WebSphere Application Server administrative console

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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

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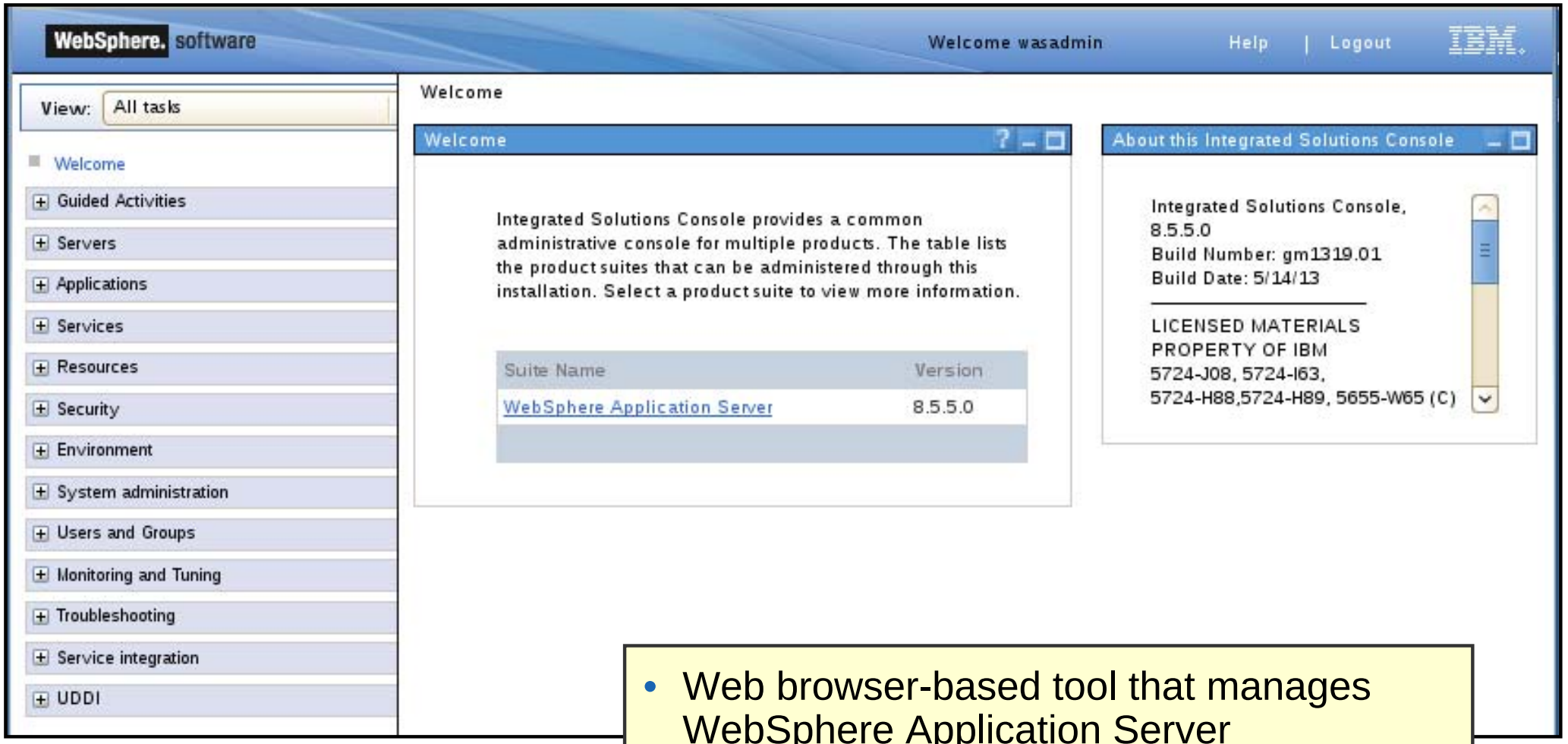
Administrative console



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

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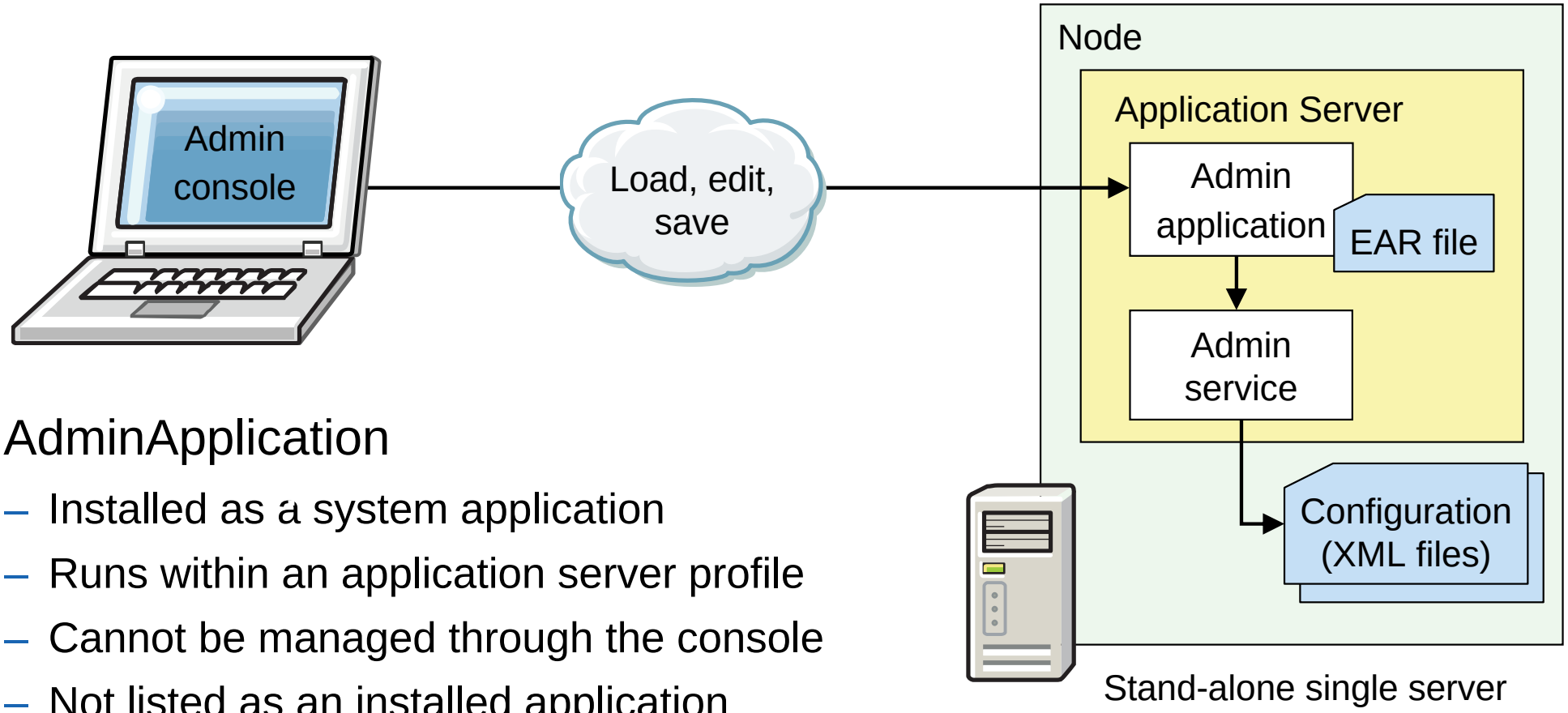
Starting the administrative console



- 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

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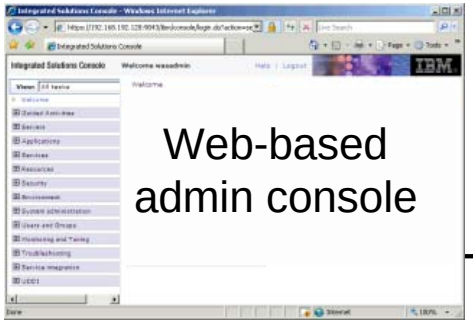
Administrative console in a cell topology



HTTP or
HTTPS

SOAP

Deployment manager

Admin application

Web container

Admin services

Node agent

Admin service

Cell config

Node01 config

server1 config

server2 config

server1

server2

EAR file

Node01

Master

Cell config

Node01 config

server1 config

server2 config

Node02 config

server3 config

server4 config

EAR file

Node agent

Admin service

Cell config

Node02 config

server3 config

server4 config

server3

server4

EAR file

Node02

Commands

Configuration

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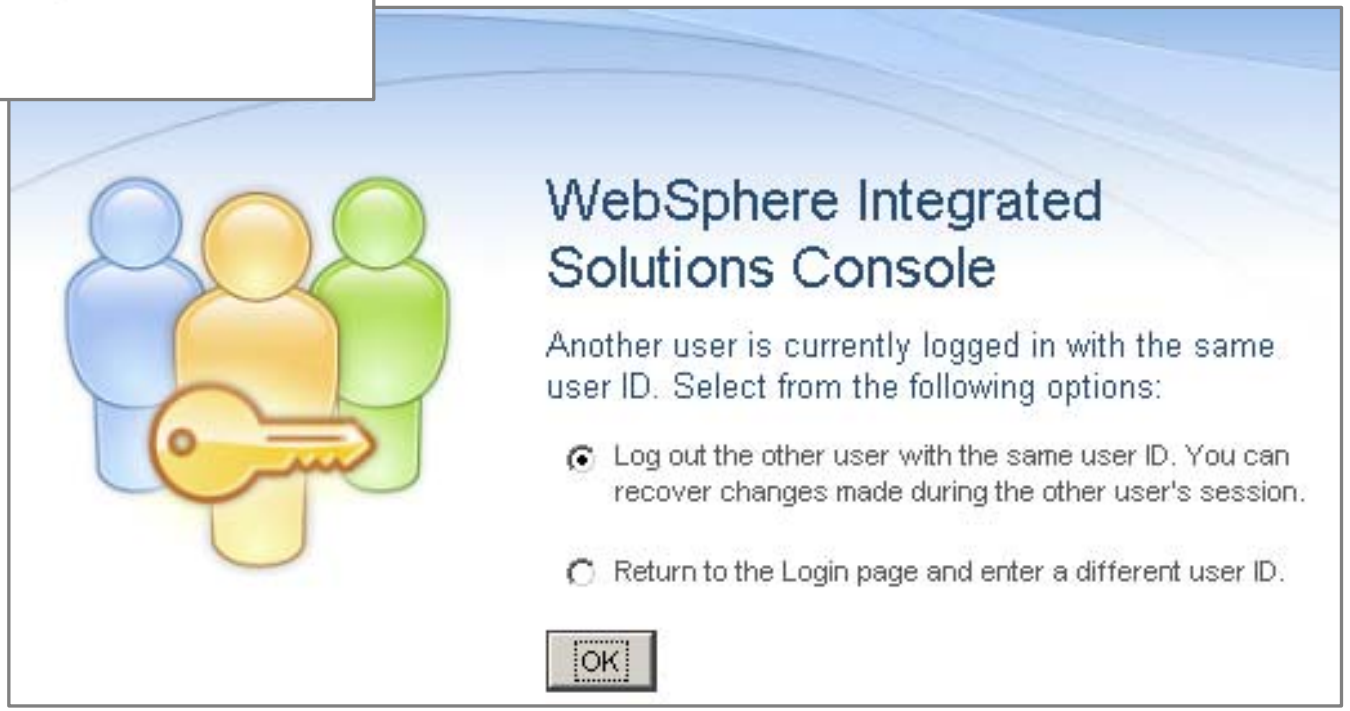
Console login

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



2

User ID conflict

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

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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

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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
```

Timeout value in minutes

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

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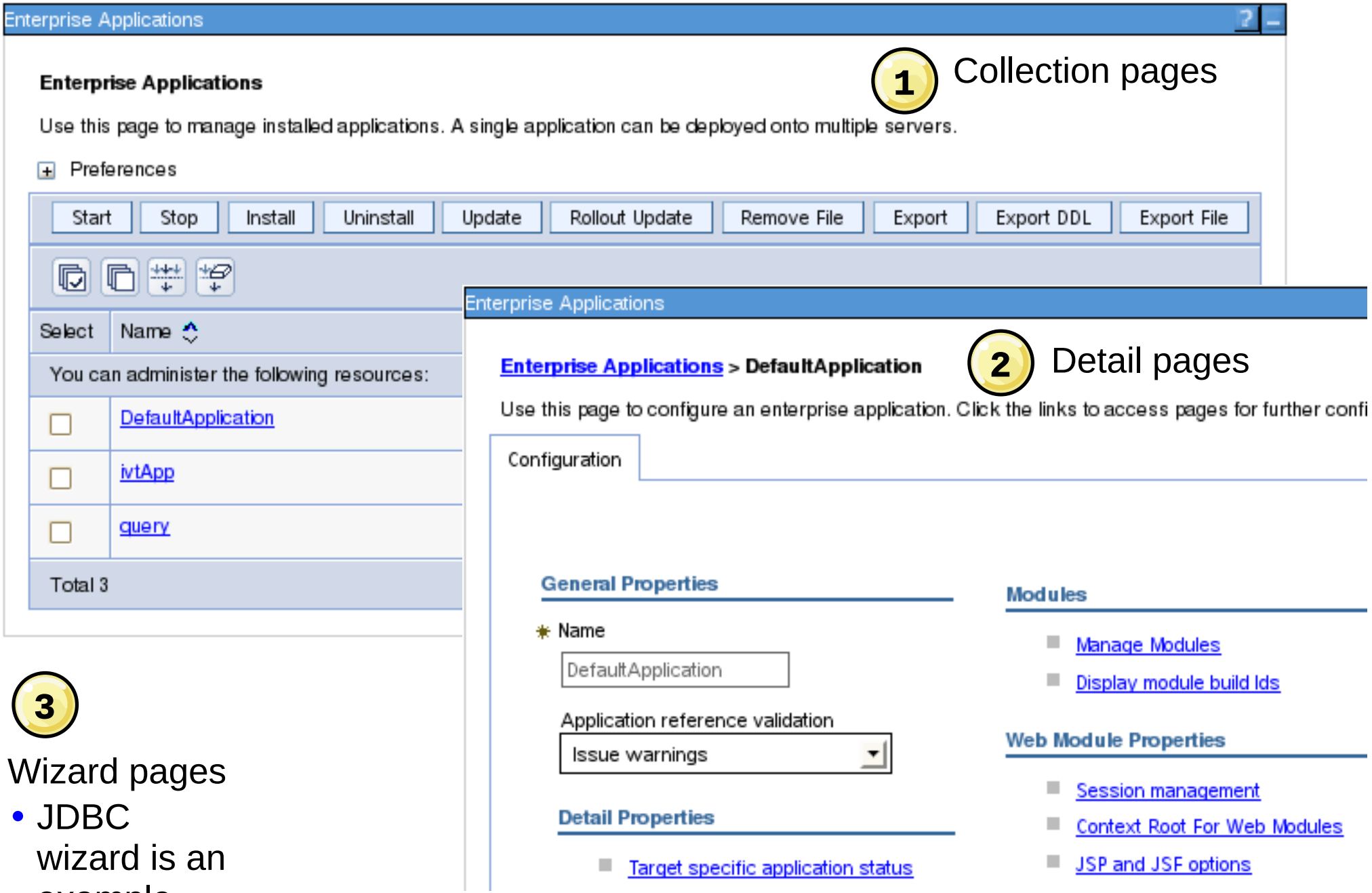
Administrative console panels



3

Wizard pages

- JDBC wizard is an example

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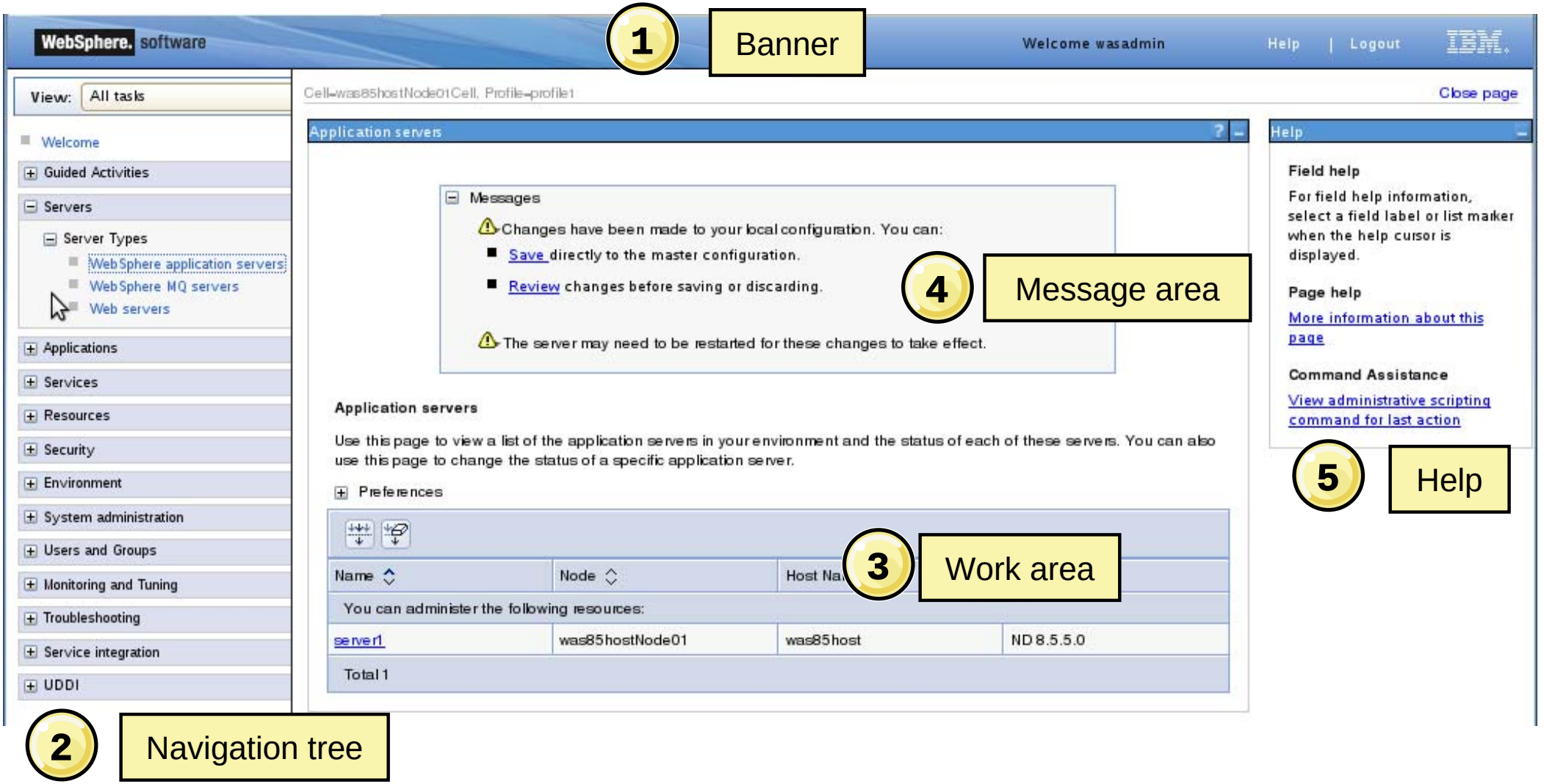
Administrative console areas



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Administrative console banner

Item	Description
Welcome	• The administrative console home page • Contains links to information sources
Logout	• 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	• Opens a new web browser with detailed online help for the administrative console • **Note**: This **Help** is not the information center

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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

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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

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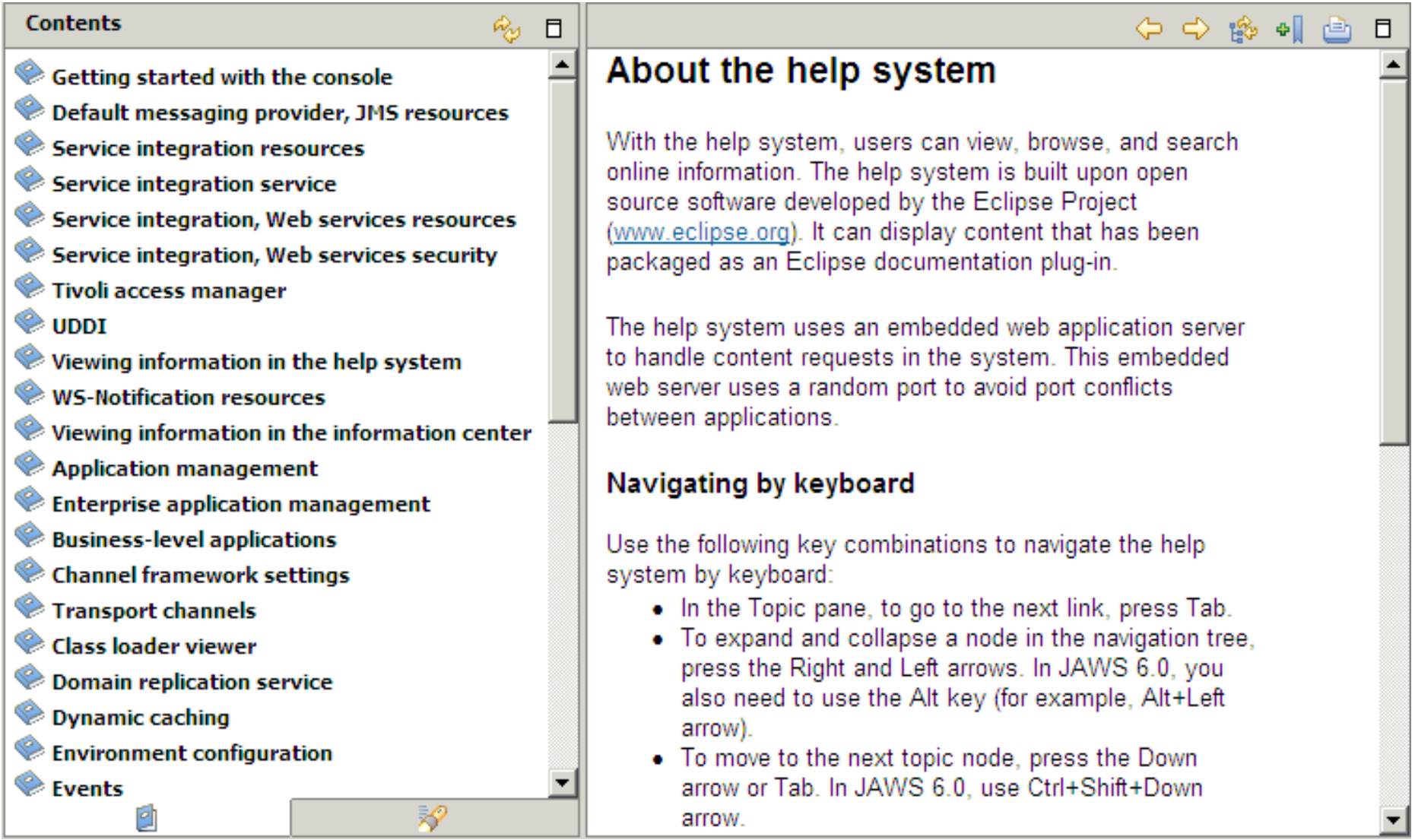
Administrative console help (1 of 2)

1. Console help
   - Click **Help** from console banner
   - Select from list of references



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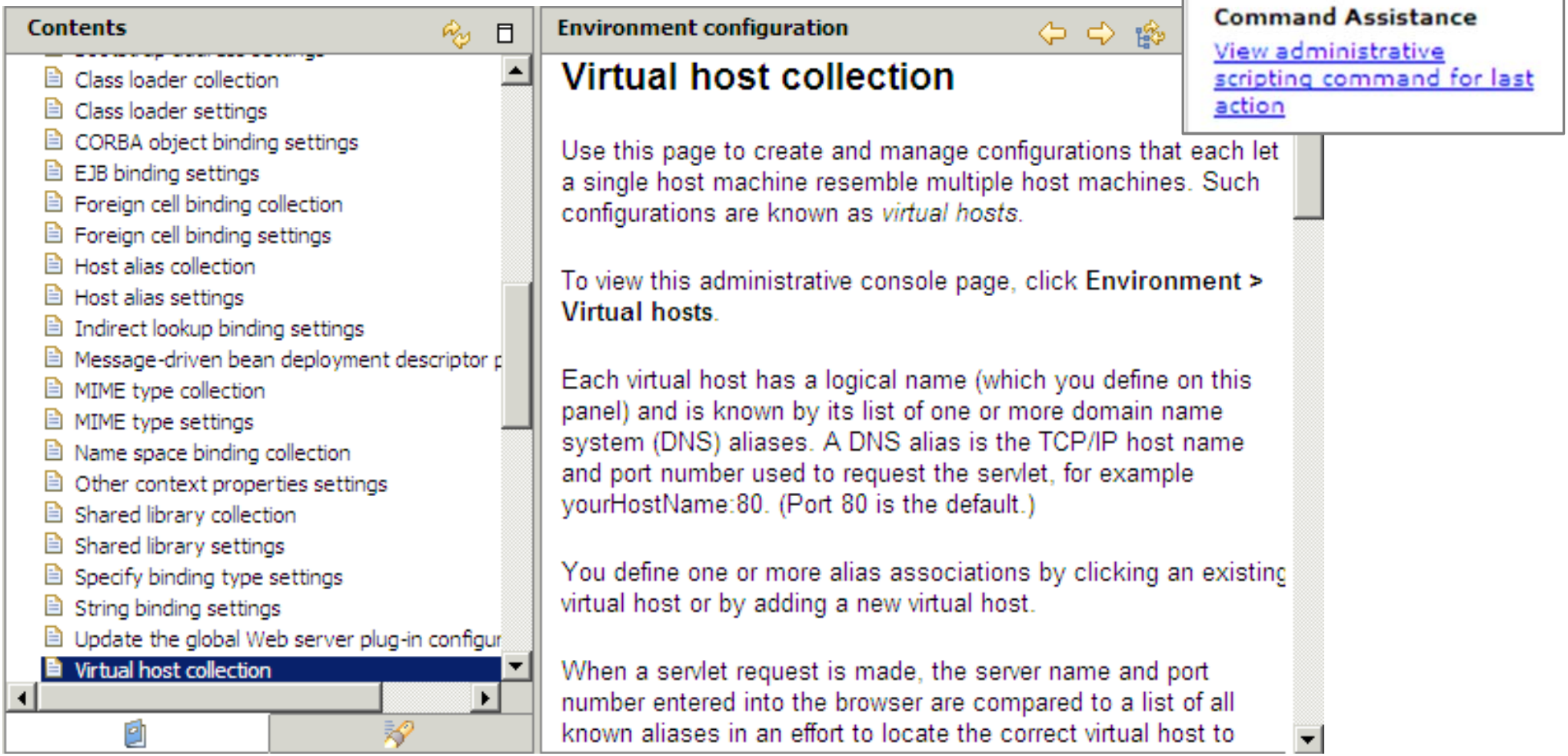
Administrative console help (2 of 2)

2 Page help

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



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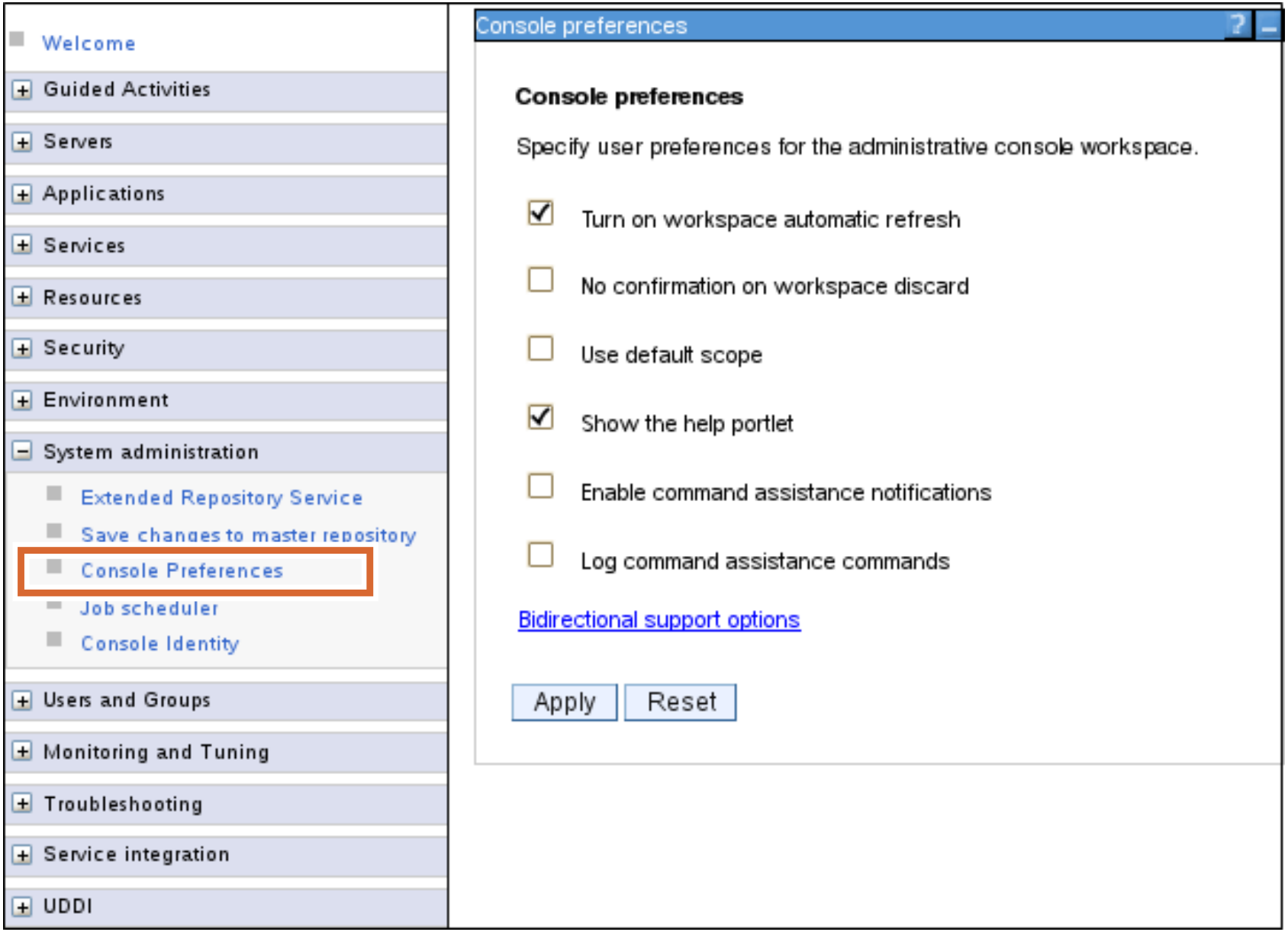
Administrative console preferences



- Specify how features of the administrative console workspace behave

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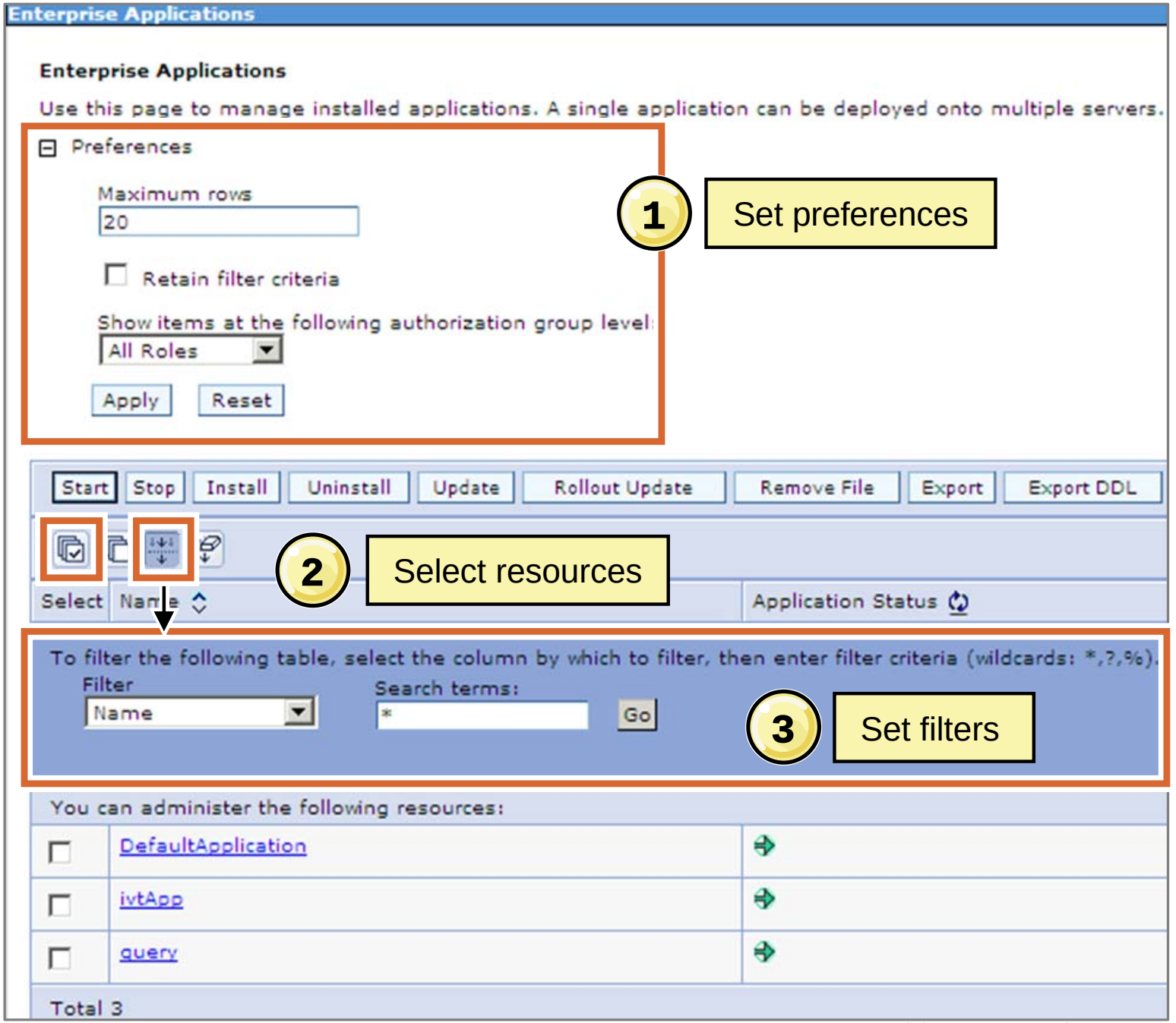
Administrative console preferences, filters, and scope

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



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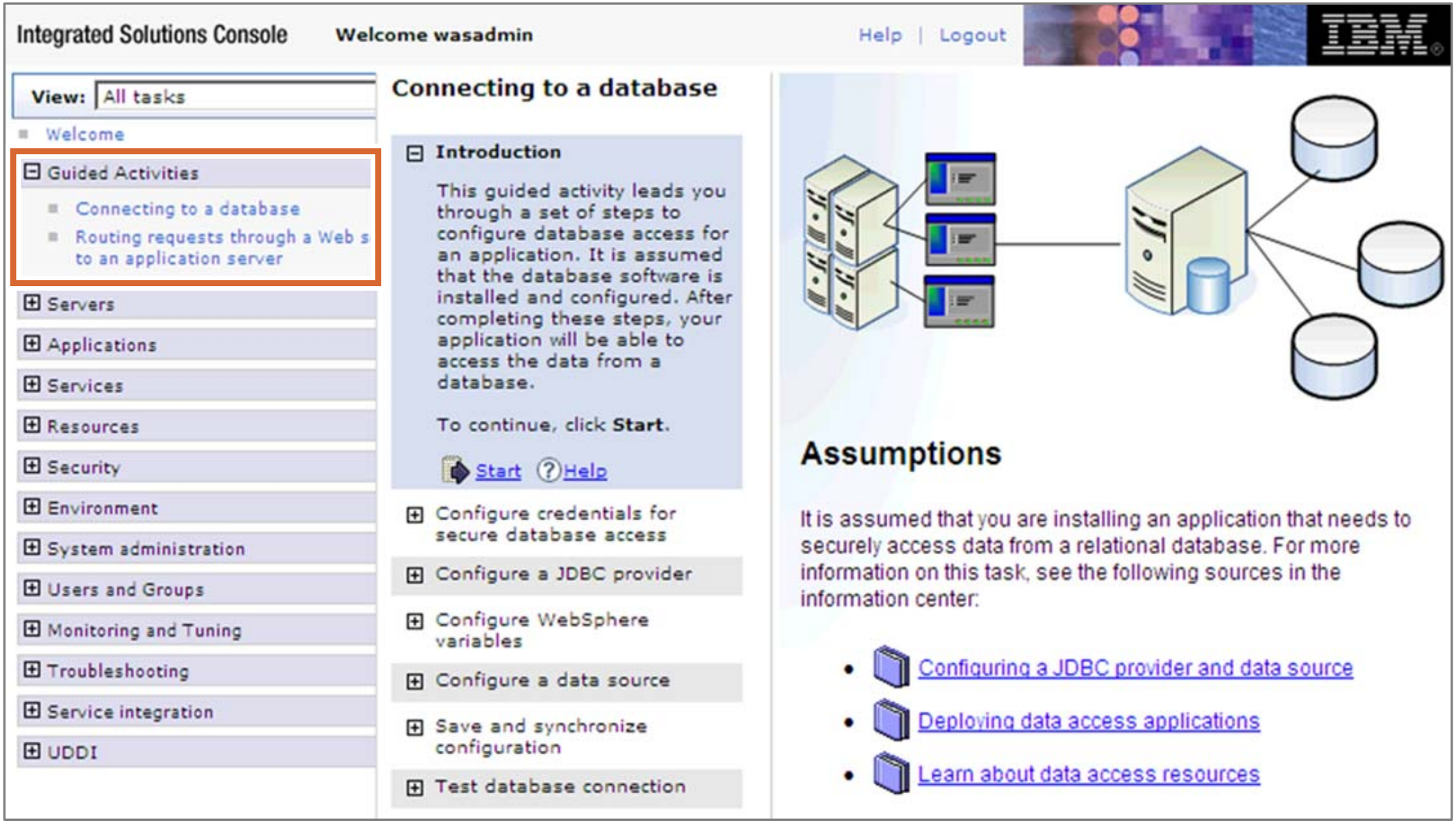
Guided Activities



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

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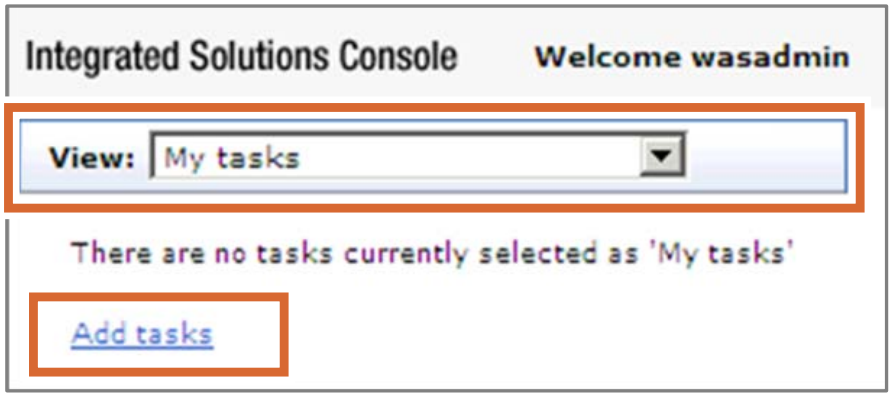
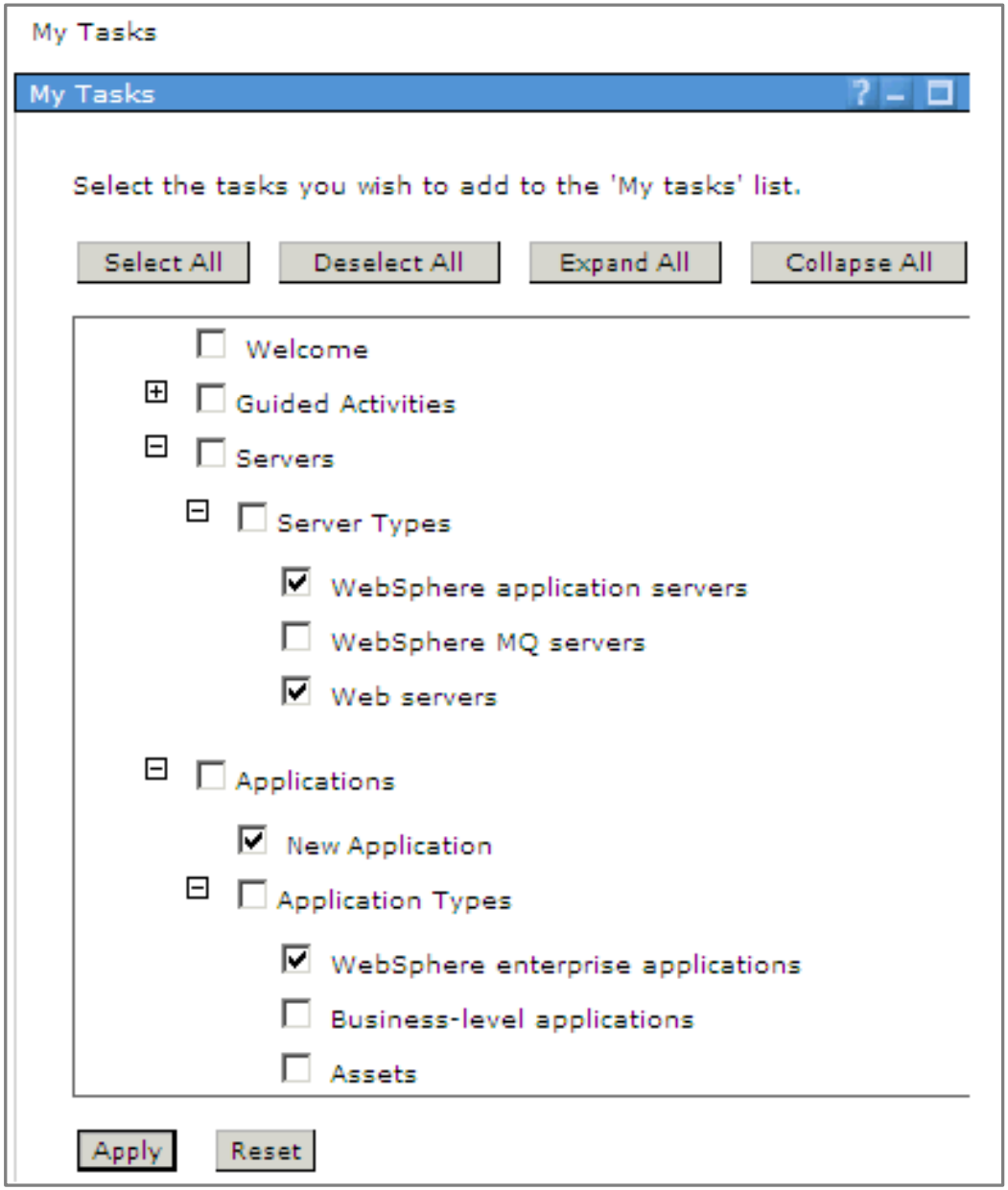
My tasks

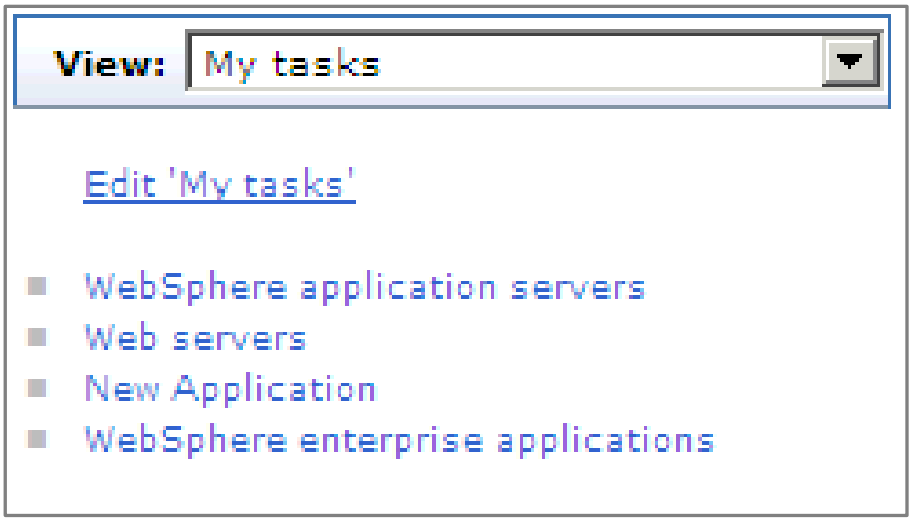
1 Select My tasks from the navigation view selection list



2 Select tasks to add to My tasks list



3 The tasks are shown in My tasks list



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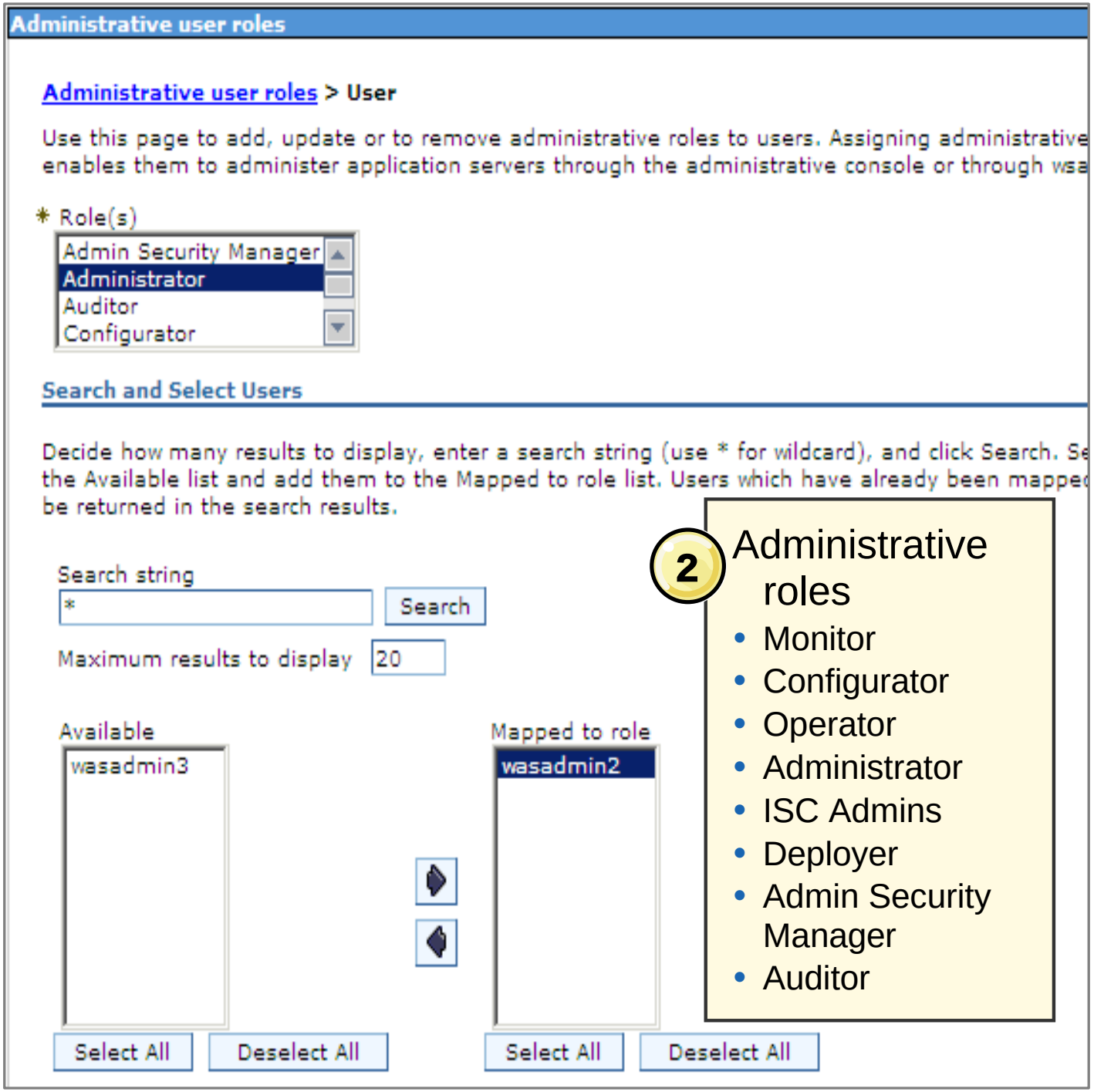
Users and groups

- 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



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

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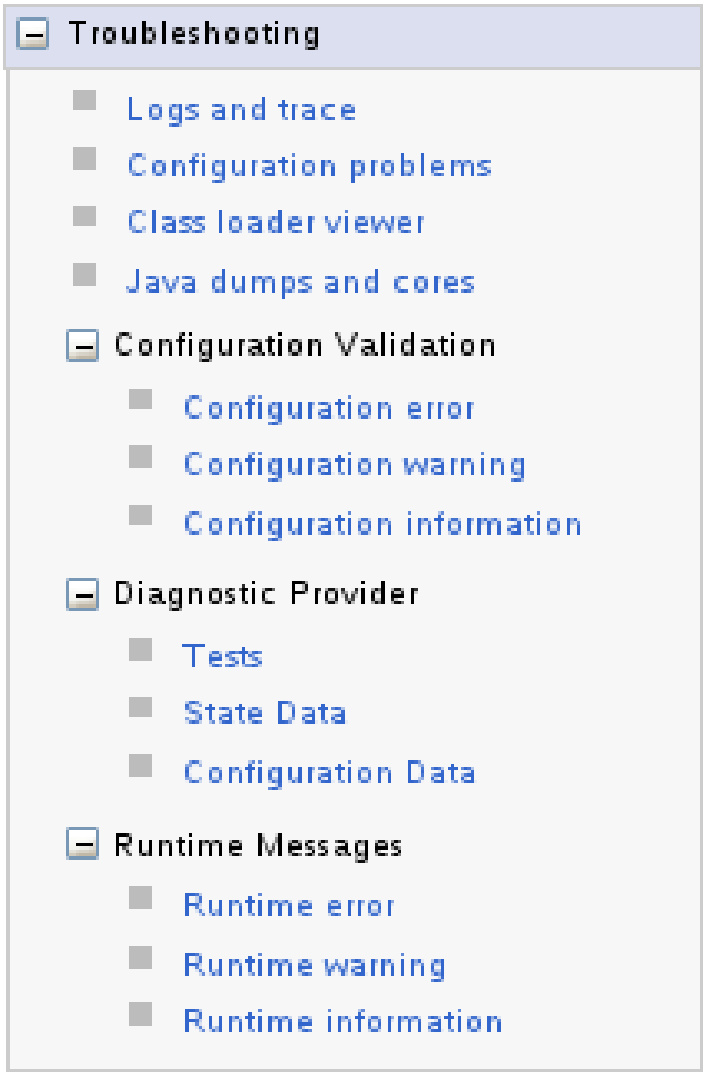
Troubleshooting information



- 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

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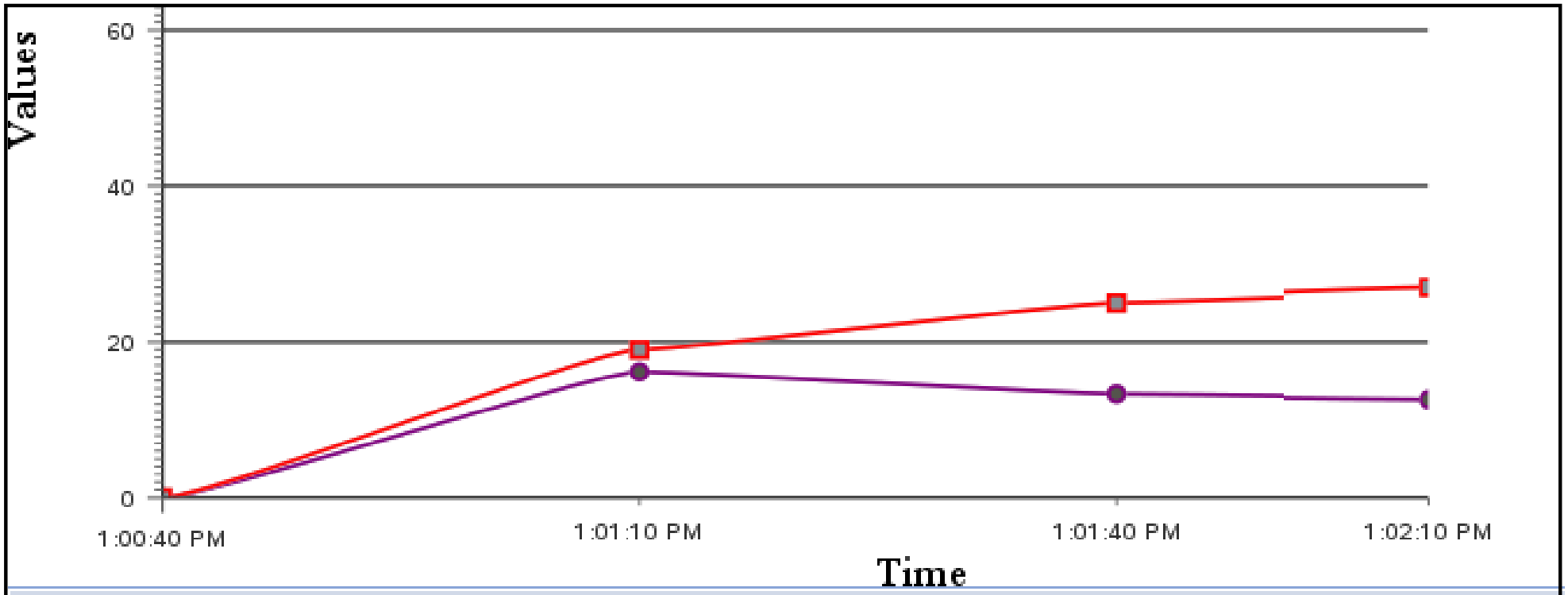
Tivoli Performance Viewer

- Integrated browser-based performance viewer and advisor



Undo Reset To Zero | Clear Buffer | View Table | Show Legend

Select	Marker	Name	Value	Scale Update	Scaled Value
Web Applications					
☑		RequestCount	27.0	1.0	27.0
☑		ServiceTime	12.592592	1.0	12.592592

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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

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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

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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.

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Exercise 4

Exploring the administrative console

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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

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