4.0 Mini-Intro to Roles/Features

What are roles and features?

Role

Role is a type of server that a computer can assume. These include

- Web roles
- File server roles
- Communication server roles
- Management roles

and more

Feature

An additional, smaller capability that you can install. These include:

- Bitlocker encryption
- Telnet Server and Client
- RIP Listener
- Powershell

Unlike a role, a feature does not drastically change the functionality of a computer within a network.

What should I be concerned with?

Computers should only have roles/features that they need installed.

Examples:

Standard workstations should not have web server roles installed, as that exposes the system to the public.

A computer that doesn't use telnet should remove telnet, since keeping it just means another method for hackers to compromise the system.

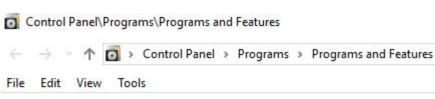
How to manage them?

Windows non-server versions (including 10)

appwiz.cpl

Windows server versions (including 2016 and 2019)

- Use previous appwiz.cpl method OR
- Use server manager, go under "Manage" and look for the "Add/Remove Roles and Features"
 - To find server manager, you can use windows search



Control Panel Home

Uninstall or change a program

To uninstall a program, select it from the list and then

View installed updates

off

Turn Windows features on or

Organize *

Name

Google Chrome

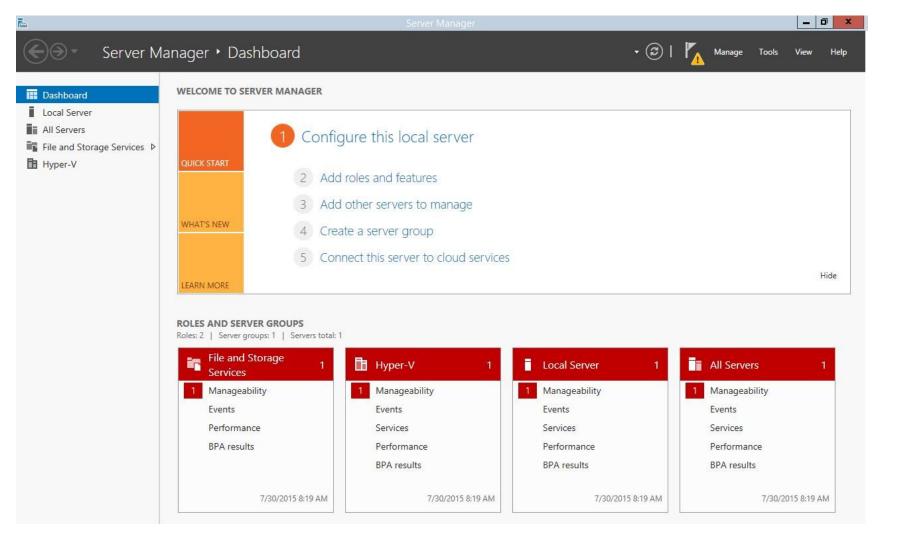






Spotify





Role Management (Server)

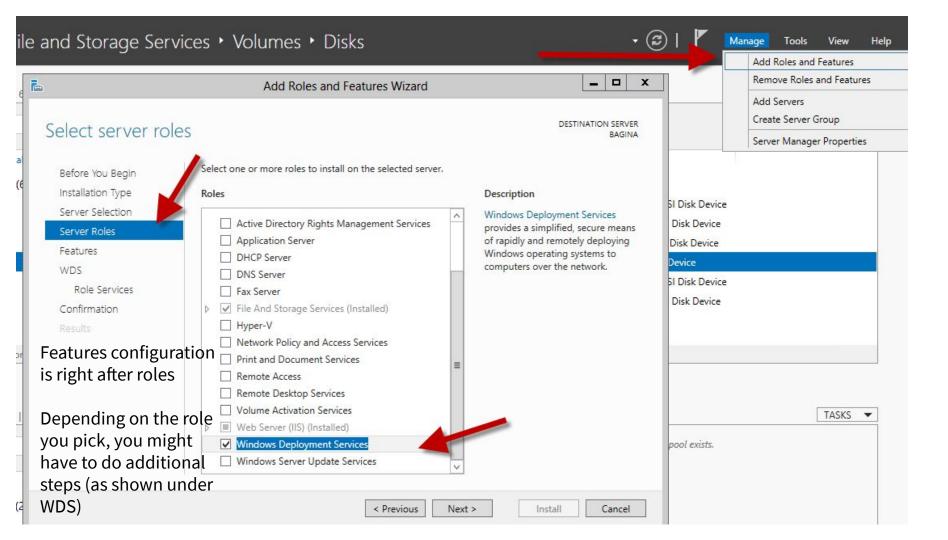
Role management in server versions is a tad bit fancier

Process

- Select role-based or feature-based installation
- Select computer you would like to manage (your own)
- Choose the roles/features you want added/removed

There are two different windows for adding and removing roles/features

First two steps of the process outlined above are automatically set for you, so you just need to click the Next button



Note on services

Uninstalling roles/features will also remove any services that came with the installation

Examples ([role] → [respective service]):

RIP Listener feature → Rip Listener service

Telnet Server feature → Telnet service

Internet Information Services (World Wide Web Services) role → World Wide Web Publishing Service

Internet Information Services (FTP Server) role → Microsoft FTP Service

Difference between configuring service and role

Disabling and stopping a service will effectively stop communications and functionalities that the service provides

However, this is a temporary action - someone can re enable the service.

Uninstalling the role/feature that the service came with will ensure that the service is not accidentally/intentionally going to be turned on

 Roles/features management requires administrative privileges, whereas services management doesn't always