

Installing AD CS

Server 2012R2

AD CS ROLE DESCRIPTION

- AD CS provides customizable services for issuing and managing digital certificates used in software security systems that employ public key technologies.
- The digital certificates that AD CS provides can be used to encrypt and digitally sign electronic documents and messages. These digital certificates can be used for authentication of computer, user, or device accounts on a network. Digital certificates are used to provide:
- Confidentiality through encryption
- Integrity through digital signatures
- Authentication by associating certificate keys with computer, user, or device accounts on a computer network

Practical Examples

- You can use AD CS to enhance security by binding the identity of a person, device, or service to a corresponding private key.
- AD CS gives you a cost-effective, efficient, and secure way to manage the distribution and use of certificates.
- Applications supported by AD CS include Secure/Multipurpose Internet Mail Extensions (S/MIME), secure wireless networks, virtual private network (VPN), Internet Protocol security (IPsec), Encrypting File System (EFS), smart card logon, Secure Socket Layer/Transport Layer Security (SSL/TLS), and digital signatures.

Add Roles and Features
Remove Roles and Features
Add Servers
Create Server Group
Server Manager Properties

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud services

Hide



Add Roles and Features Wizard



Before you begin

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Confirmation

Results

This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization, such as sharing documents, or hosting a website.

To remove roles, role services, or features:
[Start the Remove Roles and Features Wizard](#)

Before you continue, verify that the following tasks have been completed:

- The Administrator account has a strong password
- Network settings, such as static IP addresses, are configured
- The most current security updates from Windows Update are installed

If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again.

To continue, click Next.

☐ Skip this page by default

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Install

Cancel



Add Roles and Features Wizard



Select installation type

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Confirmation

Results

Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).

☒ **Role-based or feature-based installation**

Configure a single server by adding roles, role services, and features.

☐ **Remote Desktop Services installation**

Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

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Install

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Add Roles and Features Wizard



Select destination server

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Confirmation

Results

Select a server or a virtual hard disk on which to install roles and features.

☒ Select a server from the server pool

☐ Select a virtual hard disk

Server Pool

Filter:

Name

IP Address

Operating System

1 Computer(s) found

This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.

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Add Roles and Features Wizard



Select server roles

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Confirmation

Results

Select one or more roles to install on the selected server.

Roles

- ☐ Active Directory Certificate Services
- ☒ Active Directory Domain Services (Installed)
- ☐ Active Directory Federation Services
- ☐ Active Directory Lightweight Directory Services
- ☐ Active Directory Rights Management Services
- ☐ Application Server
- ☐ DHCP Server
- ☒ DNS Server (Installed)
- ☐ Fax Server
- ▷ ☒ File and Storage Services (2 of 12 installed)
- ☐ Hyper-V
- ☐ Network Policy and Access Services
- ☐ Print and Document Services
- ☐ Remote Access
- ☐ Remote Desktop Services

Description



Active Directory Certificate Services (AD CS) is used to create certification authorities and related role services that allow you to issue and manage certificates used in a variety of applications.

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 Add Roles and Features Wizard 

Add features that are required for Active Directory Certificate Services?

The following tools are required to manage this feature, but do not have to be installed on the same server.

▾ Remote Server Administration Tools

▾ Role Administration Tools

▾ Active Directory Certificate Services Tools

[Tools] Certification Authority Management Tools

☒ Include management tools (if applicable)

Add Features

Cancel



Add Roles and Features Wizard



Select server roles

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

Select one or more roles to install on the selected server.

Roles

- ☒ **Active Directory Certificate Services**
- ☒ Active Directory Domain Services (Installed)
- ☐ Active Directory Federation Services
- ☐ Active Directory Lightweight Directory Services
- ☐ Active Directory Rights Management Services
- ☐ Application Server
- ☐ DHCP Server
- ☒ DNS Server (Installed)
- ☐ Fax Server
- ▷ ☒ **File and Storage Services (2 of 12 installed)**
- ☐ Hyper-V
- ☐ Network Policy and Access Services
- ☐ Print and Document Services
- ☐ Remote Access
- ☐ Remote Desktop Services

Description

Active Directory Certificate Services (AD CS) is used to create certification authorities and related role services that allow you to issue and manage certificates used in a variety of applications.

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Add Roles and Features Wizard



Select features

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

Select one or more features to install on the selected server.

Features

<input type="checkbox"/>	.NET Framework 3.5 Features
<input checked="" type="checkbox"/>	.NET Framework 4.5 Features (4 of 7 installed)
<input type="checkbox"/>	Background Intelligent Transfer Service (BITS)
<input type="checkbox"/>	BitLocker Drive Encryption
<input type="checkbox"/>	BitLocker Network Unlock
<input type="checkbox"/>	BranchCache
<input type="checkbox"/>	Client for NFS
<input type="checkbox"/>	Data Center Bridging
<input type="checkbox"/>	Direct Play
<input type="checkbox"/>	Enhanced Storage
<input type="checkbox"/>	Failover Clustering
<input checked="" type="checkbox"/>	Group Policy Management (Installed)
<input type="checkbox"/>	IIS Hostable Web Core
<input type="checkbox"/>	Ink and Handwriting Services

Description

.NET Framework 3.5 combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.

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Add Roles and Features Wizard



Active Directory Certificate Services

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

Active Directory Certificate Services (AD CS) provides the certificate infrastructure to enable scenarios such as secure wireless networks, virtual private networks, Internet Protocol Security (IPSec), Network Access Protection (NAP), encrypting file system (EFS) and smart card log on.

Things to note:

- The name and domain settings of this computer cannot be changed after a certification authority (CA) has been installed. If you want to change the computer name, join a domain, or promote this server to a domain controller, complete these changes before installing the CA. For more information, see certification authority naming.

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Add Roles and Features Wizard



Select role services

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

Select the role services to install for Active Directory Certificate Services

Role services

- ☒ **Certification Authority**
- ☐ Certificate Enrollment Policy Web Service
- ☐ Certificate Enrollment Web Service
- ☐ Certification Authority Web Enrollment
- ☐ Network Device Enrollment Service
- ☐ Online Responder

Description

Certification Authority (CA) is used to issue and manage certificates. Multiple CAs can be linked to form a public key infrastructure.

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Add Roles and Features Wizard



Select role services

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

Select the role services to install for Active Directory Certificate Services

Role services

- ☒ Certification Authority
- ☒ Certificate Enrollment Policy Web Service
- ☒ Certificate Enrollment Web Service
- ☒ Certification Authority Web Enrollment
- ☒ Network Device Enrollment Service
- ☒ Online Responder

Description

Online Responder makes certificate revocation checking data accessible to clients in complex network environments.

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Certification Authority (CA) is used to issue and manage certificates. Multiple CAs can be linked to form a public key infrastructure.

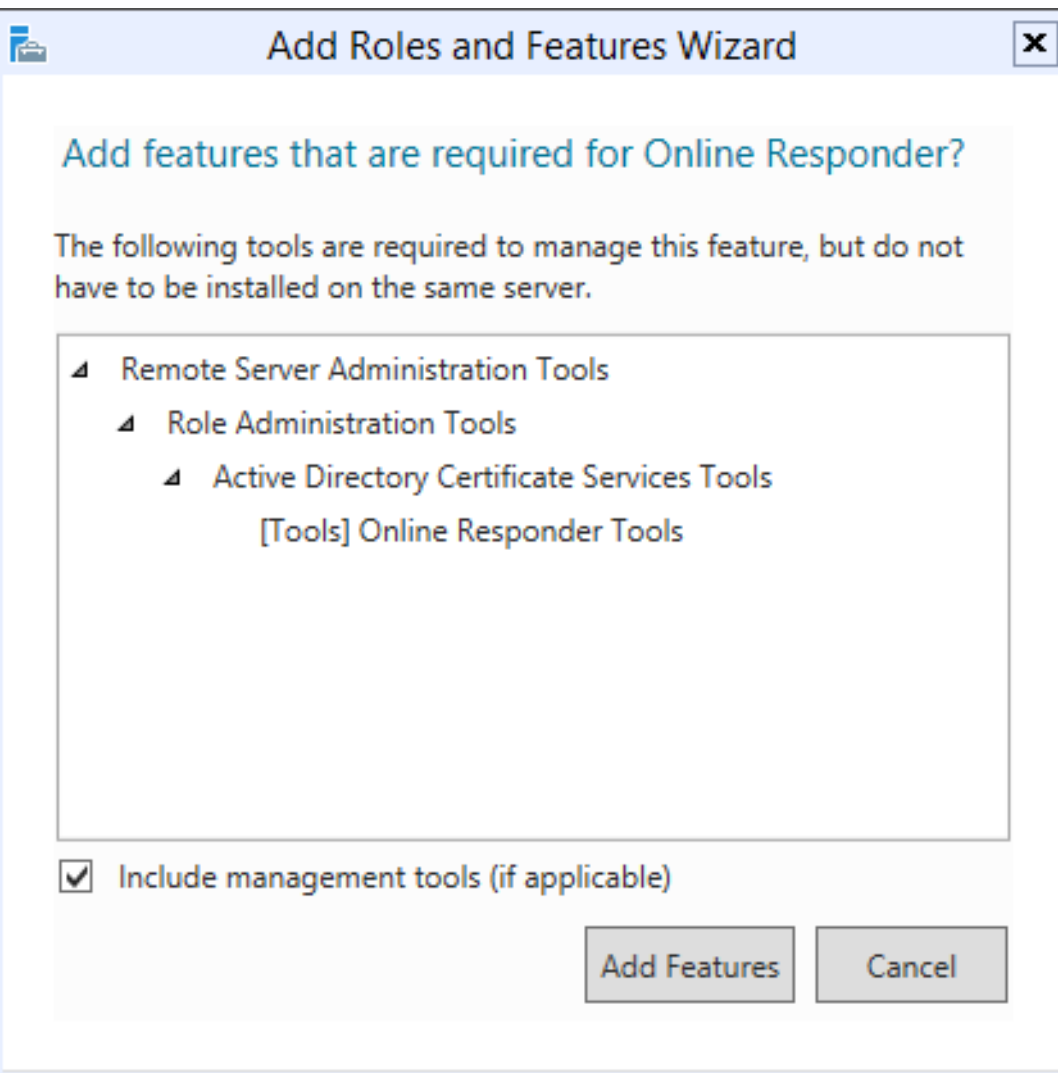
The Certificate Enrollment Policy Web Service enables users and computers to obtain certificate enrollment policy information even when the computer is not a member of a domain or if a domain-joined computer is temporarily outside the security boundary of the corporate network. The Certificate Enrollment Policy Web Service works with the Certificate Enrollment Web Service to provide policy-based automatic certificate enrollment for these users and computers.

The Certificate Enrollment Web Service enables users and computers to enroll for and renew certificates even when the computer is not a member of a domain or if a domain-joined computer is temporarily outside the security boundary of the computer network. The Certificate Enrollment Web Service works together with the Certificate Enrollment Policy Web Service to provide policy-based automatic certificate enrollment for these users and computers.

Certification Authority Web Enrollment provides a simple Web interface that allows users to perform tasks such as request and renew certificates, retrieve certificate revocation lists (CRLs), and enroll for smart card certificates.

Network Device Enrollment Service makes it possible to issue and manage certificates for routers and other network devices that do not have network accounts.

Online Responder makes certificate revocation checking data accessible to clients in complex network environments.





Add Roles and Features Wizard



Select role services

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

Select the role services to install for Active Directory Certificate Services

Role services

- ☒ Certification Authority
- ☒ Certificate Enrollment Policy Web Service
- ☒ Certificate Enrollment Web Service
- ☒ Certification Authority Web Enrollment
- ☒ Network Device Enrollment Service
- ☒ **Online Responder**

Description

Online Responder makes certificate revocation checking data accessible to clients in complex network environments.

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Add Roles and Features Wizard



Installation progress

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

View installation progress



Feature installation

Installation started on testserver.testserver.com

Active Directory Certificate Services

Certification Authority

Network Device Enrollment Service

Certificate Enrollment Policy Web Service

Certificate Enrollment Web Service

Online Responder

Certification Authority Web Enrollment

Remote Server Administration Tools

Role Administration Tools

Active Directory Certificate Services Tools

Certification Authority Management Tools



You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.

[Export configuration settings](#)

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Add Roles and Features Wizard



Installation progress

DESTINATION SERVER
testserver.testserver.com

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD CS

Role Services

Confirmation

Results

View installation progress



Feature installation

Configuration required. Installation succeeded on testserver.testserver.com.

Active Directory Certificate Services

Additional steps are required to configure Active Directory Certificate Services on the destination server

[Configure Active Directory Certificate Services on the destination server](#)

Certification Authority

Network Device Enrollment Service

Certificate Enrollment Policy Web Service

Certificate Enrollment Web Service

Online Responder

Certification Authority Web Enrollment

Remote Server Administration Tools



You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.

[Export configuration settings](#)

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Close

Cancel