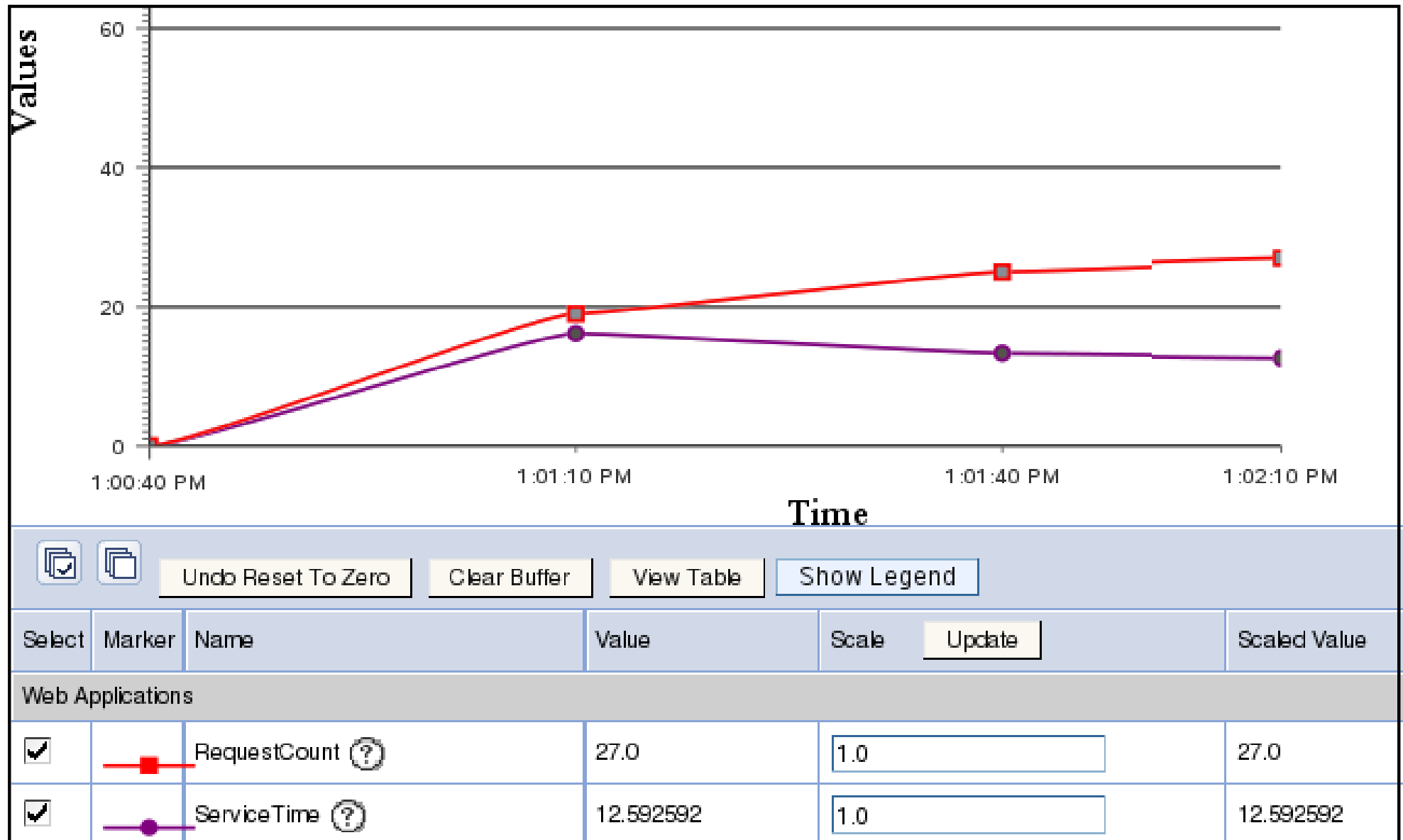
Troubleshooting information



- Troubleshooting
 - Configure log and trace settings
 - Identify and view configuration problems
 - View class loaders for modules within the topology of enterprise applications
 - Generate thread, heap, and system memory dumps
- Configuration Validation
 - View problems that exist in the present configuration
- Diagnostic Provider
 - Review the startup configuration, current configuration, and current state of a diagnostic domain
- Runtime Messages
 - Review runtime error, warnings, and information messages

Tivoli Performance Viewer

- Integrated browser-based performance viewer and advisor



Unit summary

Having completed this unit, you should be able to:

- Describe how to access the administrative console
- Describe the administrative console in a cell topology
- Describe the administrative console interface
- Describe the use of the following administrative tools:
 - Help
 - Preferences
 - Filters
 - Guided activities
 - Troubleshooting
- Describe user and group administrative roles
- Describe the Tivoli Performance Viewer



Checkpoint questions

1. The AdminApp application can be configured with the administrative console.
 - A. True
 - B. False

2. Configurable console settings, including session timeout, can be set through the Console Preferences page of the system administration task.
 - A. True
 - B. False

Checkpoint answers

1. The AdminApp application can be configured with the administrative console.
B. False

2. Configurable console settings, including session timeout, can be set through the Console Preferences page of the system administration task.
B. False. The session timeout is set from a script.

Exercise 4

Exploring the administrative console

Exercise objectives

After completing 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