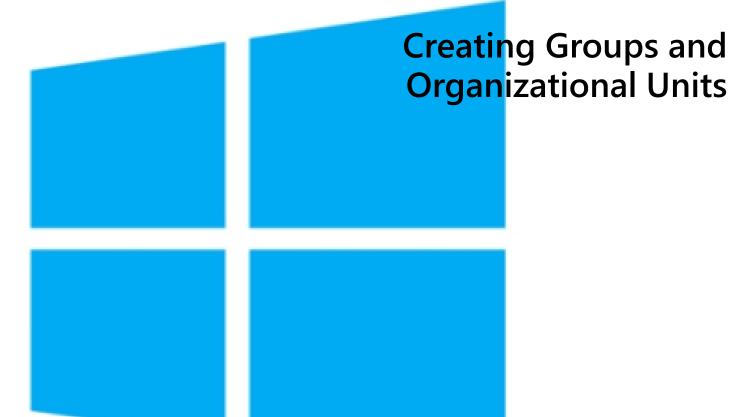
Module 4



# Windows Server 2016

### **Module Overview**

- Introduction to Groups
- Managing Groups
- Creating Organizational Units

### Lesson 1: Introduction to Groups

- What Are Groups?
- AD DS Domain Functional Levels
- What Are Global Groups?
- What Are Universal Groups?
- What Are Domain Local Groups?
- What Are Local Groups?
- Discussion: Identifying Group Usage
- What Is Group Nesting?
- Discussion: Strategies for Nesting AD DS Groups

### What Are Groups?

#### **Groups are a logical collection of similar objects:**

- Users
- Computers
- Other Groups

#### There are two types of groups:

- Security groups
  - Can be used to assign permissions and rights
  - Can also be e-mail-enabled with Exchange Server
- Distribution groups
  - Cannot be used to assign permissions
  - Used for e-mail distribution lists



### AD DS Domain Functional Levels

Domain Functional Level Available in Windows Server 2008	Supported Domain Controller Operating System
Windows® 2000 Native	Windows 2000
	Windows Server 2003
	Windows Server 2008
Windows Server® 2003	Windows Server 2003
	Windows Server 2008
Windows Server 2008	Windows Server 2008

# Domain Functional Levels that are available in Windows Server 2003:

- Windows 2000 Mixed
- Windows 2000 Native
- Windows Server 2003 Interim
  - Windows Server 2003

### What Are Global Groups?

#### **Members:**

- User and Computer accounts from the same domain as the global group
- Global groups from the same domain as the global group



#### **Permissions:**

 Global groups can be assigned permissions in any domain in the forest or any trusting domain

#### **Usage:**

- Manage directory objects that require daily maintenance, such as user and computer accounts
- Group users who have similar network access requirements

#### Can be converted to:

Universal (if it is not a member of any other global groups)

### What Are Universal Groups?

#### **Members:**

- Global groups from any domain in the forest
- User and Computer accounts from any domain in the forest
- Universal groups from any domain in the forest



#### **Permissions:**

 Can be assigned permissions in any domain in the forest or any trusting domain

#### **Usage:**

Use to combine groups that span domains

#### Can be converted to:

- Domain local
- Global (if no other universal groups exist as members)

### What Are Domain Local Groups?

#### **Members:**

- Accounts from any domain in the forest or any trusted domain
- Global groups from any domain in the forest or any trusted domain
- · Universal groups from any domain in the forest or any trusted domain
- Domain local groups, but only from the same domain as the domain local group

#### **Usage:**

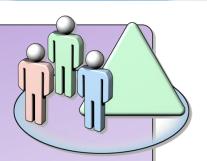
Use to define and manage access to resources in a single domain

#### **Permissions:**

 Member permissions can be assigned only within the same domain as the domain local group

#### Can be converted to:

Universal (if no other domain local groups exist as members)



### What Are Local Groups?



#### **Members:**

- Local users
- Domain users
- Domain groups

#### **Permissions:**

Local groups can be assigned permissions on the local computer only

Local groups cannot be created on domain controllers

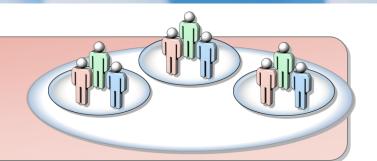
### Discussion: Identifying Group Usage

For each scenario, determine the type and scope of groups that must be created:

- Scenario 1: A. Datum has HR users spread throughout the domain in several different geographic locations, but require access to the same resources.
- Scenario 2: Tailspin Toys has two domains, one for the United States and one for Europe. You want to create a group that enables the centralized help desk to manage resources in both domains.
- Scenario 3: A. Datum has users in Sales that are geographically dispersed. They have requested a single unified group that will allow for all Sales users to access resources. Membership of the Sales group frequently changes.
- Scenario 4: Trey Research has a single domain. They want to create groups for the users in Sales, IT and Research departments so they can easily send e-mails to these groups instead of the individual users.

### What Is Group Nesting?

Nesting allows for groups to be members of other groups



Benefits of using a nesting strategy in managing AD DS groups:

- Groups that are members of other groups reduce replication
- Nested groups provide for simplified management

### Discussion: Strategies for Nesting AD DS Groups

- Scenario 1: A. Datum has HR users are spread throughout the domain in several different geographic locations, but require access to the same resources. How can nested groups be used to simplify management?
- Scenario 2: Tailspin Toys has two domains, the United States and Europe. You want to create a group for the centralized Help Desk to manage resources in both domains and reduce the replication traffic between the domains.
- Scenario 3: At A. Datum, you have to assign permissions to a folder on a member server for a project between Sales, Marketing, and Finance. All users are geographically dispersed. How would you use nesting groups in this scenario?
- Scenario 4: Trey Research wants to give the HR department permissions to a file share. The user GSmith needs to be added to the HR group. How would you use AGDLP in the scenario?

### Lesson 2: Managing Groups

- Considerations for Naming Groups
- Identifying Group Membership

### Considerations for Naming Groups

Use concise naming	Avoid long complicated names
	Use common names
Use departmental names	• Sales
	<ul> <li>Marketing</li> </ul>
	<ul> <li>Executives</li> </ul>
Use geographic names	Group users to locations:
	<ul><li>Countries</li></ul>
	• States
	<ul><li>Cities</li></ul>
Use project specific names	If virtual teams are created for a project, use the project name as a descriptor

Names should be specific enough to accurately describe their purpose, but not so specific that there is a group for every subfunction

### **Identifying Group Membership**

#### **Members** tab

Members of a group are listed in the **Members** tab:

- Individual Users
- Nested Groups

#### **Members Of tab**

The **Members Of** tab lists the groups to which the current group belongs

You can use either tab to track group membership

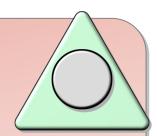
### Lesson 3: Creating Organizational Units

- What Is an Organizational Unit (OU)?
- What Is an OU Hierarchy?
- OU Hierarchy Examples
- OUs and Groups Summary

### What Is an Organizational Unit (OU)?

#### An organizational unit (OU):

- Is a directory object within the domain
- Is the smallest scope or unit to which you can assign Group Policy settings or delegate administrative authority
- Can contain users, computers, groups, printers, and other OUs



#### OUs are used to:

- Create administrative boundaries within the domain by delegating authority
- Create containers within the domain model to represent logical structures
- Enforce Group Policy

### What Is an OU Hierarchy?

OUs can be put inside other OUs to create a hierarchical design



# **OU Hierarchy Examples**

Example	Benefit
Geographic OUs	Can be administered at the location level
Departmental OUs	Delegation by job function
Resource OUs	<ul> <li>Designed to manage resource (nonuser) objects</li> </ul>
By management	Build OUs around the administration of the business

## **OUs and Groups Summary**

OUs	Groups
You can apply group policy settings to an OU	You cannot apply group policy settings directly to a group
One user can belong to one OU at a time	One user can belong to multiple groups at a time
You can't use an OU to grant or deny security access permissions to resources	Groups are used to grant or deny security access permissions to resources
You can't use an OU to distribute e-mail	You can use groups to distribute e- mail