

Windows 2008 R2 NPS (RADIUS) Server for Wi-Fi Protected Access Enterprise

- Active Directory Domain Service Installation
- Dcpromo procedure
- Installing the Active Directory Certificate Services
- NPS (Network Policy and Access Services) Installation
- Creating User account for authenticating via NPS(RADIUS)
- Creating NPS Rules
- WAP/WPA2-enterprise configuration on Access Point/Wireless client
- 802.1x Authentication configuration on Access Point/Wireless client

TSD

Aaron Jhang

● Active Directory Domain Service Installation

The screenshot shows the Windows Server configuration console. The 'Update This Server' section is active, showing update settings. Below it, the 'Customize This Server' section is visible, with the 'Add roles' option highlighted by a red box. The console also displays system information such as Product ID, Time Zone, Local Area Connection, and Full Computer Name.

Product ID:	Not activated
Time Zone:	(UTC+08:00) Beijing, Chongqing, Hong Kong, Urumqi
Local Area Connection:	192.168.0.201, IPv6 enabled
Full Computer Name:	aaron-win2k8R2.aaron2k8.com
Domain:	aaron2k8.com

Updates:	Not configured
Feedback:	Windows Error Reporting off Not participating in Customer Experience Improvement Program
Checked for Updates:	Never
Installed Updates:	Never

Roles:	DNS Server, Active Directory Domain Services
Features:	Group Policy Management, Remote Server Administration Tools, .NET Framework 3.5.1 Features
Remote Desktop:	Disabled
Firewall:	Domain: On

The screenshot shows the 'Add Roles Wizard' window. The 'Before You Begin' screen is displayed, providing instructions and prerequisites for installing roles on the server. The 'Before You Begin' step is selected in the left-hand navigation pane.

Before You Begin

This wizard helps you install roles on this server. You determine which roles to install based on the tasks you want this server to perform, such as sharing documents or hosting a Web site.

Before you continue, verify that:

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

If you have to complete any of the preceding steps, cancel the wizard, complete the steps, and then run the wizard again.

To continue, click Next.

Skip this page by default

Navigation buttons: < Previous, Next >, Install, Cancel

Add Roles Wizard

Select Server Roles

Before You Begin

Server Roles

Confirmation

Progress

Results

Select one or more roles to install on this server.

Roles:

- Active Directory Certificate Services
- Active Directory Domain Services
- Active Directory Federation Services

Description:

[Active Directory Domain Services \(AD DS\)](#) stores information about objects on the network and makes this information available to users and...

Add Roles Wizard

Add features required for Active Directory Domain Services?

You cannot install Active Directory Domain Services unless the required features are also installed.

Features:

- .NET Framework 3.5.1 Features
 .NET Framework 3.5.1

Description:

[Microsoft .NET Framework 3.5.1](#) 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.

[Why are these features required?](#)

Add Roles Wizard

Active Directory Domain Services

Before You Begin

Server Roles

Active Directory Domain Services

Confirmation

Progress

Results

Introduction to Active Directory Domain Services

Active Directory Domain Services (AD DS) stores information about users, computers, and other devices on the network. AD DS helps administrators securely manage this information and facilitates resource sharing and collaboration between users. AD DS is also required for directory-enabled applications such as Microsoft Exchange Server and for other Windows Server technologies such as Group Policy.

Things to Note

- To help ensure that users can still log on to the network in the case of a server outage, install a minimum of two domain controllers for a domain.
- AD DS requires a DNS server to be installed on the network. If you do not have a DNS server installed, you will be prompted to install the DNS Server role on this server.
- After you install the AD DS role, use the Active Directory Domain Services Installation Wizard (dcpromo.exe) to make the server a fully functional domain controller.
- Installing AD DS will also install the DFS Namespaces, DFS Replication, and File Replication services which are required by Directory Service.


Additional Information

[Overview of AD DS](#)

[Installing AD DS](#)


[Common Configurations for AD DS](#)


Add Roles Wizard [Close]


 **Confirm Installation Selections**


Before You Begin
Server Roles
Active Directory Domain Services
Confirmation
Progress
Results


To install the following roles, role services, or features, click Install.

 2 informational messages below

 This server might need to be restarted after the installation completes.

 **Active Directory Domain Services**

 After you install the AD DS role, use the Active Directory Domain Services Installation Wizard (dcpromo.exe) to make the server a fully functional domain controller.


 **.NET Framework 3.5.1 Features**

.NET Framework 3.5.1

[Print, e-mail, or save this information](#)

< Previous Next > **Install** Cancel

Add Roles Wizard



 **Installation Progress**

Before You Begin
Server Roles
Active Directory Domain Services
Confirmation
Progress
Results

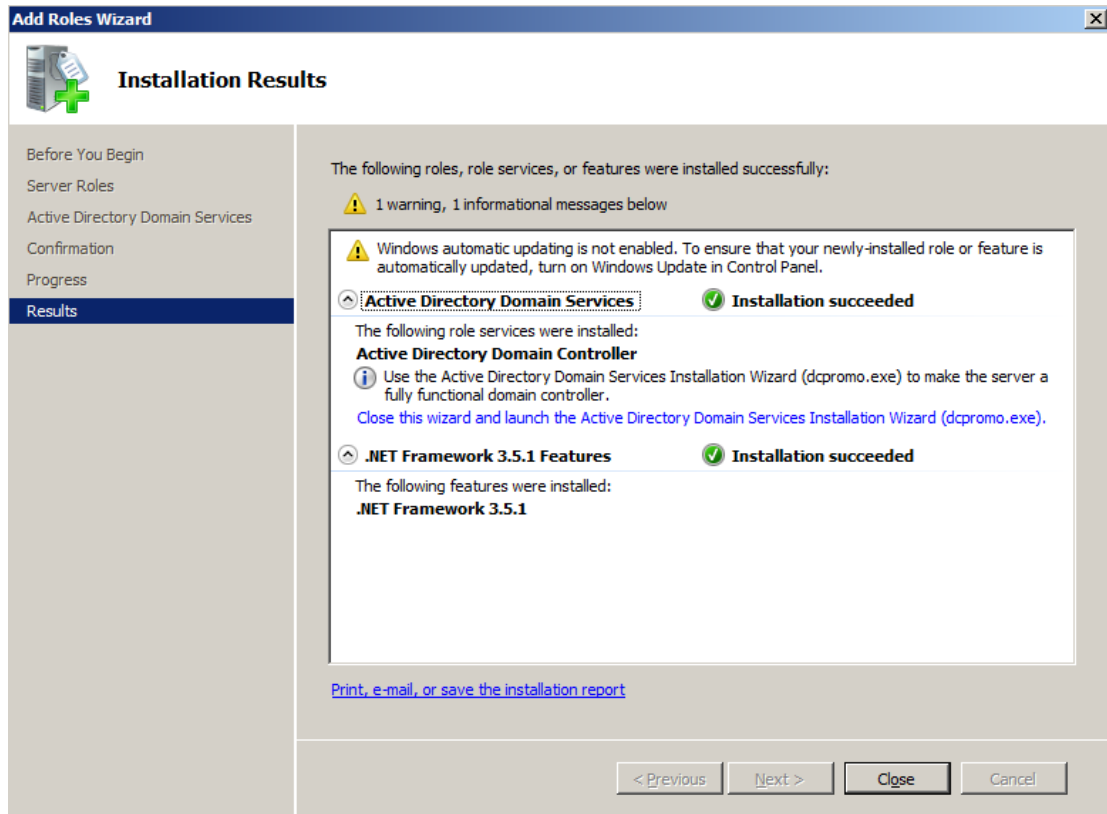
The following roles, role services, or features are being installed:

Active Directory Domain Services

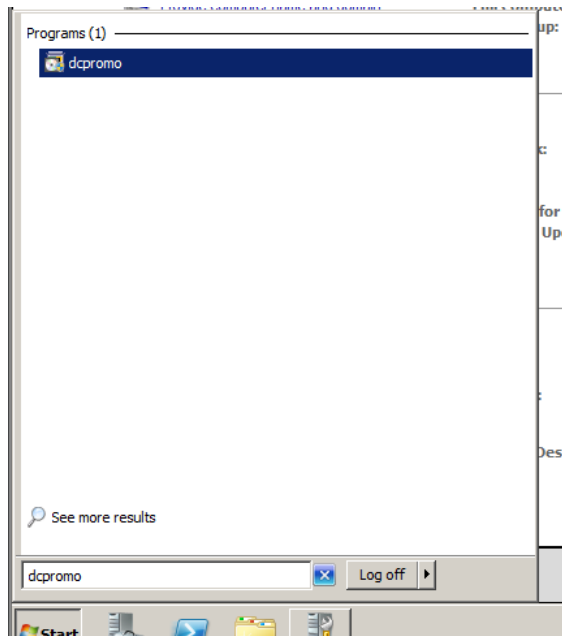
.NET Framework 3.5.1 Features

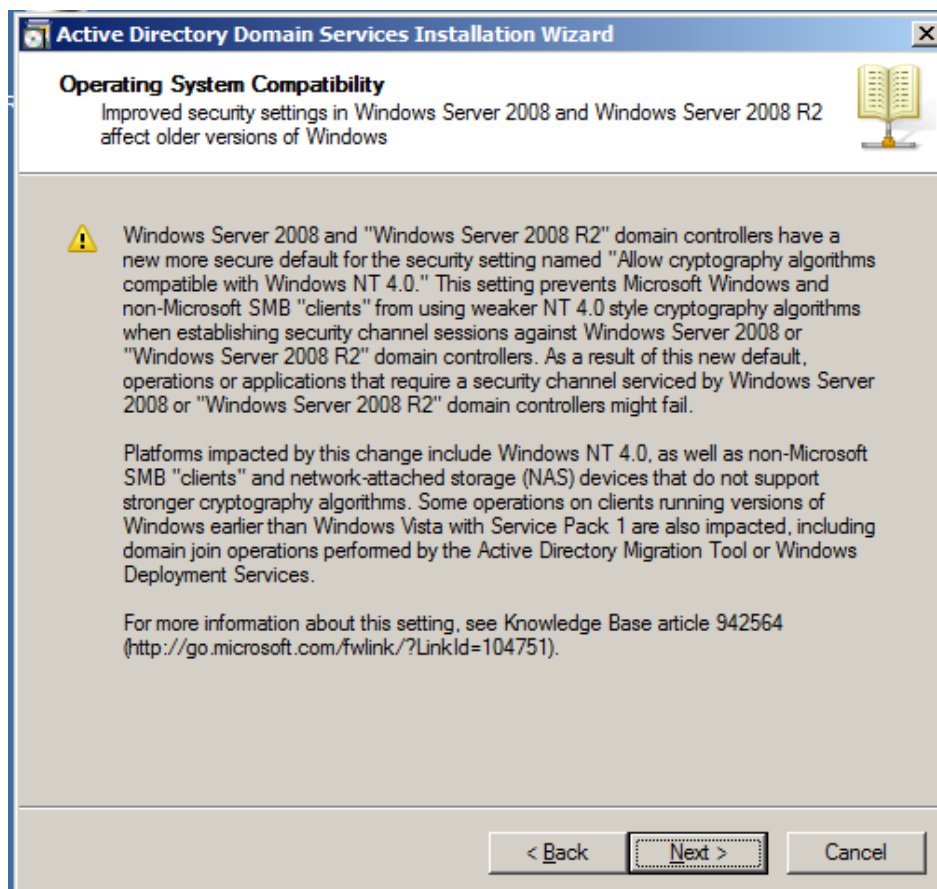
  Installing...

< Previous Next > **Install** Cancel



- **Dcpromo procedure**





Active Directory Domain Services Installation Wizard

Choose a Deployment Configuration

You can create a domain controller for an existing forest or for a new forest.

- Existing forest
 - Add a domain controller to an existing domain
 - Create a new domain in an existing forest
This server will become the first domain controller in the new domain.
- Create a new domain in a new forest

More about [possible deployment configurations](#)

< Back Next > Cancel

Active Directory Domain Services Installation Wizard

Name the Forest Root Domain

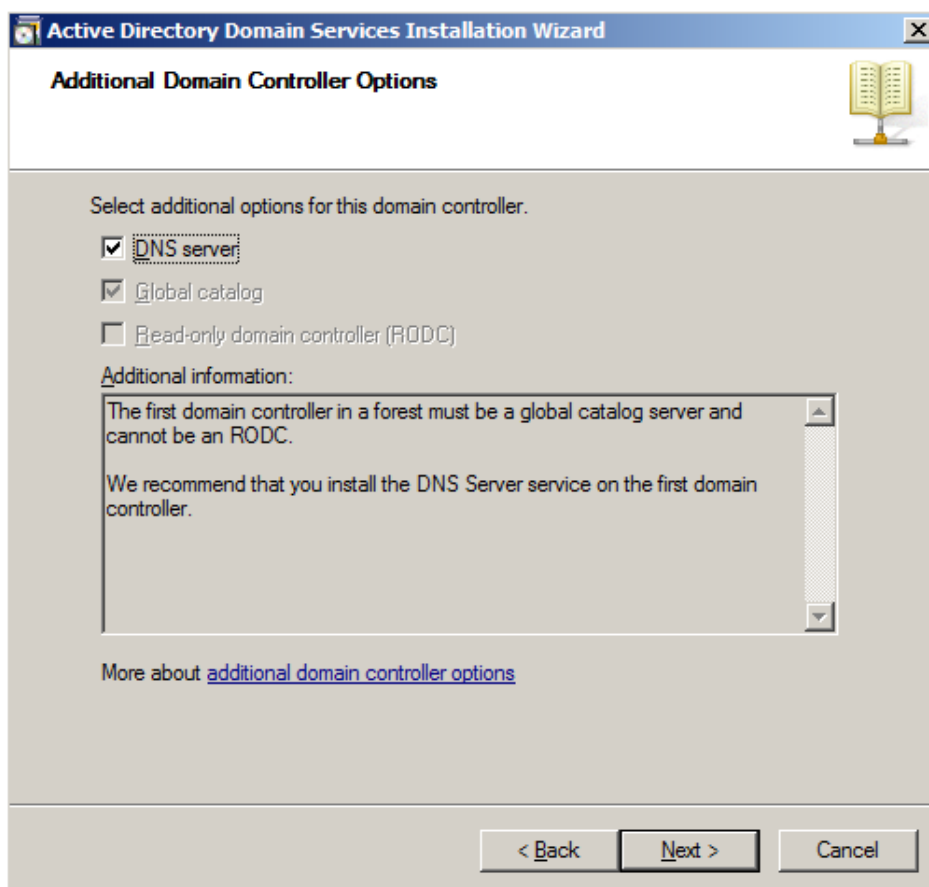
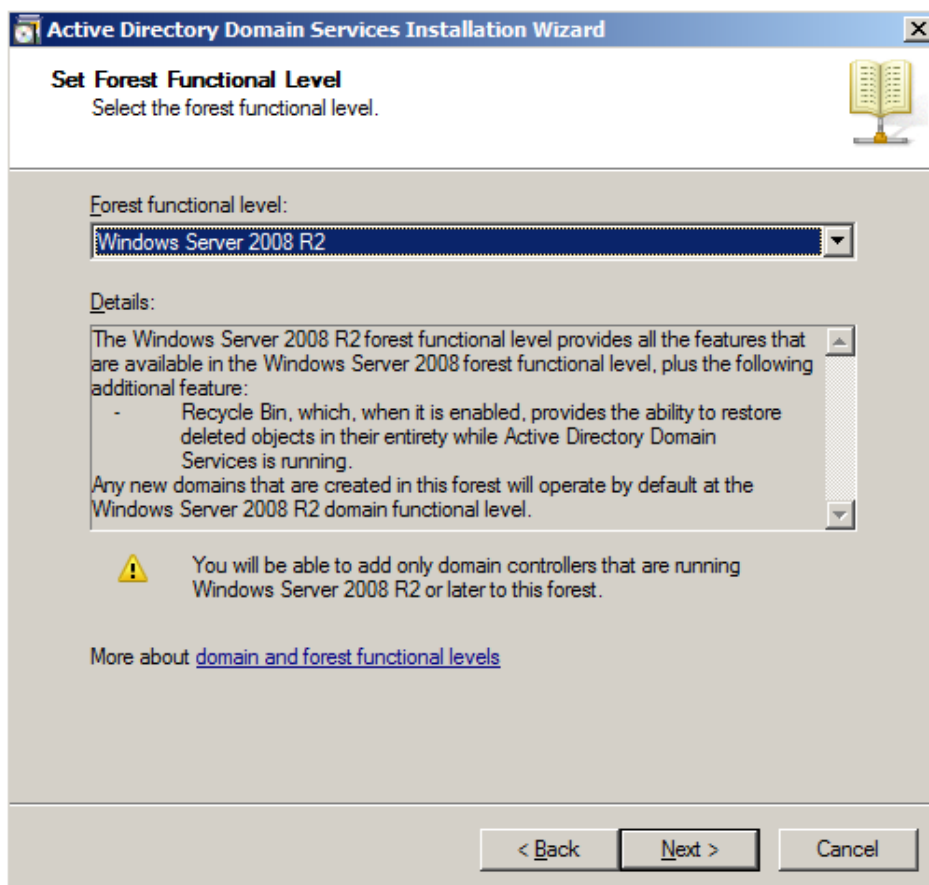
The first domain in the forest is the forest root domain. Its name is also the name of the forest.

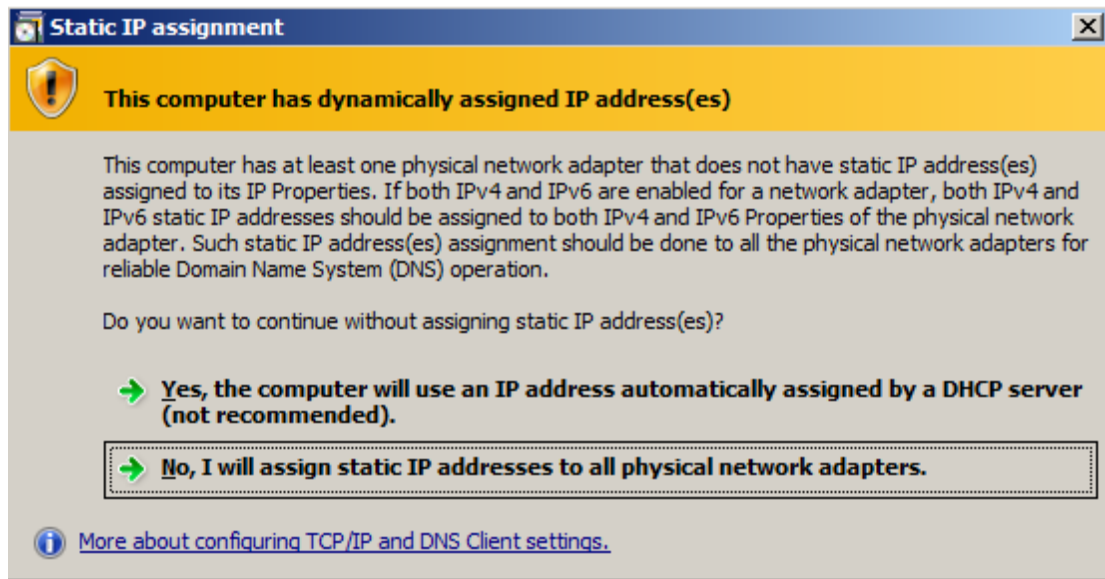
Type the fully qualified domain name (FQDN) of the new forest root domain.

FQDN of the forest root domain:

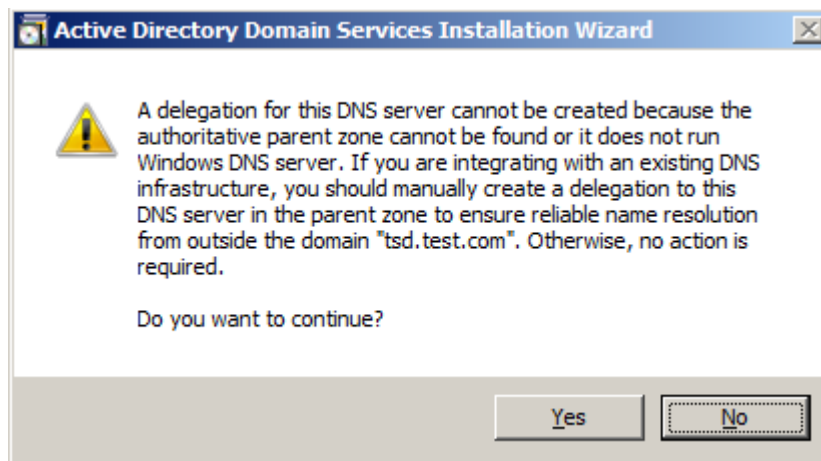
Example: corp.contoso.com

< Back Next > Cancel





Configuring your server with a static IP address



Click Yes

Active Directory Domain Services Installation Wizard

Location for Database, Log Files, and SYSVOL

Specify the folders that will contain the Active Directory domain controller database, log files, and SYSVOL.

For better performance and recoverability, store the database and log files on separate volumes.

Database folder:
 Browse...

Log files folder:
 Browse...

SYSVOL folder:
 Browse...

[More about placing Active Directory Domain Services files](#)

< Back Next > Cancel

Active Directory Domain Services Installation Wizard

Directory Services Restore Mode Administrator Password

The Directory Services Restore Mode Administrator account is different from the domain Administrator account.

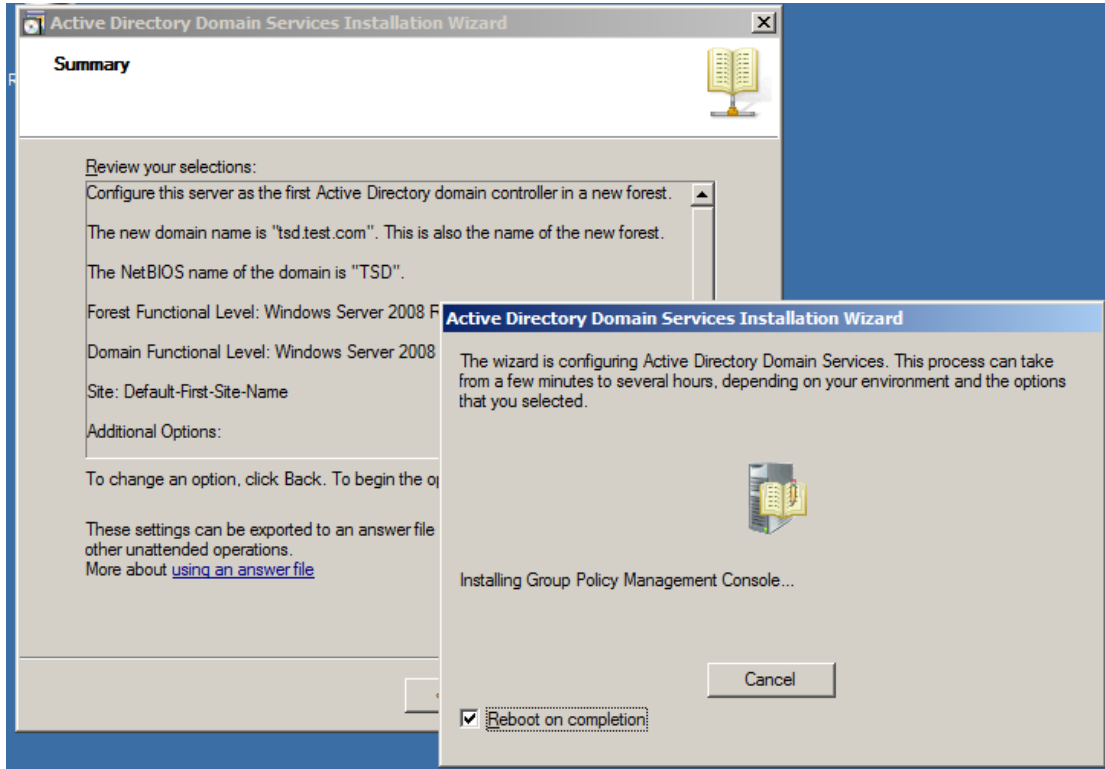
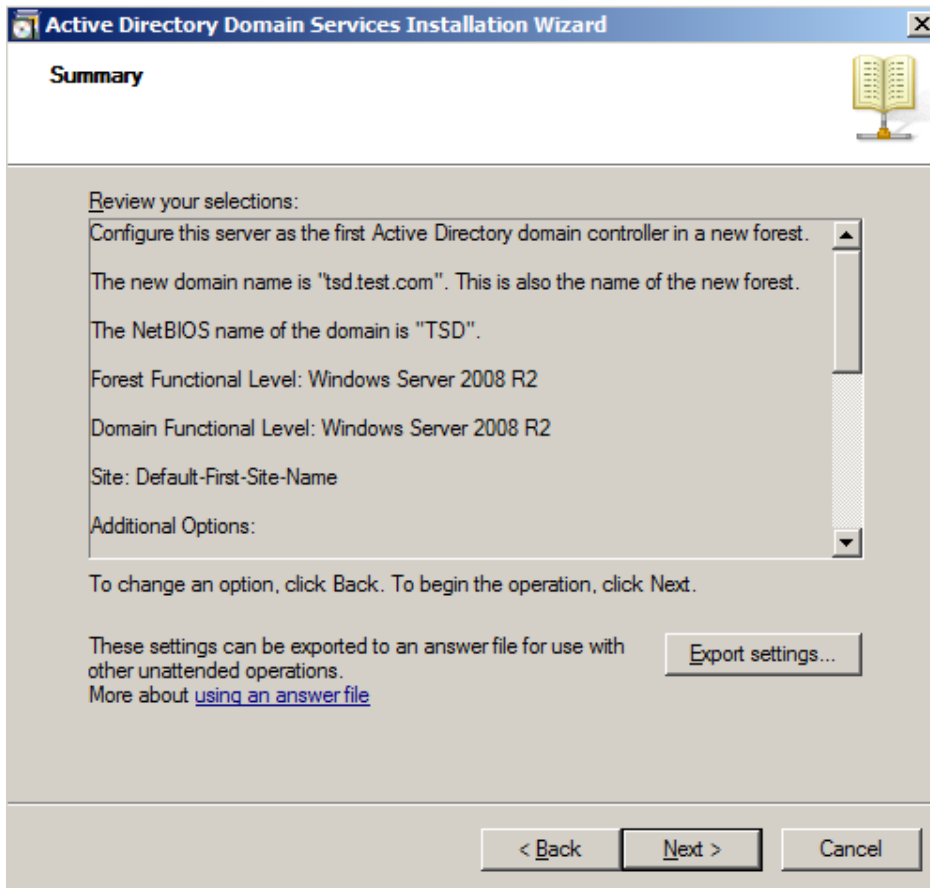
Assign a password for the Administrator account that will be used when this domain controller is started in Directory Services Restore Mode. We recommend that you choose a strong password.

Password:

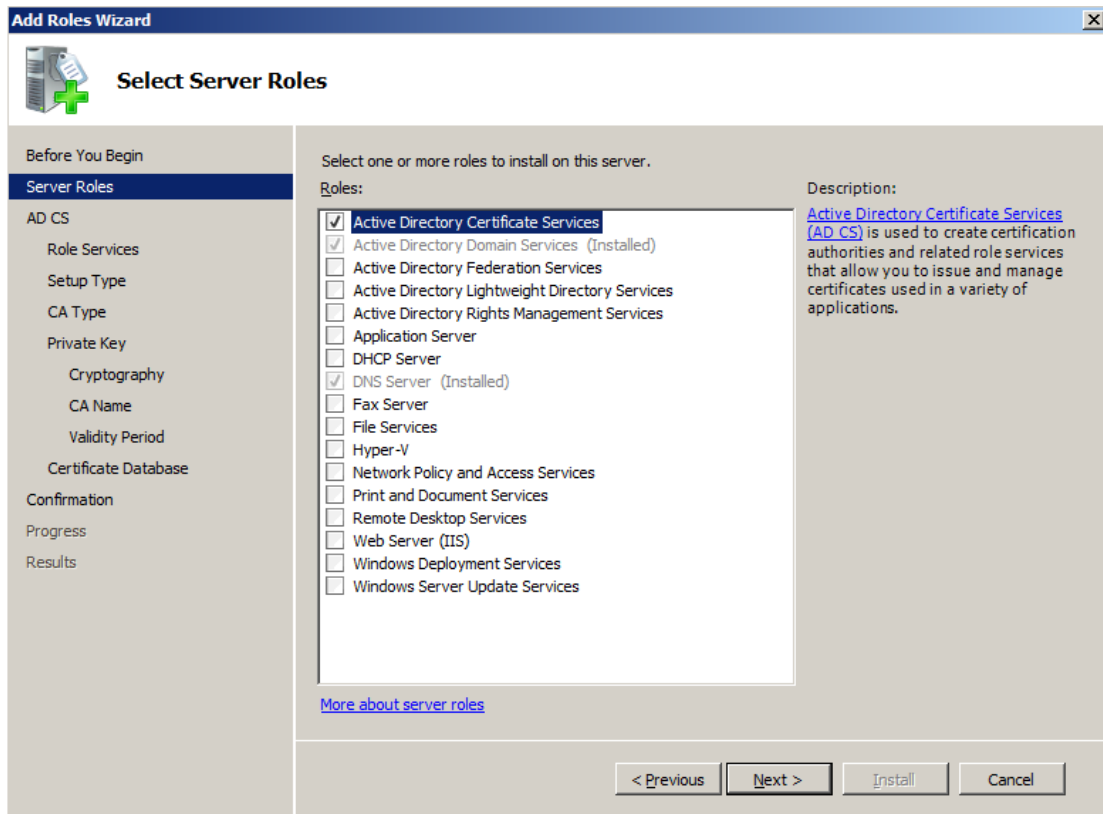
Confirm password:

[More about Directory Services Restore Mode password](#)

< Back Next > Cancel



● Installing the Active Directory Certificate Services



Add Roles Wizard

Select Server Roles

Before You Begin

Server Roles

AD CS

- Role Services
- Setup Type
- CA Type
- Private Key
 - Cryptography
- CA Name
- Validity Period
- Certificate Database

Confirmation

Progress

Results

Select one or more roles to install on this server.

Roles:

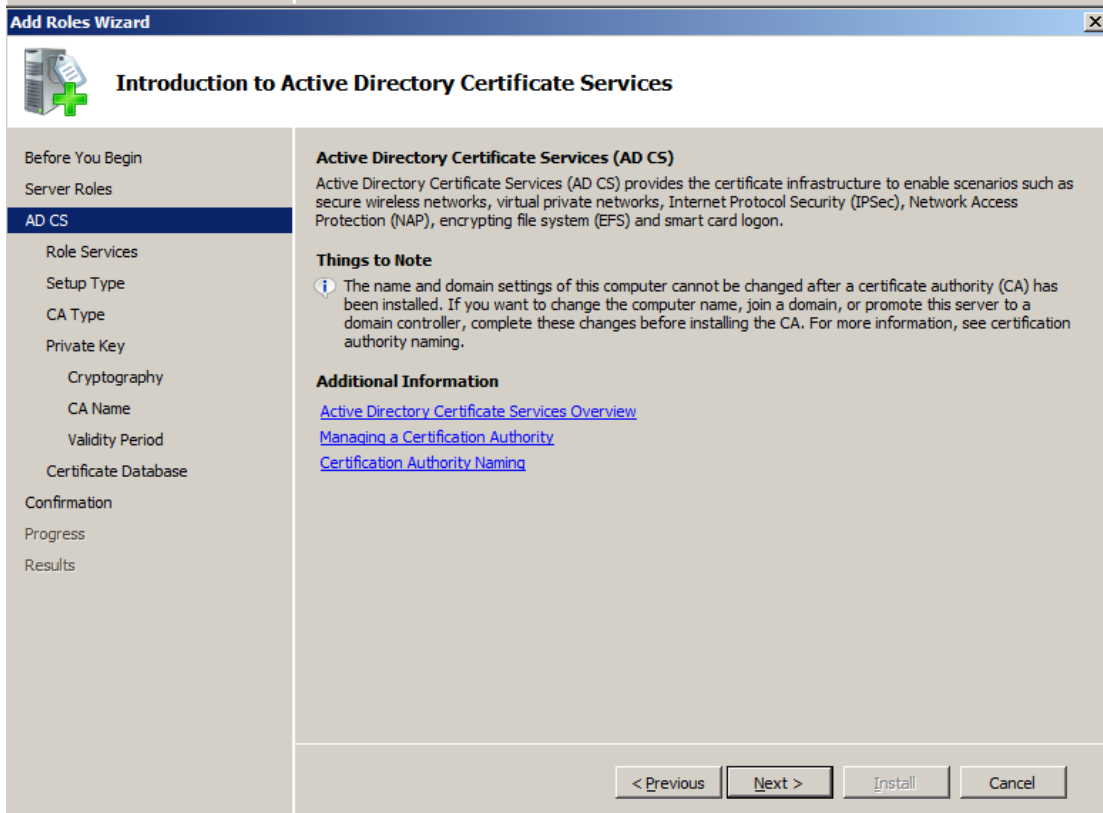
- Active Directory Certificate Services**
- Active Directory Domain Services (Installed)
- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Application Server
- DHCP Server
- DNS Server (Installed)
- Fax Server
- File Services
- Hyper-V
- Network Policy and Access Services
- Print and Document Services
- Remote Desktop Services
- Web Server (IIS)
- Windows Deployment Services
- Windows Server Update 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.

[More about server roles](#)

< Previous Next > Install Cancel



Add Roles Wizard

Introduction to Active Directory Certificate Services

Before You Begin

Server Roles

AD CS

- Role Services
- Setup Type
- CA Type
- Private Key
 - Cryptography
- CA Name
- Validity Period
- Certificate Database

Confirmation

Progress

Results

Active Directory Certificate Services (AD CS)

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 logon.

Things to Note

- The name and domain settings of this computer cannot be changed after a certificate 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.

Additional Information

- [Active Directory Certificate Services Overview](#)
- [Managing a Certification Authority](#)
- [Certification Authority Naming](#)

< Previous Next > Install Cancel

Add Roles Wizard

Select Role Services

Before You Begin
Server Roles
AD CS

Role Services

Setup Type
CA Type
Private Key
Cryptography
CA Name
Validity Period
Certificate Data
Confirmation
Progress
Results

Select the role services to install for Active Directory Certificate Services:

Role services:

- Certification Authority
- Certification Authority Web Enrollment

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

Add Roles Wizard

Add role services and features required for Certification Authority Web Enrollment?

You cannot install Certification Authority Web Enrollment unless the required role services and features are also installed.

Role Services:

- Web Server (IIS)
 - Web Server
 - Management Tools
- Remote Server Administration Tools
 - Role Administration Tools

Description: Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure.

[Why are these role services and features required?](#)

[More about role services](#)

Continue by adding required role services

Add Roles Wizard

Select Role Services

Before You Begin
Server Roles
AD CS

Role Services

Setup Type
CA Type
Private Key
Cryptography
CA Name
Validity Period
Certificate Database
Web Server (IIS)
Role Services
Confirmation
Progress
Results

Select the role services to install for Active Directory Certificate Services:


Role services:

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

Description: 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.

[More about role services](#)

Add Roles Wizard [X]

 **Specify Setup Type**

Before You Begin
 Server Roles
 AD CS
 Role Services
Setup Type
 CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
 Certificate Database
 Web Server (IIS)
 Role Services
 Confirmation
 Progress
 Results

Certification Authorities can use data in Active Directory to simplify the issuance and management of certificates. Specify whether you want to set up an Enterprise or Standalone CA.


Enterprise
 Select this option if this CA is a member of a domain and can use Directory Service to issue and manage certificates.

Standalone
 Select this option if this CA does not use Directory Service data to issue or manage certificates. A standalone CA can be a member of a domain.

[More about the differences between enterprise and standalone setup](#)

< Previous Next > Install Cancel

Add Roles Wizard [X]

 **Specify CA Type**

Before You Begin
 Server Roles
 AD CS
 Role Services
 Setup Type
CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
 Certificate Database
 Web Server (IIS)
 Role Services
 Confirmation
 Progress
 Results

A combination of root and subordinate CAs can be configured to create a hierarchical public key infrastructure (PKI). A root CA is a CA that issues its own self-signed certificate. A subordinate CA receives its certificate from another CA. Specify whether you want to set up a root or subordinate CA.


Root CA
 Select this option if you are installing the first or only certification authority in a public key infrastructure.

Subordinate CA
 Select this option if your CA will obtain its CA certificate from another CA higher in a public key infrastructure.

[More about public key infrastructure \(PKI\)](#)

< Previous Next > Install Cancel

Add Roles Wizard ✕

 **Set Up Private Key**

Before You Begin

Server Roles

AD CS

 Role Services

 Setup Type

 CA Type

Private Key

 Cryptography

 CA Name

 Validity Period

 Certificate Database

Web Server (IIS)

 Role Services

Confirmation

Progress

Results


To generate and issue certificates to clients, a CA must have a private key. Specify whether you want to create a new private key or use an existing one.

- Create a new private key**
Use this option if you don't have a private key or wish to create a new private key to enhance security. You will be asked to select a cryptographic service provider and specify a key length for the private key. To issue new certificates, you must also select a hash algorithm.
- Use existing private key**
Use this option to ensure continuity with previously issued certificates when reinstalling a CA.
 - Select a certificate and use its associated private key**
Select this option if you have an existing certificate on this computer or if you want to import a certificate and use its associated private key.
 - Select an existing private key on this computer**
Select this option if you have retained private keys from a previous installation or want to use a private key from an alternate source.

[More about public and private keys](#)

< Previous
Next >
Install
Cancel

Add Roles Wizard ✕

 **Configure Cryptography for CA**

Before You Begin

Server Roles

AD CS

 Role Services

 Setup Type

 CA Type

 Private Key

Cryptography

 CA Name

 Validity Period

 Certificate Database

Web Server (IIS)

 Role Services

Confirmation

Progress

Results

To create a new private key, you must first select a [cryptographic service provider](#), [hash algorithm](#), and key length that are appropriate for the intended use of the certificates that you issue. Selecting a higher value for key length will result in stronger security, but increase the time needed to complete signing operations.

Select a cryptographic service provider (CSP): Key character length:

RSA#Microsoft Software Key Storage Provider 2048

Select the hash algorithm for signing certificates issued by this CA:

SHA256

SHA384

SHA512


SHA1

Allow administrator interaction when the private key is accessed by the CA.

[More about cryptographic options for a CA](#)

< Previous
Next >
Install
Cancel

Add Roles Wizard X

 **Configure CA Name**

Before You Begin
Server Roles
AD CS
Role Services
Setup Type
CA Type
Private Key
Cryptography
CA Name
Validity Period
Certificate Database
Web Server (IIS)
Role Services
Confirmation
Progress
Results

Type in a common name to identify this CA. This name is added to all certificates issued by the CA. Distinguished name suffix values are automatically generated but can be modified.


Common name for this CA:
tsd-RADIUS-CA

Distinguished name suffix:
DC=tsd,DC=test,DC=com

Preview of distinguished name:
CN=tsd-RADIUS-CA,DC=tsd,DC=test,DC=com

[More about configuring a CA name](#)

Add Roles Wizard X

 **Set Validity Period**

Before You Begin
Server Roles
AD CS
Role Services
Setup Type
CA Type
Private Key
Cryptography
CA Name
Validity Period
Certificate Database
Web Server (IIS)
Role Services
Confirmation
Progress
Results


A certificate will be issued to this CA to secure communications with other CAs and with clients requesting certificates. The validity period of a CA certificate can be based on a number of factors, including the intended purpose of the CA and security measures that you have taken to secure the CA.

Select validity period for the certificate generated for this CA:
5 Years

CA expiration Date: 9/26/2017 10:37 AM
Note that CA will issue certificates valid only until its expiration date.

[More about setting the certificate validity period](#)

Add Roles Wizard [X]

 **Configure Certificate Database**

Before You Begin
 Server Roles
 AD CS
 Role Services
 Setup Type
 CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
Certificate Database
 Web Server (IIS)
 Role Services
 Confirmation
 Progress
 Results

The certificate database records all certificate requests, issued certificates, and revoked or expired certificates. The database log can be used to monitor management activity for a CA.


Certificate database location:

Use existing certificate database from previous installation at this location

Certificate database log location:

< Previous Next > Install Cancel

Add Roles Wizard [X]

 **Web Server (IIS)**

Before You Begin
 Server Roles
 AD CS
 Role Services
 Setup Type
 CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
 Certificate Database
Web Server (IIS)
 Role Services
 Confirmation
 Progress
 Results

Introduction to Web Server (IIS)
 Web servers are computers that have specific software that allows them to accept requests from client computers and return responses to those requests. Web servers let you share information over the Internet, or through intranets and extranets. The Web Server role includes Internet Information Services (IIS) 7.0, a unified Web platform that integrates IIS 7.0, ASP.NET, and Windows Communication Foundation. IIS 7.0 also features enhanced security, simplified diagnostics, and delegated administration.

Things to Note


- Using Windows System Resource Manager (WSRM) can help ensure equitable servicing of Web server traffic, especially when there are multiple roles on this computer.
- The default installation for the Web Server (IIS) role includes the installation of role services that enable you to serve static content, make minor customizations (such as default documents and HTTP errors), monitor and log server activity, and configure static content compression.

Additional Information

- [Overview of Web Server \(IIS\)](#)
- [Overview of Available Role Services in IIS 7.0](#)
- [IIS Checklists](#)
- [Common Administrative Tasks in IIS](#)
- [Overview of WSRM](#)

< Previous Next > Install Cancel

Add Roles Wizard [X]

 **Select Role Services**

Before You Begin
 Server Roles
 AD CS
 Role Services
 Setup Type
 CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
 Certificate Database
 Web Server (IIS)
Role Services
 Confirmation
 Progress
 Results

Select the role services to install for Web Server (IIS):
 Role services:


- Web Server
 - Common HTTP Features
 - Static Content
 - Default Document
 - Directory Browsing
 - HTTP Errors
 - HTTP Redirection
 - WebDAV Publishing
 - Application Development
 - ASP.NET
 - .NET Extensibility
 - ASP
 - CGI
 - ISAPI Extensions
 - ISAPI Filters
 - Server Side Includes
 - Health and Diagnostics
 - HTTP Logging
 - Logging Tools
 - Request Monitor
 - Tracing

Description:
[Web Server](#) provides support for HTML Web sites and optional support for ASP.NET, ASP, and Web server extensions. You can use the Web Server to host an internal or external Web site or to provide an environment for developers to create Web-based applications.

[More about role services](#)


< Previous Next > Install Cancel


Add Roles Wizard [X]


 **Confirm Installation Selections**

Before You Begin
 Server Roles
 AD CS
 Role Services
 Setup Type
 CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
 Certificate Database
 Web Server (IIS)
 Role Services
Confirmation
 Progress
 Results


To install the following roles, role services, or features, click Install.

 1 warning, 2 informational messages below

 This server might need to be restarted after the installation completes.


 **Active Directory Certificate Services**


Certification Authority

 The name and domain settings of this computer cannot be changed after Certification Authority has been installed.

CA Type :	Standalone Root
CSP :	RSA#Microsoft Software Key Storage Provider
Hash Algorithm :	SHA1
Key Length :	2048
Allow CSP Interaction :	Disabled
Certificate Validity Period :	9/26/2017 10:37 AM
Distinguished name :	CN=tsd-RADIUS-CA,DC=tsd,DC=test,DC=com
Certificate Database Location :	C:\Windows\system32\CertLog
Certificate Database Log Location :	C:\Windows\system32\CertLog

Certification Authority Web Enrollment


 **Web Server (IIS)**

 Find out more about Windows System Resource Manager (WSRM) and how it can help optimize CPU usage.

[Print, e-mail, or save this information](#)

< Previous Next > Install Cancel

Add Roles Wizard

 **Installation Progress**

Before You Begin
 Server Roles
 AD CS
 Role Services
 Setup Type
 CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
 Certificate Database
 Web Server (IIS)
 Role Services
 Confirmation
Progress
 Results


The following roles, role services, or features are being installed:

- Active Directory Certificate Services**
- Web Server (IIS)**
- Remote Server Administration Tools**

Installing...


< Previous Next > Install Cancel


Add Roles Wizard



 **Installation Results**

Before You Begin
 Server Roles
 AD CS
 Role Services
 Setup Type
 CA Type
 Private Key
 Cryptography
 CA Name
 Validity Period
 Certificate Database
 Web Server (IIS)
 Role Services
 Confirmation
 Progress
Results

The following roles, role services, or features were installed successfully:

 1 warning message below

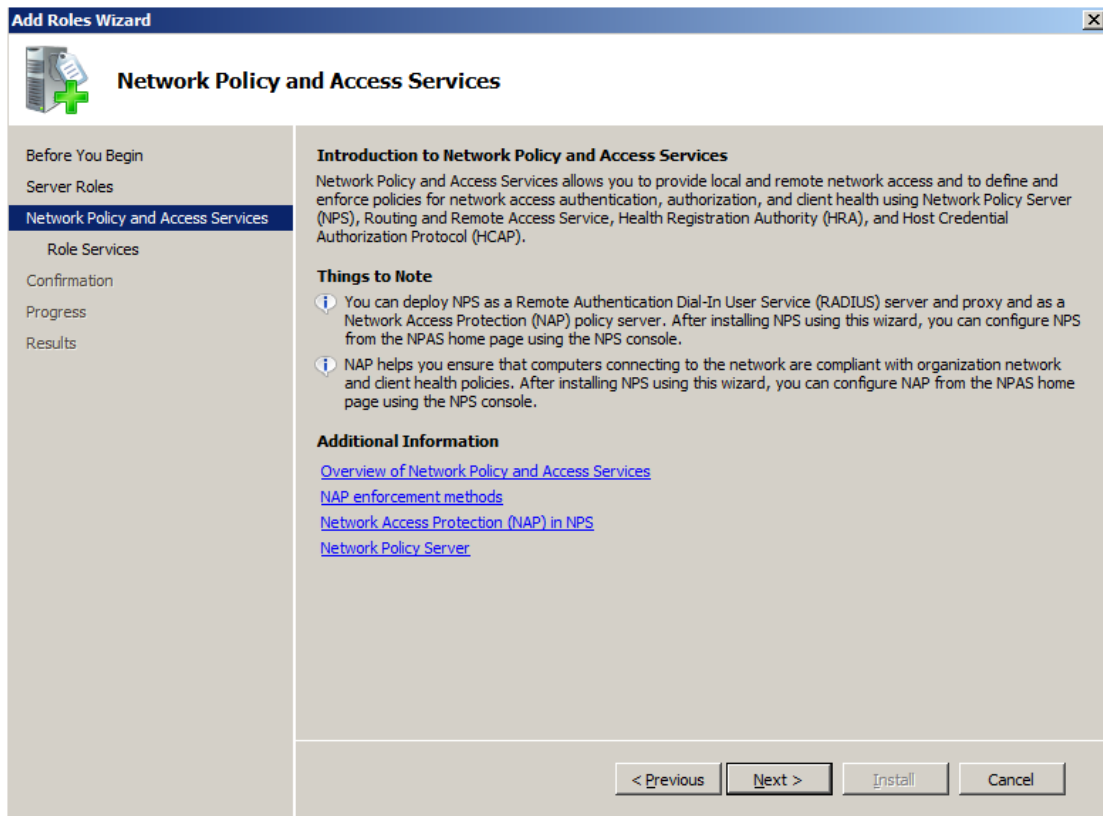
 Windows automatic updating is not enabled. To ensure that your newly-installed role or feature is automatically updated, turn on Windows Update in Control Panel.

- Active Directory Certificate Services**  **Installation succeeded**
 The following role services were installed:
Certification Authority
Certification Authority Web Enrollment
- Web Server (IIS)**  **Installation succeeded**
 The following role services were installed:
Web Server
 Common HTTP Features
 Static Content
 Default Document
 Directory Browsing
 HTTP Errors
 HTTP Redirection
 Application Development
 ASP

[Print, e-mail, or save the installation report](#)

< Previous Next > Close Cancel

● NPS (Network Policy and Access Services) Installation



Add Roles Wizard

Network Policy and Access Services

Before You Begin

- Server Roles
- Network Policy and Access Services**
- Role Services
- Confirmation
- Progress
- Results

Introduction to Network Policy and Access Services

Network Policy and Access Services allows you to provide local and remote network access and to define and enforce policies for network access authentication, authorization, and client health using Network Policy Server (NPS), Routing and Remote Access Service, Health Registration Authority (HRA), and Host Credential Authorization Protocol (HCAP).

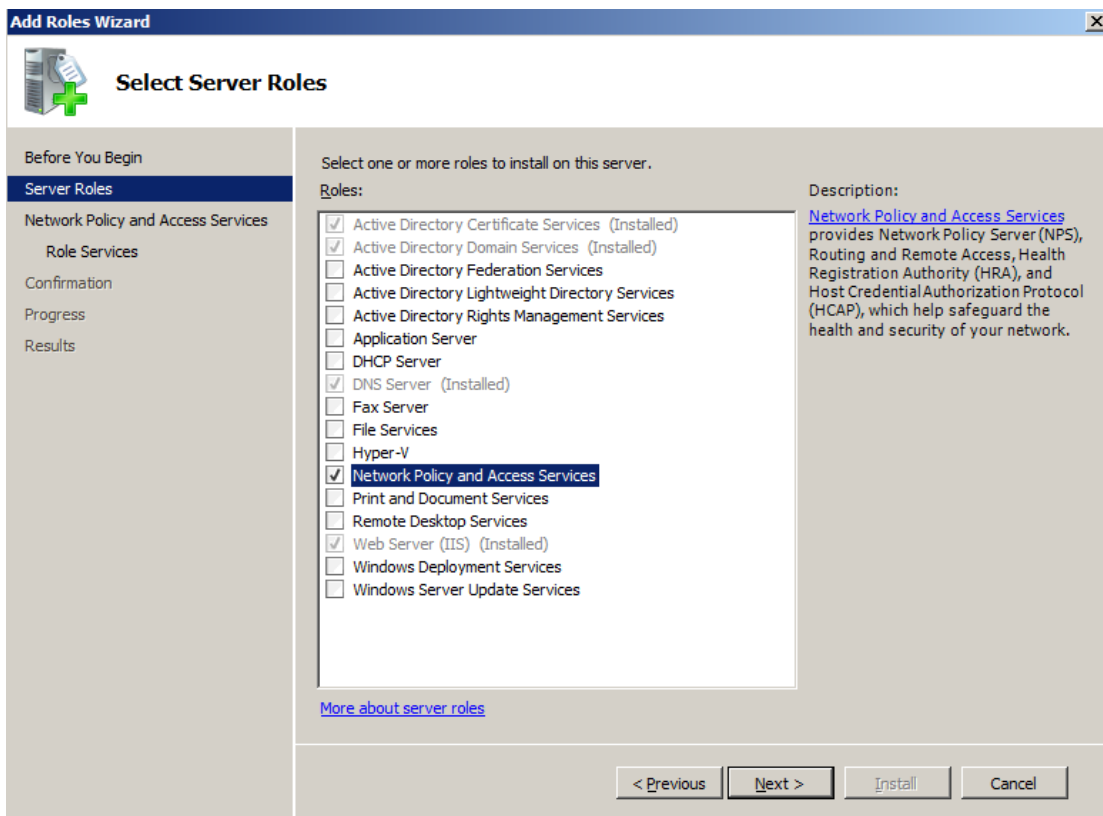
Things to Note

- You can deploy NPS as a Remote Authentication Dial-In User Service (RADIUS) server and proxy and as a Network Access Protection (NAP) policy server. After installing NPS using this wizard, you can configure NPS from the NPAS home page using the NPS console.
- NAP helps you ensure that computers connecting to the network are compliant with organization network and client health policies. After installing NPS using this wizard, you can configure NAP from the NPAS home page using the NPS console.

Additional Information

- [Overview of Network Policy and Access Services](#)
- [NAP enforcement methods](#)
- [Network Access Protection \(NAP\) in NPS](#)
- [Network Policy Server](#)

< Previous Next > Install Cancel



Add Roles Wizard

Select Server Roles

Before You Begin

- Server Roles**
- Network Policy and Access Services
- Role Services
- Confirmation
- Progress
- Results

Select one or more roles to install on this server.

Roles:

- Active Directory Certificate Services (Installed)
- 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 Services
- Hyper-V
- Network Policy and Access Services**
- Print and Document Services
- Remote Desktop Services
- Web Server (IIS) (Installed)
- Windows Deployment Services
- Windows Server Update Services

Description:

[Network Policy and Access Services](#) provides Network Policy Server (NPS), Routing and Remote Access, Health Registration Authority (HRA), and Host Credential Authorization Protocol (HCAP), which help safeguard the health and security of your network.

[More about server roles](#)

< Previous Next > Install Cancel

Add Roles Wizard

Select Role Services

Before You Begin
Server Roles
Network Policy and Access Services
Role Services
Confirmation
Progress
Results

Select the role services to install for Network Policy and Access Services:

Role services:

- Network Policy Server
- Routing and Remote Access Services
 - Remote Access Service
 - Routing
- Health Registration Authority
- Host Credential Authorization Protocol

Description:
Network Policy Server (NPS) allows you to create and enforce organization-wide network access policies for client health, connection request authentication, and connection request authorization. With NPS, you can also deploy Network Access Protection (NAP), a client health policy creation, enforcement, and remediation technology.

[More about role services](#)

< Previous Next > Install Cancel

Add Roles Wizard

Confirm Installation Selections

Before You Begin
Server Roles
Network Policy and Access Services
Role Services
Confirmation
Progress
Results

To install the following roles, role services, or features, click Install.

i 1 informational message below

- i** This server might need to be restarted after the installation completes.

^ **Network Policy and Access Services**

- Network Policy Server**

[Print, e-mail, or save this information](#)

< Previous Next > Install Cancel

Add Roles Wizard

Installation Progress

Before You Begin
Server Roles
Network Policy and Access Services
 Role Services
Confirmation
Progress
Results

The following roles, role services, or features are being installed:

Network Policy and Access Services

Installing...

< Previous Next > Install Cancel

Add Roles Wizard

Installation Results

Before You Begin
Server Roles
Network Policy and Access Services
 Role Services
Confirmation
Progress
Results

The following roles, role services, or features were installed successfully:

⚠ 1 warning, 1 informational messages below

⚠ Windows automatic updating is not enabled. To ensure that your newly-installed role or feature is automatically updated, turn on Windows Update in Control Panel.

⬆ **Network Policy and Access Services** ✓ **Installation succeeded**

The following role services were installed:

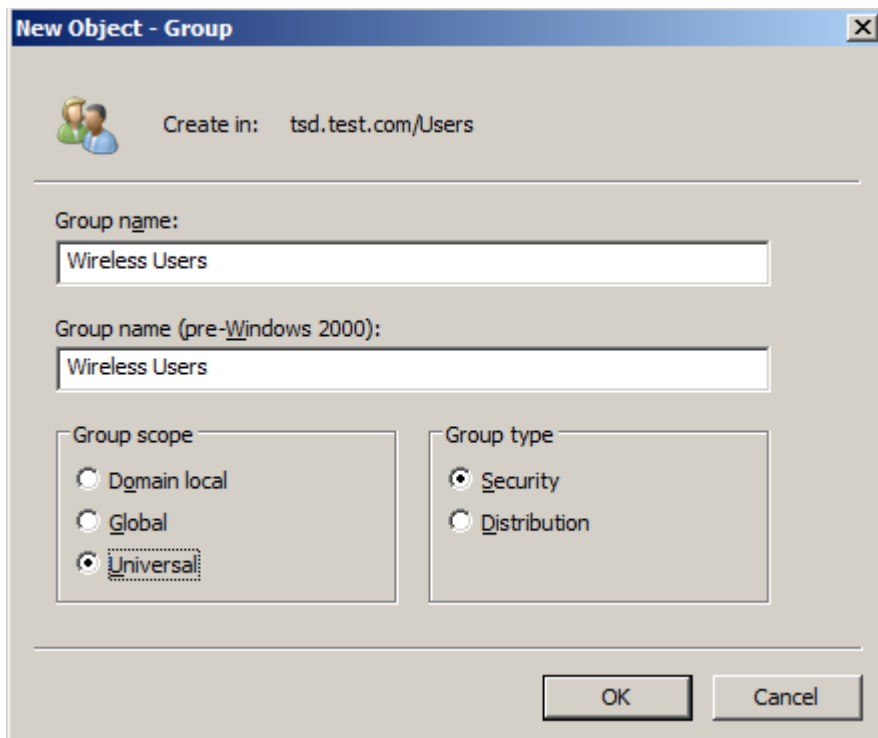
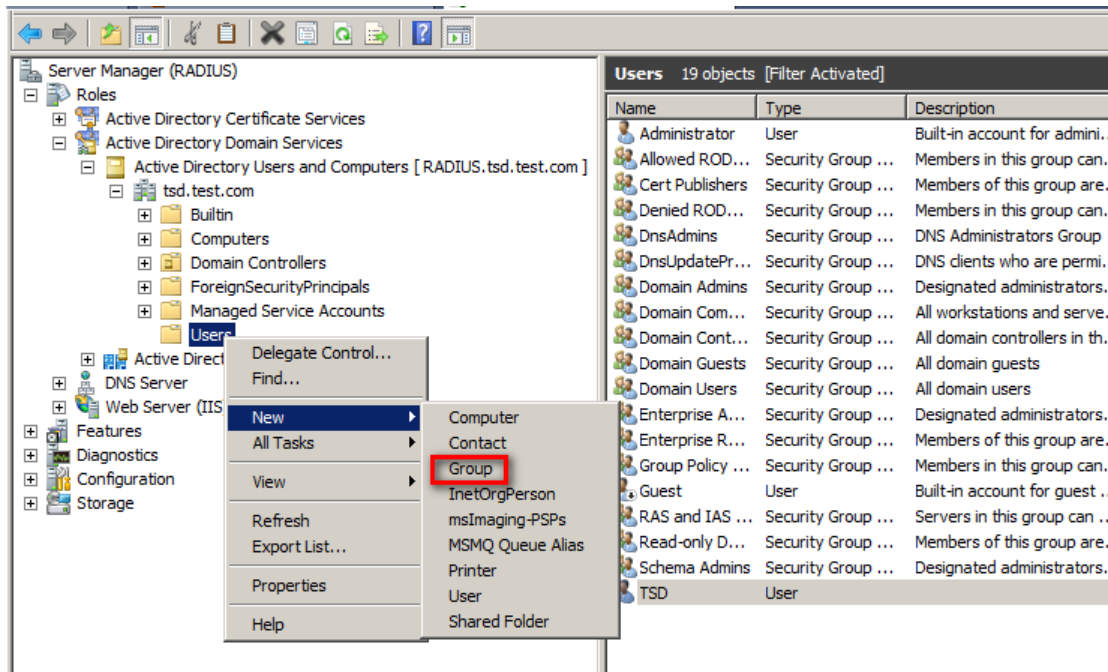
Network Policy Server

ℹ You can use a wizard in the NPS console to configure Network Access Protection (NAP). To open the NPS console after installation, go to Server Manager or click Start, Administrative Tools, Network Policy Server.

[Print, e-mail, or save the installation report](#)

< Previous Next > Close Cancel

● **Creating User account for authenticating via NPS(RADIUS)**



Server Manager (RADIUS)

- Roles
 - Active Directory Certificate Services
 - Active Directory Domain Services
 - Active Directory Users and Computers [RADIUS.tsd.test.com]
 - tsd.test.com
 - Builtin
 - Computers
 - Domain Controllers
 - ForeignSecurityPrincipals
 - Managed Service Accounts
 - Users
 - Delegate Control...
 - Find...
 - New
 - Computer
 - Contact
 - Group
 - InetOrgPerson
 - msImaging-PSPs
 - MSMQ Queue Alias
 - Printer
 - User
 - Shared Folder
 - All Tasks
 - View
 - Refresh
 - Export List...
 - Properties
 - Help

Users 20 objects [Filter Activated]

Name	Type
Administrator	User
Allowed ROD...	Security Group ...
Cert Publishers	Security Group ...
Denied ROD...	Security Group ...
DnsAdmins	Security Group ...
DnsUpdatePr...	Security Group ...
Domain Admins	Security Group ...
Domain Com...	Security Group ...
Domain Cont...	Security Group ...
Domain Guests	Security Group ...
Domain Users	Security Group ...
Enterprise A...	Security Group ...
Enterprise R...	Security Group ...
Group Policy ...	Security Group ...
Guest	User
RAS and IAS ...	Security Group ...
Read-only D...	Security Group ...
Schema Admins	Security Group ...
TSD	User
Wireless Users	Security Group ...

New Object - User

Create in: tsd.test.com/Users

First name: Initials:

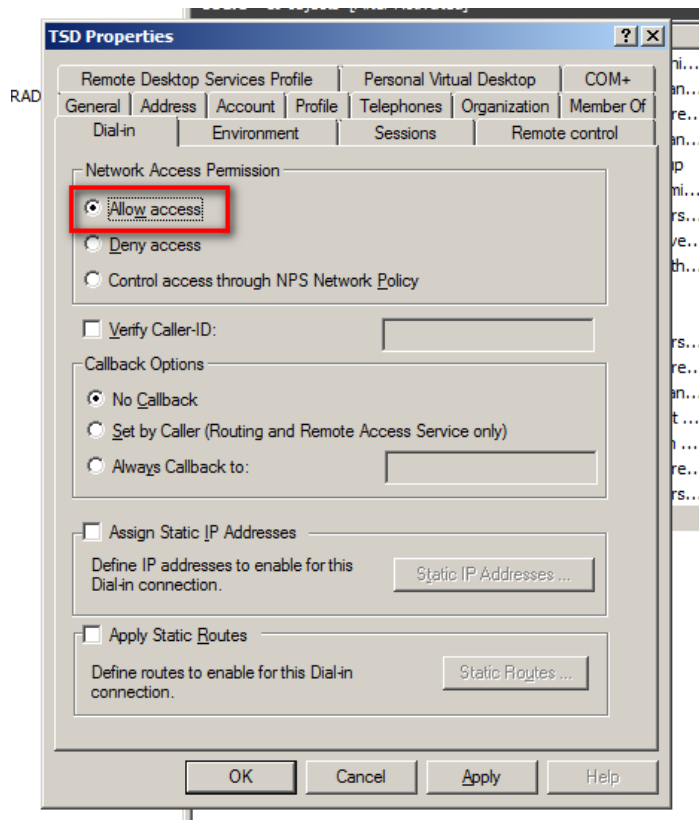
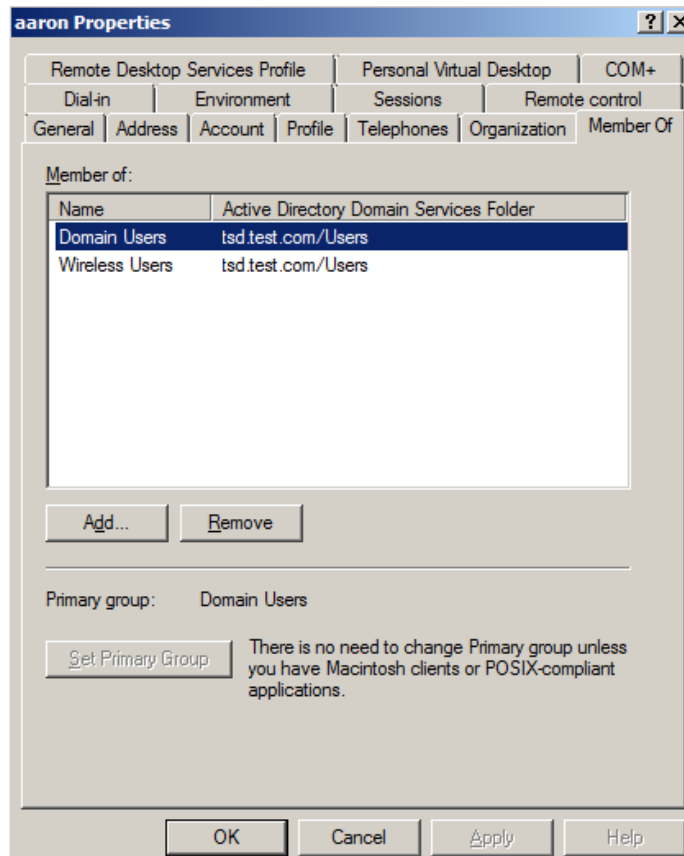
Last name:

Full name:

User logon name:

User logon name (pre-Windows 2000):

< Back Next > Cancel

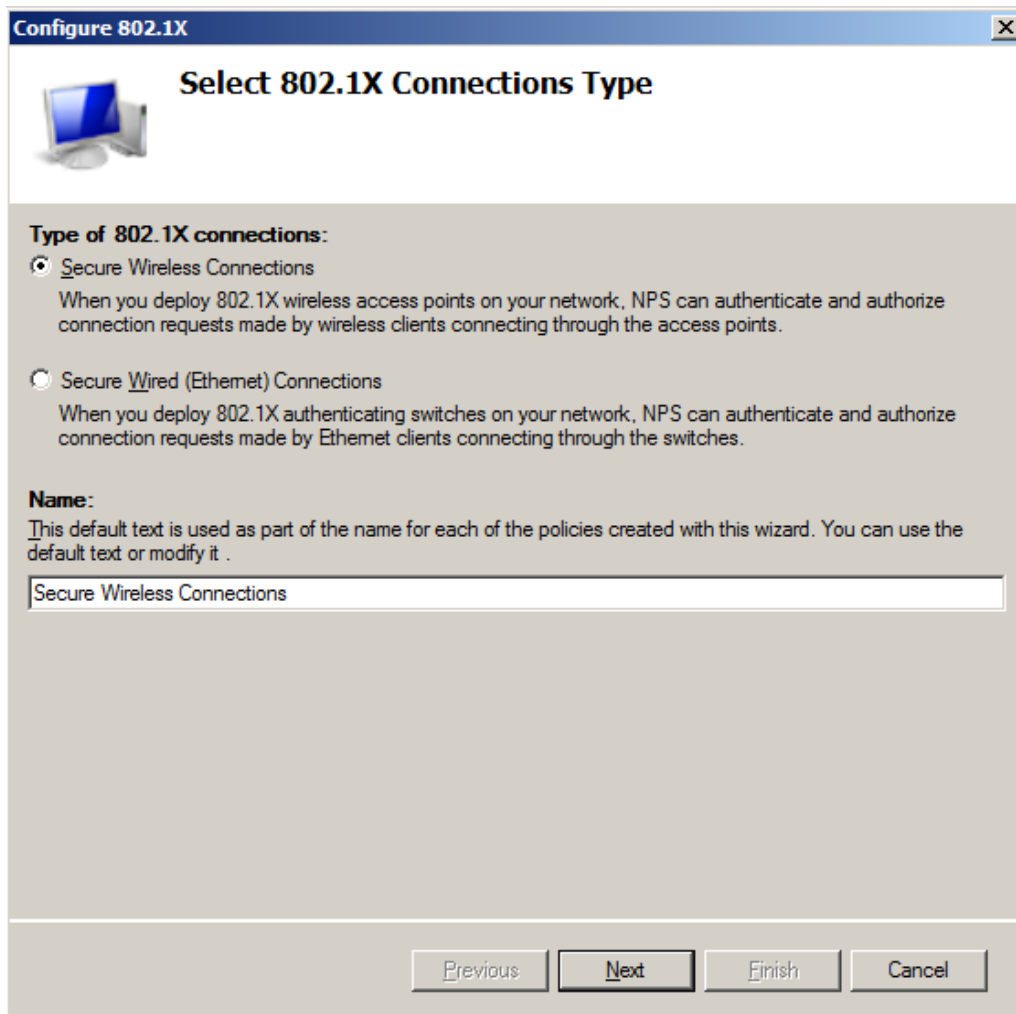
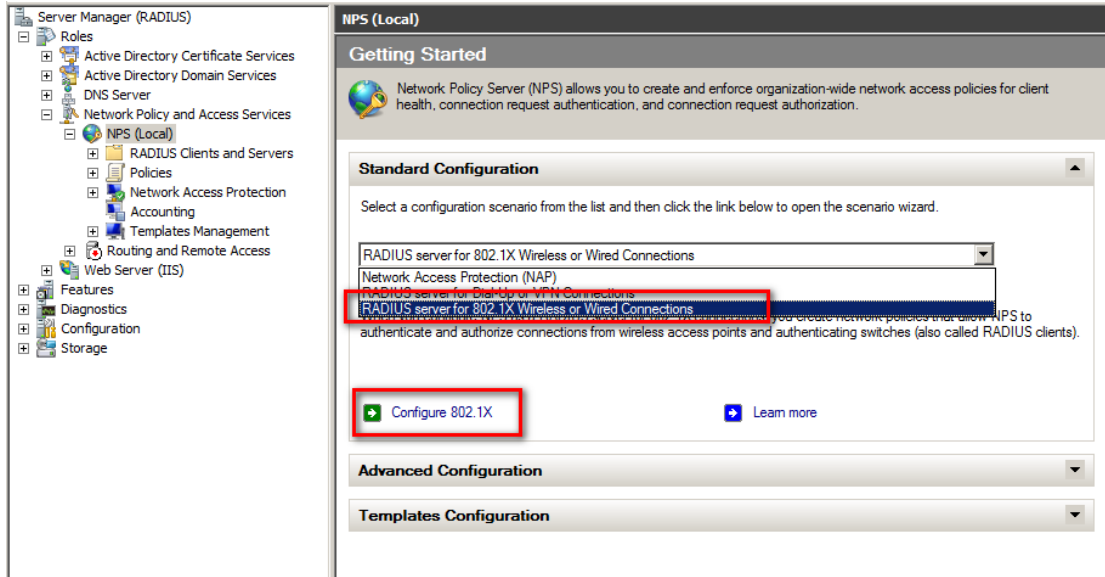


Add account from AD

Modifying remote access permission to Allow access (Deny access by default)

- **Creating NPS Rules**

Configuring NPS for the RADIUS, for the Standard Configuration option, select RADIUS server for 802.1X Wireless or Wired Connections



Configure **DAP-2360 Properties**

Settings

Select an existing template:

Name and Address

Friendly name: DAP-2360

Address (IP or DNS): 192.168.0.50

Shared Secret

Select an existing Shared Secrets template: None


To manually type a shared secret, click Manual. To automatically generate a shared secret, click Generate. You must configure the RADIUS client with the same shared secret entered here. Shared secrets are case-sensitive.

Manual Generate

Shared secret:

Confirm shared secret:

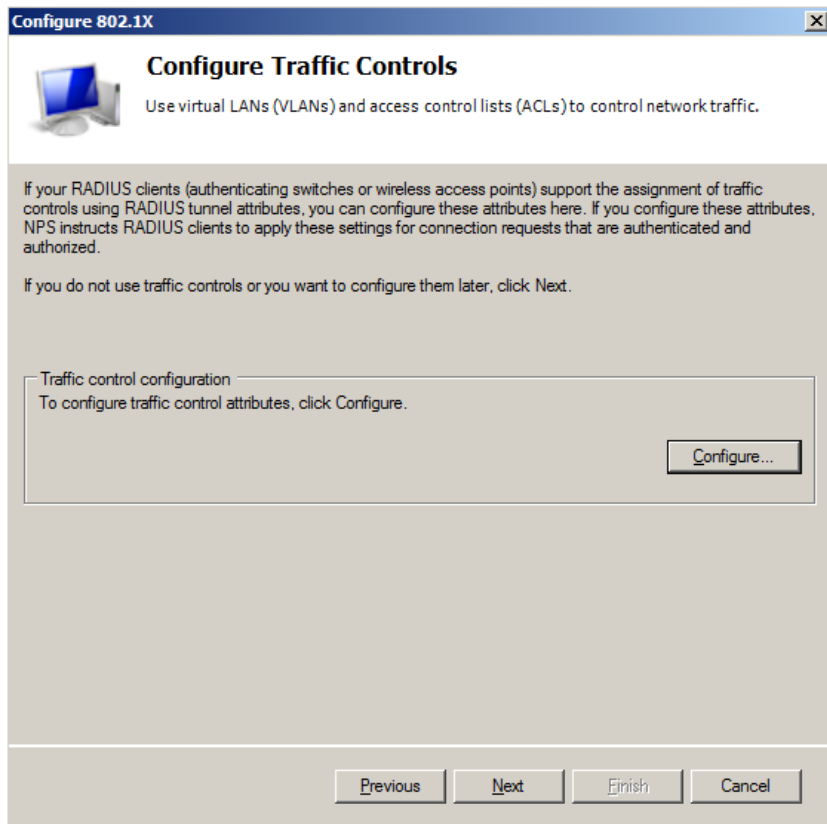
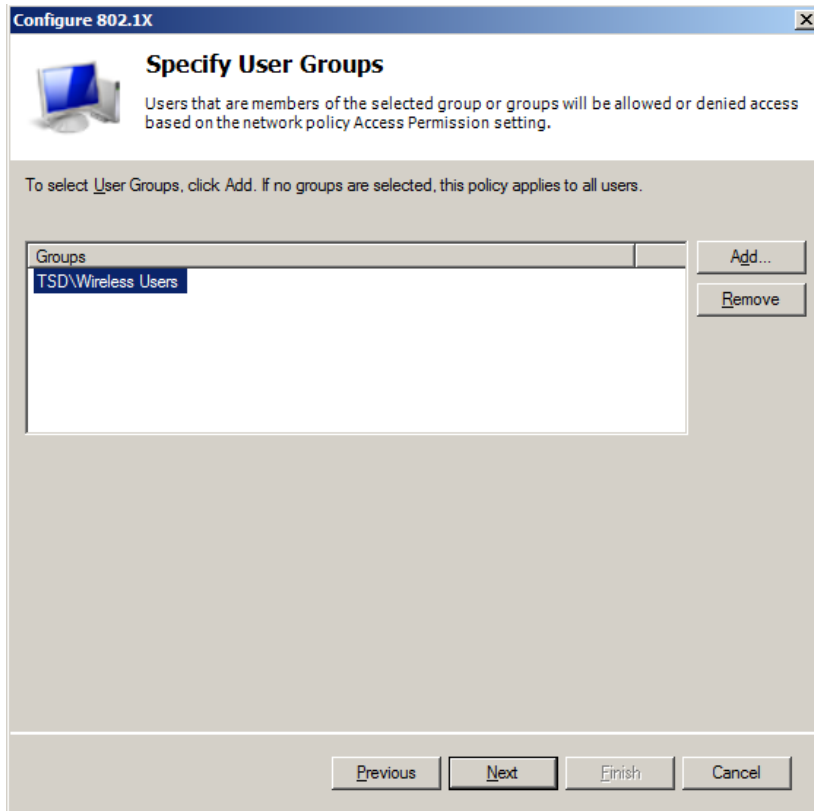
Configure **802.1X**

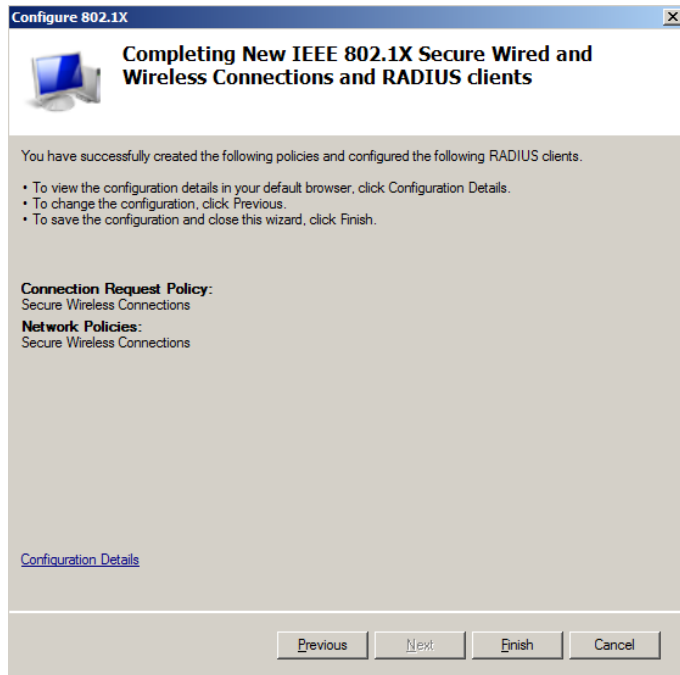
 **Configure an Authentication Method**

Select the EAP type for this policy.

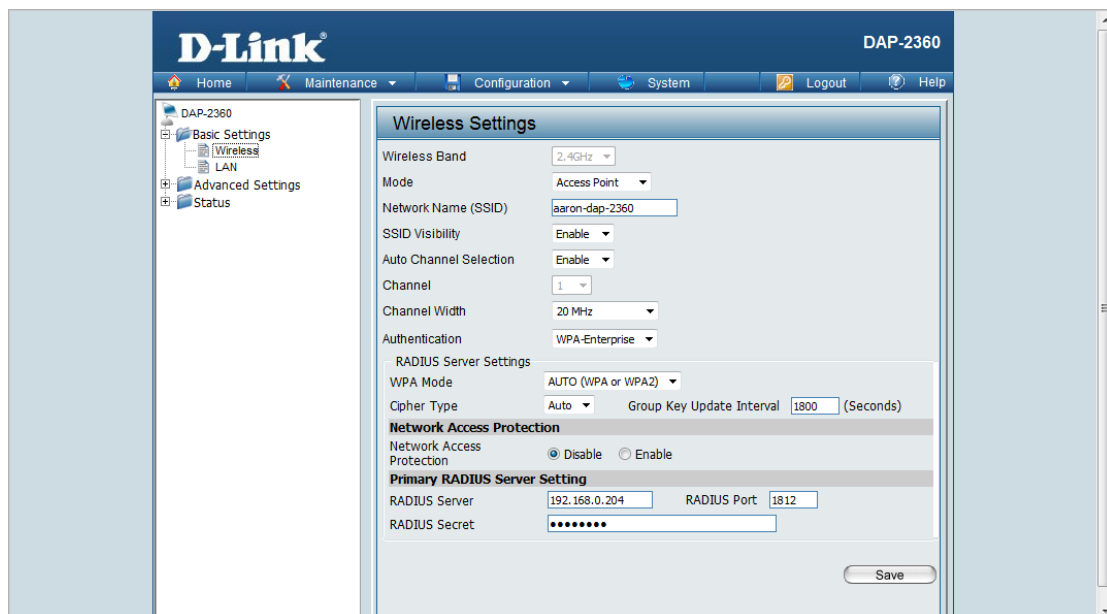
Type (based on method of access and network configuration):

Microsoft: Protected EAP (PEAP)

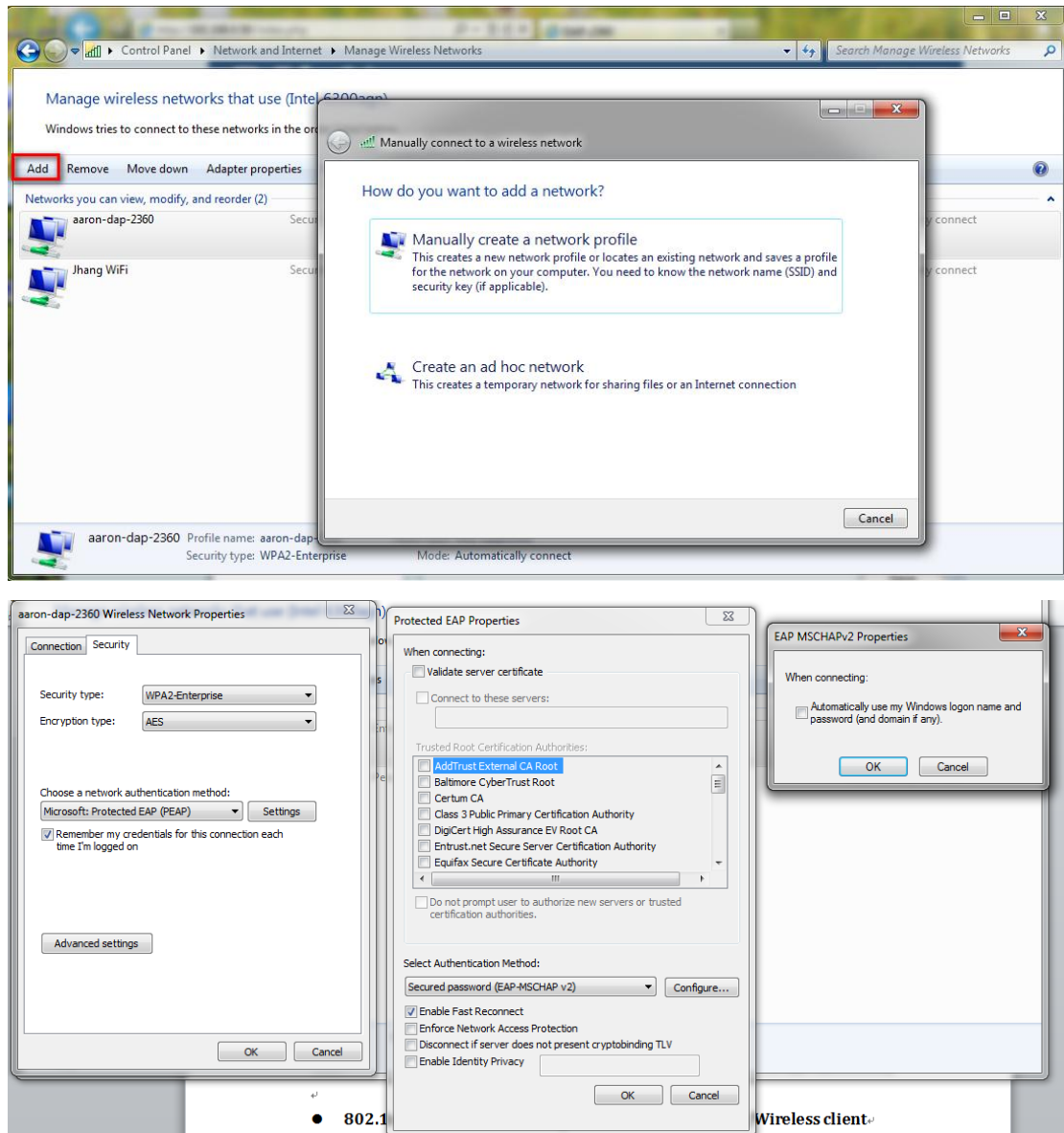


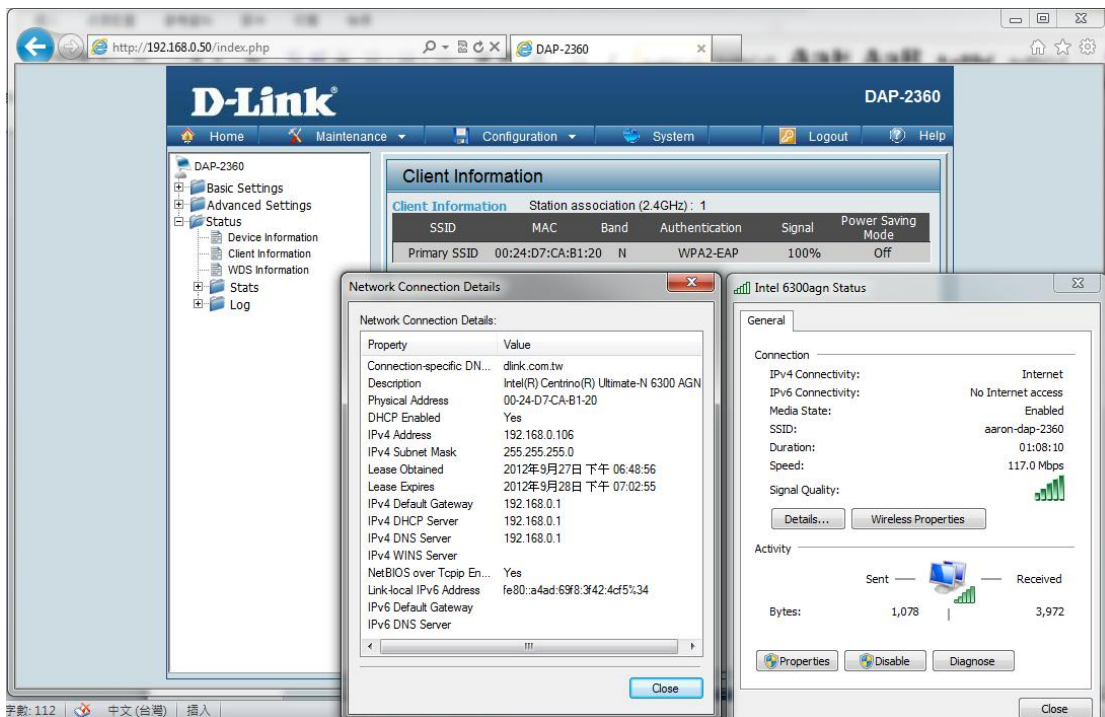
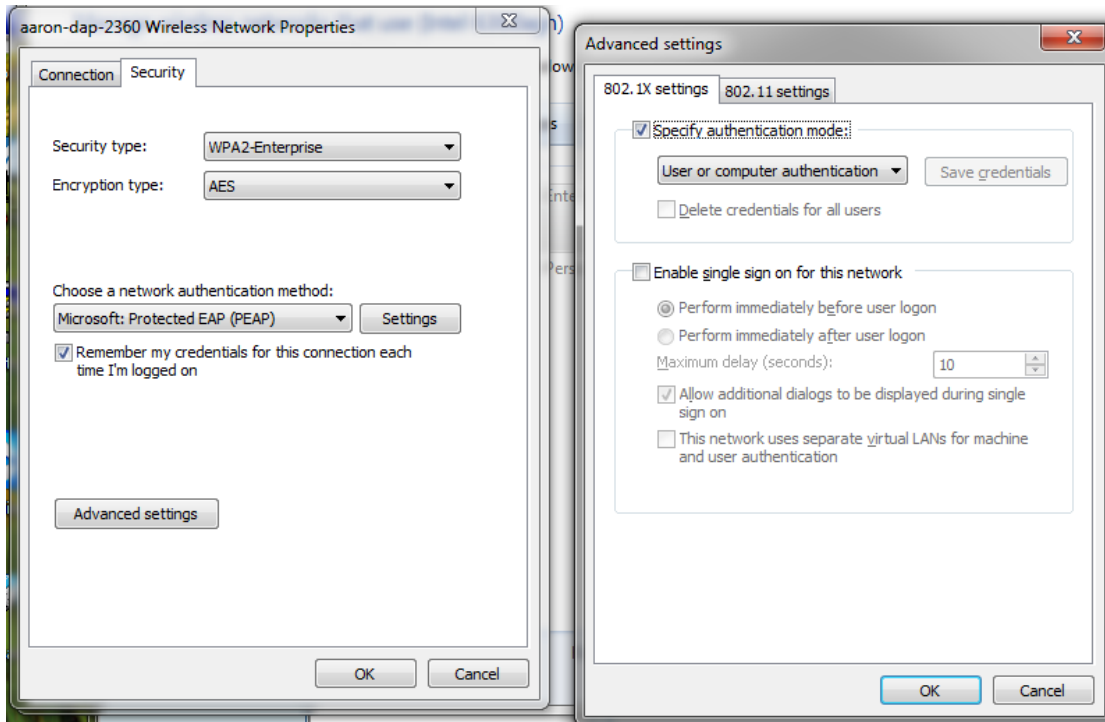


- **WAP/WPA2-enterprise configuration on Access Point/Wireless client**
Access Point Authentication WPA-Enterprise



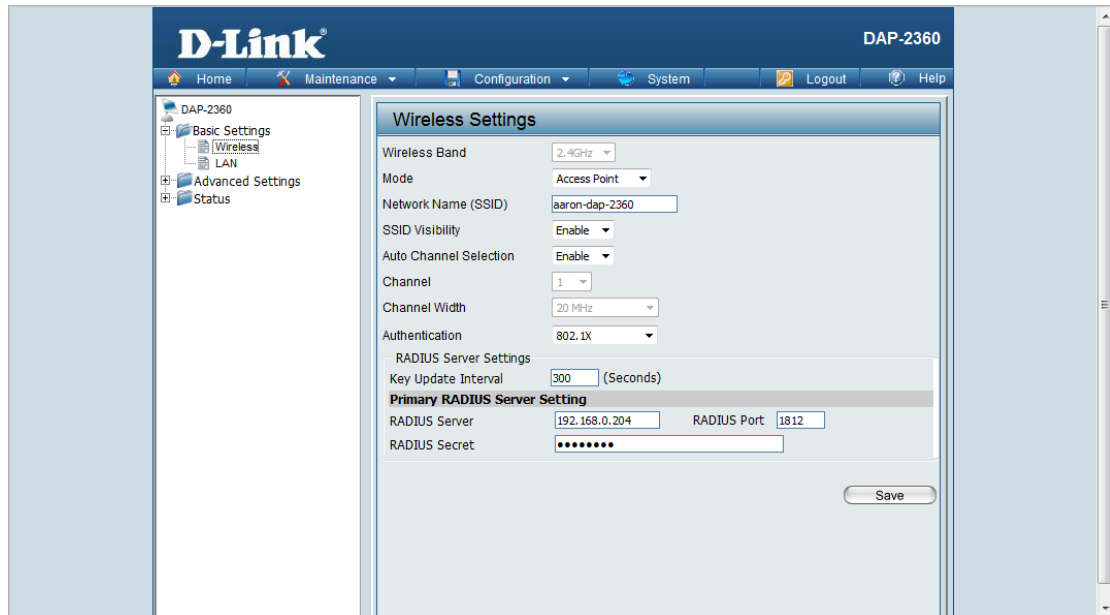
Wireless client / PEAP Authentication method



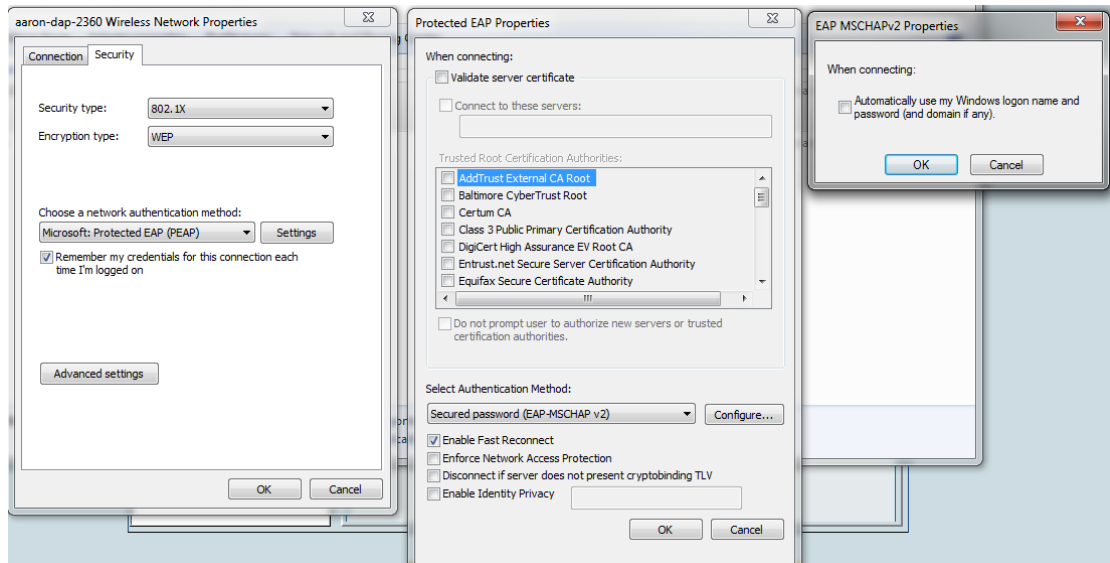


● 802.1x Authentication configuration on Access Point/Wireless client

Access Point Authentication 802.1x



Wireless client / PEAP Authentication method



D-Link DAP-2360

Home Maintenance Configuration System Logout Help

DAP-2360

- Basic Settings
- Advanced Settings
- Status
 - Device Information
 - Client Information
 - WDS Information
- Stats
- Log

Client Information

Client Information Station association (2.4GHz) : 1

SSID	MAC	Band	Authentication	Signal	Power Saving Mode
Primary SSID	00:24:D7:CA:B1:20	G	802.1X/WEP	100%	Off

Network Connection Details

Property	Value
Connection-specific DN...	dlink.com.tw
Description	Intel(R) Centrino(R) Ultimate-N 6300 AGN
Physical Address	00-24-D7-CA-B1-20
DHCP Enabled	Yes
IPv4 Address	192.168.0.106
IPv4 Subnet Mask	255.255.255.0
Lease Obtained	2012年9月27日 下午 06:48:56
Lease Expires	2012年9月28日 下午 06:58:56
IPv4 Default Gateway	192.168.0.1
IPv4 DHCP Server	192.168.0.1
IPv4 DNS Server	192.168.0.1
IPv4 WINS Server	
NetBIOS over Tcpip En...	Yes
Link-local IPv6 Address	fe80::a4ad:69f8:3f42:4cf5%34
IPv6 Default Gateway	
IPv6 DNS Server	

Intel 6300agn Status

General

Connection

IPv4 Connectivity: Internet

IPv6 Connectivity: No Internet access

Media State: Enabled

SSID: aaron-dap-2360

Duration: 01:04:20

Speed: 54.0 Mbps

Signal Quality:

Activity

Sent: 1,195 Bytes

Received: 11,205 Bytes