

Deltek Vision® 6.1Sp4

Document Management Installation Guide

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Important Information for Users of Previous Versions of Deltek Vision Document Management

If you are upgrading from an earlier version of Vision, particularly from a 5.x version, note the following important information.

WSS 2.0 Users

Deltek Vision 5.x and earlier versions supported Windows SharePoint Services 2.0, but Vision 6.x does not support WSS 2.0. If you have not yet upgraded your Windows SharePoint Services installation from WSS 2.0 to WSS 3.0, you must upgrade WSS as your first step. Refer to the *Deltek Vision 5.1 Document Management Upgrade Guide* for the necessary upgrade steps.

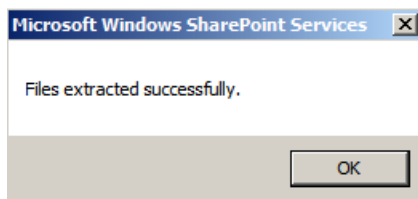
You must upgrade WSS before you implement Deltek Vision 6.1.

Differences between Vision 5.1 and Vision 6.1 Document Management

The key differences between Vision 5.1 and Vision 6.1 Document Management are the following:

- Unlike Vision 5.1 with Windows SharePoint Services (WSS) 3.0, you cannot install WSS 3.0 to the same Web site as Vision 6.1 when using Windows Server 2008/IIS 7.0 or Windows Server 2008 R2/IIS 7.5.
- During the Vision 6.1 Document Management installation, the WSS 3.0 setup files are extracted automatically.

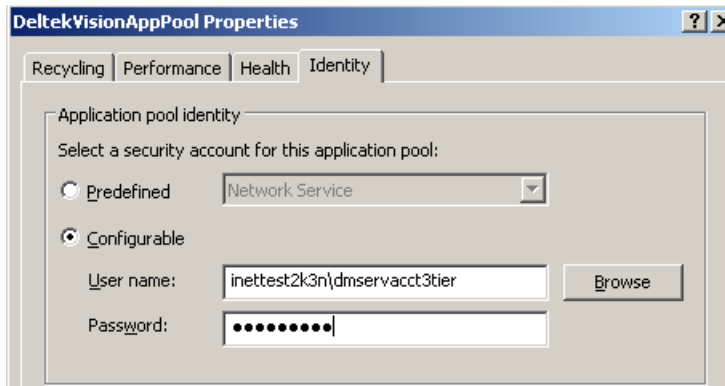
When the following dialog box is displayed, click **OK** to continue the Document Management installation.



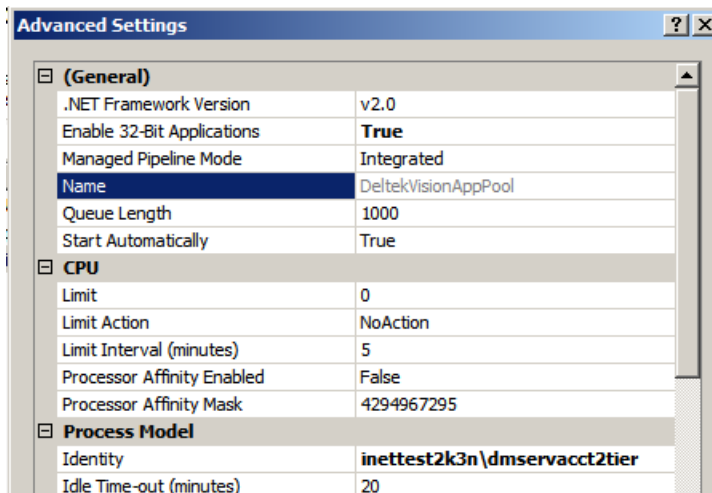
- With the Vision 5.1 Document Management installation, you had to configure the ASP .NET Impersonation Identity. This installation step is no longer necessary, because the Identity of the Application Pool performs this function in Vision 6.1. The installation of Vision 6.1 creates the DeltekVisionAppPool with the local DeltekVision account as the Identity.

The WSS Service account must be the Application Pool Identity for Vision 6.1 and a domain account, as shown in the following example dialog boxes:

IIS 6.0 example:



IIS 7.0 example:

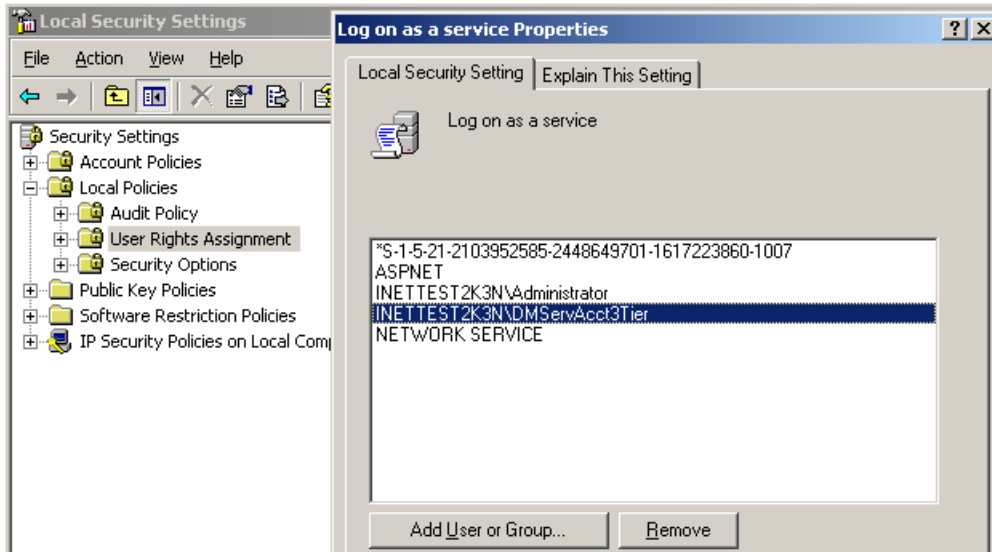


For this account to be the Application Pool Identity, it must be a member of the IIS_WPG group in IIS 6.0 and the IIS_IUSRS group in IIS7.0, in addition to being a member of the local administrators group for Vision.

- The WSS Service account credentials must be specified in Weblink System Settings, as shown in the following example of the Document Management setup fields.



- The WSS Service account must be granted **Logon as a service** rights on the Vision 6.1 Web/Application Server for multi-tier Document Management installations, as shown in the following example of the Local Security Settings setup screens.



- The configuration of Service Principal Names and Delegation has changed with Vision 6.1. Specifically, a Service Principal Name (SPN) must be configured for the domain account chosen to be the Vision 6.1 Application Pool Identity / WSS Service account only when deploying a multi-tier deployment of Vision Document Management when using Windows Server 2003/IIS 6.0. When using Windows Server 2008/IIS 7.0 or Windows Server 2008 R2/IIS 7.5, there are three possible authentication configurations, only two of which require you to create an SPN for the Application Pool Identity. Refer to Appendix B for detailed information on the configuration options for Windows Server 2008/IIS 7.0 or Windows Server 2008 R2/IIS 7.5.

To add the Application Pool Identity as a Service Principal Name, do the following:

- Enter the following commands on the domain server where setspn is installed:

setspn -A http/<Vision Web/App Server name> <domain app pool identity>

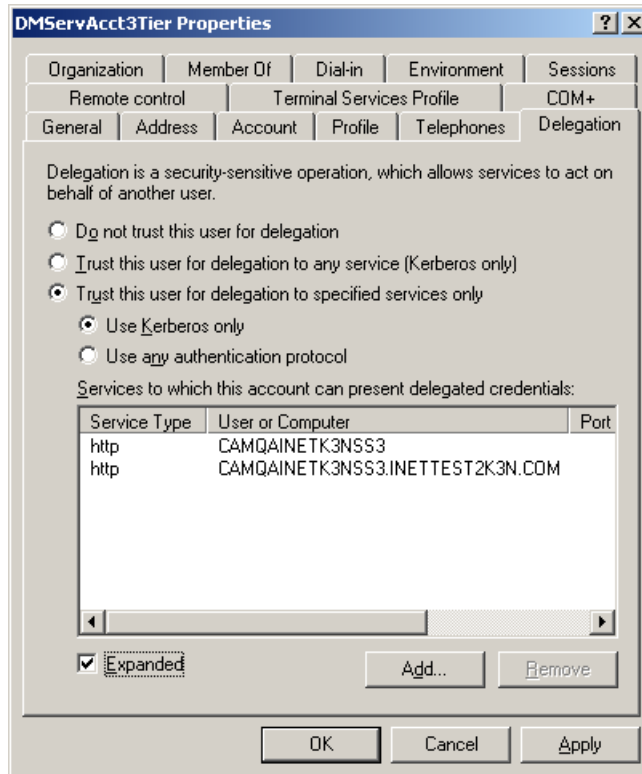
For example: `setspn -A http/camqainetk3nwb5 inettest2k3n\dmservacct3tier`

- Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>

- In a multi-tier installation of Vision Document Management using IIS 7.0 for the Vision Web/Application server, the default configuration of Windows Integrated Authentication (which enables Kernel Mode Authentication) will not work because when you use Kernel Mode Authentication, the Application Pool Identity is effectively ignored. Because Vision requires that this account be used for delegation, you must either disable Kernel Mode Authentication or configure the application pool to explicitly use the Application Pool Identity by modifying the ApplicationHost.config file.
- In multi-tier installations of Vision Document Management, you must configure domain based delegation. This configuration has changed from Vision 5.1. It is now configured for this user account running the Vision 6.1 Application Pool being granted delegation rights to the WSS server. This configuration is shown in the following example of the Delegation tab of the Application Pool Identity Properties dialog box:



Vision 5.1 to Vision 6.1 Document Management Upgrade

To upgrade from Vision 5.1 Document Management to Vision 6.1 Document Management, complete these steps:

1. Uninstall Deltek Vision 5.1 Document Management from Add/Remove Programs on your Deltek Vision Web server and any dedicated Document Management (WSS) servers.
2. Delete the old Deltek.Vision.WSS30.dll from \inetpub\bin or inetpub\virtual directories\wss\<port>\bin.
3. Uninstall the old Deltek.Vision.WSS30.dll from GAC (c:\windows\assembly).
4. Install Vision 6.1 Document Management.

Vision 6.0 to Vision 6.1 Document Management Upgrade

To upgrade from Vision 6.0 Document Management to Vision 6.1 Document Management, complete these steps:

1. Run the Deltek Vision 6.1 installation to upgrade your Vision servers to Deltek Vision 6.1.
2. Run the Deltek Vision 6.1 Document Management installation to upgrade your Document Management server(s) to Deltek Vision 6.1 Document Management.

Note: Run the upgrade on both your Vision and SharePoint servers if they are on different physical machines.

3. Update the Deltek Vision Document Management .NET assembly (Deltek.Vision.WSS30.Server.dll) in your SharePoint site \bin directory with the updated assembly located in <drive>:\Program Files\Deltek\Vision\Support\DM\3.0 folder.

Vision 6.1 to Vision 6.1 Sp4 Document Management Upgrade

Deltek Vision 6.1 Sp4 now supports SharePoint Foundation 2010 for new installations only. Existing installations of Windows SharePoint Services will not be upgraded to SharePoint Foundation 2010 via the Document Management installation; however, existing Document Management customers can upgrade their installation of SharePoint by following the documentation available from Microsoft, which is included below:

Hardware and Software Requirements (SharePoint Foundation 2010):

<http://technet.microsoft.com/en-us/library/cc288751.aspx>

Upgrade and Migration for SharePoint Foundation 2010:

<http://technet.microsoft.com/en-us/sharepoint/ee517215.aspx>



IMPORTANT NOTE: It is highly recommended that you perform the upgrade of Windows SharePoint Services to SharePoint Foundation before installing Vision 6.1 Sp4 Document Management and that any previous installations of Document Management be uninstalled (this will not uninstall SharePoint). Upgrading to SharePoint foundation after installing Vision 6.1 Sp4 Document Management will break the Document Management functionality as the installation makes modifications differently based on which version of SharePoint is installed.

To upgrade from any previous version of Vision 6.1 Document Management to Vision 6.1 Sp4 Document Management and continue using Windows SharePoint Services, complete these steps:

1. Run the Deltek Vision 6.1 Sp4 installation to upgrade your Vision servers to Deltek Vision 6.1 Sp4.
2. Run the Deltek Vision 6.1 Sp4 Document Management installation to upgrade your Document Management server(s) to Deltek Vision 6.1 Sp4 Document Management.



Run the upgrade on both your Vision and SharePoint servers if they are on different physical machines.

3. Update the Deltek Vision Document Management .NET assembly (Deltek.Vision.WSS30.Server.dll) in your SharePoint site \bin directory with the updated assembly located in <drive>:\Program Files\Deltek\Vision\Support\DM\3.0 folder.

Important Information Regarding Windows Server 2008, IIS 7.0 and SQL Server 2008

Windows Server 2008 Specific Information

If you will be installing Vision 6.1 Document Management on Windows Server 2008 / IIS 7.0, refer to Appendix B for detailed configuration information.

SQL 2008 – Database Rights

If you will use SQL Server 2008 as the database server for your Vision 6.1 Document Management installation, note the following: WSS 3.0 is able to successfully add the domain SharePoint Service Account to the necessary SQL Server fixed server roles in SQL 2005. However, you must perform these grants manually with SQL 2008. The account must be added as a database login and granted securityadmin and dbcreator fixed server roles, as described in the following Technet article:

<http://technet.microsoft.com/en-us/library/cc287748.aspx>

Vision Document Management Installation

Vision Document Management Requirements

The Deltek Vision Document Management installation for Vision 6.1 has the following requirements:

- The Vision Web/Application and Microsoft SharePoint Web server(s) must be running Windows Server 2003 (x86 or x64) or Windows Server 2008 (x86 or x64) or Windows Server 2008 R2 x64.



As of Vision 6.1 Sp4, SharePoint Foundation 2010 will be installed if the server is Windows Server 2008 x64 or Windows Server 2008 R2 x64. Refer to Appendix D for detailed installation information.



x64 for the Deltek Vision Web/Application server is only supported with the Deltek Vision 6.1 Sp2 and later versions.

- An Active Directory domain (Server 2003) is required and the domain functional level must be Native. Refer to Appendix A for how to identify and raise your domain functional level.



Deltek has not as yet had an opportunity to test Windows Server 2008 domains.

- Internet Information Services (IIS) must be configured for Integrated Windows Authentication on both the Vision Web/Application server(s) and the Microsoft SharePoint Web server(s). A standard deployment of Vision supports either Anonymous Access (Vision Security) or Integrated Windows Authentication (Domain security), so this may be a change if you already have Vision deployed. The use of Integrated Security in IIS does not prohibit the use of Vision Security login accounts (for example, you don't have to configure all users in Vision for Integrated Security).



There are additional Microsoft licensing requirements necessary to support the use of Integrated Windows Authentication with IIS. Specifically, a CAL (Client Access License) is required for each user that will access the IIS server (Vision).

- If you choose to install WSS 3.0 to the same Web site as Vision, (only supported if your Vision Web/Application/SharePoint server is Windows Server 2003/Internet Information Services (IIS) 6.0), the WSS installation will automatically cause all virtual directories in that site to use Integrated Windows Authentication. You must follow the steps below to reconfigure the VisionClient virtual directory to be Anonymous.

To reconfigure the VisionClient directory, complete the following steps:

1. Open Internet Information Services.
2. Right click the **VisionClient** virtual directory, and click **Properties** on the shortcut menu.
3. Click the Directory Security tab.
4. Click the **Edit** button under Anonymous Access and Authentication Control.
5. Clear the **Windows Integrated Authentication** option and select **Anonymous Access**.
6. Restart IIS.

Understanding Infrastructure Configuration Changes

Delegation and Kerberos Authentication

Delegation is the process of passing the credentials of the logged-in user from one server to another. In the case of Vision Document Management, they would pass from the Vision Web/Application server to the SharePoint server. In Vision 6.1, delegation is configured by modifying the domain user account of the Vision Application Pool Identity to perform delegation.

Kerberos Authentication is a secure key-based authentication protocol necessary for delegation to be performed. Essentially, the Vision Web Server needs to delegate the credentials of the authenticated domain user to the SharePoint server. The Vision Web server requests a key from the Key Distribution Center (KDC—a service which runs on domain controllers). The KDC authenticates the user and provides the key to the Vision Web Server for use in delegating the users' credentials to the SharePoint server.

Constrained Delegation, Unconstrained Delegation, and Protocol Transition

Unconstrained Delegation — You are allowing delegation from one computer in the domain to any other User/Computer or Service on the domain with no restrictions. This is the only model available in Windows 2000 and Windows 2003 Mixed domains.

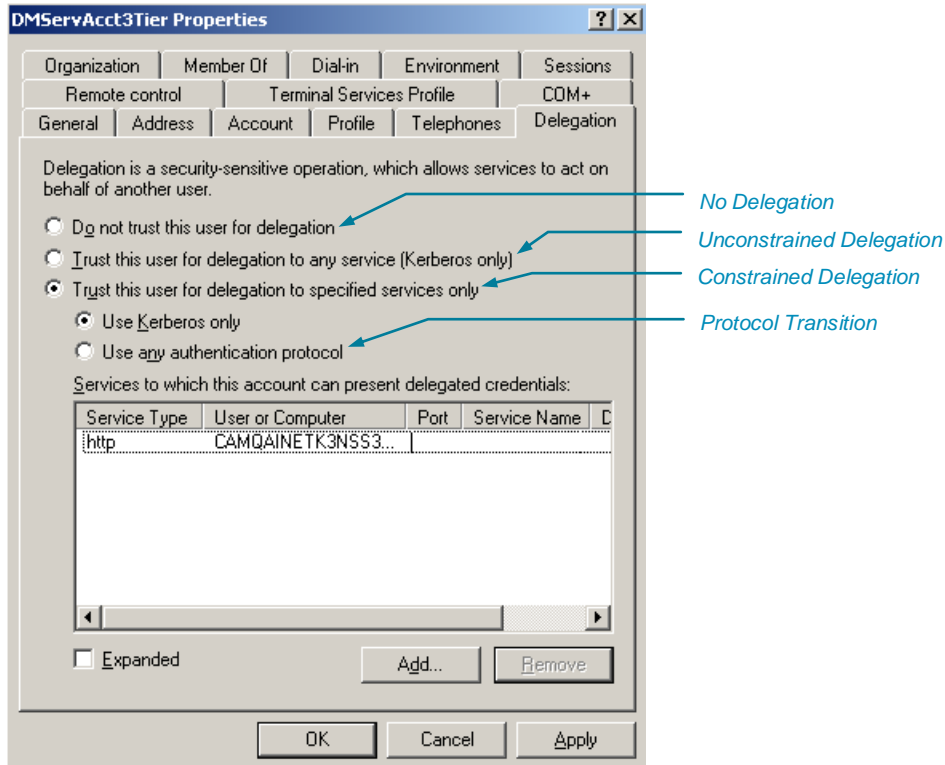


Vision 6.1 with WSS 3.0 does not support Unconstrained Delegation.

Constrained Delegation — You are limiting the delegation that can be performed by a computer in the domain to a specific User/Computer or Service. This method of delegation is much more granular and secure and is only available in Server 2003 native domains.

Protocol Transition — This option allows you to transition the authentication protocol from the trusted server during the delegation. In the case of Vision Document Management in an Internet deployment, we have the need to transition the protocol from NTLM (as Kerberos is not available through the firewall) on the Vision Web server to Kerberos when communicating to the SharePoint server. This is necessary for Internet deployments because the client must negotiate the Kerberos ticket. This would require that Port 88 be open inbound through the firewall to the domain controller (not an advisable security configuration). The ticket is requested by the Vision Web server on the client's behalf and once granted, it is used to authenticate the user with Kerberos to the WSS server. Again, this option is only available in Server 2003 Native domains.

Windows 2000 Native or Mixed Mode domains have the option on the General tab of the Computer account properties labeled **Trust Computer for Delegation**. The following screen shot is of a computer account in a native Server 2003 functional domain that allows us to show all of the available Delegation and protocol transition configurations.

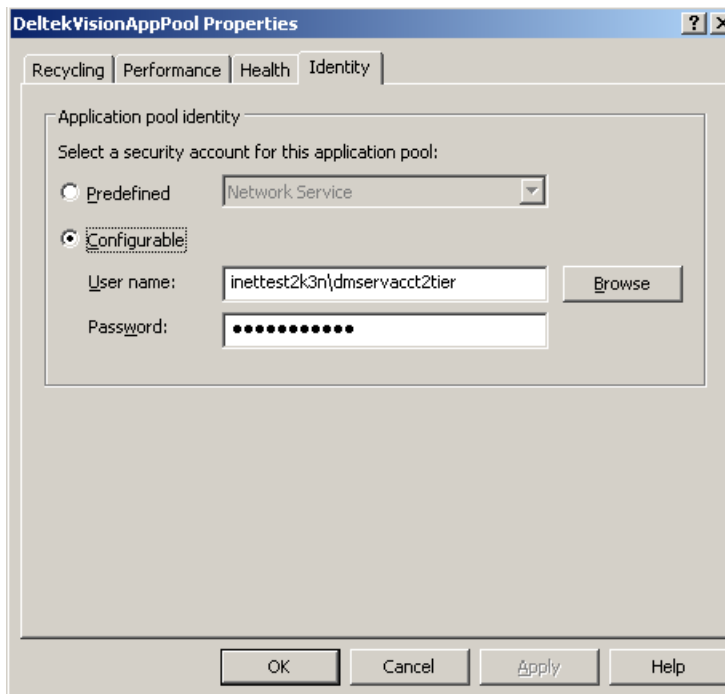


Vision Application Pool Identity

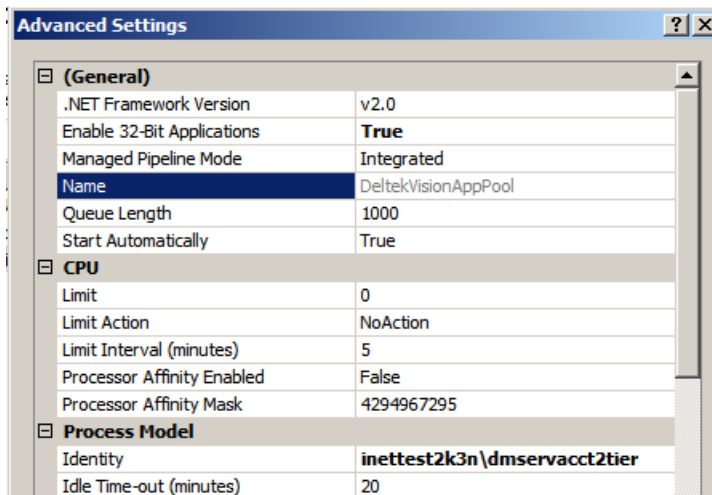
With the Vision 5.1 Document Management installation, you had to configure the ASP .NET Impersonation Identity using the Deltek Vision Resource Kit. This installation step is no longer necessary, because the identity of the Application Pool performs this function in Vision 6.1. The installation of Vision 6.1 creates the DeltekVisionAppPool with the local DeltekVision account as the Identity.

The WSS Service account must be the Application Pool Identity for Vision 6.1 and a domain account, as shown in the following example dialog boxes:

IIS 6.0 example:



IIS 7.0 example:



For this account to be the Application Pool Identity, it must be a member of the IIS_WPG group in IIS 6.0 and the IIS_IUSRS group in IIS7.0, in addition to being a member of the local administrators group for Vision.

Service Principal Name (SPN)

In addition to the information provided earlier in this document about the SPN needed for the Vision Application Pool Identity, below are some additional instances where SPNs may need to be configured for your Document Management deployment.

If you are using or will be using a custom Fully Qualified Domain Name (FQDN) as your SharePoint URL (for example, <http://sharepoint.company.com>, where "sharepoint" is a custom DNS record added to avoid using the actual machine name of the server) and your deployment model requires the configuration of Constrained Delegation, you will need to register the custom FQDN using the Service Principal Name utility (setspn.exe) so that it can be configured for Constrained Delegation or Protocol Transition.

Additionally, when deploying Microsoft Office SharePoint Server (MOSS) 2007, the application pool identity for the SharePoint Web application defaults to a domain account. If your SharePoint Application Pool Identity is a domain account (as opposed to Network Service, which is the default for Windows SharePoint Services 3.0), you will need to create SPNs for this account as identified in the following Microsoft Support article (<http://support.microsoft.com/?id=871179>).

Modifications to IIS Metabase (not applicable for IIS 7.0 and above)

The IIS metabase contains the information on the authentication methods that IIS supports. For Document Management, the options are the following:

- **Negotiate**, which requires Kerberos
- **NTLM**, which uses NTLM

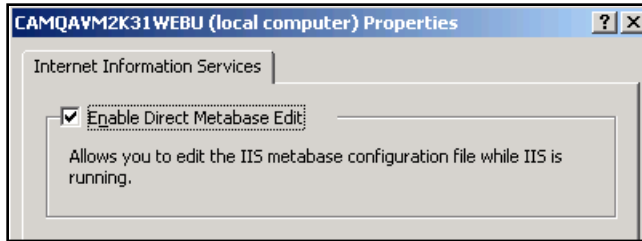
These options are located in the NTAuthenticationProviders element in the IISWebServer tag as shown in the following example:

```
<IISWebServer Location="/LM/W3SVC/1"
AppPoolId="DefaultAppPool"
DefaultDoc="Default.htm,Default.asp,index.htm,iisstart.htm,
Default.aspx"
NTAuthenticationProviders="Negotiate,NTLM"
ServerAutoStart="TRUE"
ServerBindings=":80:"
ServerComment="Default Web Site"
ServerSize="1"
>
</IISWebServer>
```



The Vision Document Management installation adds the NTAuthenticationProviders element to use both Negotiate and NTLM.

By default, an installation of IIS 6.0 does not include the NTAuthenticationProviders element in the metabase for IIS to use, so all communication defaults to NTLM as the authentication mechanism. In order to edit the metabase.xml file, you need to go into the IIS server properties and select the **Enable Direct Metabase Edit** check box, which allows you to make the change and for it to be dynamic (for example, no need to restart the Web server).



Refer to Appendix B for information on the changes needed for the IIS 7.0 configuration file (applicationhost.config) that replaces the IIS 6.0 Metabase.

Document Management Supported Deployments and Required Infrastructure Configuration Changes

Use the table on the next page to identify necessary infrastructure configuration changes based on your domain and chosen deployment model. The steps necessary to implement those configuration changes are outlined in the "Installation and Configuration" section for your deployment scenario.

Document Management Supported Deployments and Required Configuration Changes								
Windows SharePoint Services 3.0 (2007)								
Windows Server 2003 Native Domains				Required Configuration Changes			Required Delegation	
Deploy-ment Model	DM Tier Model	Domain Functional Level	Deltek Vision URL	Set SPN for Vision Application Pool Identity	Use Domain Application Pool Identity (Note 1)	IIS Metabase Settings (Note 2)	Configure Constrained Delegation (Note 3)	Configure Protocol Transition (Note 4)
Intranet	Single	2003 Native	NETBIOS	No	Yes	Negotiate, NTLM	No	No
Intranet	Multi	2003 Native	NETBIOS	Yes	Yes	Negotiate, NTLM	Yes	No
Intranet	Single	2003 Native	Servername FQDN	No	Yes	Negotiate, NTLM	No	No
Intranet	Multi	2003 Native	Servername FQDN	Yes	Yes	Negotiate, NTLM	Yes	No
Intranet	Single	2003 Native	Custom FQDN	Yes	Yes	Negotiate, NTLM	No	No
Intranet	Multi	2003 Native	Custom FQDN	Yes	Yes	Negotiate, NTLM	Yes	No
Internet	Single	2003 Native	Servername FQDN	No	Yes	Negotiate, NTLM	No	No
Internet	Multi	2003 Native	Servername FQDN	Yes	Yes	Negotiate, NTLM	No	Yes
Internet	Single	2003 Native	Custom FQDN	Yes	Yes	Negotiate, NTLM	No	Yes
Internet	Multi	2003 Native	Custom FQDN	Yes	Yes	Negotiate, NTLM	No	Yes

Note 1: Domain account used for Vision Application Pool Identity must be the SharePoint Services account.

Note 2: The Document Management installation is automatically configuring this property.

Note 3: Constrained delegation must be configured for **all** multi-tier deployments of Document Management.

Note 4: Protocol transition is only required for Internet deployments of Document Management.

Single Server — New Installation of Document Management 6.1

The following instructions assume that Vision and Windows SharePoint Services 3.0 will exist on the same Web server and assume you are deploying to Windows Server 2003/IIS 6.0. If you will be deploying to Windows Server 2008/IIS 7.0 or Windows Server 2008 R2/IIS 7.5, refer to Appendix B for detailed configuration information. As of Vision 6.1 Sp4, SharePoint Foundation 2010 will be installed if the server is Windows Server 2008 x64 or Windows Server 2008 R2 x64. Refer to Appendix D for detailed installation information.



Vision and MOSS 2007 are not supported on the same physical server.

If your Windows SharePoint Services server is separate, use the multi-tier installation procedures beginning on page 42.

Prerequisites

- Install/upgrade to Vision 6.1.
- Change the Application Pool Identity for the DeltekVisionAppPool to be a domain account (the Vision 6.1 installation sets this to be the local DeltekVision account). This account will also be the SharePoint (WSS) Service account. Add this user to the local Administrators and IIS_WPG group on the Vision server.

Configure Vision Application Pool Identity to be a Domain Account

You must change the Deltek Vision Application Pool Identity to be a domain account. The default is for Vision to use a Local Administrator Account. The DeltekVision user is created during the Vision installation. The reason for this change has to do with the local account's inability to read the SPN configured in Active Directory.

To change the Vision Application Pool Identity, complete the following steps:

1. Create a domain user account. No domain Admin rights are needed for this account.
2. Log on to the domain on the Vision Web/Application server using an Administrator account.
3. **Start » All Programs » Administrative Tools » Internet Information Services..**
4. Expand **Application Pools**.
5. Right-click the **DeltekVisionAppPool** and select **Properties**.
6. Click the Identity tab and change the account from DeltekVision to your Domain\User account created above. Make sure this account is a member of the Local Administrators and IIS_WPG local groups.

Configure SPN for Vision Application Pool Identity

As mentioned earlier in this document, it is necessary to create a Service Principal Name (SPN) for the domain user running the DeltekVisionAppPool.

To add the Application Pool Identity as a Service Principal Name, complete the following steps:

1. Enter the following commands on the domain server where setspn is installed:
setspn -A http/<Vision Web/App Server name> <domain app pool identity>
For example: **setspn -A http/camqainetk3nwb5 inettest2k3n\dmserveacct3tier**
2. Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>



If your Vision Web server is accessed by a DNS / FQDN (Fully Qualified Domain Name) that *does not match* the name of the server (for example, if your Vision Web server is named Server01 and its DNS name is Server01.Company.com, but you have added a custom DNS value Vision.Company.com), you must also add an SPN for this custom DNS name.

Install and Configure Vision 6.1 Document Management and WSS 3.0

When you install Vision 6.1 Document Management, WSS is automatically installed. (If you are upgrading from Vision 5.1 or already have WSS installed, no changes are made to your WSS installation.) However, the Document Management installation will not automatically configure WSS. The steps to configure SharePoint are outlined in this document.

The Document Management installation does the following:

- Installs Web Service Extensions (WSE) 2.0 Sp3.
- Installs WSS 3.0, if it is not already installed.
- Changes the IIS metabase NTAuthenticationProviders element to be "Negotiate,NTLM".
- Copies Document Management files to the SharePoint ISAPI folder (c:\program files\common files\microsoft shared\web service extensions\12\isapi).
- Copies Document Management files to the Vision Support folder (\program files\deltek\vision\support\DM\30).
- Modifies the SharePoint Web.config file in the ISAPI directory to work with Vision Document Management.
- Installs Deltek.Vision.WSS30.Server.dll into the Global Assembly Cache (GAC).

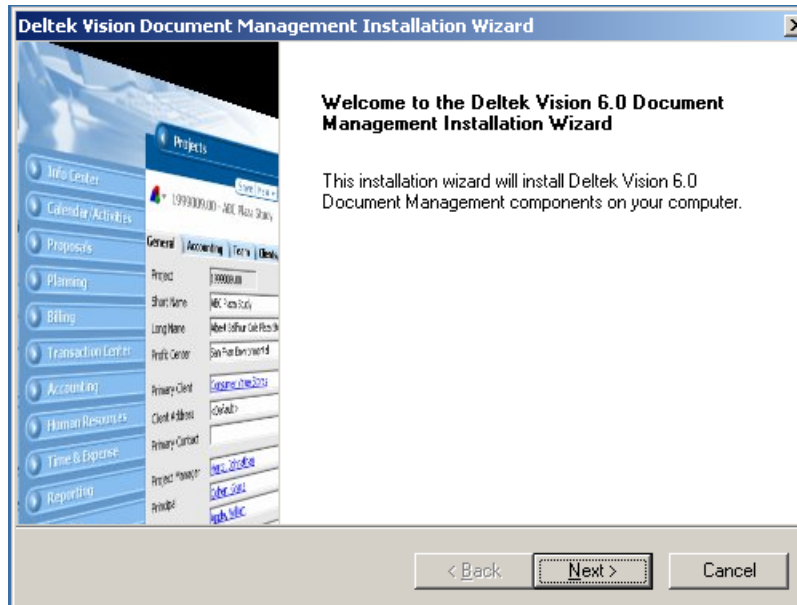
Install Vision Document Management and WSS

To install Vision Document Management and WSS, complete the following steps:

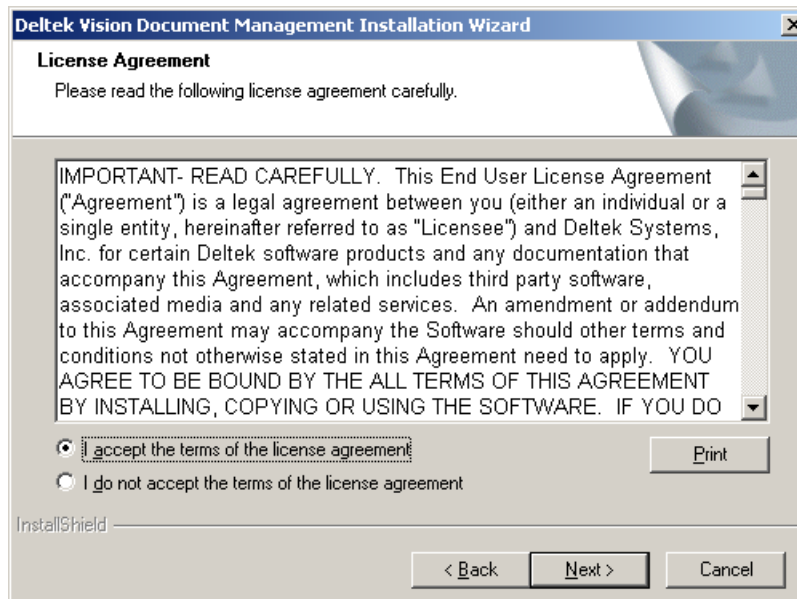
1. If you have previously installed Deltek Vision 5.1 Document Management (or other previous versions), uninstall Deltek Vision Document Management from Add/Remove Programs. (This will not uninstall Windows SharePoint Services 3.0.)
2. Download the DeltekVision61SP4DM.exe file and run the setup on your Vision Web server. The following dialog box displays, indicating the IIS licensing requirements for the use of Windows Integrated Authentication (required to use Vision Document Management):



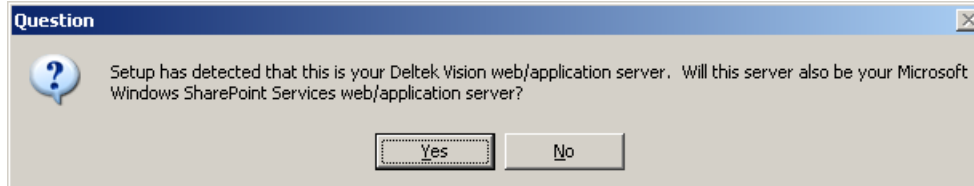
3. Click **OK**. The Document Management Installation Wizard displays.



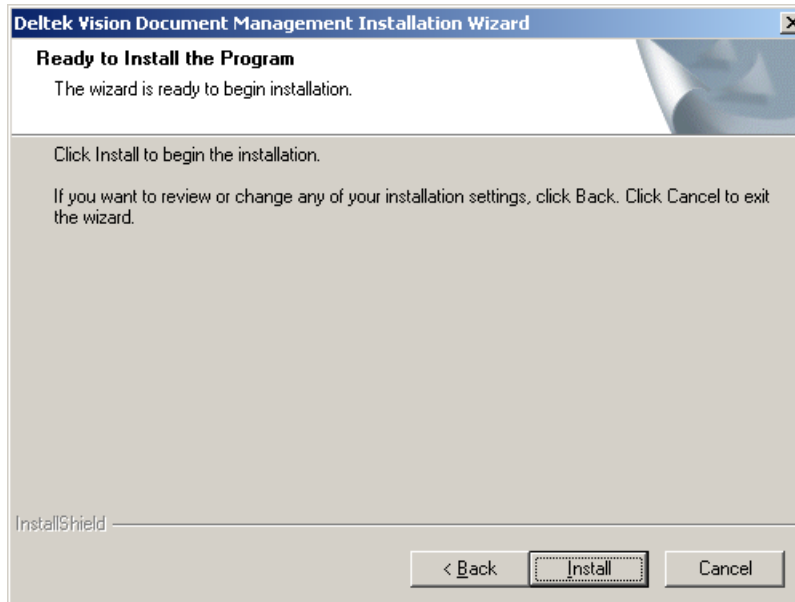
4. Click **Next**. The License Agreement page displays.



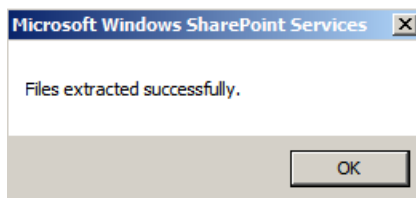
5. Accept the License Agreement and click **Next**. The Web/application server page displays, along with the following confirmation dialog box.



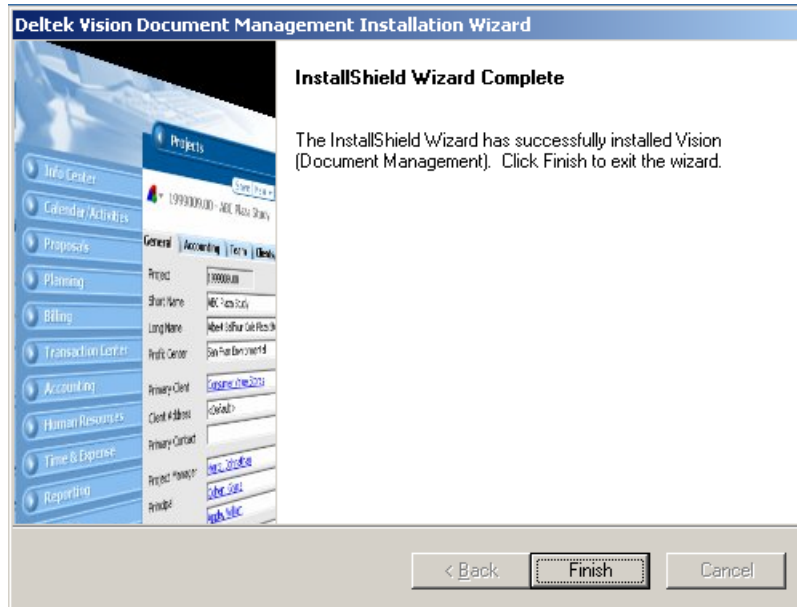
6. Click **Yes** since this is a single-tier installation of Vision Document Management and this server will host both Vision and WSS 3.0. The Ready to Install the Program page displays.



7. Click **Install** to start the installation. The installation automatically downloads the version of Windows SharePoint Services 3.0 specific to your platform (x86 or x64), extracts the WSS 3.0 setup files, and installs Windows SharePoint Services. During the extraction process, you receive the following dialog box. You must click the **OK** button to continue the installation.



8. When the installation is complete, the InstallShield Wizard Complete page displays.

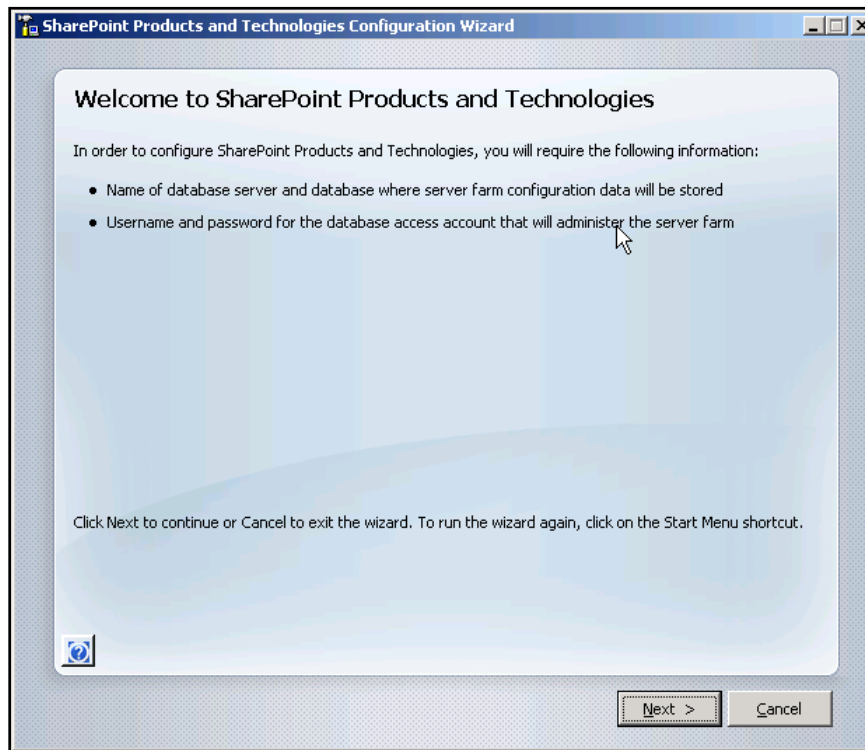


9. Click **Finish**.

Run the SharePoint Products and Technologies Configuration Wizard

To run the SharePoint Products and Technologies Configuration wizard, complete the following steps:

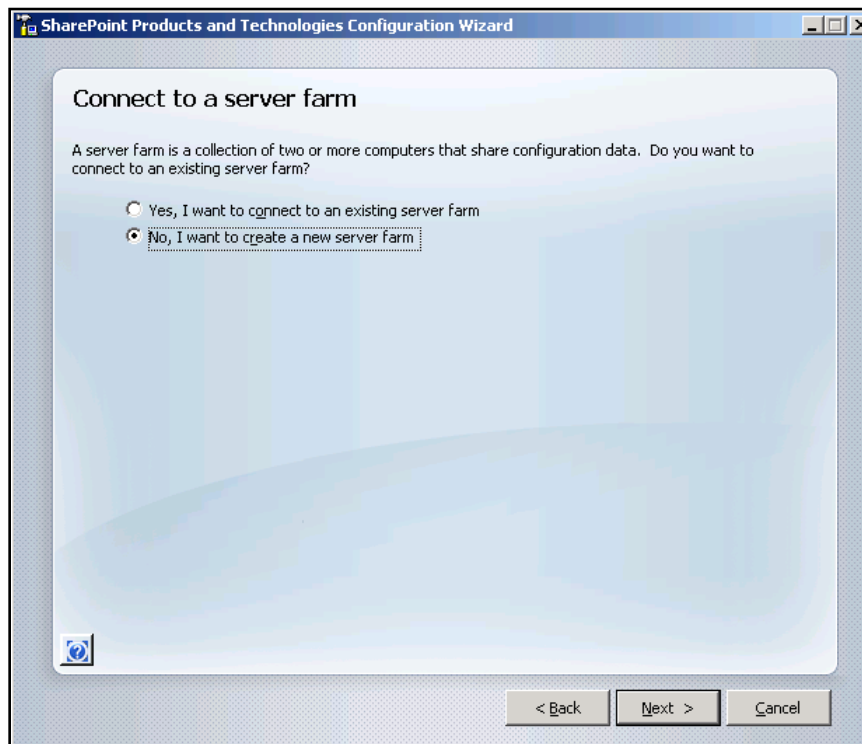
1. Click **Start » Administrative Tools » SharePoint Products and Technologies Wizard**. The Welcome page displays.



2. Click **Next**. The following dialog box displays.



3. Click **Yes**. The Connect to a server farm page displays.



4. Select the **No, I want to create a new server farm** option and click **Next**. The Specify Configuration Database Settings page displays.

help.' There are two text boxes: 'Database server:' with the value 'camqainetk3ndb2' and 'Database name:' with the value 'SharePoint_Config'. Below this is the section 'Specify Database Access Account' with instructions: 'Select an existing Windows account that this machine will always use to connect to the configuration database. If your configuration database is hosted on another server, you must specify a domain account. Type the username in the form DOMAIN\User_Name and password for the account.' There are two text boxes: 'Username:' with the value 'inettest2k3n\dmservacct3tier' and 'Password:' with a masked password '.....'. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'."/>

5. Enter the name of the database server to host the SharePoint configuration database and accept the default database name: SharePoint_Config.

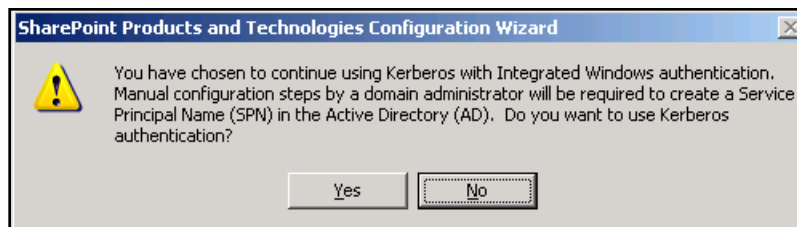


If you are using SQL Server 2008, your database access account will need to have the dbcreator and securityadmin SQL Server Roles.

6. In **Username**, enter the domain and name of the Vision Application Pool Identity (as configured earlier) as the username for the SharePoint database access account, and enter the user's password in **Password**.
7. Click **Next**. The Configure SharePoint Central Administration Web Application page displays.



8. Select the **Specify port number** check box and enter the port to be used for the SharePoint Central Administration Web site.
9. Select the **Negotiate (Kerberos)** option for the Authentication provider to use.
10. Click **Next**. The following dialog box displays.



11. Click **Yes** to continue using Kerberos with Windows Authentication. The Completing the SharePoint Products and Technologies Configuration Wizard page displays.



12. Click **Next** to begin the configuration. This process may take some time to complete. The Configuration Successful page displays when configuration is complete.

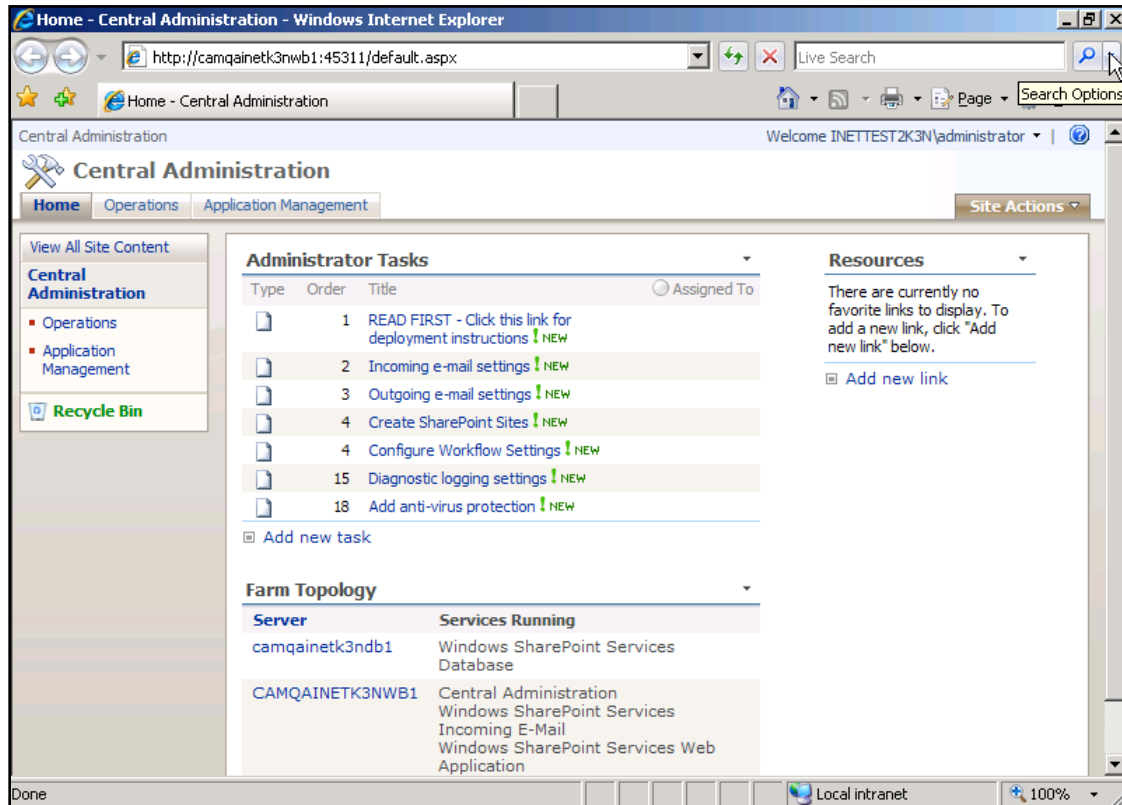


13. Click **Finish** to finish the configuration process. The SharePoint Central Administration page displays.

Use SharePoint Central Administration to Complete the SharePoint Configuration

To complete the SharePoint Configuration, complete the following steps:

1. When you click **Finish** in the preceding procedure, SharePoint Central Administration is launched.



2. Click **Operations**. The Operations page displays.

Central Administration > Operations

Operations

This page contains links to pages that help you manage your server or server farm, such as changing the server farm topology, specifying which services are running on each server, and changing settings that affect multiple servers or applications.

Topology and Services

- Servers in farm
- Services on server
- Outgoing e-mail settings
- Incoming e-mail settings
- Approve/reject distribution groups

Global Configuration

- Timer job status
- Timer job definitions
- Alternate access mappings
- Manage farm features
- Solution management

Security Configuration

- Service accounts
- Information Rights Management
- Antivirus
- Blocked file types

Backup and Restore

- Perform a backup
- Backup and restore history
- Restore from backup
- Backup and restore job status

- Click **Services on Server** under **Topology and Services** to configure the SharePoint Services search.

Central Administration > Operations > Services on Server

Services on Server: CAMQAINETK3NWB1

Complete all steps below

Server: CAMQAINETK3NWB1

Start services in the table below:

Service	Comment	Status	Action
Central Administration		Started	Stop
Windows SharePoint Services Incoming E-Mail		Started	Stop
Windows SharePoint Services Search	Required on Farm, not running	Stopped	Start
Windows SharePoint Services Web Application		Started	Stop

When finished, return to the Central Administration home page

- Locate the **Windows SharePoint Services Search** option and click **Start**.

Central Administration

Welcome INETTEST2K3N\administrator

Central Administration > Operations > Services on Server > Windows SharePoint Services Search Service Settings

Configure Windows SharePoint Services Search Service Settings on server CAMQAINETK3NSS1

Use this page to configure Windows SharePoint Services Search Service Settings.

Warning: this page is not encrypted for secure communication. User names, passwords, and any other information will be sent in clear text. For more information, contact your administrator.

Service Account
The search service will run using this account.

The search service account must not be a built-in account in order to access the database. Examples of built-in accounts are Local Service and Network Service.

User name:
Password:

Content Access Account
The search service will access all content using this account.

The account will be added to the Full Read policy, giving it read-only access to all content.

For proper search functionality and information security, do not use an administrator account, and do not use accounts that can modify content.

User name:
Password:

Search Database
Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.

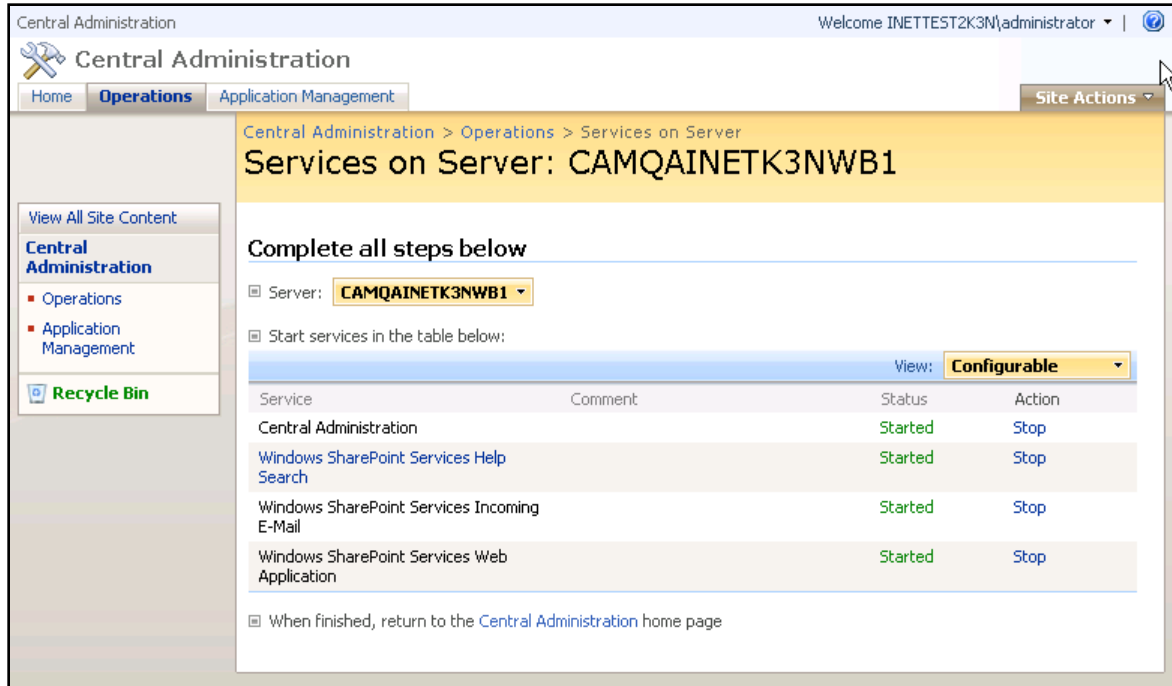
Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.

Database Server:
Database Name:
Database authentication:
☒ Windows authentication (recommended)
☐ SQL authentication
Account:
Password:

Indexing Schedule
Configure the indexing Schedule.

Indexing schedule:
☒ Every Minutes
☐ Hourly between and minutes past the hour
☐ Daily
Between and
and and

- Configure the search service to include the Service account and Content Access account (use the same account information as your Vision Application Pool Identity).
- Configure **Search Database** as shown above and click **Start**. After a minute or so, the service's status changes to **Started**.



Central Administration > Operations > Services on Server

Services on Server: CAMQAINETK3NWB1

Complete all steps below

Server: **CAMQAINETK3NWB1**

Start services in the table below:

Service	Comment	Status	Action
Central Administration		Started	Stop
Windows SharePoint Services Help Search		Started	Stop
Windows SharePoint Services Incoming E-Mail		Started	Stop
Windows SharePoint Services Web Application		Started	Stop

View: **Configurable**

When finished, return to the [Central Administration](#) home page

7. Click **Application Management** to configure the SharePoint Web Application.



Central Administration > Application Management

Application Management

This page contains links to pages that help you configure settings for applications and components that are installed on the server or server farm.

SharePoint Web Application Management

- [Create or extend Web application](#)
- [Remove SharePoint from IIS Web site](#)
- [Delete Web application](#)
- [Define managed paths](#)
- [Web application outgoing e-mail settings](#)
- [Web application general settings](#)
- [Content databases](#)
- [Manage Web application features](#)
- [Web application list](#)

SharePoint Site Management

- [Create site collection](#)
- [Delete site collection](#)
- [Site use confirmation and deletion](#)
- [Quota templates](#)
- [Site collection quotas and locks](#)
- [Site collection administrators](#)
- [Site collection list](#)

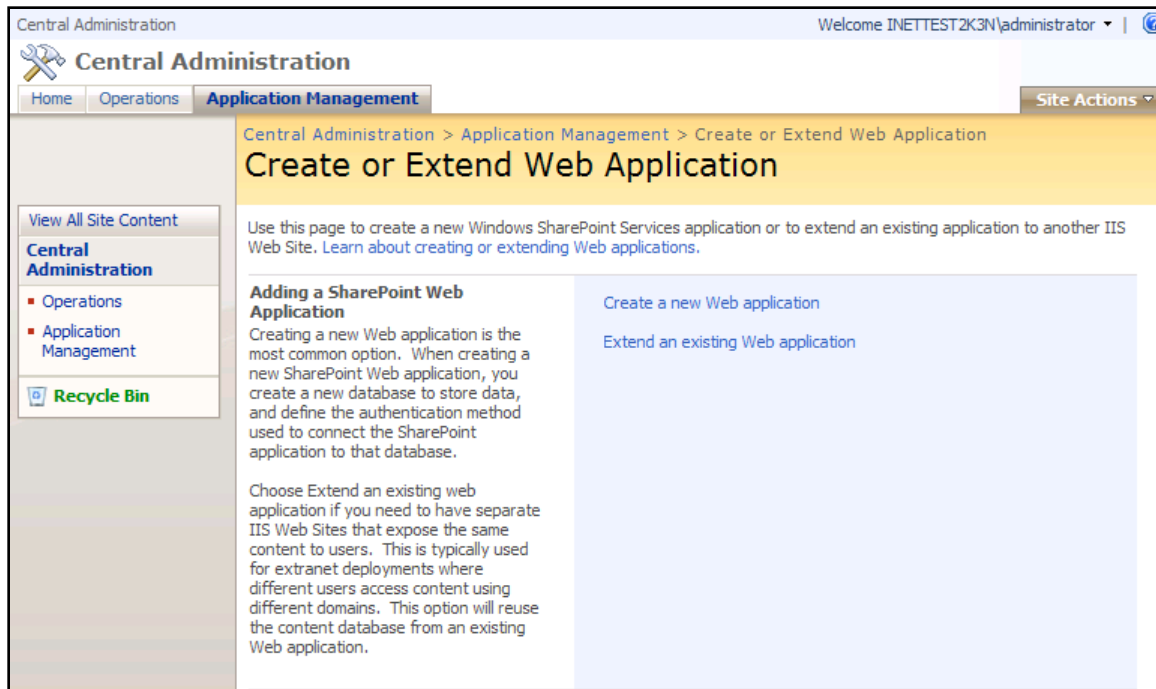
Application Security

- [Security for Web Part pages](#)

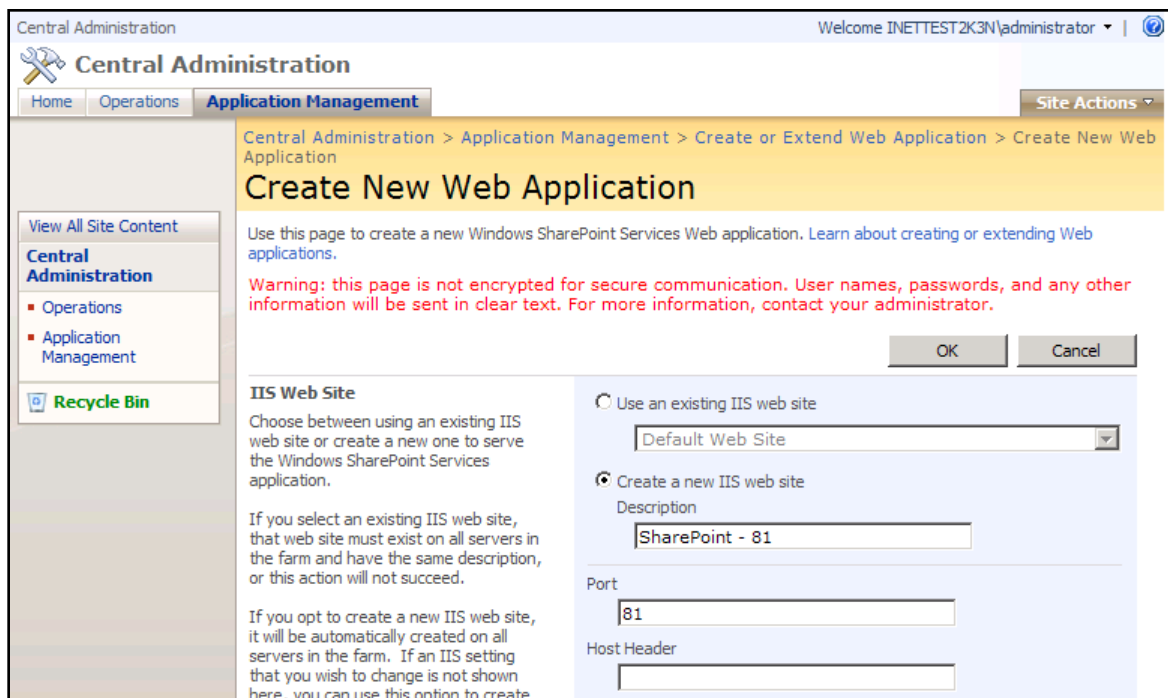
External Service Connections

- [Records center](#)
- [HTML viewer](#)
- [Document conversions](#)

8. Select the **Create or extend Web application** option. The Create or Extend Web Application page displays.



9. Click **Create a new Web application**. The Create a New Web Application page displays.



10. Select the **Create a new IIS web site** option. Enter a description for the Web site and specify a port in **Port**.



Vision and SharePoint can be installed to the same Web site if your Vision Web/Application/SharePoint server is Windows Server 2003/Internet Information Services (IIS) 6.0. If you are using Windows Server 2008/Internet Information Services (IIS) 7.0, please install SharePoint to different Web site than Vision.

Alternatively, you can create a new Web site ahead of time using a different IP address and select the option to **Use an existing IIS web site**.

<p>the basic site, then update it using the standard IIS tools.</p>	<p>Path pub\wwwroot\wss\VirtualDirectories\81</p>
<p>Security Configuration</p> <p>Kerberos is the recommended security configuration to use with Integrated Windows authentication. Kerberos requires the application pool account to be Network Service or special configuration by the domain administrator. NTLM authentication will work with any application pool account and the default domain configuration.</p> <p>If you choose to use Secure Sockets Layer (SSL), you must add the certificate on each server using the IIS administration tools. Until this is done, the web application will be inaccessible from this IIS Web Site.</p>	<p>Authentication provider:</p> <p><input checked="" type="radio"/> Negotiate (Kerberos)</p> <p><input type="radio"/> NTLM</p> <p>Allow Anonymous:</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p> <p>Use Secure Sockets Layer (SSL):</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p>
<p>Load Balanced URL</p> <p>The load balanced URL is the domain name for all sites users will access in this SharePoint Web application. This URL domain will be used in all links shown on pages within the web application. By default, it is set to the current servername and port.</p>	<p>URL http://CAMQAINETK3NWB1:81</p> <p>Zone Default</p>
<p>Application Pool</p>	<p><input checked="" type="radio"/> Use existing application pool</p>

Note the entry in **Path**, which by default is the root of your WSS Web site in a directory named after the port chosen under c:\inetpub\wwwroot\wss\virtualdirectories.

11. Select **Negotiate (Kerberos)** under **Authentication provider**.
12. For the **Allow Anonymous** and **Use Secure Sockets Layer (SSL)** options, accept the default of **No**. If you want to use SSL with SharePoint, you can configure SSL later, but you must not configure SSL to be required.

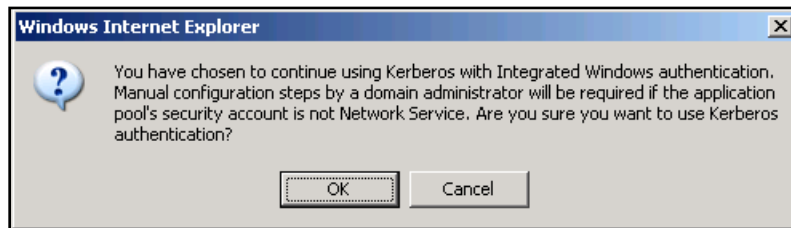
	<p>Application Pool</p> <p>Choose the application pool to use for the new web application. This defines the account and credentials that will be used by this service.</p> <p>You can choose an existing application pool or create a new one.</p>	<p><input type="radio"/> Use existing application pool</p> <p>DefaultAppPool (Network Service)</p> <p><input checked="" type="radio"/> Create new application pool</p> <p>Application pool name</p> <p>SharePoint - 81</p> <p>Select a security account for this application pool</p> <p><input checked="" type="radio"/> Predefined</p> <p>Network Service</p> <p><input type="radio"/> Configurable</p> <p>User name</p> <p>Password</p>
	<p>Reset Internet Information Services</p> <p>Use this section to allow SharePoint to restart IIS on other farm servers. The local server must be restarted manually for the process to complete. If this option is not selected and you have more than one server in the farm, you must wait until the IIS web site is created on all servers, and then run</p>	<p><input type="radio"/> Restart IIS Automatically</p> <p><input checked="" type="radio"/> Restart IIS Manually</p>

13. Select the **Create new application pool** option and provide a name (Deltek recommends using the same name as the Web site).
14. Select **Predefined** and **Network Service** for the security account to be used for the application pool.
15. Select the **Restart IIS Manually** option for **Reset Internet Information Services**.

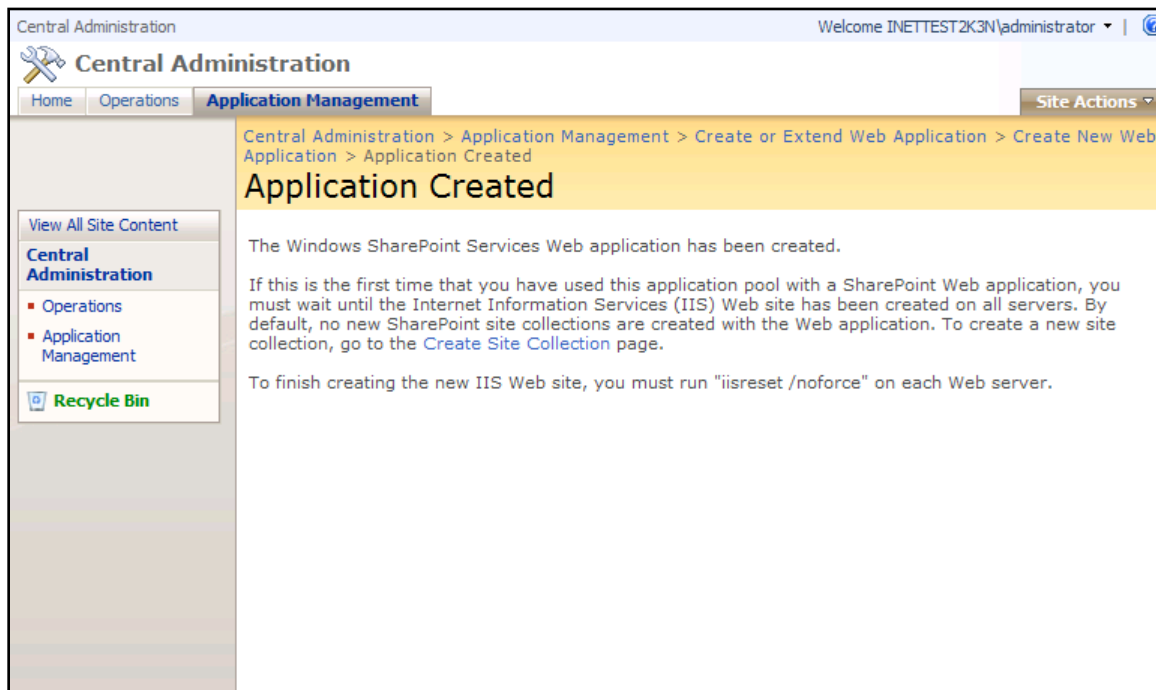
	<p>"iisreset /noforce" on each Web server. The new IIS site will not be usable until that is completed.</p>	
	<p>Database Name and Authentication</p> <p>Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.</p> <p>Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.</p>	<p>Database Server</p> <p>camqainetk3ndb1</p> <p>Database Name</p> <p>WSS_Content</p> <p>Database authentication</p> <p><input checked="" type="radio"/> Windows authentication (recommended)</p> <p><input type="radio"/> SQL authentication</p> <p>Account</p> <p>Password</p>
	<p>Search Server</p> <p>You can choose to associate a content database with a specific server that is running the Windows SharePoint Services search service.</p>	<p>Select Windows SharePoint Services search server</p> <p>CAMQAINETK3NWB1</p>

OK Cancel

16. Verify the name of the server in **Database Server**. (It should be the same as that used for the SharePoint configuration database server.) Accept the default in **Database Name** for the content database.
17. Select **Windows authentication (recommended)** under **Database authentication**. (This will use the SharePoint service account and Vision Application Pool Identity configured previously.)
18. Select the search server in **Select Windows SharePoint Services search server** and click **OK**. The following dialog box displays.



19. Click **OK** to use Kerberos for Windows Authentication. After a few minutes, the Application Created page displays. It indicates the status of the process to create a new Web application.



20. Do not click the **Create Site Collection** link at this time. It is still necessary to add DeltekVision as a managed path with explicit inclusion before you create the site collection.
21. Click **Application Management** and select the **Define Managed Paths** option.

Home Operations **Application Management** Site Actions ▾

Central Administration > Application Management > Define Managed Paths

Define Managed Paths

Use this page to specify which paths in the URL namespace are managed by Windows SharePoint Services. [Learn about defining managed paths.](#)

Web Application
Select a Web application.

Web Application: **http://camqainetk3nwb1:81/ ▾**

Included Paths
This list specifies which paths within the URL namespace are managed by Windows SharePoint Services.

Add a New Path
Specify the path within the URL namespace to include. You can include an exact path, or all paths subordinate to the specified path.

Use the **Check URL** button to ensure that the path you include is not already in use for existing sites or folders, which will open a new browser window with that URL.

Delete selected paths

Path	Type
<input type="checkbox"/> (root)	Explicit inclusion
<input type="checkbox"/> sites	Wildcard inclusion

Path:

Note: To indicate the root path for this web application, type a slash (/).

Check URL

Type: **Explicit inclusion ▾**

22. Enter **DelttekVision** in **Path** and select **Explicit inclusion** in **Type**.

23. Click **OK**.

Home Operations **Application Management** Site Actions ▾

Central Administration > Application Management > Define Managed Paths

Define Managed Paths

Use this page to specify which paths in the URL namespace are managed by Windows SharePoint Services. [Learn about defining managed paths.](#)

Web Application
Select a Web application.

Web Application: **http://camqainetk3nwb1:81/ ▾**

Included Paths
This list specifies which paths within the URL namespace are managed by Windows SharePoint Services.

Delete selected paths

Path	Type
<input type="checkbox"/> (root)	Explicit inclusion
<input type="checkbox"/> sites	Wildcard inclusion
<input type="checkbox"/> deltekvision	Explicit inclusion

24. Click **Application Management** and select the **Create Site Collection** option under **SharePoint Site Management**.



The Create Site Collection page displays.

The screenshot shows the 'Create Site Collection' page in the 'Central Administration' interface. The page title is 'Create Site Collection'. It contains several sections for configuring a new site collection:

- Web Application:** A dropdown menu showing 'http://camqainetk3nwb1:81/'.
- Title and Description:** A text box for 'Title' containing 'Deltek Vision' and a text box for 'Description'.
- Web Site Address:** A text box for 'URL' showing 'http://camqainetk3nwb1:81/deltekvision/'.

Buttons for 'OK' and 'Cancel' are located at the top right. The left sidebar and top navigation bar are consistent with the previous screenshot.

25. Enter **Deltek Vision** in **Title** and enter a description, if appropriate.
26. From the **URL** drop-down list, select **/deltekvision**. This will be the top level root for Vision Document Management.

Template Selection

A site for teams to quickly organize, author, and share information. It provides a document library, and lists for managing announcements, calendar items, tasks, and discussions.

Primary Site Collection Administrator
Specify the administrator for this Web site collection.

Secondary Site Collection Administrator
Specify the secondary administrator for this Web site collection.

Quota Template
Select a predefined quota template to limit resources used for this site collection.
To add a new quota template, go to the [Manage Quota Templates](#) page.

Select a template:
Collaboration Meetings
Team Site
Blank Site
Document Workspace
Wiki Site
Blog

User name:
inettest2k3n\administrator

User name:
inettest2k3n\administrator

Select a quota template:
No Quota

Storage limit:
Number of invited users:

OK Cancel

27. Under **Select a template**, accept the default of **Team Site** for the template to be used and enter a username in each of the **User name** fields for the primary and secondary site collection administrators.

28. Select **No Quota** in **Select a quota template** and click **OK**. The Top-Level Site Successfully Created page displays.

Central Administration

Welcome INETTEST2K3N\administrator

Central Administration > Application Management > Create Site Collection > Top-Level Site Successfully Created

Top-Level Site Successfully Created

The new, empty top-level site was created successfully with the specified URL. If you have permission to view the Web site, you can do so in a new browser window by clicking the URL. To return to SharePoint Central Administration, click **OK**.

<http://camqainetk3nwb1:81/deltekvision>

OK

View All Site Content

Central Administration

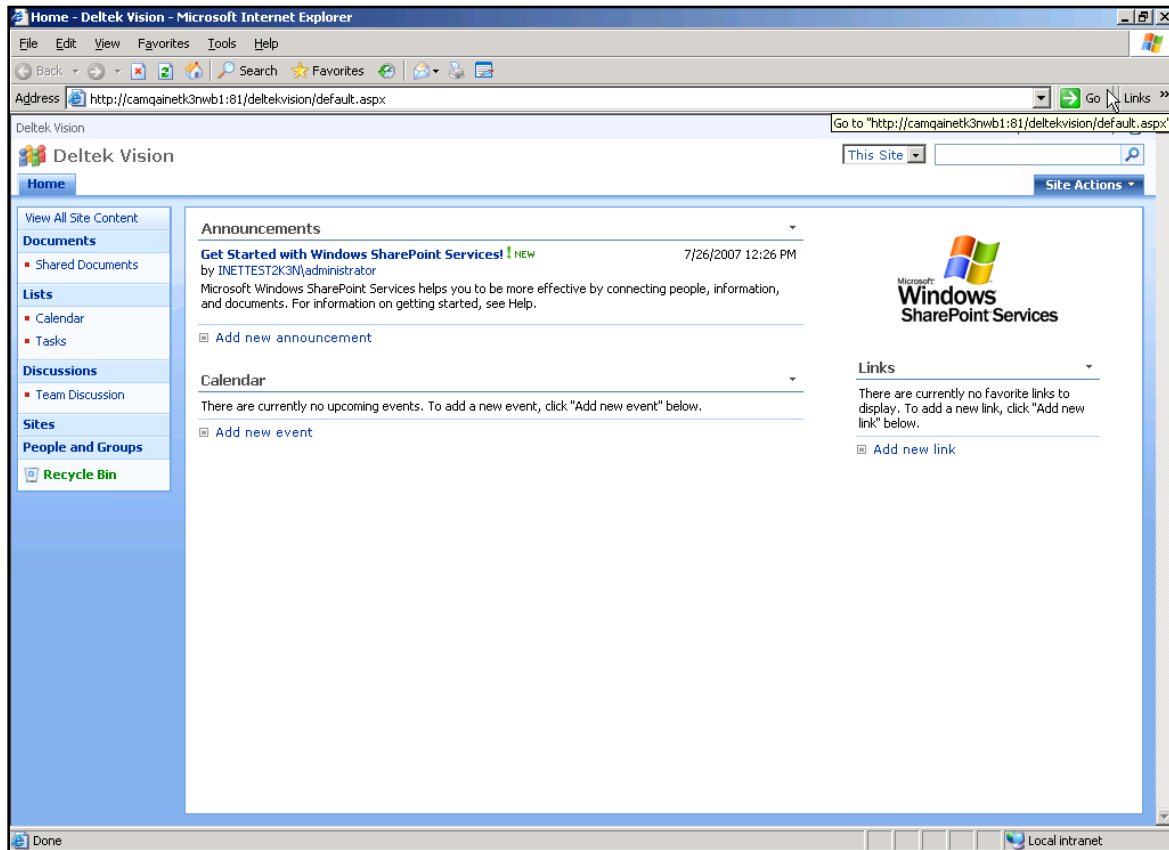
Operations

Application Management

Recycle Bin

29. Click **Start » Run**, enter **iisreset /noforce**, and click **Enter**.

30. Click the link for the top level site (in our example it is <http://camqainetk3nwb1:81/deltekvision/>) to display the site.



31. The SharePoint configuration is complete. Close SharePoint Central Administration.

Configure SharePoint for a Fully Qualified Domain Name (FQDN) URL (Optional)

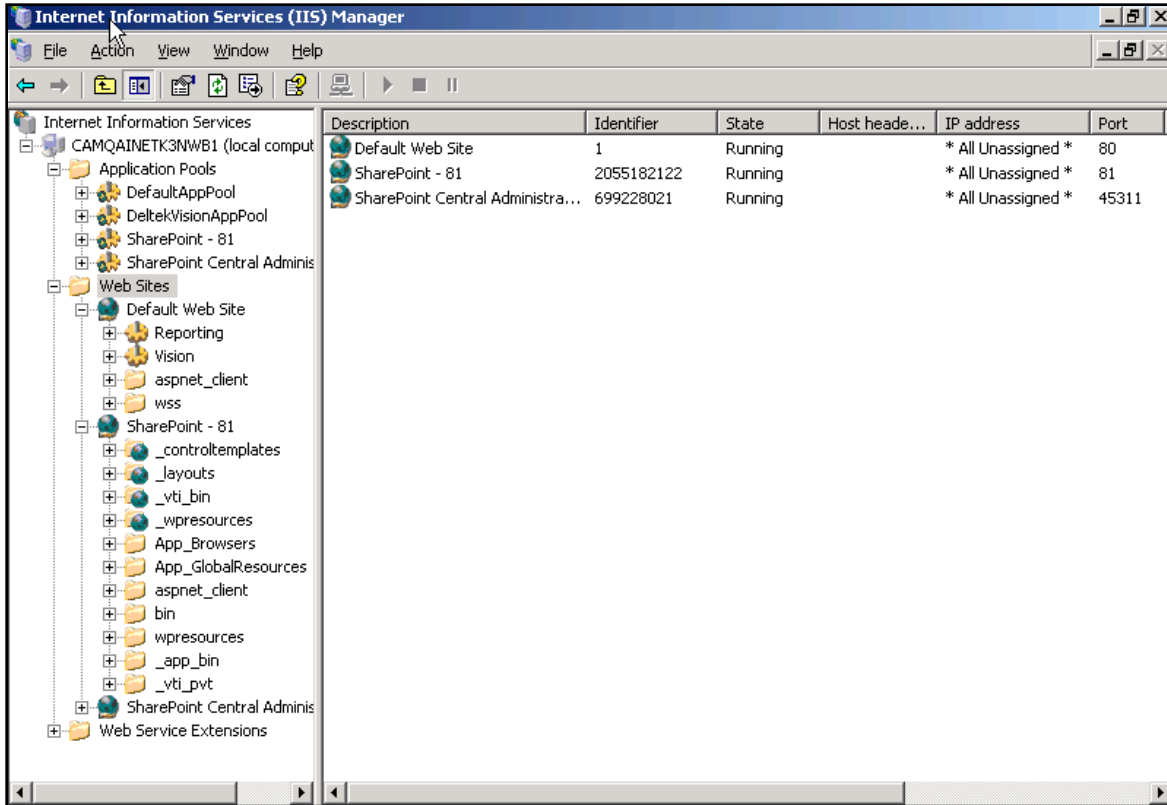
If you will be configuring your SharePoint server to use a custom DNS record for the URL you must create an additional SPN and also create Alternate Access Mappings in SharePoint.

See “Appendix C: SPN Configuration When Using Custom DNS Records” on page 100 for more information.

Verify IIS Configuration and Configure Deltek Vision Document Management .NET Assembly

To verify IIS configuration, complete the following steps:

1. Use the directions that follow to open Internet Information Services to view these Web sites:
 - **Default Web Site** — This is your Vision Web Site
 - **SharePoint – 81** — This is your WSS 3.0 Web Site (if installed to a different Web site from Vision)
 - **SharePoint Central Administration Web Site**



2. Copy the Vision Document Management .NET assembly to SharePoint site directory.
3. Copy Deltek.Vision.WSS30.Server.dll from <Vision Installation Directory>\Support\DM\30 to:
c:\inetpub\wwwroot\bin (if WSS was installed to the default web site)
or to
c:\inetpub\wwwroot\wss\Virtual Directories\<site>\bin



By default, the <site> directory will reference the port chosen. In our example, the port is 81.

Configure Document Management Service Account in Weblink

You must configure the Document Management service account (username/password) on the System Settings tab of the Deltek Vision Weblink utility. Follow the instructions below to configure this:

1. On the Vision Web server, launch Weblink from **Start » Programs » Deltek Vision**
2. Enter the Weblink password when prompted.
3. Click the System Settings tab.

In the **Document Management** group box, enter your SharePoint username and password. This account is your SharePoint Service account/Deltek Vision Application Pool Identity.

Document Management

SharePoint Username

SharePoint Password

Configure Vision Document Management

To configure Vision Document Management, complete the following steps:

1. Log in to Vision using an account that has access to the Configuration menus.
2. Click **Configuration » General » System Settings** and select the Document Management tab.

General System Settings - Apple & Bartlett, PC - Period Ending 6/30/2005 - v6.0 (Limited Release 1)

Applications Back Forward Dashboard Search Options Help

Applications

- Calendar/Activities
- Proposals
- Planning
- Billing
- Transaction Center
- Accounting
- Human Resources
- Time & Expense
- Purchasing
- Inventory
- Reporting
- Utilities
- Configuration

General System Settings

Save Help

Lookups Email Servers Labels Numbering Synchronization Document Management Audit Trail Miscellaneous

☒ Enable Document Management

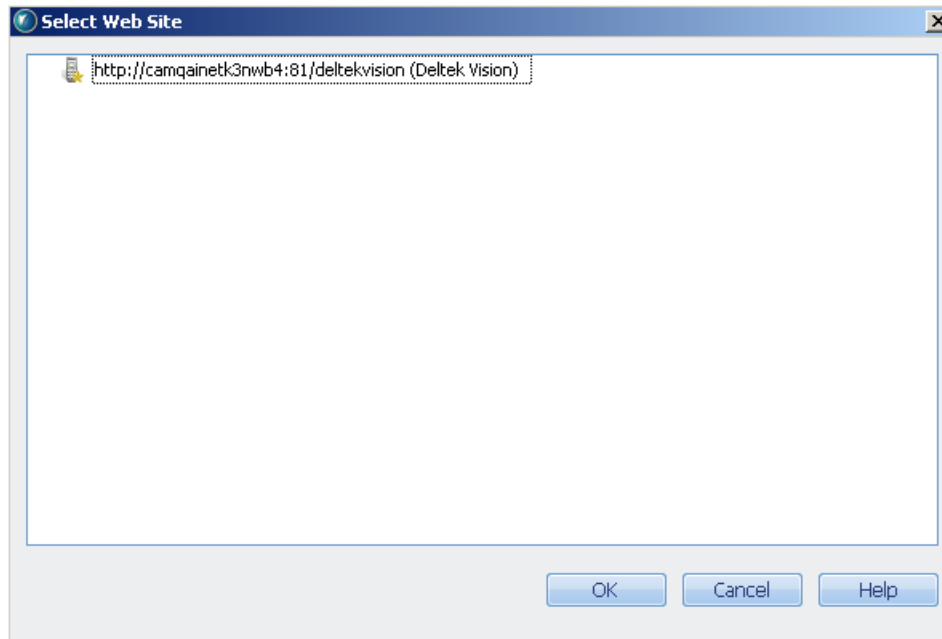
Server Name/IP

Virtual Server Port

Current Site

Test Site View Site New Site

3. Select the **Enable Document Management** check box.
4. Enter the name of the server hosting Document Management. This can be the NetBIOS name, server name FQDN, or custom DNS/FQDN. Enter this value without the protocol prefix (for example, remove the http://). In the illustration above, the value is **camqainetk3nwb4**.
5. Enter the port in **Virtual Server Port**. In our example the port is 81.
6. Click the Lookup icon to select the current site.



7. The Select Web Site dialog box displays the available sites. Select a site and click **OK**.
8. Save your changes.

Optional: Configure Protocol Transition

If Vision Document Management functionality is required over the Internet and you will be using a custom DNS/FQDN for the SharePoint URL (as in our example, vision1.inettest2k3n.com), then you must configure a form of delegation referred to as Protocol Transition. If Document Management functionality is not required, you can skip this step.

The Kerberos authentication protocol must be used to authenticate from the Vision Web server to the SharePoint server. However, if Vision is deployed in an Internet scenario and there are users outside of the firewall that need to access Document Management features, Kerberos authentication cannot be used to authenticate the client to the Web server. This is because the client needs to have the ability to negotiate a Kerberos ticket with the Key Distribution Center (KDC), which is a service running on a Domain Controller. This requires port 88 to be opened inbound on the firewall to the Domain Controller, which is not an advisable configuration.

To get around this, you must be running a Native Windows Server 2003 functional domain.

To configure Protocol Transition, select the **Use any authentication protocol** option instead of the **Use Kerberos only** option that is used to configure Constrained Delegation. This allows the client to authenticate to the Vision Web server using NTLM instead of Kerberos, and that authentication is then “transitioned” over to Kerberos for Delegation to the SharePoint server.

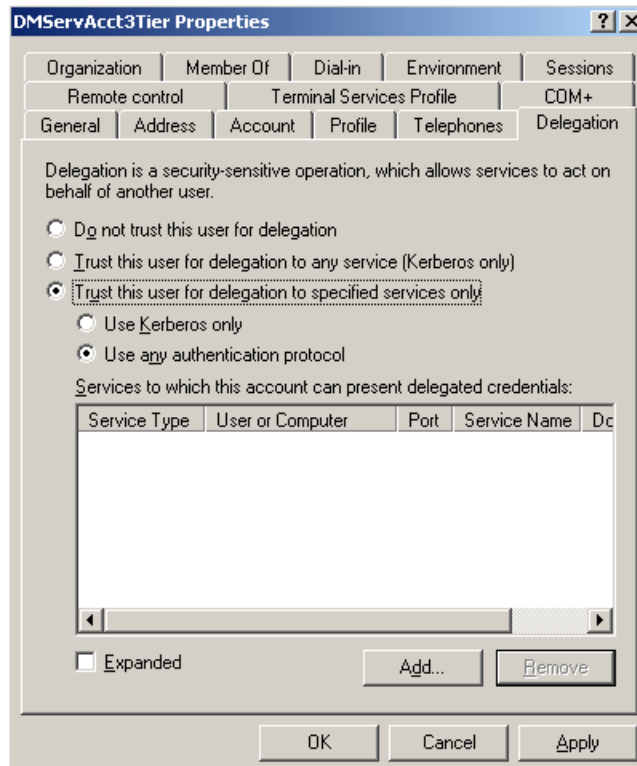
To configure Protocol Transition, complete the following steps:

1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (WSS Service account).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for delegation to specified services only** option.

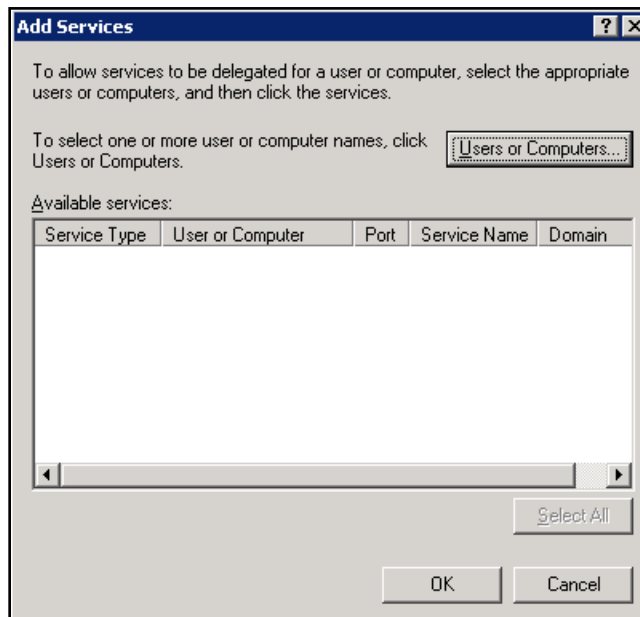


If you click the second option, you will be configuring Unconstrained Delegation, which would be the equivalent of Delegation in a Windows 2000 or Mixed domain. The Constrained Delegation feature of Windows Server 2003 Native domain is more secure and therefore recommended.

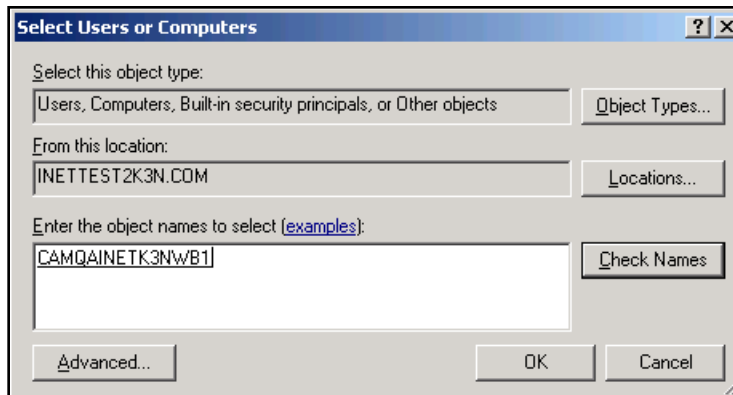
5. Select the **Use any authentication protocol** option.



6. Click the **Add** button. The **Add Services** dialog box displays.

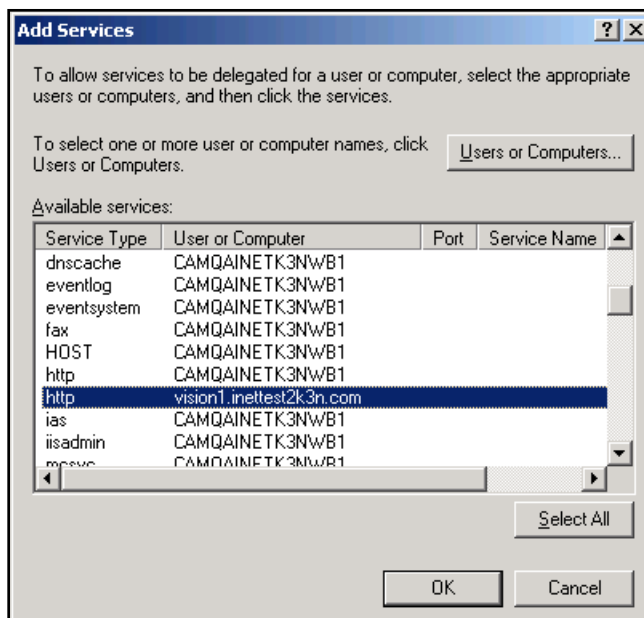


7. Click **Users or Computers**. The Select Users or Computers dialog box displays.



8. Search for the SharePoint server and click **OK**.
9. Locate the http service for the SPN (FQDN) you created earlier (in our example, vision1.inettest2k3n.com), select it, and click **OK**.

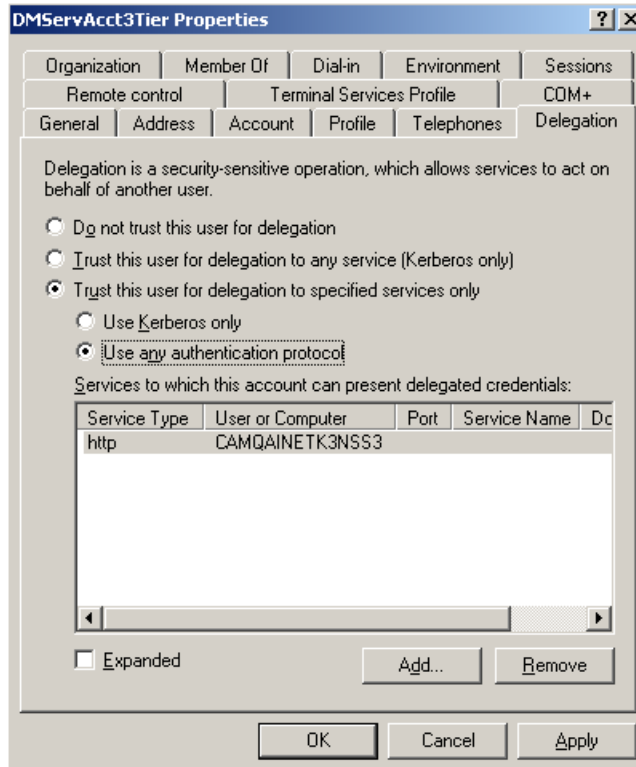
In the following screenshot, there are two http service types listed. Unless you have registered a custom FQDN using the setspn utility, only the server name displays. These service types are known as Service Principal Names (SPNs).



The SPN referencing CAMQAINETK3NWB1.inettest2k3n.com was created automatically when the server was added to the domain and the http service (IIS) was installed.

The second SPN referencing vision1.inettest2k3n.com is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

The Delegation tab options should be as follows:



Because we are explicitly specifying the http service and not all services on the SharePoint server, and because we are using the **Use any authentication protocol option** and not Kerberos, this is known as “Protocol Transition.”

Multi-Tier—New Installation of Document Management 6.1 with Windows SharePoint Services 3.0

The following instructions assume that Vision and Windows SharePoint Services 3.0 exist on separate servers and assume that you are deploying to Windows Server 2003/IIS 6.0. If you will be deploying to Windows Server 2008/IIS 7.0 or Windows Server 2008 R2/IIS 7.5, refer to Appendix B for detailed configuration information.

Prerequisites

- Install/upgrade to Vision 6.1.
- Change the Application Pool Identity for the DeltekVisionAppPool to be a domain account. (The Vision 6.1 installation sets this to be the local DeltekVision account.) This account will also be the SharePoint (WSS) Service account. Add this user to the local Administrators and IIS_WPG groups on the Vision server and local Administrators group on the WSS server.

Configure Vision Application Pool Identity to Be a Domain Account

You must change the Vision Application Pool Identity to be a domain account. (The default is for Vision to use a Local Administrator Account. The DeltekVision user is created during the Vision installation.) The reason for this change is that the local accounts are unable to read the SPN configured in Active Directory.

To change the Vision Application Pool Identity, complete the following steps:

1. Create a domain user account. No domain Admin rights are needed for this account.
2. Log on to the domain on the Vision Web/application server using an Administrator account.
3. Click **Start » All Programs » Administrative Tools » Internet Information Services**.
4. Expand **Application Pools**.
5. Right-click **DeltekVisionAppPool** and select **Properties** on the shortcut menu.
6. Click the Identity tab and change the account from DeltekVision to your domain\user account created in step 1. Make sure this account is a member of the Local Administrators and IIS_WPG local groups.

Configure SPN for Vision Application Pool Identity

As mentioned earlier in this document, it is necessary to create a Service Principal Name (SPN) for the domain user running the DeltekVisionAppPool.

To add the Application Pool Identity as a Service Principal Name, complete the following steps:

1. Enter the following commands on the domain server where setspn is installed:
setspn -A http<Vision Web/App Server name> <domain app pool identity>
For example: setspn -A http/camqainetk3nwb5 inettest2k3n\dmservacct3tier
2. Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>



If your Vision Web server is accessed by a DNS / FQDN (Fully Qualified Domain Name) that *does not match* the name of the server (for example, if your Vision Web server is named Server01 and its DNS name is Server01.Company.com, but you have added a custom DNS value Vision.Company.com), you must also add an SPN for this custom DNS name.

Install and Configure Vision 6.1 Document Management and WSS 3.0

When you install Vision 6.1 Document Management, WSS is automatically installed. (If you are upgrading from Vision 5.1, no changes are made to your WSS installation.) However, the Document Management installation will not automatically configure WSS. The steps to configure SharePoint are outlined in this document.

The Document Management installation does the following:

- Installs Web Service Extensions (WSE) 2.0 SP3.
- Installs WSS 3.0, if it is not already installed.
- Changes the IIS metabase NTAuthenticationProviders element to be Negotiate,NTLM.
- Copies Document Management files to the SharePoint ISAPI folder (c:\program files\common files\microsoft shared\web service extensions\12\isapi).
- Copies Document Management files to the Vision Support folder (\program files\deltek\vision\support\DM\30).
- Modifies the SharePoint Web.config file in the ISAPI directory to work with Vision Document Management.
- Installs Deltek.Vision.WSS30.Server.dll into the Global Assembly Cache (GAC).

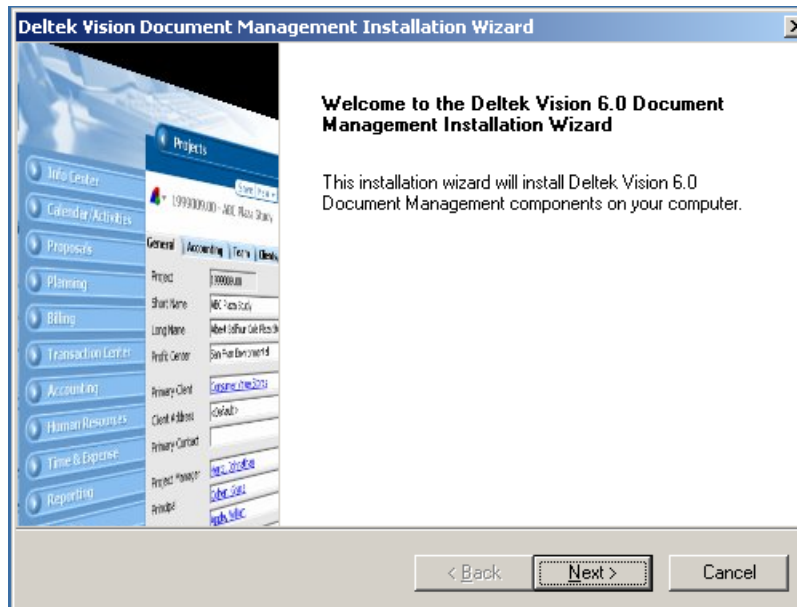
Install Vision 6.1 Document Management on the Vision Web Server

To install Vision 6.1 Document Management on the Vision Web server, complete the following steps:

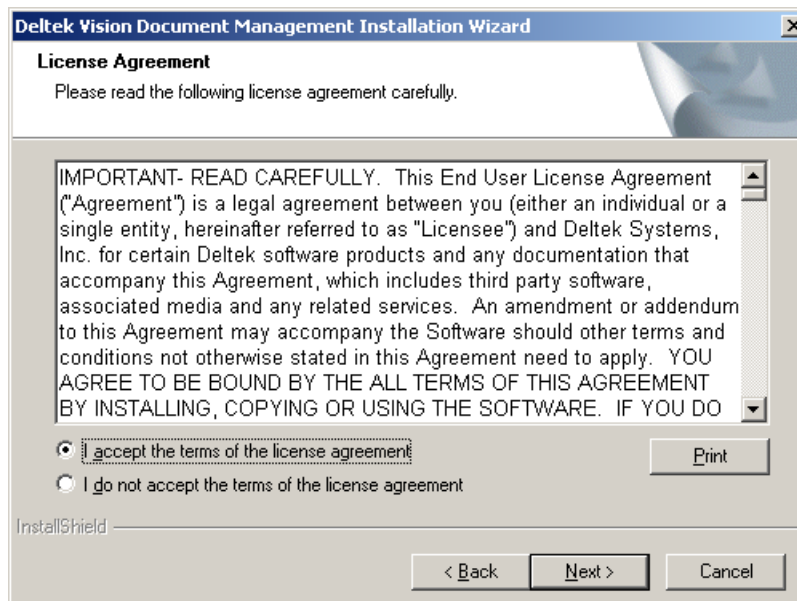
1. Run the setup on your Vision Web server. The following dialog box then indicates the IIS licensing requirements for the use of Windows Integrated Authentication (required to use Vision Document Management):



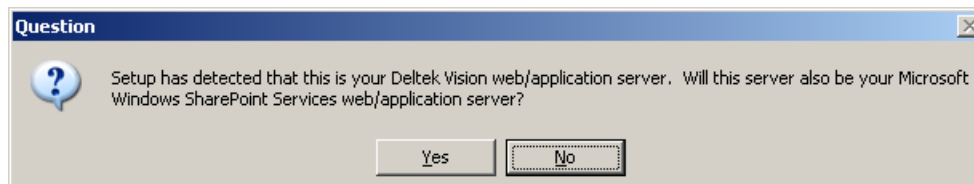
2. Click **OK**. The Welcome page displays.



3. Click **Next**. The License Agreement page displays.



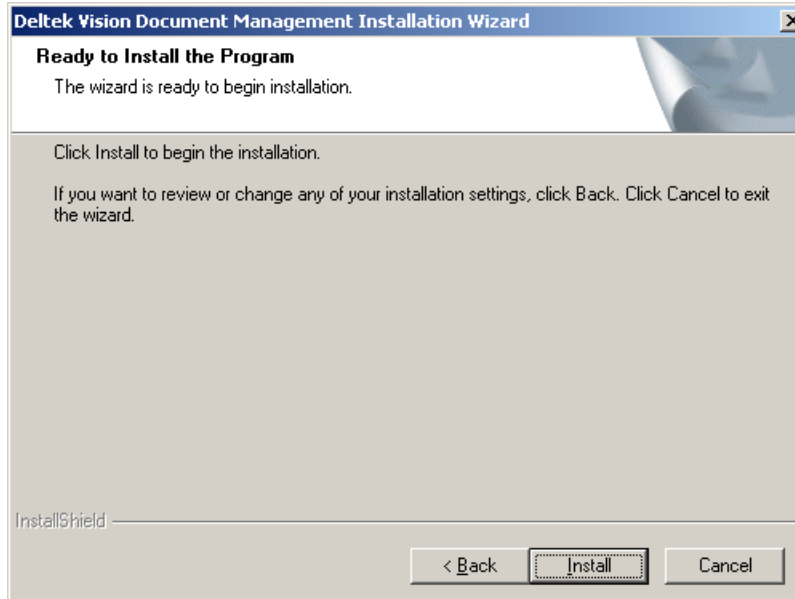
4. Select **I accept the terms of the license agreement** and click **Next**. The following dialog box displays.



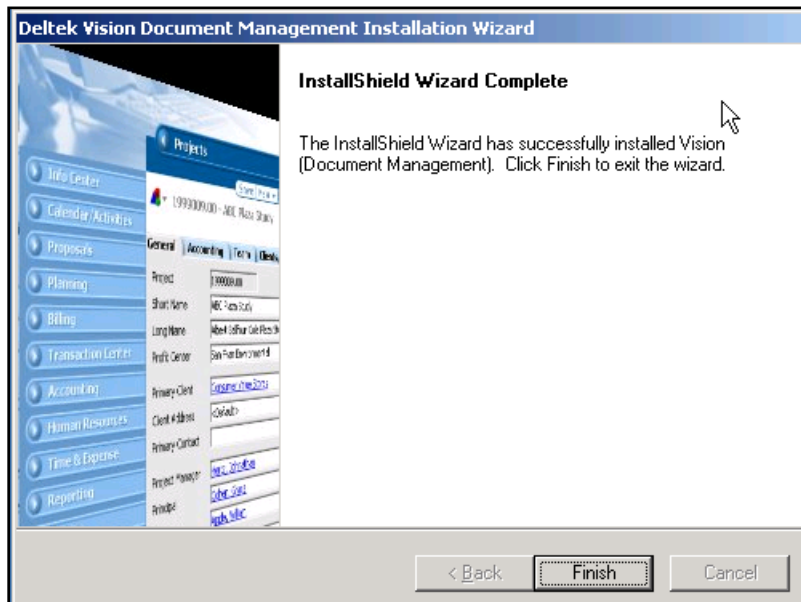
5. Click **No** because this is a multi-tier installation of Vision Document Management and your Vision Web server will not host WSS 3.0. The following dialog box displays to remind you to run the setup on the WSS server.



6. Click **OK** to display the Ready to Install the Program page.



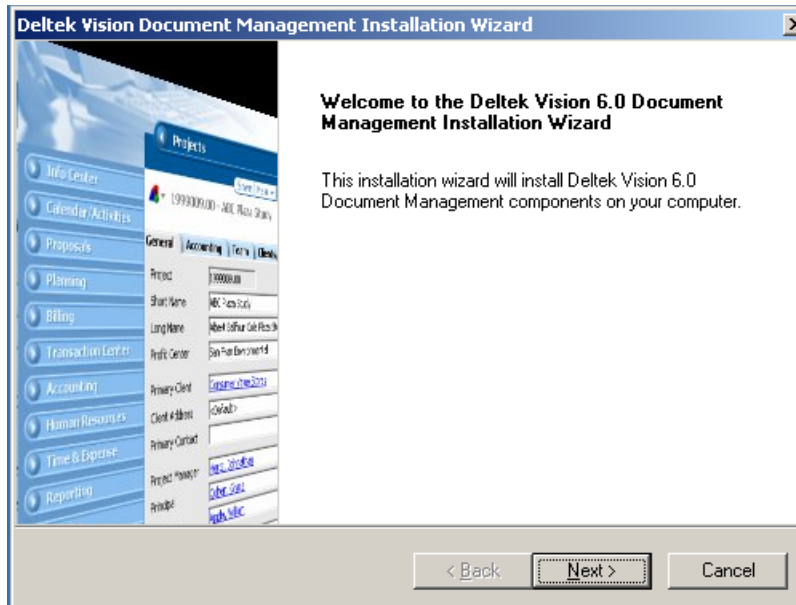
7. Click **Install** to start the installation.
8. Click **Finish** when the installation is completed.



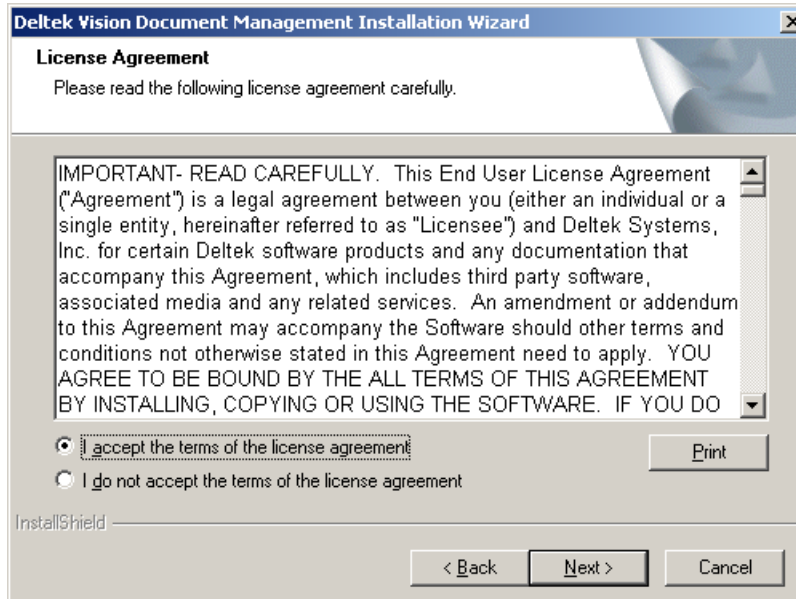
Install Vision Document Management on the WSS Server

To install Vision Document Management on the WSS server, complete the following steps:

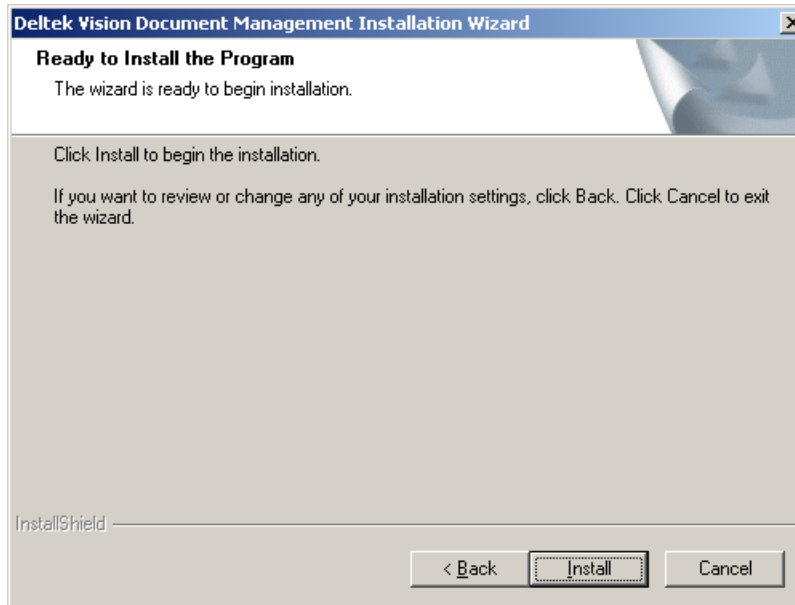
1. If you have previously installed Deltek Vision 5.1 Document Management (or other earlier versions), uninstall Deltek Vision Document Management using Add/Remove Programs. (This will not uninstall Windows SharePoint Services 3.0.)
2. Download DeltekVision61SP4DM.exe and run the setup on your WSS server. The Welcome page displays.



3. Click **Next**. The License Agreement page displays.

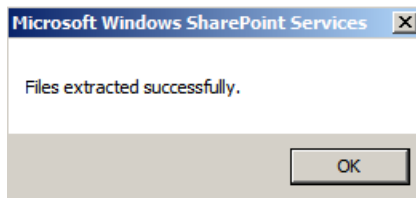


4. Accept the license agreement and click **Next**. The Ready to Install the Program page displays.

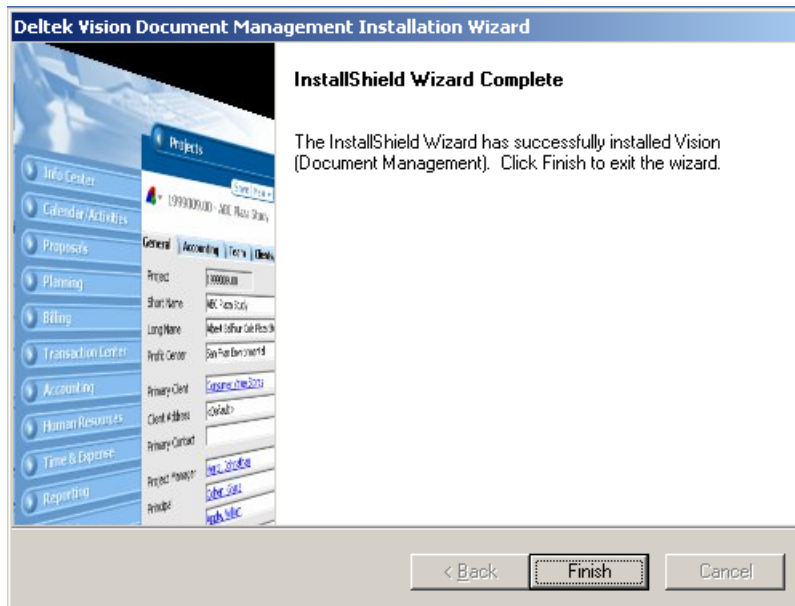


5. Click **Install** to start the installation. The installation automatically downloads the version of Windows SharePoint Services 3.0 specific to your platform (x86 or x64), extracts the WSS 3.0 setup files, and installs Windows SharePoint Services.

During the extraction process, the following dialog box displays. You must click **OK** to continue the installation).



6. When the installation is complete, the InstallShield Wizard Complete page displays.

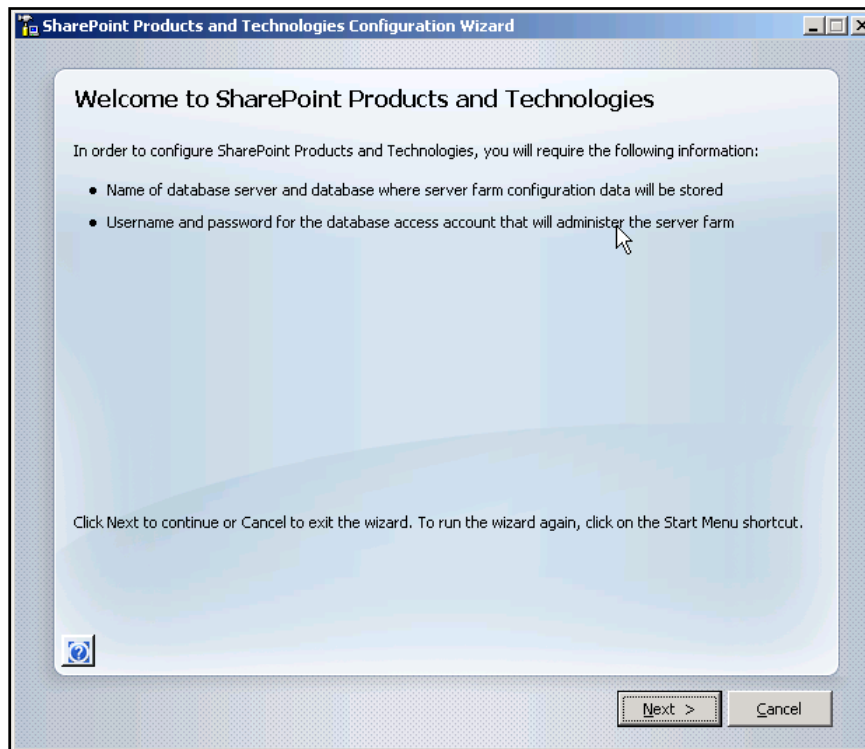


7. Click **Finish**.

Run the SharePoint Products and Technologies Configuration Wizard

To run the SharePoint Products and Technologies Configuration wizard, complete the following steps:

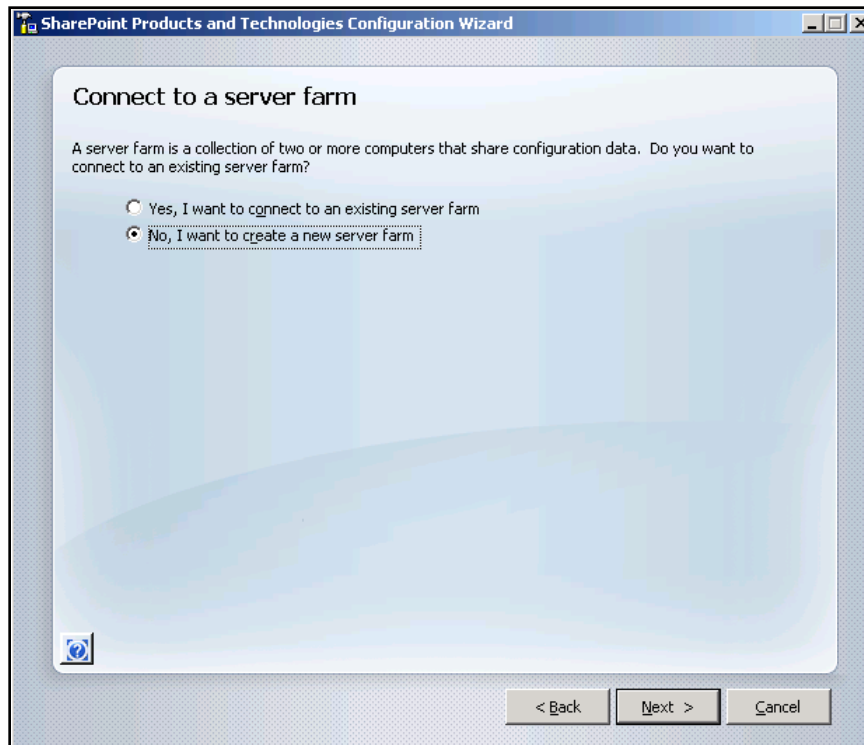
1. To run the SharePoint Products & Technologies Configuration Wizard, click **Start » Administrative Tools » SharePoint Products and Technologies Wizard**. The Welcome page displays.



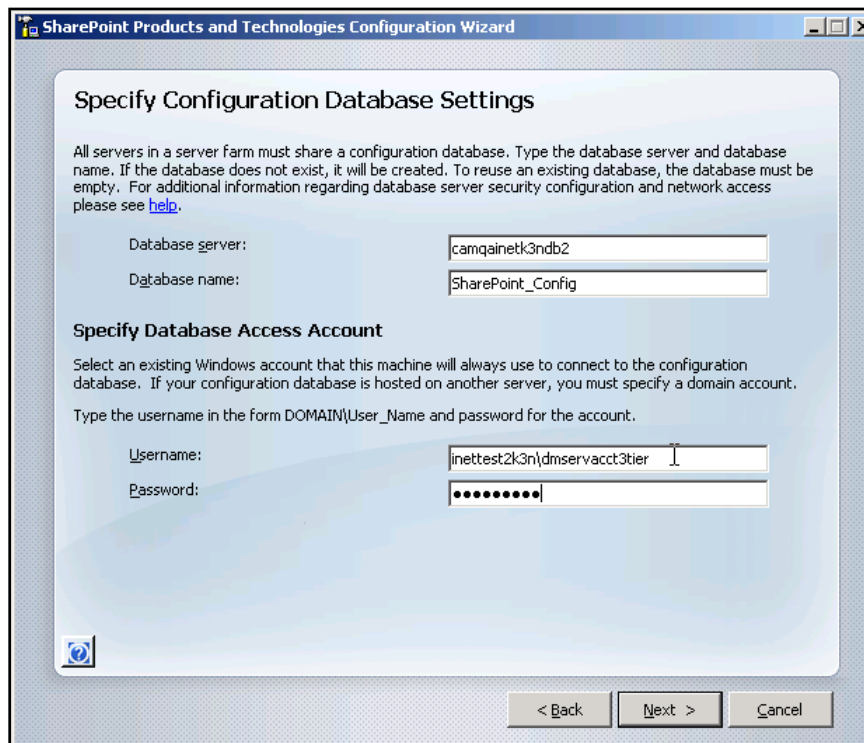
2. Click **Next**. The following dialog box displays.



3. Click **Yes**. The Connect to a server farm page displays.



4. Select the **No, I want to create a new server farm** option and click **Next** to display the Specify Configuration Database Settings page.



5. Enter the name of the database server to host the SharePoint configuration database and accept the default database name: SharePoint_Config.



If you use SQL Server 2008, your database access account will need to have the dbcreator and securityadmin SQL Server Roles.

6. Enter the domain and name of the Vision Application Pool Identity (configured and added to the local administrator group on the WSS server) as the **Username** for the SharePoint database access account and enter that user's **Password**.
7. Click **Next**. The Configure SharePoint Central Administration Web Application page displays.

SharePoint Products and Technologies Configuration Wizard

Configure SharePoint Central Administration Web Application

A SharePoint Central Administration Web Application allows you to manage configuration settings for a server farm. The first server added to a server farm must host this web application. To specify a port number for the web application hosted on this machine, check the box below and type a number between 1 and 65535. If you do not specify a port number, a random one will be chosen.

☒ Specify port number:

Configure Security Settings

Kerberos is the recommended security configuration to use with Integrated Windows authentication. Kerberos requires special configuration by the domain administrator. NTLM authentication will work with any application pool account and the default domain configuration. [Show me more information.](#)

Choose an authentication provider for this Web Application.

☐ NTLM

☒ Negotiate (Kerberos)

< Back Next > Cancel

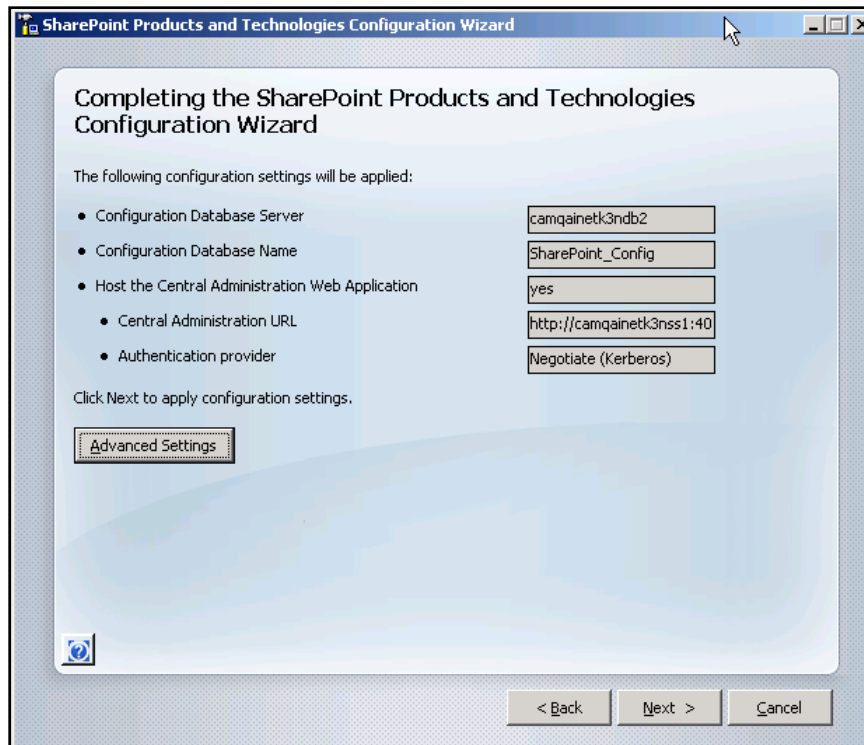
8. Specify the port to be used for the SharePoint Central Administration Web site.
9. Select **Negotiate (Kerberos)** for the authentication provider.

SharePoint Products and Technologies Configuration Wizard

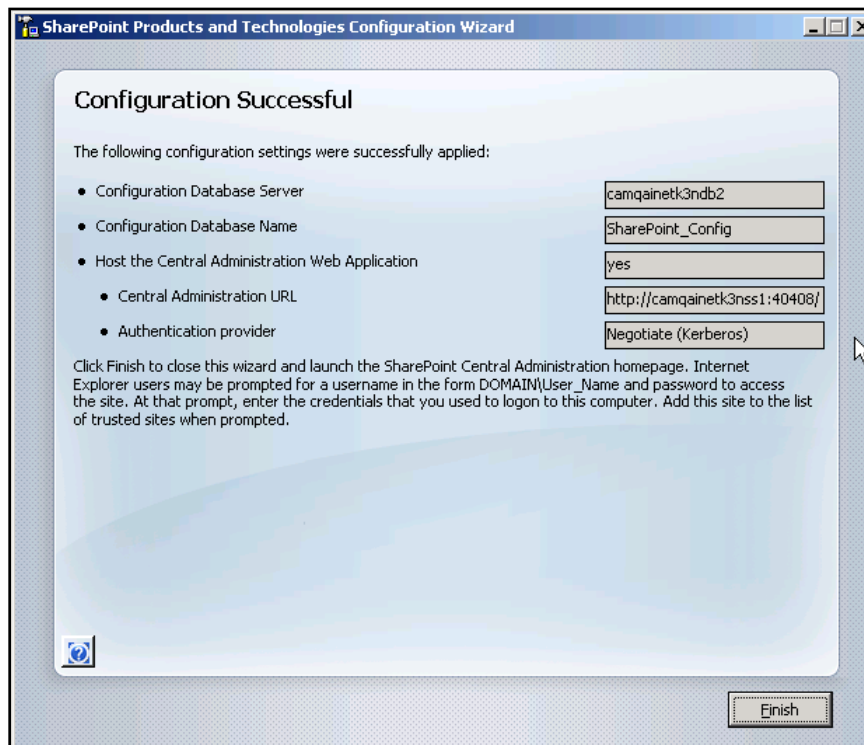
You have chosen to continue using Kerberos with Integrated Windows authentication. Manual configuration steps by a domain administrator will be required to create a Service Principal Name (SPN) in the Active Directory (AD). Do you want to use Kerberos authentication?

Yes No

10. Click **Yes** to continue using Kerberos with Windows Authentication. The Completing the SharePoint Products and Technologies Configuration Wizard page displays.



11. Click **Next** to begin the configuration. This process may take some time to complete. The Configuration Successful page displays when configuration is complete.

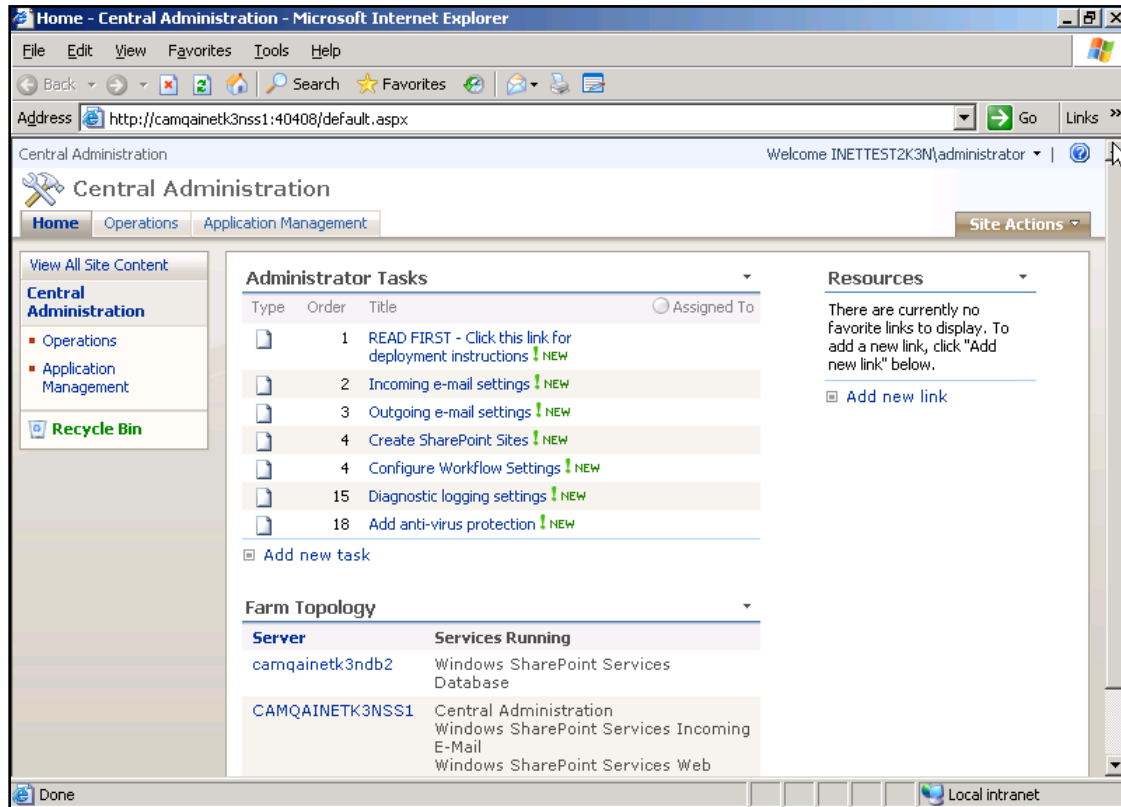


12. Click **Finish** to finish the configuration process. The SharePoint Central Administration page displays.

Use SharePoint Central Administration to Complete the SharePoint Configuration

To complete the SharePoint configuration, complete the following steps:

1. When you click **Finish** in the preceding procedure, SharePoint Central Administration is launched.



2. Click **Operations**. The Operations page displays.

Central Administration > Operations

Operations

This page contains links to pages that help you manage your server or server farm, such as changing the server farm topology, specifying which services are running on each server, and changing settings that affect multiple servers or applications.

Topology and Services

- Servers in farm
- Services on server
- Outgoing e-mail settings
- Incoming e-mail settings
- Approve/reject distribution groups

Global Configuration

- Timer job status
- Timer job definitions
- Alternate access mappings
- Manage farm features
- Solution management

Security Configuration

- Service accounts
- Information Rights Management
- Antivirus
- Blocked file types

Backup and Restore

- Perform a backup
- Backup and restore history
- Restore from backup
- Backup and restore job status

- Click **Services on Server** under **Topology and Services** to configure the SharePoint Services search.

Central Administration > Operations > Services on Server

Services on Server: CAMQAINETK3NSS1

Complete all steps below

Server: **CAMQAINETK3NSS1**

Start services in the table below:

Service	Comment	Status	Action
Central Administration		Started	Stop
Windows SharePoint Services Incoming E-Mail		Started	Stop
Windows SharePoint Services Search	Required on Farm, not running	Stopped	Start
Windows SharePoint Services Web Application		Started	Stop

When finished, return to the [Central Administration](#) home page

- Locate the **Windows SharePoint Services Search** option and click **Start**.

Central Administration

Welcome INETTEST2K3N\administrator

Central Administration

Home Operations Application Management Site Actions

Central Administration > Operations > Services on Server > Windows SharePoint Services Search Service Settings

Configure Windows SharePoint Services Search Service Settings on server CAMQAINETK3NSS1

Use this page to configure Windows SharePoint Services Search Service Settings.

Warning: this page is not encrypted for secure communication. User names, passwords, and any other information will be sent in clear text. For more information, contact your administrator.

Service Account

The search service will run using this account.

User name:

Password:

The search service account must not be a built-in account in order to access the database. Examples of built-in accounts are Local Service and Network Service.

Content Access Account

The search service will access all content using this account.

User name:

Password:

The account will be added to the Full Read policy, giving it read-only access to all content.

For proper search functionality and information security, do not use an administrator account, and do not use accounts that can modify content.

Search Database

Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.

Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.

Database Server:

Database Name:

Database authentication:

☒ Windows authentication (recommended)

☐ SQL authentication

Account:

Password:

Indexing Schedule

Configure the indexing Schedule.

Indexing schedule:

☒ Every Minutes

☐ Hourly between and minutes past the hour

☐ Daily

Between and

Start Cancel

- Configure the search service to include the Service account and Content Access account (use the same account information as your Vision Application Pool Identity).

6. Configure **Search Database** as shown and click **Start**. After a minute or so, the service's status changes to **Started**.

The screenshot shows the 'Services on Server' page in Central Administration. The breadcrumb trail is 'Central Administration > Operations > Services on Server'. The page title is 'Services on Server: CAMQAINETK3NSS1'. A message says 'Complete all steps below'. There is a dropdown for 'Server: CAMQAINETK3NSS1' and a checkbox 'Start services in the table below:'. A table lists services with their status and actions.

Service	Comment	Status	Action
Central Administration		Started	Stop
Windows SharePoint Services Help Search		Started	Stop
Windows SharePoint Services Incoming E-Mail		Started	Stop
Windows SharePoint Services Web Application		Started	Stop

Below the table, there is a checkbox 'When finished, return to the Central Administration home page'.

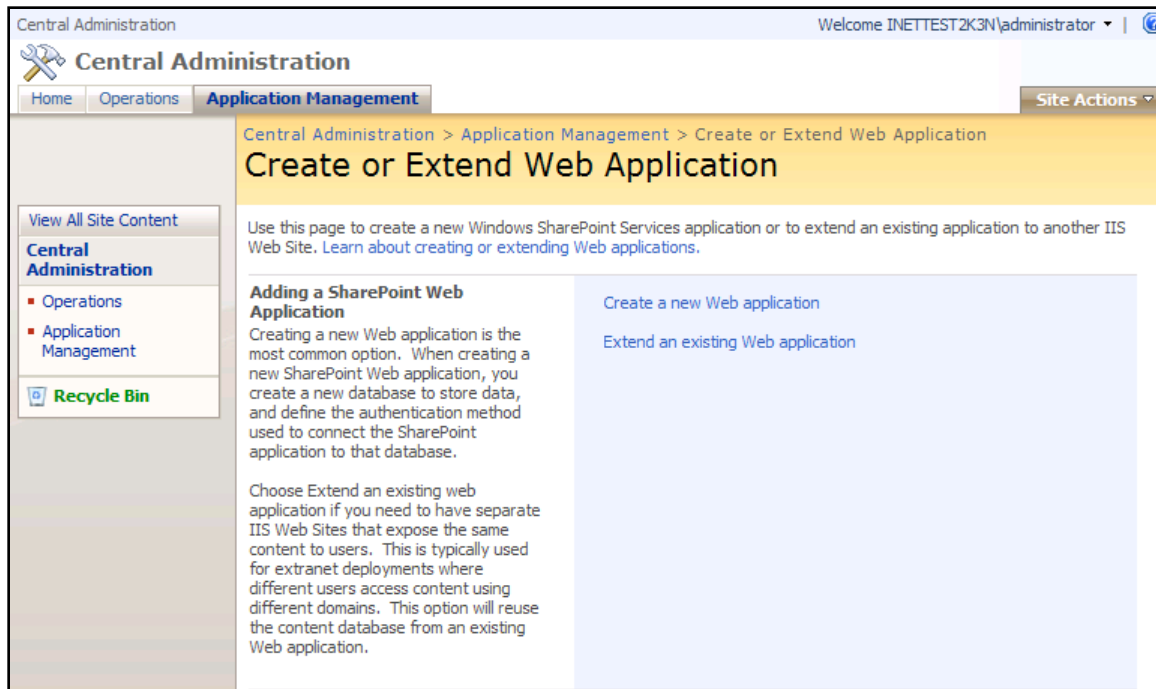
7. Click **Application Management** to configure the SharePoint Web Application.

The screenshot shows the 'Application Management' page in Central Administration. The breadcrumb trail is 'Central Administration > Application Management'. The page title is 'Application Management'. A message says 'This page contains links to pages that help you configure settings for applications and components that are installed on the server or server farm.' There are three main sections: 'SharePoint Web Application Management', 'SharePoint Site Management', and 'External Service Connections'.

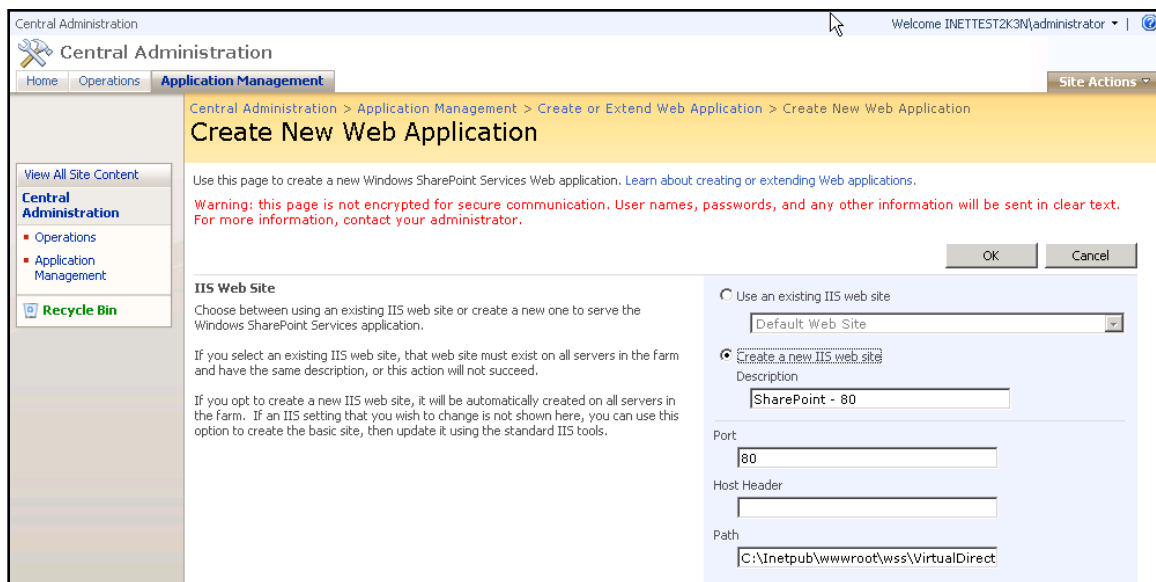
- SharePoint Web Application Management**
 - Create or extend Web application
 - Remove SharePoint from IIS Web site
 - Delete Web application
 - Define managed paths
 - Web application outgoing e-mail settings
 - Web application general settings
 - Content databases
 - Manage Web application features
 - Web application list
- SharePoint Site Management**
 - Create site collection
 - Delete site collection
 - Site use confirmation and deletion
 - Quota templates
 - Site collection quotas and locks
 - Site collection administrators
 - Site collection list
- External Service Connections**
 - Records center
 - HTML viewer
 - Document conversions

There is also an 'Application Security' section with a link to 'Security for Web Part pages'.

8. Select the **Create or extend Web application** option. The Create or Extend Web Application page displays.



9. Click **Create a new Web application**. The Create a New Web Application page displays.



10. Select the **Create a new IIS web site** option. Enter a description for the Web site and specify a port in **Port**.

Because WSS is installed on its own server, it can run on the Default Web Site and Port 80. To accomplish this, select the existing Web site (Default Web Site). Note the entry in **Path**, which by default is the root of your WSS Web site in a directory named after the port chosen under c:\inetpub\wwwroot\wss\virtualdirectories.

<p>Security Configuration</p> <p>Kerberos is the recommended security configuration to use with Integrated Windows authentication. Kerberos requires the application pool account to be Network Service or special configuration by the domain administrator. NTLM authentication will work with any application pool account and the default domain configuration.</p> <p>If you choose to use Secure Sockets Layer (SSL), you must add the certificate on each server using the IIS administration tools. Until this is done, the web application will be inaccessible from this IIS Web Site.</p>	<p>Authentication provider:</p> <p><input checked="" type="radio"/> Negotiate (Kerberos)</p> <p><input type="radio"/> NTLM</p> <p>Allow Anonymous:</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p> <p>Use Secure Sockets Layer (SSL):</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p>
<p>Load Balanced URL</p> <p>The load balanced URL is the domain name for all sites users will access in this SharePoint Web application. This URL domain will be used in all links shown on pages within the web application. By default, it is set to the current servername and port.</p>	<p>URL</p> <p><input type="text" value="http://CAMQAINETK3NSS1:80/"/></p> <p>Zone</p> <p><input type="text" value="Default"/></p>

11. Select **Negotiate (Kerberos)** under **Authentication provider**.
12. For the **Allow Anonymous** and **Use Secure Sockets Layer (SSL)** options, accept the default of **No**. If you want to use SSL with SharePoint, you can configure SSL later but you must not configure SSL to be required.

<p>Application Pool</p> <p>Choose the application pool to use for the new web application. This defines the account and credentials that will be used by this service.</p> <p>You can choose an existing application pool or create a new one.</p>	<p><input type="radio"/> Use existing application pool</p> <p><input type="text" value="DefaultAppPool (Network Service)"/></p> <p><input checked="" type="radio"/> Create new application pool</p> <p>Application pool name</p> <p><input type="text" value="SharePoint - 80"/></p> <p>Select a security account for this application pool</p> <p><input checked="" type="radio"/> Predefined</p> <p><input type="text" value="Network Service"/></p> <p><input type="radio"/> Configurable</p> <p>User name</p> <p><input type="text"/></p> <p>Password</p> <p><input type="text"/></p>
<p>Reset Internet Information Services</p> <p>Use this section to allow SharePoint to restart IIS on other farm servers. The local server must be restarted manually for the process to complete. If this option is not selected and you have more than one server in the farm, you must wait until the IIS web site is created on all servers, and then run "iisreset /noforce" on each Web server. The new IIS site will not be usable until that is completed.</p>	<p><input type="radio"/> Restart IIS Automatically</p> <p><input checked="" type="radio"/> Restart IIS Manually</p>

13. Select the **Create a new application pool** option and provide a name (Deltek recommends using the same name as the Web site). Note that if you are installing WSS to the Default Web Site, you can also choose to use the Default App Pool rather than creating a new application pool.
14. Select **Predefined** and **Network Service** for the security account to be used for the application pool.
15. Select the **Restart IIS Manually** option for **Reset Internet Information Services**.

Database Name and Authentication

Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.

Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.

Database Server
camqainetk3ndb2

Database Name
WSS_Content

Database authentication

☒ Windows authentication (recommended)

☐ SQL authentication

Account
Password

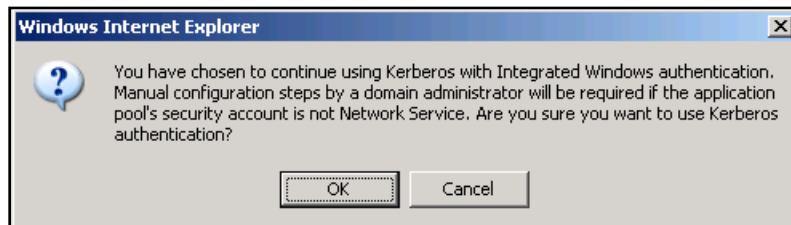
Search Server

You can choose to associate a content database with a specific server that is running the Windows SharePoint Services search service.

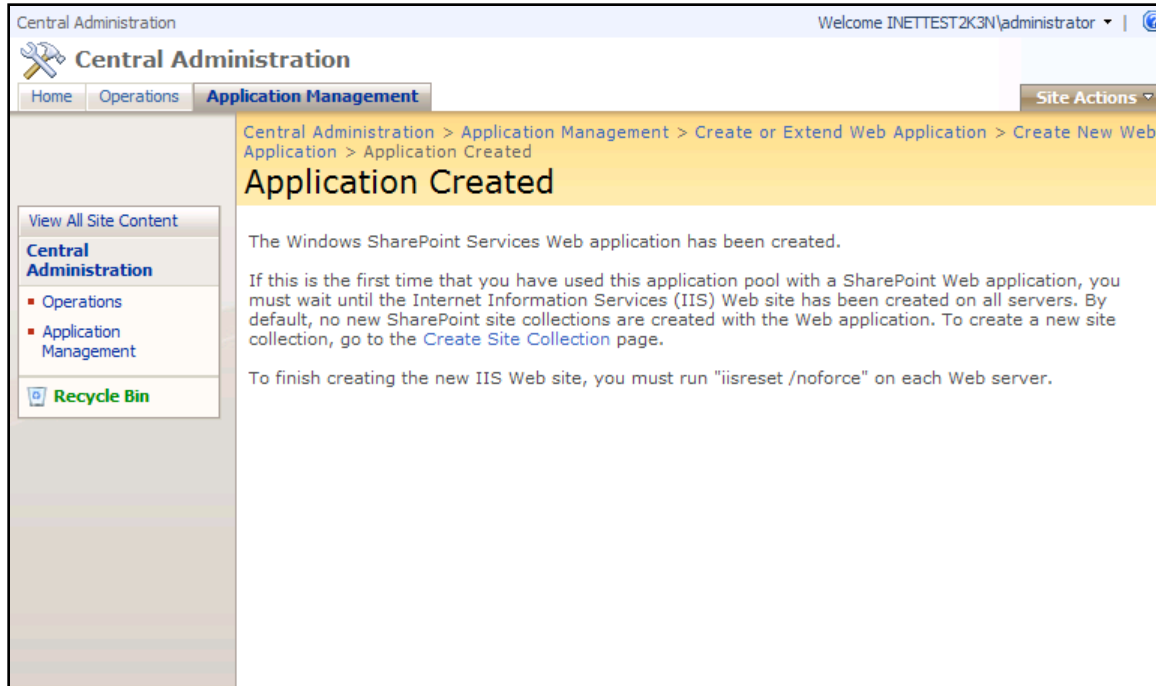
Select Windows SharePoint Services search server
CAMQAINETK3NSS1

OK Cancel

16. Verify the name of the server in **Database Server**. (It should be the same as that used for the SharePoint configuration database server.) Accept the default in **Database Name** for the content database.
17. Select **Windows authentication (recommended)** under **Database authentication**. (This will use the SharePoint service account and Vision Application Pool Identity configured previously.)
18. Select the search server in **Select Windows SharePoint Services search server** and click **OK**. The following dialog box displays.

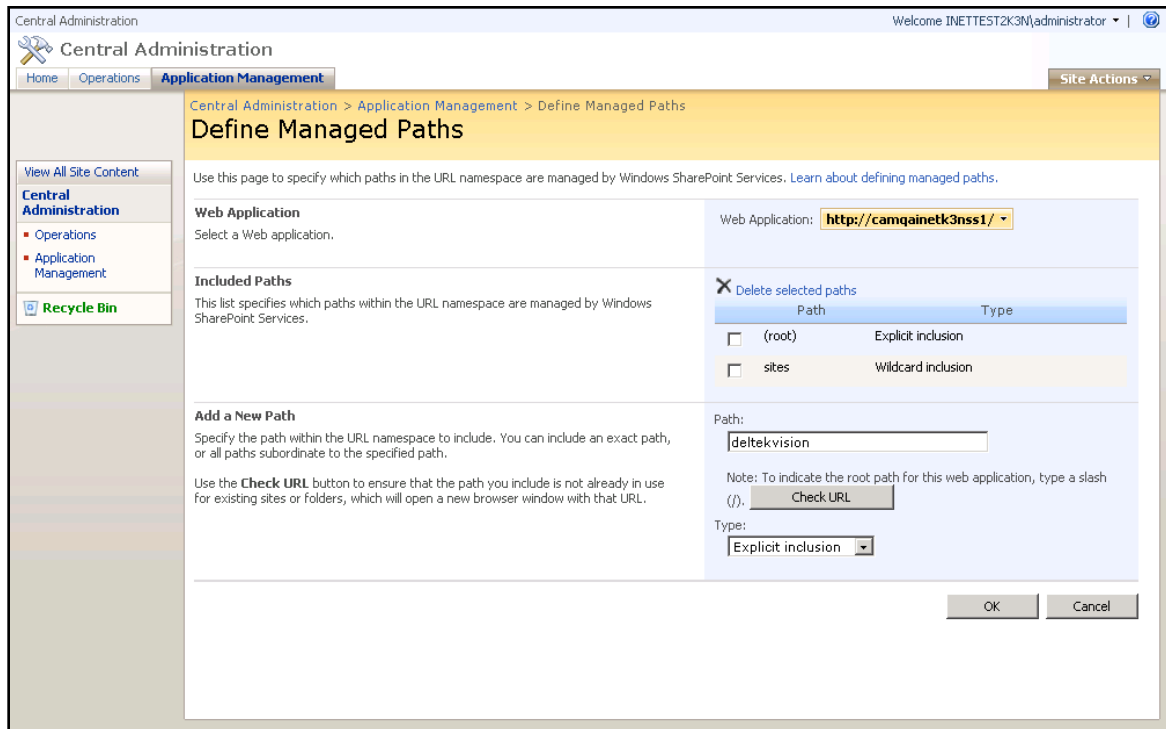


19. Click **OK** to use Kerberos for Windows Authentication. After a few minutes, the Application Created page displays. It indicates the status of the process to create a new Web application.



20. Do not click the **Create Site Collection** link at this time. It is still necessary to add DeltekVision as a managed path with explicit inclusion before you create the site collection.

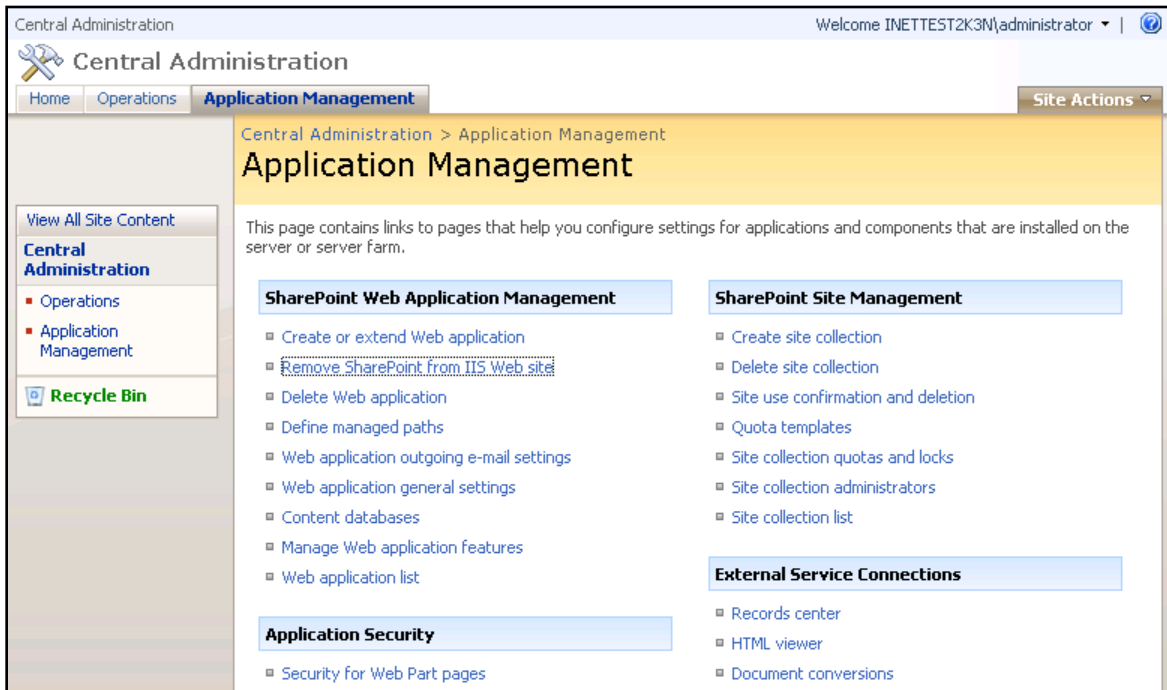
21. Click **Application Management** and select the **Define Managed Paths** option.



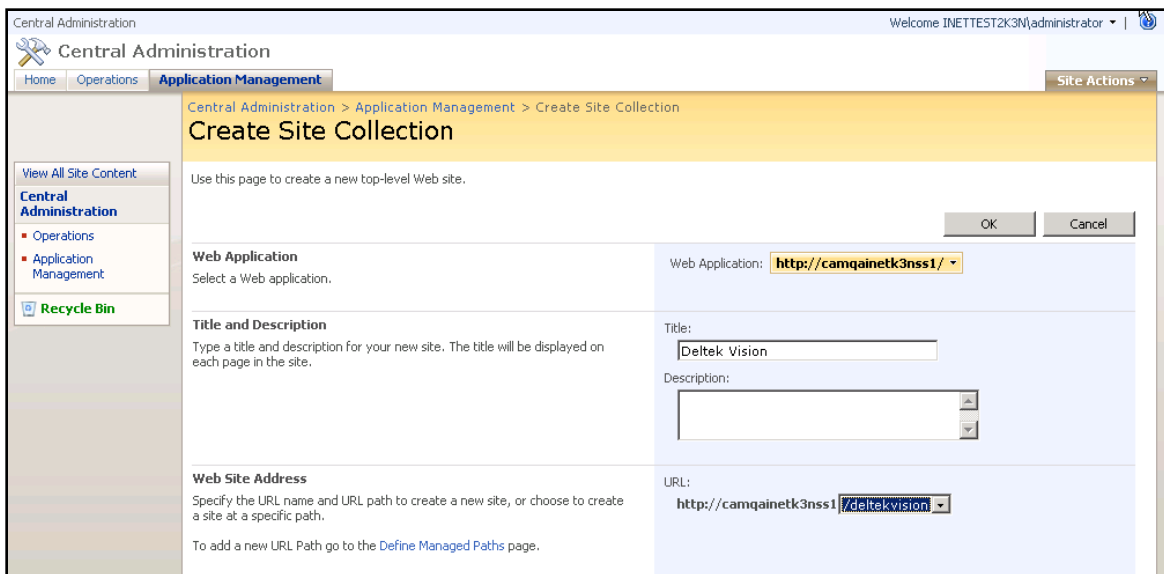
22. Enter **DeltekVision** in **Path** and select **Explicit inclusion** in **Type**.

23. Click **OK**.

24. Click **Application Management** and select the **Create site collection** option under **SharePoint Site Management**.



The Create Site Collection page displays.



25. Enter **Deltek Vision** in **Title** and enter a description, if appropriate.
26. From the **URL** drop-down list, select **/deltekvision**. This will be the top level root for Vision Document Management.

Template Selection

A site for teams to quickly organize, author, and share information. It provides a document library, and lists for managing announcements, calendar items, tasks, and discussions.

Primary Site Collection Administrator
Specify the administrator for this Web site collection.

Secondary Site Collection Administrator
Specify the secondary administrator for this Web site collection.

Quota Template
Select a predefined quota template to limit resources used for this site collection.
To add a new quota template, go to the [Manage Quota Templates](#) page.

Select a template:

Collaboration Meetings

Team Site
Blank Site
Document Workspace
Wiki Site
Blog

User name:
inettest2k3n\administrator

User name:
inettest2k3n\administrator

Select a quota template:
No Quota

Storage limit:
Number of invited users:

OK Cancel

27. Under **Select a template**, accept the default of **Team Site** for the template to be used and enter a username in each of the **User name** fields for the primary and secondary site collection administrators.

28. Select **No Quota** in **Select a quota template** and click **OK**. The Top-Level Site Successfully Created page displays.

Central Administration

Welcome INETTEST2K3N\administrator

Central Administration > Application Management > Create Site Collection > Top-Level Site Successfully Created

Top-Level Site Successfully Created

The new, empty top-level site was created successfully with the specified URL. If you have permission to view the Web site, you can do so in a new browser window by clicking the URL. To return to SharePoint Central Administration, click **OK**.

<http://camqaintk3nss1/deltekvision>

OK

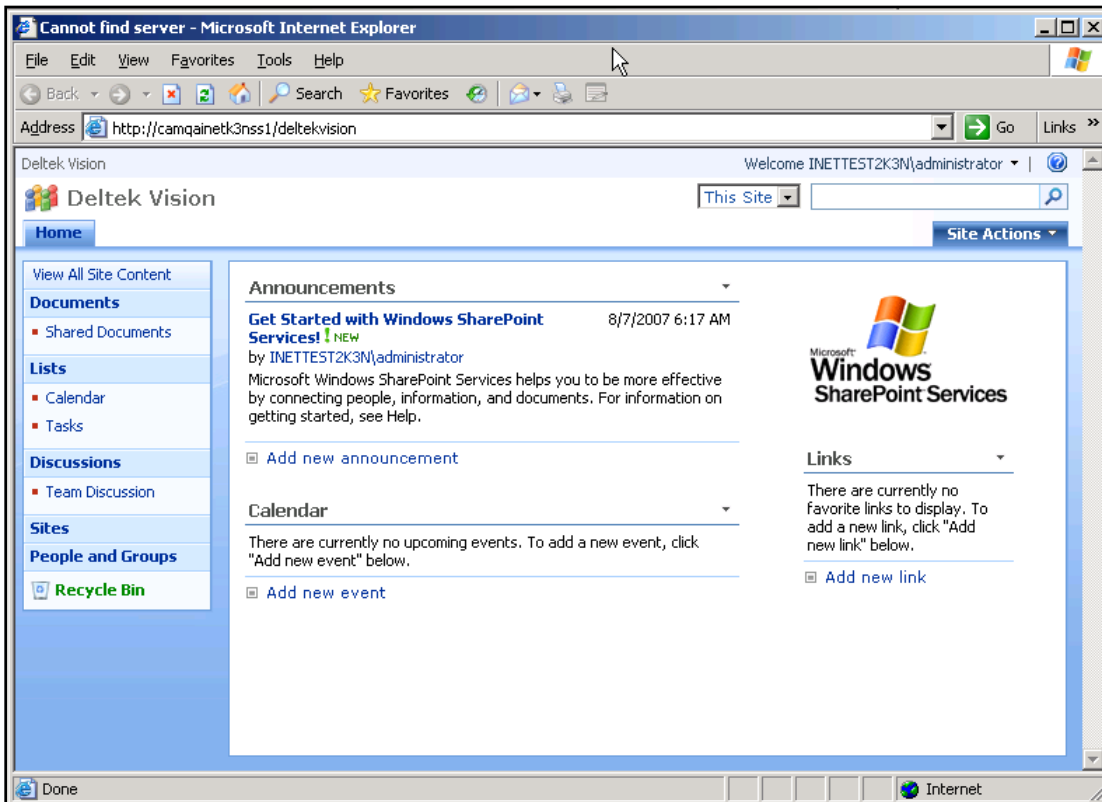
View All Site Content

Central Administration

- Operations
- Application Management
- Recycle Bin

29. Click **Start » Run**, enter **iisreset /noforce**, and click **Enter**.

30. Click the link for the top level site (in our example it is <http://camqainetk3nss1/deltekvision>) to display the site.



31. The SharePoint configuration is complete. Close SharePoint Central Administration.

Configure SharePoint for a Fully Qualified Domain Name (FQDN) URL (Optional)

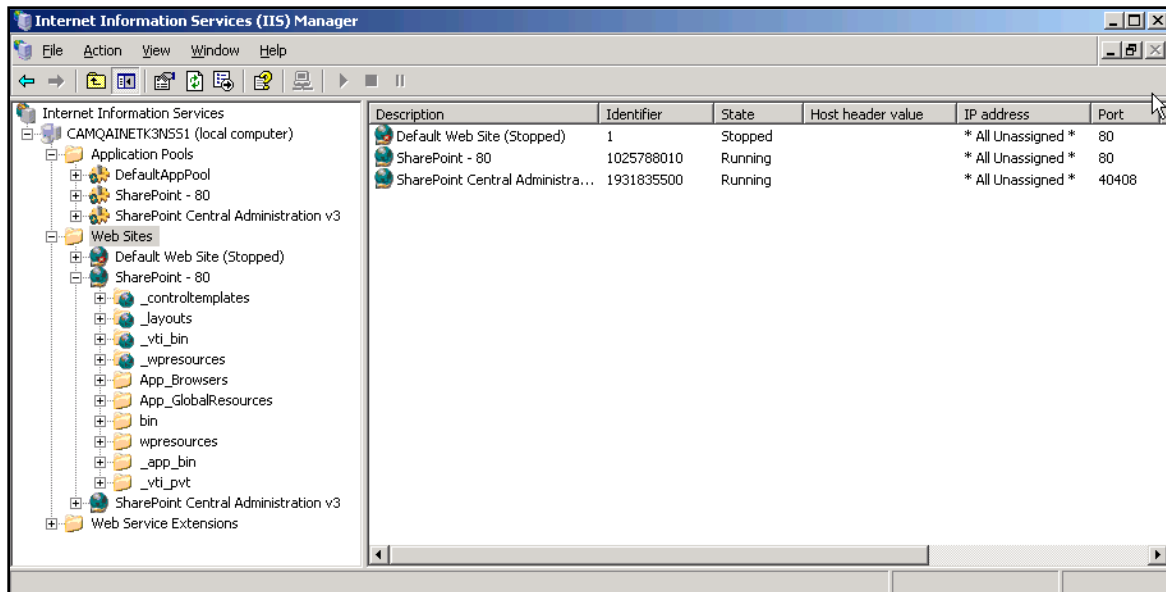
If you will be configuring your SharePoint server to use a custom DNS record for the URL you must create an additional SPN and also to create Alternate Access Mappings in SharePoint.

See “Appendix C: SPN Configuration When Using Custom DNS Records” on page 100 for more information.

Verify IIS Configuration and Configure Deltek Vision Document Management .NET Assembly

To verify IIS configuration, complete the following steps:

1. Use the directions that follow to open Internet Information Services to view these Web sites:
 - **Default Web Site** — Stopped.
 - **SharePoint – 80** — This is your WSS 3.0 Web site.
 - **SharePoint Central Administration Web Site**



2. Copy the Vision Document Management .NET assembly to SharePoint site directory.
3. Copy Deltek.Vision.WSS30.Server.dll from <Vision Installation Directory>\Support\DM\30 to:
c:\inetpub\wwwroot\bin (if WSS was installed to the default web site)
or to
c:\inetpub\wwwroot\wss\Virtual Directories\<site>\bin



By default, the <site> directory will reference the port chosen. In our example, the port is 80. If you extended WSS to the Default Web Site, the path will be c:\inetpub\wwwroot\bin.

Configure Document Management Service Account in Weblink

You must configure the Document Management service account (username/password) on the System Settings tab of the Deltek Vision Weblink utility. Follow the instructions below to configure this:

1. On the Vision Web server, launch Weblink from **Start » Programs » Deltek Vision**.
2. Enter the Weblink password when prompted.
3. Click the System Settings tab.
4. In the **Document Management** group box, enter your SharePoint username and password. This account is your SharePoint Service account/Deltek Vision Application Pool Identity.

Document Management

SharePoint Username:

SharePoint Password:

Configure Vision Document Management

To configure Vision Document Management, complete the following steps:

1. Log in to Vision using an account that has access to the Configuration menus.
2. Click **Configuration » General » System Settings** and select the Document Management tab.

General System Settings - Apple & Bartlett, PC - Period Ending 6/30/2005 - v6.0 (Limited Release 1)

Applications: Back Forward Dashboard Search Options Help

Applications: Calendar/Activities, Proposals, Planning, Billing, Transaction Center, Accounting, Human Resources, Time & Expense, Purchasing, Inventory, Reporting, Utilities, Configuration

General System Settings: Save Help

Lookups | Email | Servers | Labels | Numbering | Synchronization | **Document Management** | Audit Trail | Miscellaneous

☒ Enable Document Management

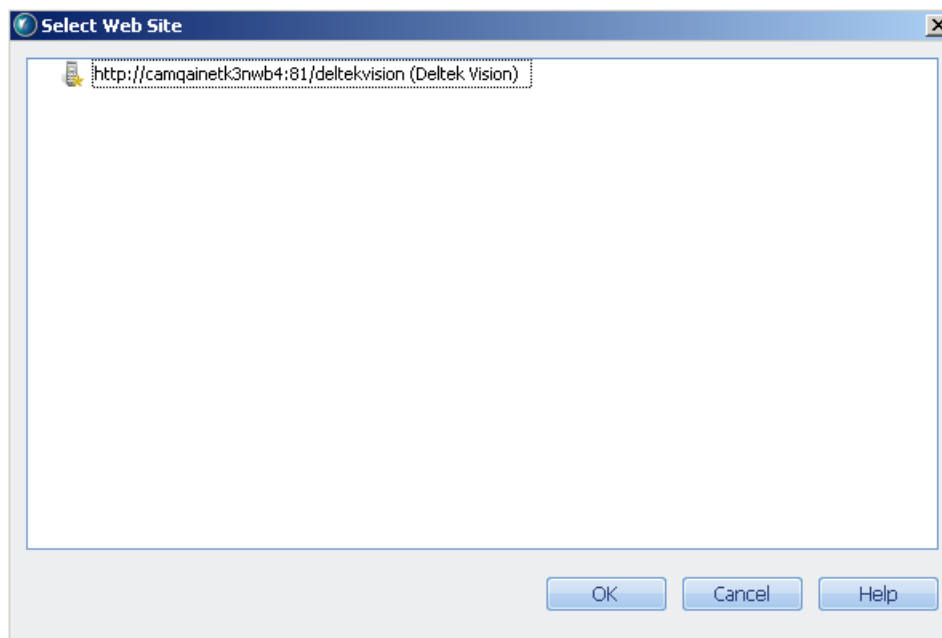
Server Name/IP: camqainetk3nwb4

Virtual Server Port: 81

Current Site: [Lookup Icon]

Test Site View Site New Site

3. Select the **Enable Document Management** check box.
4. Enter the name of the server hosting Document Management. This can be the NetBIOS name, server name FQDN, or custom DNS/FQDN. Enter this value without the protocol prefix (for example, remove the http://). In the illustration above, the value is **camqainetk3nwb4**.
5. Enter the **Virtual Server Port**. In the illustration above, the port is 81.
6. Click the Lookup icon to select the current site.



7. The Select Web Site dialog box displays the available sites. Select a site, and click **OK**.
8. Save your changes.

Configure Constrained Delegation

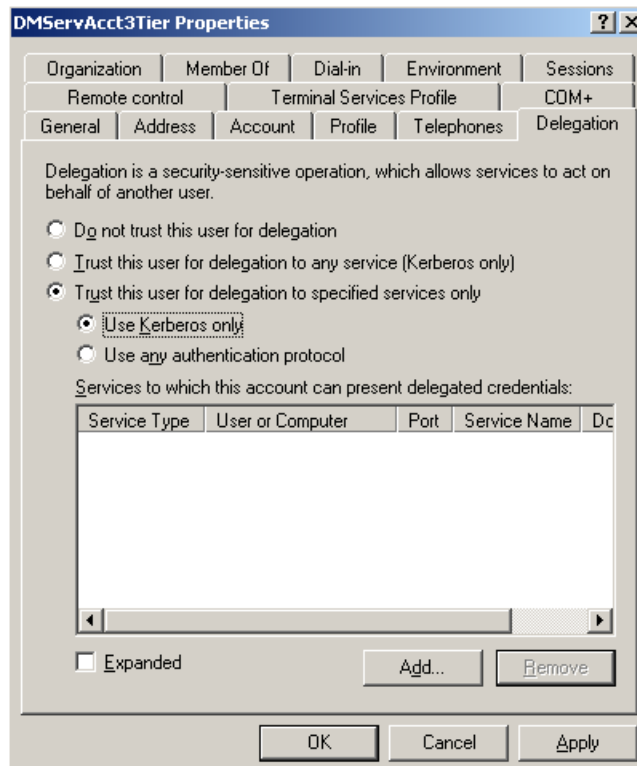
Because your WSS server is on a separate physical server and because the Vision Web server needs to pass the domain credentials of your Vision Document Management users on to the WSS server, you must configure Constrained Delegation.



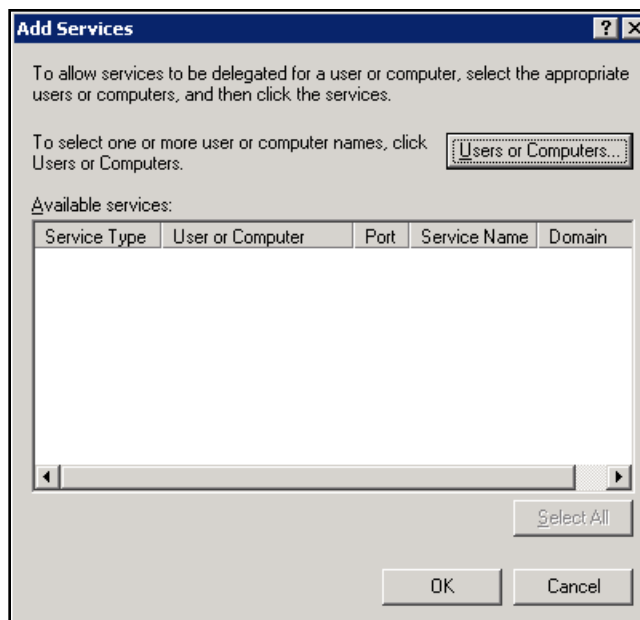
This assumes a non-Internet deployment of Vision Document Management using Kerberos authentication. If you are deploying Vision Document Management so that it is accessible over the Internet, you need to skip ahead to “Configure Protocol Transition” on page 86.

To configure Constrained Delegation, complete the following steps:

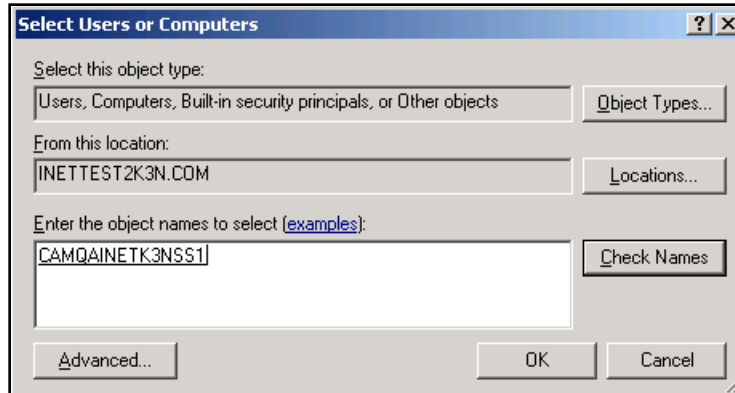
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (WSS Service account).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for delegation to specified services only** option.
5. Select the **Use Kerberos only** option.



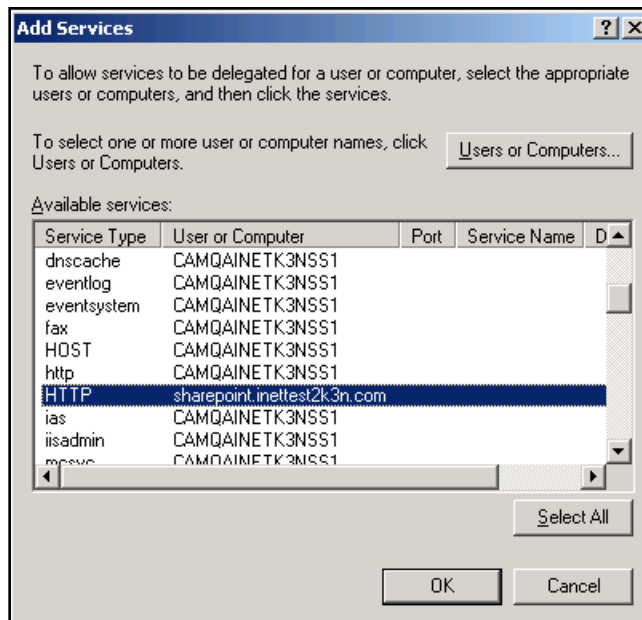
6. Click the **Add** button. The **Add Services** dialog box displays.



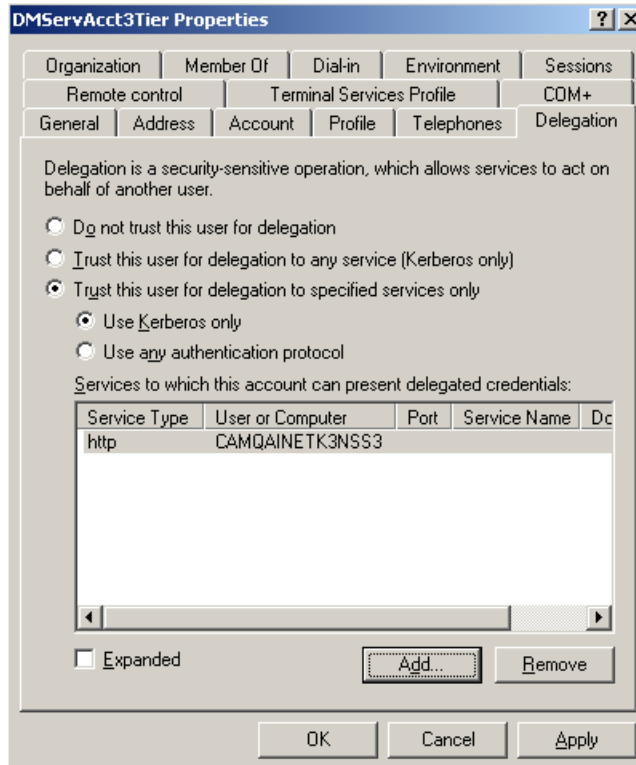
7. Click **Users or Computers**. The Select Users or Computers dialog box displays.



8. Locate the http service, select it, and click **OK**.



The Delegation tab should look like this:



Because we are explicitly specifying the http service and not all services on the SharePoint server, this is known as Constrained Delegation.

There are two http service types listed. These service types are known as Service Principal Names (SPNs). The SPN referencing CAMQAINETK3NSS1.inetest2k3n.com was created automatically when the server was added to the domain and the http service (IIS) was installed. The second SPN referencing sharepoint.inetest2k3n.com is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

Configure Protocol Transition

If Vision Document Management functionality is required over the Internet and you will be using a custom DNS/FQDN for the SharePoint URL (as in our example, vision1.inetest2k3n.com), then you need to configure a form of delegation referred to as Protocol Transition. If Document Management functionality is not required, you can skip this step.

The Kerberos authentication protocol must be used to authenticate from the Vision Web server to the SharePoint server. However, if Vision is deployed in an Internet scenario and there are users outside of the firewall who need to access Document Management features, Kerberos authentication cannot be used to authenticate the client to the Web server. This is because the client needs to have the ability to negotiate a Kerberos ticket with the Key Distribution Center (KDC), which is a service running on a Domain Controller. This requires port 88 to be opened inbound on the firewall to the Domain Controller, which is not an advisable configuration.

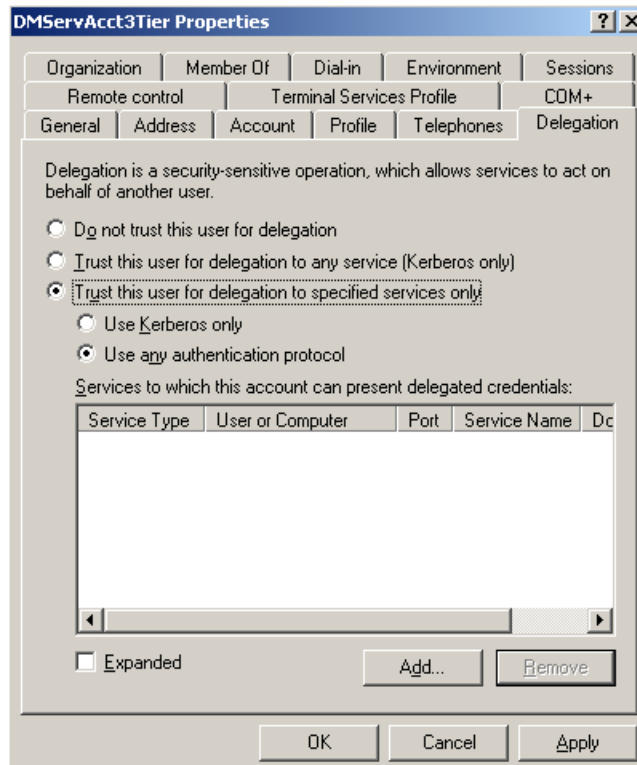
To get around this, you must be running a Native Windows Server 2003 functional domain.

Protocol Transition is configured by selecting the **Use any authentication protocol** option instead of the **Use Kerberos only** option, which is used to configure Constrained Delegation. This allows the client to authenticate to the Vision Web server using NTLM instead of Kerberos,

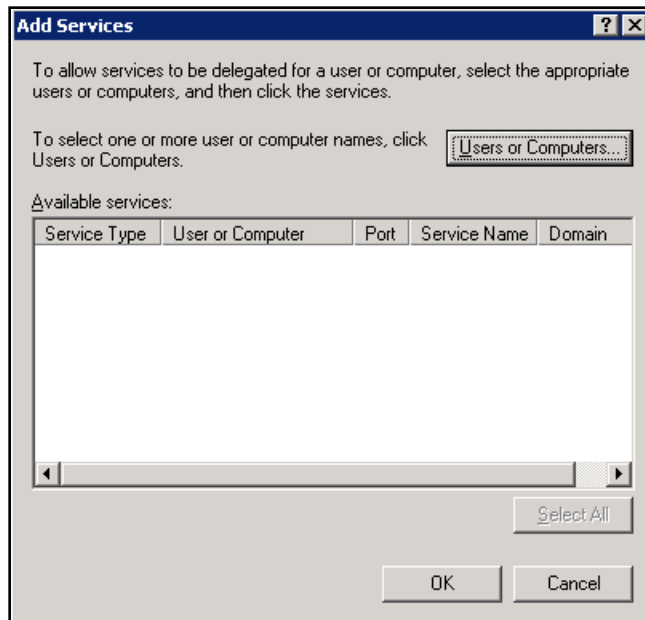
and that authentication is then “transitioned” over to Kerberos for Delegation to the SharePoint server.

To configure Protocol Transition, complete the following steps:

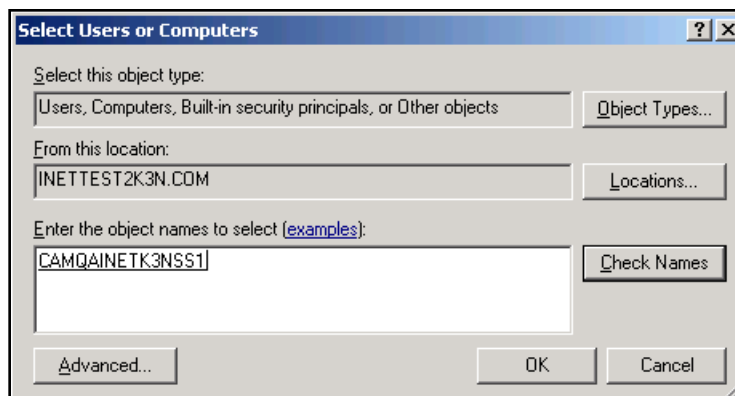
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (WSS Service account), which is most likely under the Computers Organizational Unit (OU).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for delegation to specified services only** option.
5. Select the **Use any authentication protocol** option.



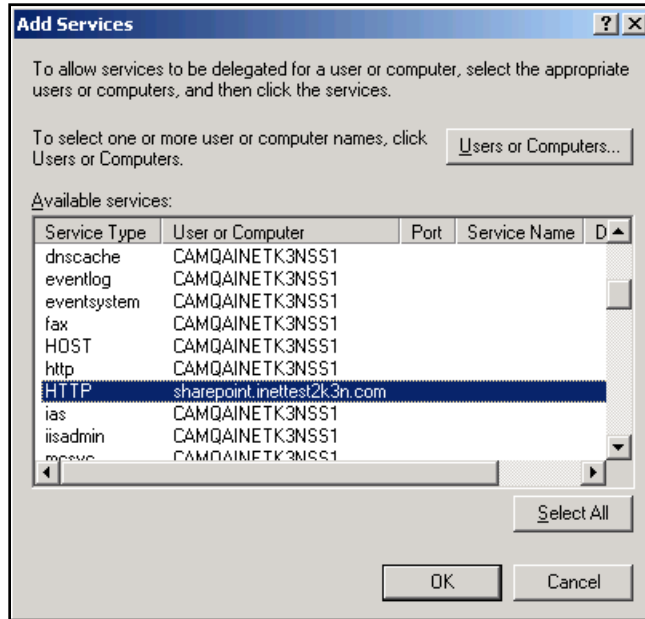
6. Click the **Add** button. The **Add Services** dialog box displays.



7. Click **Users or Computers**, search for the SharePoint server, and click **OK**.



8. Locate the http service for the SPN (FQDN) you created earlier (in our example, **sharepoint.inetest2k3n.com**), select it, and click **OK**.

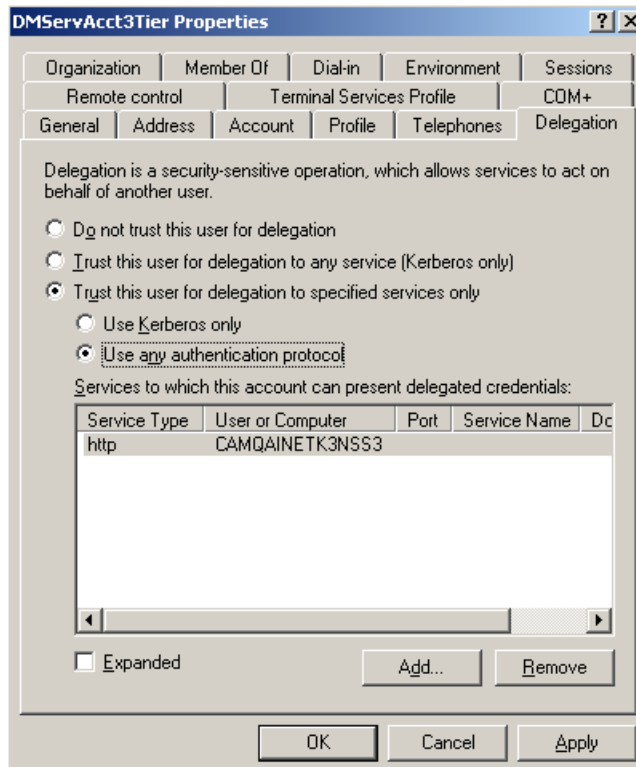


This illustration shows two http service types. Unless you have registered a custom FQDN using the setspn utility, only the server name displays. These service types are known as Service Principal Names (SPNs).

The SPN referencing **CAMQAINETK3NSS1.inettest2k3n.com** was created automatically when the server was added to the domain and the http service (IIS) was installed.

The second SPN referencing **sharepoint.inettest2k3n.com** is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

The Delegation tab should look like this:



Because you explicitly specified the http service and not all services on the SharePoint server and because you selected the **Use any authentication protocol** option and not Kerberos, this is known as Protocol Transition.

Multi-Tier—New Installation of Document Management 6.1 with MOSS 2007

The following instructions assume that Vision and MOSS 2007 exist on separate servers as Vision and MOSS 2007 are not supported on the same physical server. They also assume you are deploying to Windows Server 2003/IIS 6.0. If you will be deploying to Windows Server 2008/IIS 7.0 or Windows Server 2008 R2/IIS 7.5, refer to Appendix B for detailed configuration information

Prerequisites

- Install and configure MOSS 2007.
- Install/upgrade to Vision 6.1.
- Change the Application Pool Identity for the DeltekVisionAppPool to be a domain account. (The Vision 6.1 installation sets this to be the local DeltekVision account.) This account will also be the SharePoint (WSS) Service account. Add this user to the local Administrators group on the Vision server (and WSS server if running on a separate server).

Configure Vision Application Pool Identity to Be a Domain Account

You must change the Vision Application Pool Identity to be a domain account. (The default is for Vision to use a Local Administrator Account. The DeltekVision user is created during the Vision installation.) The reason for this change is that the local accounts are unable to read the SPN configured in Active Directory.

To change the Vision Application Pool Identity, complete the following steps:

1. Create a domain user account. No domain Admin rights are needed for this account.
2. Log on to the domain on the Vision Web/application server using an Administrator account.
3. Click **Start » All Programs » Administrative Tools » Internet Information Services**.
4. Expand **Application Pools**.
5. Right-click **DeltekVisionAppPool** and select **Properties** on the shortcut menu.
6. Click the Identity tab and change the account from DeltekVision to your domain\user account created in step 1. Make sure this account is a member of the Local Administrators and IIS_WPG local groups.

Configure SPN for Vision Application Pool Identity

As mentioned earlier in this document, it is necessary to create a Service Principal Name (SPN) for the domain user running the DeltekVisionAppPool.

To add the Application Pool Identity as a Service Principal Name, complete the following steps:

1. Enter the following commands on the domain server where setspn is installed:
setspn -A http/<Vision Web/App Server name> <domain app pool identity>
 For example: setspn -A http/camqainetk3nwb5 inettest2k3n\dmserveacct3tier
2. Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>



If your Vision Web server is accessed by a DNS / FQDN (Fully Qualified Domain Name) that *does not match* the name of the server (for example, if your Vision Web server is named Server01 and its DNS name is Server01.Company.com, but you have added a custom DNS value Vision.Company.com), you must also add an SPN for this custom DNS name.

Install and Configure Vision 6.1 Document Management and the MOSS 2007 Site Collection

When you install Vision 6.1 Document Management on your MOSS 2007 server, only the necessary components are installed. Post-installation configuration is necessary. The steps to configure MOSS 2007 are outlined below.

The Document Management installation performs the following:

- Installs Web Service Extensions (WSE) 2.0 Sp3.
- Changes the IIS metabase NTAuthenticationProviders element to be Negotiate,NTLM.
- Copies Document Management files to SharePoint ISAPI folder (c:\program files\common files\microsoft shared\web service extensions\12\isapi).
- Copies Document Management files to the Vision Support folder (\program files\deltek\vision\support\DM\30).
- Modifies the SharePoint Web.config file in the ISAPI directory to work with Vision Document Management.
- Installs Deltek.Vision.WSS30.Server.dll into the Global Assembly Cache (GAC).

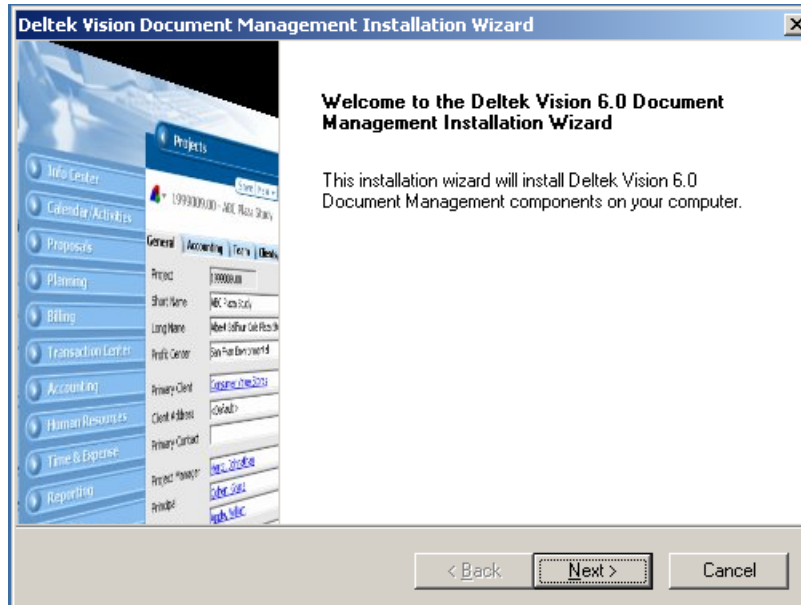
Install Vision 6.1 Document Management on the Vision Web Server

To install Vision 6.1 Document Management on the Vision Web server, complete the following steps:

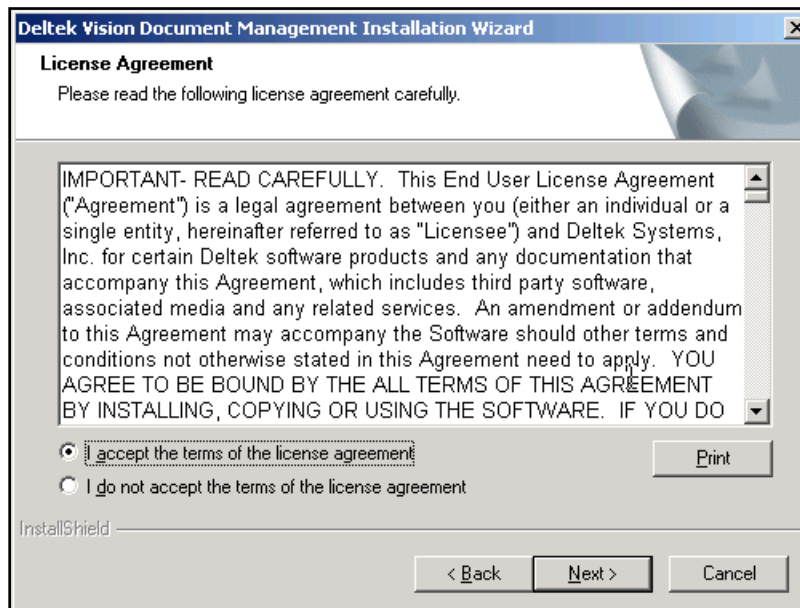
1. Run the setup on your Vision Web server. The following dialog box then indicates the IIS licensing requirements for the use of Windows Integrated Authentication (required to use Vision Document Management):



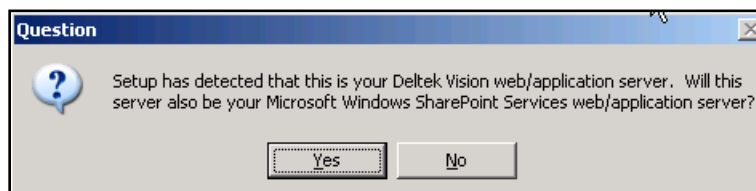
2. Click **OK**. The Welcome page displays.



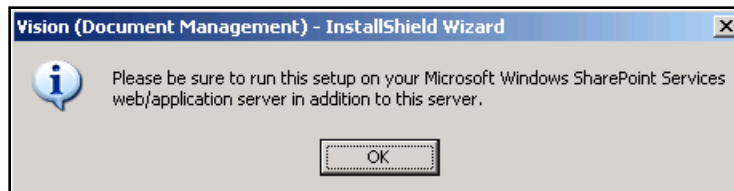
3. Click **Next**. The License Agreement page displays.



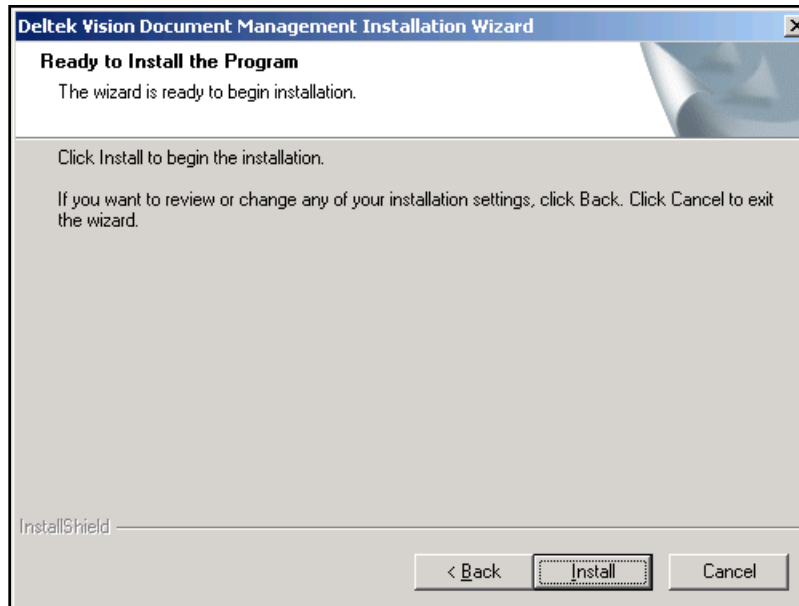
4. Click **I accept the terms of the license agreement** and click **Next**. The following dialog box displays.



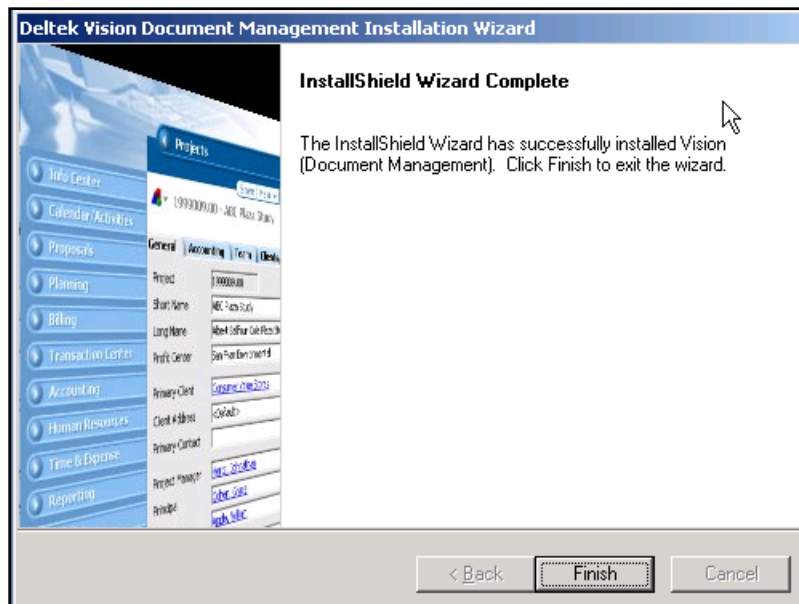
5. Click **No** because this is a multi-tier installation of Vision Document Management and your Vision Web server will not host WSS 3.0. The following dialog box displays to remind you to run the setup on the WSS server.



6. Click **OK** to display the Ready to Install the Program page.



7. Click **Install** to start the installation.
8. Click **Finish** when the installation is completed.



Install Vision Document Management on the MOSS 2007 Server

To install Vision Documentation Management on the MOSS 2007 server, complete the following steps:

1. Download DeltekVision61SP4DM.exe and run the setup on your MOSS 2007 server. The Welcome page displays.
2. Click **Next**. The License Agreement page displays.
3. Accept the license agreement and click **Next**. The Ready to Install page displays.
4. Click **Install** to start the installation.
5. Click **Finish** when the installation is completed.

Use SharePoint Central Administration to Complete the SharePoint Configuration

Complete the SharePoint configuration using SharePoint Central Administration. This section assumes that MOSS 2007 has already been installed and configured.

To complete the SharePoint configuration, complete the following steps:

1. In SharePoint Central Administration, click **Application Management** and select the **Define Managed Paths** option. This will create a specific URL for your Vision Document Management site collection (for example, http://MOSSServer/DeltekVision).

Central Administration

Welcome INETTEST2K3N\administrator

Central Administration > Application Management > Define Managed Paths

Define Managed Paths

Use this page to specify which paths in the URL namespace are managed by Windows SharePoint Services. [Learn about defining managed paths.](#)

Web Application
Select a Web application.

Web Application: **http://camqainetk3nss1/**

Included Paths
This list specifies which paths within the URL namespace are managed by Windows SharePoint Services.

Path	Type
<input type="checkbox"/> (root)	Explicit inclusion
<input type="checkbox"/> sites	Wildcard inclusion

Add a New Path
Specify the path within the URL namespace to include. You can include an exact path, or all paths subordinate to the specified path.

Use the **Check URL** button to ensure that the path you include is not already in use for existing sites or folders, which will open a new browser window with that URL.

Path:

Note: To indicate the root path for this web application, type a slash (/).

Type: **Explicit inclusion**

2. Enter **DeltekVision** in **Path** and select **Explicit inclusion** from the **Type** drop-down list.
3. Click **OK**.
4. Click **Application Management** and select the **Create site collection** option under **SharePoint Site Management**.



The Create Site Collection page displays.

The screenshot shows the 'Create Site Collection' page in the Central Administration interface. The top navigation bar includes 'Home', 'Operations', and 'Application Management'. The main heading is 'Create Site Collection'. Below this, a message states: 'Use this page to create a new top-level Web site.' The page is divided into three main sections: 'Web Application', 'Title and Description', and 'Web Site Address'. The 'Web Application' section has a 'Web Application' dropdown menu set to 'http://camqainetk3nss1/'. The 'Title and Description' section has a 'Title' text box containing 'Deltek Vision' and a 'Description' text box. The 'Web Site Address' section has a 'URL' dropdown menu set to 'http://camqainetk3nss1/deltekvision'. There are 'OK' and 'Cancel' buttons at the top right of the form.

5. Enter **Deltek Vision** in **Title** and enter a description, if appropriate.
6. From the **URL** drop-down list, select **/deltekvision**. This will be the top level root for Vision Document Management.

Template Selection

A site for teams to quickly organize, author, and share information. It provides a document library, and lists for managing announcements, calendar items, tasks, and discussions.

Primary Site Collection Administrator
Specify the administrator for this Web site collection.

Secondary Site Collection Administrator
Specify the secondary administrator for this Web site collection.

Quota Template
Select a predefined quota template to limit resources used for this site collection.
To add a new quota template, go to the [Manage Quota Templates](#) page.

Select a template:
Collaboration Meetings
Team Site
Blank Site
Document Workspace
Wiki Site
Blog

User name:
inettest2k3n\administrator

User name:
inettest2k3n\administrator

Select a quota template:
No Quota

Storage limit:
Number of invited users:

OK Cancel

7. Under **Select a template**, accept the default of **Team Site** for the template to be used and enter a username in each of the **User name** fields for the primary and secondary site collection administrators.
8. Select **No Quota** in **Select a quota template** and click **OK**. The Top-Level Site Successfully Created page displays.

Central Administration

Welcome INETTEST2K3N\administrator

Central Administration > Application Management > Create Site Collection > Top-Level Site Successfully Created

Top-Level Site Successfully Created

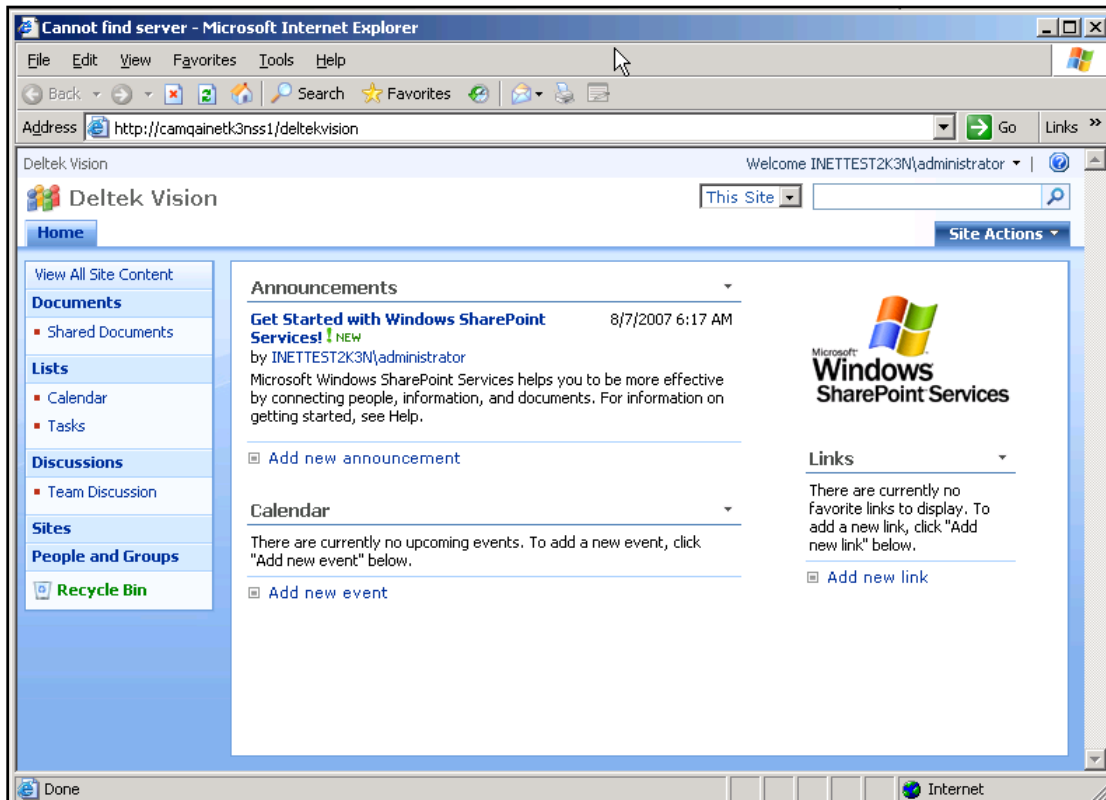
The new, empty top-level site was created successfully with the specified URL. If you have permission to view the Web site, you can do so in a new browser window by clicking the URL. To return to SharePoint Central Administration, click **OK**.

<http://camqainetk3nss1/deltekvision>

OK

9. Click **Start » Run**, enter **iisreset /noforce**, and click **Enter**.

10. Click the link for the top level site (in our example it is <http://camqainetk3nss1/deltekvision>) to display the site.



11. The SharePoint configuration is complete. Close SharePoint Central Administration.

Configure SharePoint for a Fully Qualified Domain Name (FQDN) URL (Optional)

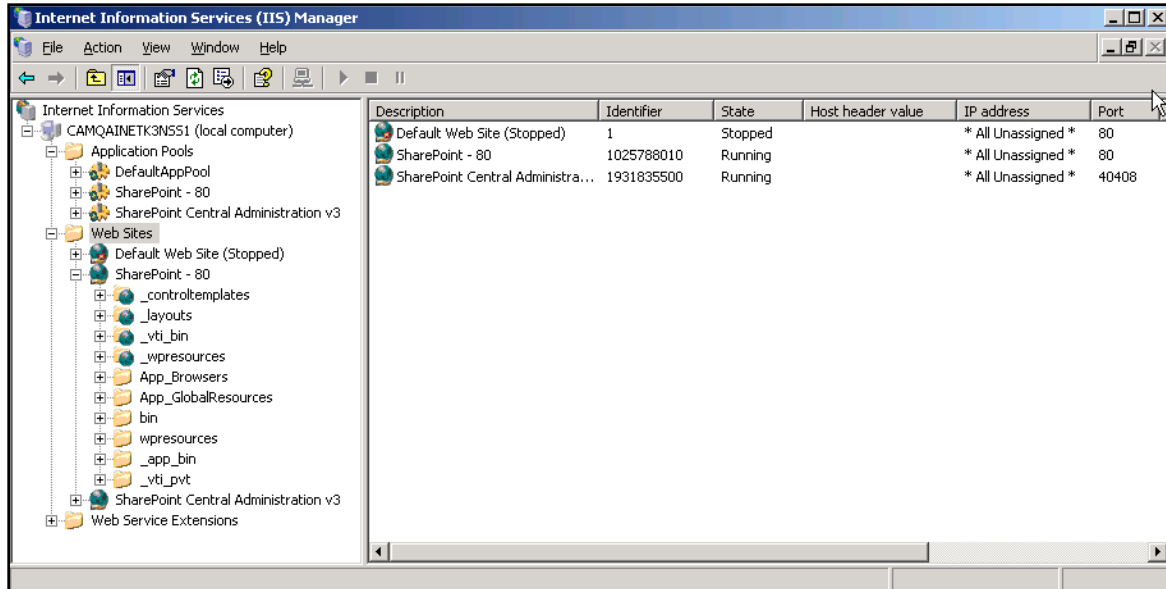
If you will be configuring your SharePoint server to use a custom DNS record for the URL you must create an additional SPN and also to create Alternate Access Mappings in SharePoint.

See “Appendix C: SPN Configuration When Using Custom DNS Records” on page 100 for more information.

Verify IIS Configuration and Configure Deltek Vision Document Management .NET Assembly

To verify IIS configuration, complete the following steps:

1. Use the directions that follow to open Internet Information Services to view these Web sites:
 - **Default Web Site** — Stopped.
 - **SharePoint – 80** — This is your MOSS 2007 Web site.
 - **SharePoint Central Administration Web Site**



2. Copy Vision Document Management .NET assembly to the SharePoint site directory.
3. Copy Deltek.Vision.WSS30.Server.dll from <Vision Installation Directory>\Support\DM\30 to:
c:\inetpub\wwwroot\bin (if WSS was installed to the default web site)
or to
c:\inetpub\wwwroot\wss\Virtual Directories\<site>\bin



By default, the <site> directory will reference the port chosen. In our example, the port is 80. If you extended WSS to the Default Web Site, the path will be c:\inetpub\wwwroot\bin.

Configure Document Management Service Account in Weblink

You must configure the Document Management service account (username/password) on the System Settings tab of the Deltek Vision Weblink utility. Follow the instructions below to configure this:

1. On the Vision Web server, launch Weblink from **Start » Programs » Deltek Vision**.
2. Enter the Weblink password when prompted.
3. Click the System Settings tab.
4. In the **Document Management** group box, enter your SharePoint username and password. This account is your SharePoint Service account/Deltek Vision Application Pool Identity.

Document Management

SharePoint Username:

SharePoint Password:

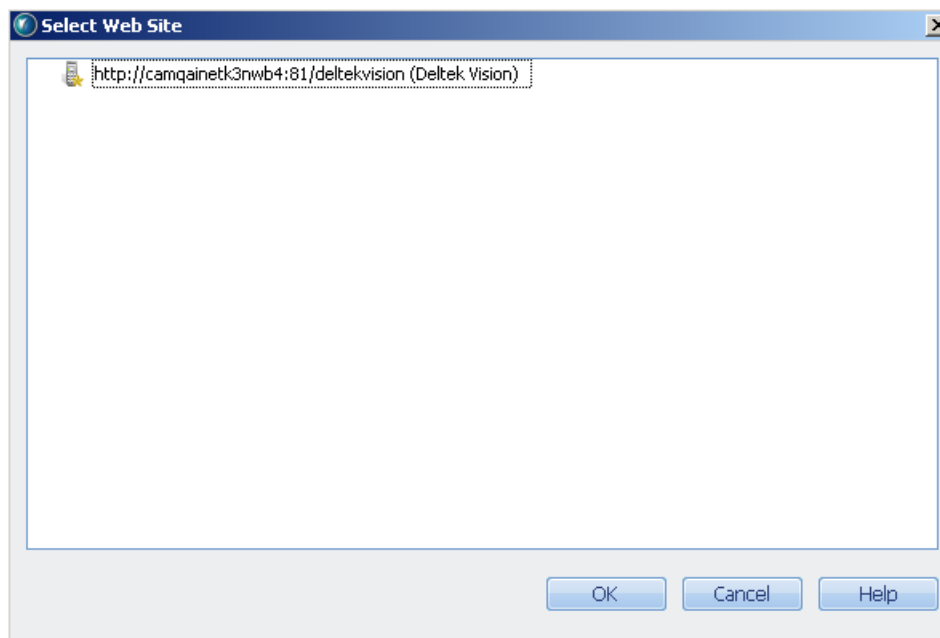
Configure Vision Document Management

To configure Vision Document Management, complete the following steps:

1. Log in to Vision using an account that has access to the Configuration menus.
2. Click **Configuration » General » System Settings** and select the Document Management tab.

The screenshot shows the 'General System Settings' window for 'Apple & Bartlett, PC - Period Ending 6/30/2005 - v6.0 (Limited Release 1)'. The left sidebar lists various applications, with 'Configuration' expanded to show 'General' and 'System Settings'. The main area displays the 'Document Management' tab, which includes a 'Save' button and a 'Help' icon. Below the tabs, the 'Enable Document Management' checkbox is checked. The 'Server Name/IP' field contains 'camqainetk3nwb4', the 'Virtual Server Port' is set to '81', and the 'Current Site' field is empty with a lookup icon. At the bottom, there are buttons for 'Test Site', 'View Site', and 'New Site'.

3. Select the **Enable Document Management** option.
4. Enter the name of the server hosting document management. This can be the NetBIOS name, server name FQDN, or custom DNS/FQDN. Enter this value without the protocol prefix (for example, remove the http://). In the illustration above, the value is **camqainetk3nwb4**.
5. Enter the **Virtual Server Port**. In our example the port is 81.
6. Click the Lookup icon to select the current site.



7. The Select Web Site dialog box displays the available sites. Select a site, and click **OK**.
8. Save your changes.

Configure Constrained Delegation

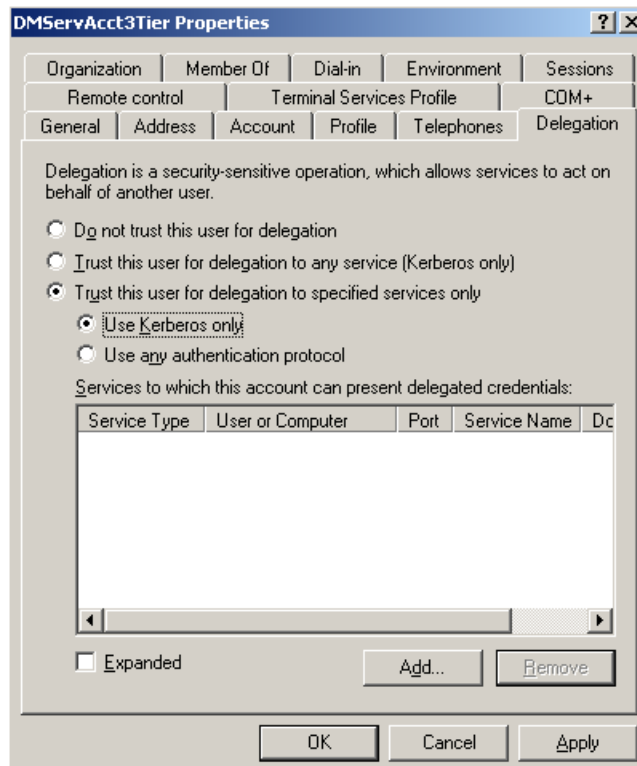
Because your WSS server is on a separate physical server and because the Vision Web server needs to pass the domain credentials of your Vision Document Management users on to the WSS server, you must configure Constrained Delegation.



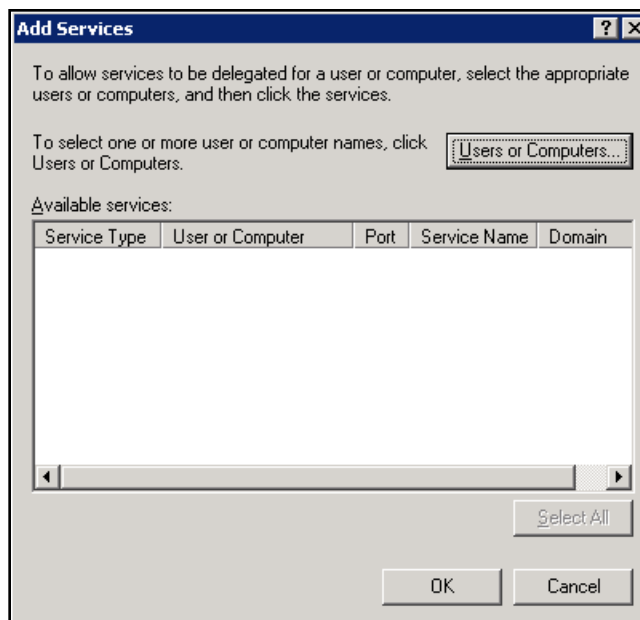
This assumes a non-Internet deployment of Vision Document Management using Kerberos authentication. If you are deploying Vision Document Management so that it is accessible over the Internet, you need to skip ahead to “Configure Protocol Transition” on page 86.

To configure Constrained Delegation, complete the following steps:

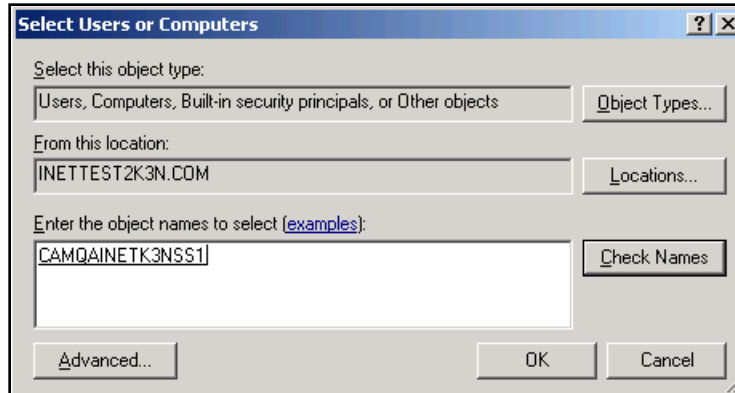
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (MOSS Service account), which is most likely under the Computers Organizational Unit (OU).
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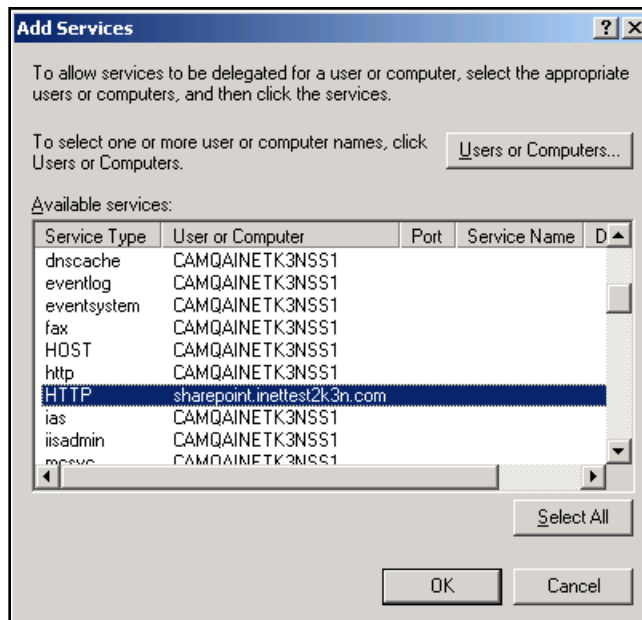
6. Click the **Add** button. The **Add Services** dialog box displays.



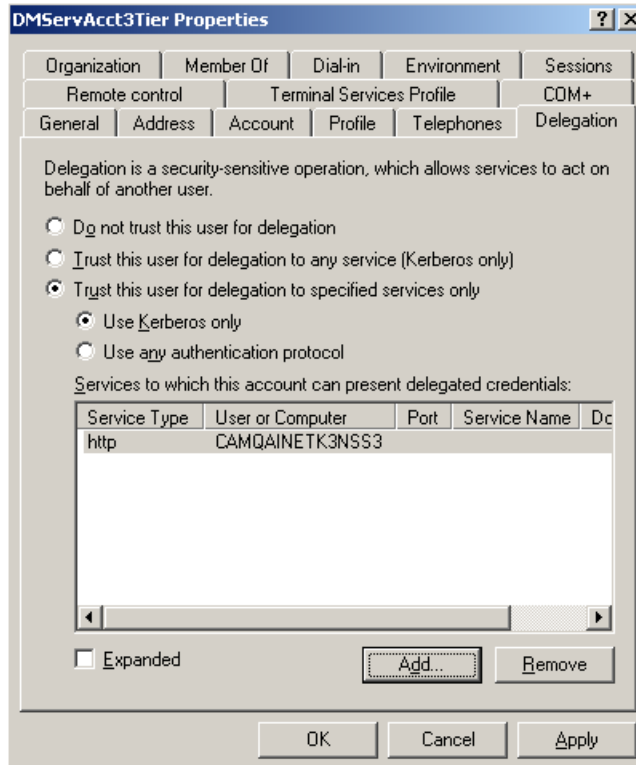
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8. Locate the http service, select it, and click **OK**.



9. The Delegation tab should look like this:



Because we are explicitly specifying the http service and not all services on the SharePoint server, this is known as Constrained Delegation.

There are two http service types listed. These service types are known as Service Principal Names (SPNs). The SPN referencing CAMQAINETK3NSS1.inetest2k3n.com was created automatically when the server was added to the domain and the http service (IIS) was installed. The second SPN referencing sharepoint.inetest2k3n.com is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

Configure Protocol Transition

If Vision Document Management functionality is required over the Internet and you will be using a custom DNS/FQDN for the SharePoint URL (as in our example, vision1.inetest2k3n.com), then you need to configure a form of delegation referred to as Protocol Transition. If Document Management functionality is not required, you can skip this step.

The Kerberos authentication protocol must be used to authenticate from the Vision Web server to the SharePoint server. However, if Vision is deployed in an Internet scenario and there are users outside of the firewall who need to access Document Management features, Kerberos authentication cannot be used to authenticate the client to the Web server. This is because the client needs to have the ability to negotiate a Kerberos ticket with the Key Distribution Center (KDC), which is a service running on a Domain Controller. This requires port 88 to be opened inbound on the firewall to the Domain Controller, which is not an advisable configuration.

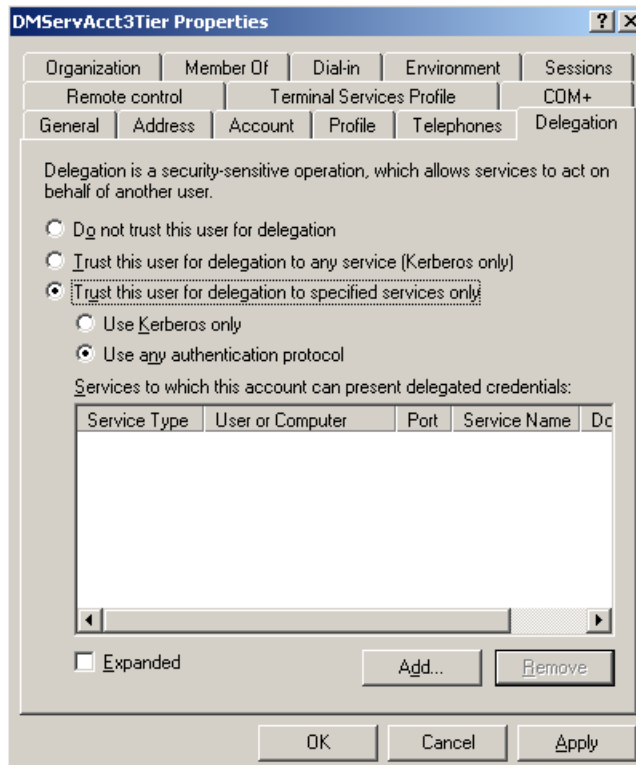
To get around this, you must be running a Native Windows Server 2003 functional domain.

Protocol Transition is configured by selecting the **Use any authentication protocol** option instead of the **Use Kerberos only** option, which is used to configure Constrained Delegation. This allows the client to authenticate to the Vision Web server using NTLM instead of Kerberos,

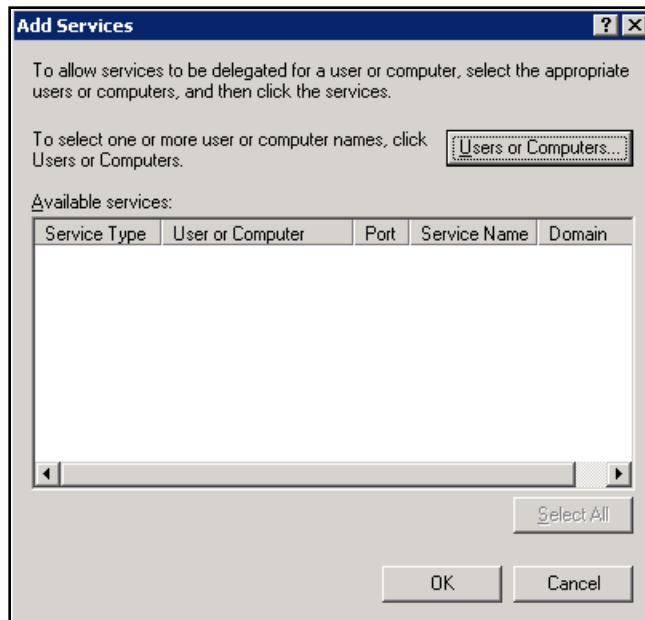
and that authentication is then “transitioned” over to Kerberos for Delegation to the SharePoint server.

To configure Protocol Transition, complete the following steps:

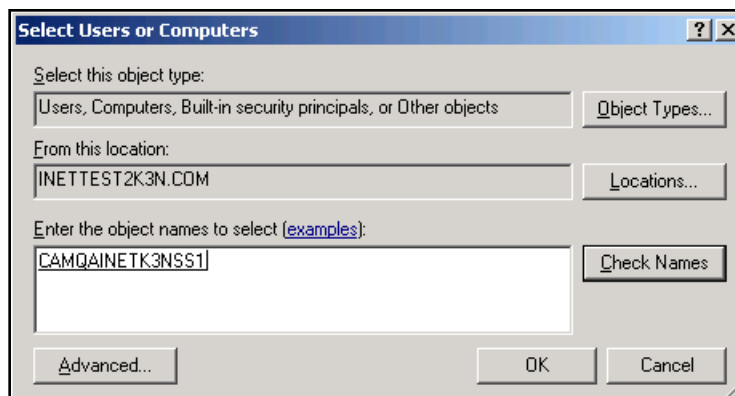
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (MOSS Service account), which is most likely under the Computers Organizational Unit (OU).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for Delegation to specified services only** option.
5. Select the **Use any authentication protocol** option.



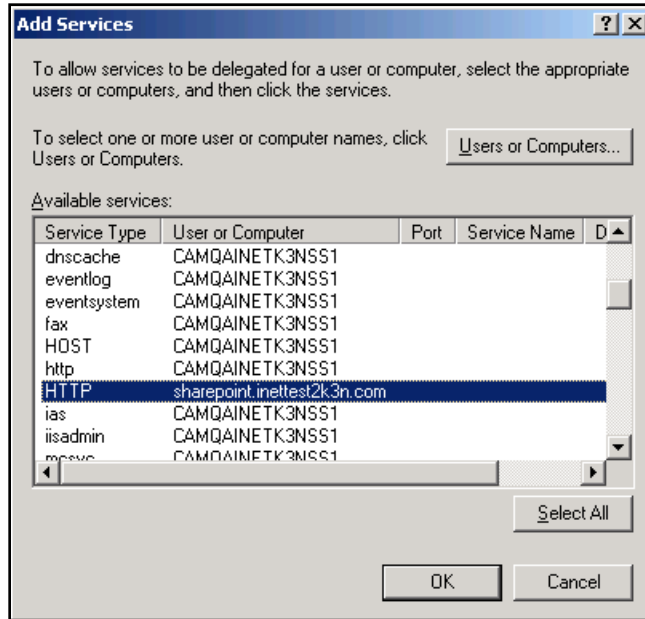
6. Click the **Add** button. The **Add Services** dialog box displays.



7. Click **Users or Computers**, search for the SharePoint server, and click **OK**.



8. Locate the http service for the SPN (FQDN) you created earlier (in our example, **sharepoint.inettest2k3n.com**) select it, and click **OK**.

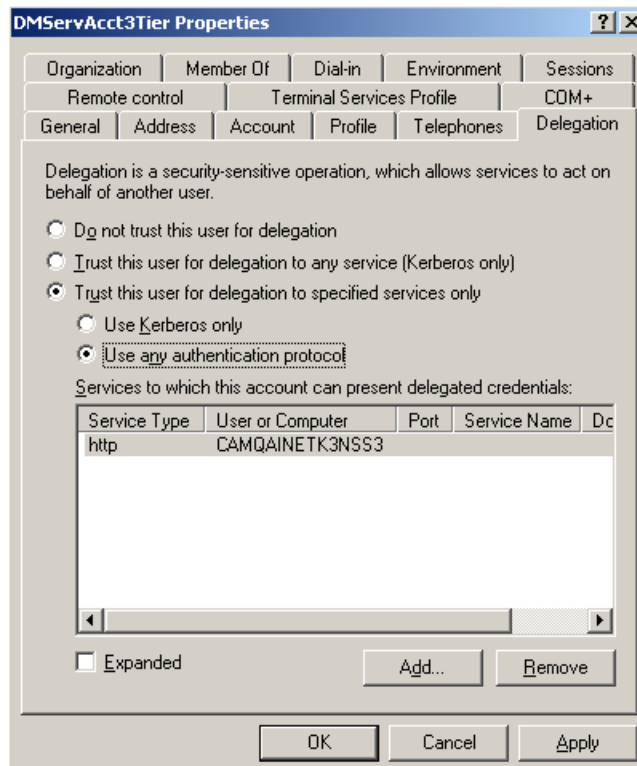


This illustration shows two http service types. Unless you have registered a custom FQDN using the setspn utility, only the server name displays. These service types are known as Service Principal Names (SPNs).

The SPN referencing **CAMQAINETK3NSS1.inettest2k3n.com** was created automatically when the server was added to the domain and the http service (IIS) was installed.

The second SPN referencing **sharepoint.inettest2k3n.com** is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

The Delegation tab should look like this:



Because we are explicitly specifying the http service and not all services on the SharePoint server and because we are using the **Use any authentication protocol** option and not Kerberos, this is known as Protocol Transition.

Appendix A: Active Directory Domain Functional Level

Directory Functional Levels

There are three possible active directory functional levels:

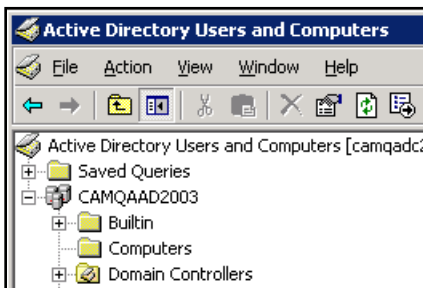
- **Windows 2000 Native** — All domain controllers are Windows 2000
- **Windows 2000 Mixed** — Server 2003 domain with support for Windows 2000 domain controllers
- **Windows Server 2003** — “Native” where all domain controllers are Server 2003

However, only one of these is supported for Vision 6.1 Document Management.

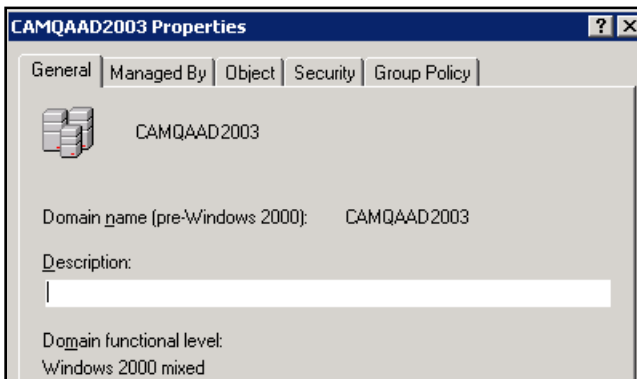
The domain configuration for the first two is effectively the same as far as Document Management is concerned and are not supported for Vision 6.1 Document Management because your only option is to configure what is called Unconstrained Delegation. The third domain can be configured for Unconstrained Delegation; however, Constrained Delegation is much more secure. Another benefit of a native Server 2003 domain is that it supports Protocol Transition, which is necessary to support Internet deployments of Vision where Document Management functionality is required.

Identify the Domain Functional Level

You can check the functional level of the domain by opening the Active Directory Users and Computers tool on the Domain Controller:



Right-click the domain, and select **Properties**.



You may need to raise the domain functional level to that supported by Vision 6.1 Document Management. If so, follow the steps outlined in the next section: “How to Raise the Domain Functional Level.”

How to Raise the Domain Functional Level

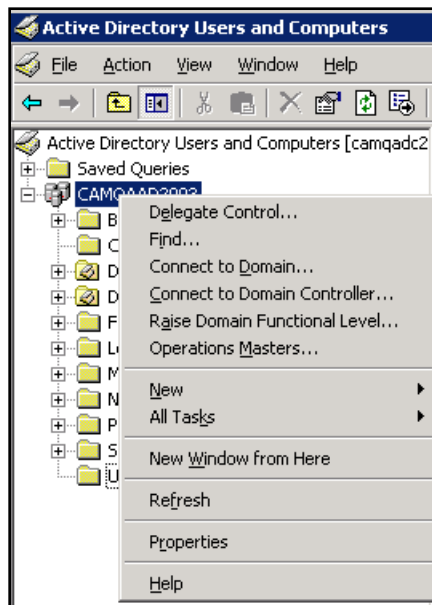


This operation cannot be reversed.

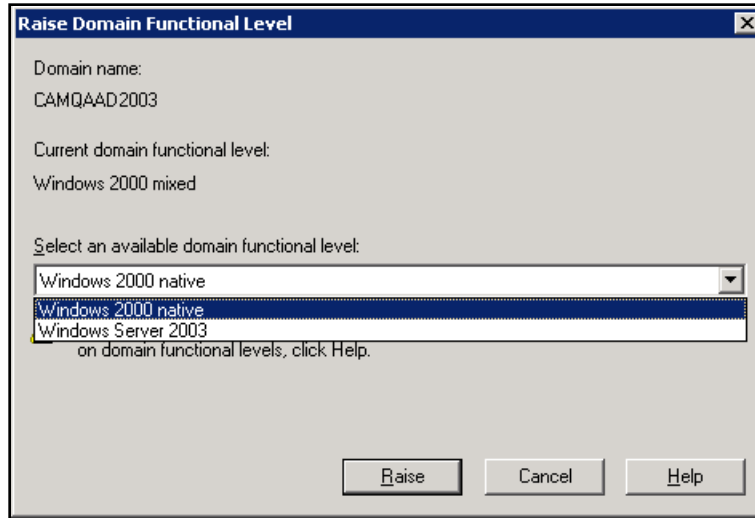
To raise the domain functional level, all Domain Controllers in the domain must be running Windows Server 2003. Also, this action cannot be reversed, so be sure that you want to raise the domain function level before you proceed.

To raise the domain functional level, complete the following steps:

1. Open the Active Directory Users and Computers MMC on your Domain Controller.
2. Right-click the domain, and select **Raise Domain Functional Level** on the shortcut menu.



3. Select **Windows Server 2003** from the **Select an available domain functional level** drop-down list, and click the **Raise** button.



Appendix B: Installing Vision 6.1 Document Management on Windows Server 2008/IIS 7.0 and Windows Server 2008 R2/IIS 7.5

The information in this appendix applies only if you are installing Vision 6.1 Document Management in a Windows Server 2008/IIS 7.0 and Windows Server 2008 R2/IIS 7.5 environment.

Prerequisite Information

If you will install Vision 6.1 Document Management on Windows Server 2008/IIS 7.0 or Windows Server 2008 R2/IIS 7.5, note the following:

- The IIS role configuration must include the following IIS role service (in addition to those required for Deltek Vision): IIS 6.0 Metabase compatibility
- WSS 3.0 requires .NET 3.0, which is bundled with the operating system and can be installed by choosing .NET Framework 3.0 under **Feature setup** in Server Manager.
- The Managed Pipeline mode for the IIS 7.0 Application Pool for the WSS Web Application must be Classic (not Integrated Pipeline mode) if you choose to create a new Application Pool during the creation of the WSS Web application.
- If you will install WSS 3.0 on the same server as your Vision Web/application server, the WSS Web application must be created in its own Web site. Vision Document Management will not function properly if WSS and Vision exist on the same Web site.
- In a multi-tier installation of Vision Document Management using IIS 7.0 for the Vision Web/application server, the default configuration of Windows Integrated Authentication (which enables Kernel Mode Authentication) will not work because when you use Kernel Mode Authentication the Application Pool Identity is effectively ignored. Because Vision requires that this account be used for delegation, you must either disable Kernel Mode Authentication or configure the application pool to explicitly use the Application Pool Identity by modifying the ApplicationHost.config file. Information on the different configuration options are outlined later in this appendix.

Configure Vision Application Pool Identity to Be a Domain Account

You must change the Vision Application Pool Identity to be a domain account. The default is for Vision to use a local DeltekVision user created during the Vision installation. This change is necessary because of the local account's inability to read the SPN configured in Active Directory.

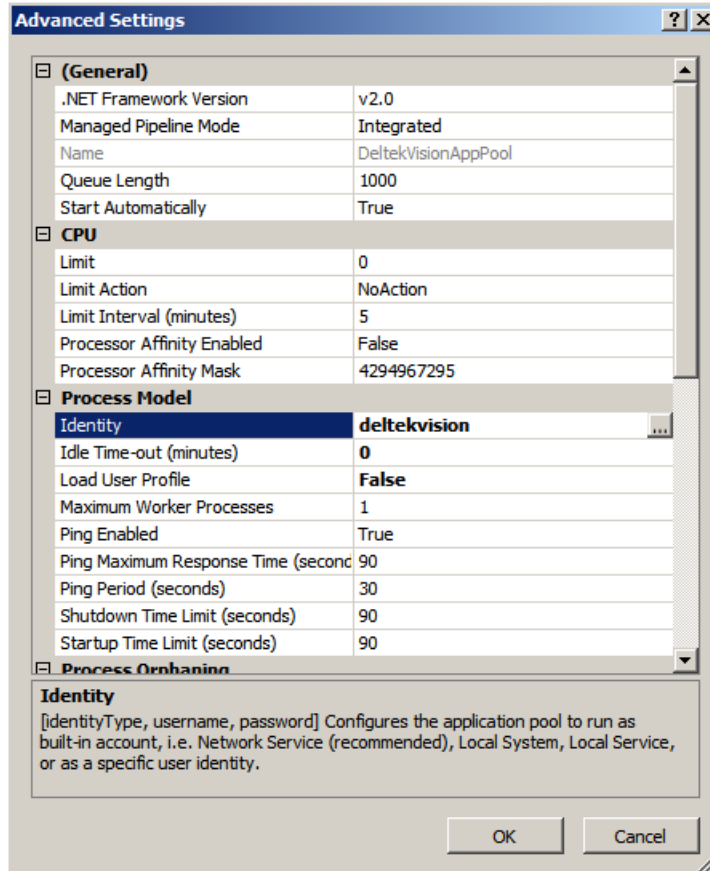


For this account to be the Application Pool Identity it must be a member of the IIS_IUSRS group in IIS7.0, in addition to being a member of the local administrators group for Vision.

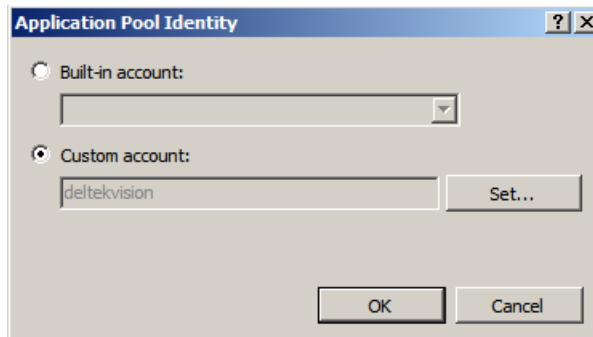
To change the Vision Application Pool Identity, complete the following steps:

1. Create a domain user account. This account must also be your WSS 3.0 Service account. No domain Admin rights are needed for this account.
2. Log on to the domain on the Vision Web/application server using an Administrator account.

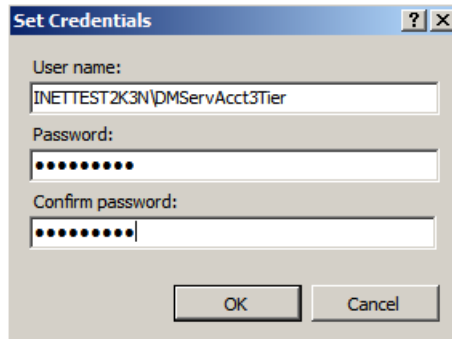
3. Open Internet Information Services: **Start » All Programs » Administrative Tools » Internet Information Services (IIS) Manager**.
4. Expand the Server name and then click **Application Pools**.
5. Select the **DeltekVisionAppPool** and select **Advanced Settings** from the Action pane on the right hand side. The following displays:



6. Place your cursor in the Identity field and then click the ellipses button to set the identity. The Application Pool Identity dialog box displays:



7. Select the **Custom account** option and click **Set**. The Set Credentials dialog box displays.



8. In **User name**, enter the Application Pool Identity in the form <Domain>\<Username>. In **Password** and **Confirm password**, enter that user's password. Then click **OK** three times to set the identity.

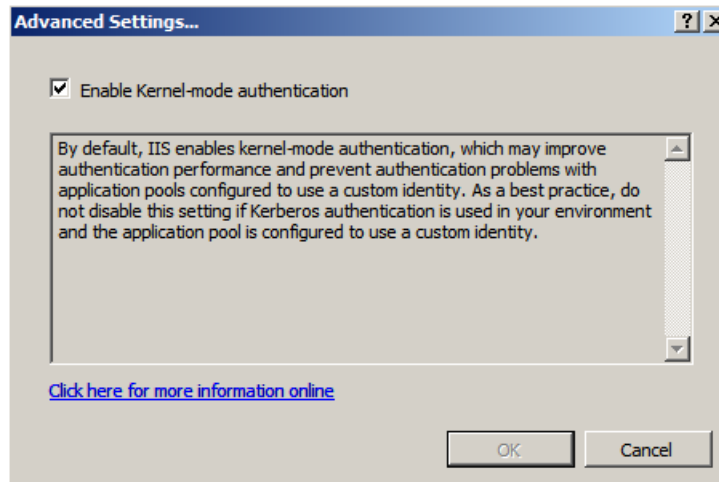
IIS 7.0/7.5 Kernel Mode Authentication

The default configuration of IIS 7.0/7.5 when using Windows Integrated Authentication (required for Vision Document Management) is to use Kernel Mode Authentication. Under this configuration, the application pool runs under the Machine account whether or not an identity has been established. Because the Machine account cannot be used for delegation scenarios which are required for multi-tier deployments of Vision Document Management, the additional configuration steps below are necessary.

Identify if Kernel Mode Authentication Is Enabled

Follow the steps below to identify if Kernel Mode Authentication is enabled. (In a default configuration of IIS 7.0/7.5, it will be enabled.)

1. Log on to the domain on the Vision Web/application server using an Administrator account.
2. Open Internet Information Services: **Start » All Programs » Administrative Tools » Internet Information Services (IIS) Manager**.
3. Expand the server name, expand **Sites**, and expand **Default Web Site** or whichever site Vision is installed to.
4. Select the Vision virtual directory and then double click **Authentication** in the Features view.
5. Select **Windows Authentication** and verify that the status is Enabled (Anonymous Access should be Disabled). If it is not, select **Enable** from the Actions menu.
6. With **Windows Authentication** still selected, click **Advanced settings** on the Action menu. The Advanced Settings dialog box displays:



Kernel Mode Authentication Implementation

As mentioned above, under this default configuration, Vision Document Management will not be able to delegate credentials to a WSS 3.0 server separate from the Vision Web/application server. Two possible configurations allow Document Management to function properly:

- **Disable Kernel Mode Authentication.** In order to Disable Kernel Mode Authentication, simply uncheck the Enable Kernel Mode Authentication option under the Advanced Settings of the Windows Authentication feature for the Vision virtual directory.
- **Modify the ApplicationHost.config file to force the use of the Application Pool Identity.** In order to continue to use Kernel Mode Authentication but force the Application Pool to run under its Identity rather than the Machine account, it is necessary to modify the ApplicationHost.config file, the steps of which are outlined below:
 1. Click **Start » All Programs » Accessories**.
 2. Right-click **Notepad**, click **Run as**, and select the Administrator account.



This is necessary in order to save the changes we need to make to the ApplicationHost.config file, which is protected under UAC (User Account Control) on Windows Server 2008.

3. Click **Open** on the File menu and locate the ApplicationHost.config file from c:\windows\system32\inetsrv\config.
4. Click Find on the Edit menu in Notepad and search for the following: <location path="Default Web Site/Vision">

5. Locate the windowsAuthentication tag and add **useAppPoolCredentials="true"** as shown in the following:

```
<location path="Default web site/vision">
  <system.webServer>
    <defaultDocument enabled="true">
      <files>
        <remove value="index.htm" />
        <add value="index.htm" />
      </files>
    </defaultDocument>
    <security>
      <authentication>
        <windowsAuthentication enabled="true" useAppPoolCredentials="true" />
        <anonymousAuthentication enabled="false" />
        <digestAuthentication enabled="false" />
        <basicAuthentication enabled="false" />
      </authentication>
    </security>
    <staticContent>
      <clientCache cacheControlMode="NoControl" />
    </staticContent>
  </system.webServer>
</location>
```

6. Once the edits are complete, save your changes and restart IIS to make the changes effective.

Both of these configuration options require that a Service Principal Name be established for the Application Pool Identity. The following section provides more information on SPNs.

Service Principal Names

Under the default configuration with Kernel Mode Authentication enabled, it is *not necessary* to create a Service Principal Name for the Application Pool Identity. The default SPNs created will suffice. As a matter of fact, creating an SPN for the Application Pool Identity in this configuration will actually result in a “duplicate SPN” issue, preventing Windows Integrated Security from authenticating anyone to the Web site.

Once one of the above Kernel Mode configuration changes have been established, use the steps outlined below to create a Service Principal Name for the Application Pool Identity of the DeltekVisionAppPool.



The setspn utility is installed by default on Windows Server 2008. It is not necessary to download and install it separately.

1. Open a command prompt and type the following:
setspn -A http/<Vision Web/App Server name> <domain app pool identity>
For example: setspn -A http/camqainetk3nwb5 inettest2k3n\dmservacct3tier
2. Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>

Single Server—New Installation of Document Management 6.1

For the most part you will follow the steps outlined earlier in this document for installing Vision and WSS 3.0 on a single server. There are, however, several differences to keep in mind:

- Follow the steps provided earlier in this appendix to configure the Application Pool Identity.
- There is no need to modify the Kernel Mode Authentication settings or configure a Service Principal Name in this configuration, so you can bypass those steps.
- When you get to the point in the procedure where you create the SharePoint Web Application, be sure to either choose a Web site that is different from the one where Vision is installed or create a new Web site during the Create Web Application process.



Vision will cease to function if you install the SharePoint Web Application on the same Web site as Vision.

Multi-Tier—New Installation of Document Management 6.1

For the most part you will follow the steps outlined earlier in this document for installing Vision and WSS 3.0 on separate servers. However, it is important that you follow the specific steps outlined in this appendix when configuring the DeltekVisionAppPool, Kernel Mode Authentication, and Service Principal Names.

Appendix C: SPN Configuration When Using Custom DNS Records

If you will configure your SharePoint server to use a custom DNS record for the URL you must create an additional SPN and also create Alternate Access Mappings in SharePoint.

Configure SPN for Custom DNS/FQDN Entry for SharePoint Web Server

Consider the following:

- If the URL you wish to use for your users (and also Vision Document Management) to access SharePoint will be an FQDN (Fully Qualified Domain Name), either based on the server name (for example, `servername.company.com`) or based on a custom DNS entry (for example, `sharepoint.company.com`), you must create a Service Principal Name (SPN).
- If you will use a custom FQDN, you also must configure an Alternate Access Mapping in SharePoint for the FQDN. (Creation of the SPN is not necessary for an FQDN based on the server name.)



For more information, refer to the following Microsoft support article:
<http://support.microsoft.com/?id=871179>.

Add an SPN for a Custom DNS Name

To add an SPN for a custom DNS name, complete the following steps:

1. Download **setspn.exe** from the Microsoft Web site:
<http://support.microsoft.com/kb/927229>
2. Install the setspn.exe command line utility on the Vision Web server.
3. Open a command prompt to the `c:\program files\resource kit` directory and run the following command:

Setspn -A HTTP/CustomDNSName WebServerNetbiosName

Where *CustomDNSName* is the fully qualified domain name of the server (for example, `Vision.company.com`) and *WebServerNetbiosName* is the actual netbios computer name of the server (for example, `Server01`).

4. **If you are doing a new multi-tier installation of Document Management 6.1 with Windows SharePoint Services 3.0:** If WSS 3.0 was installed before Deltek Vision Document Management, and the SharePoint Web application pool was created using a domain account, it is necessary to register SPNs for this domain account. Otherwise, you will receive the same authentication errors when you attempt to configure Vision Document Management. See the following Microsoft Support Article for details (<http://support.microsoft.com/?id=871179>).

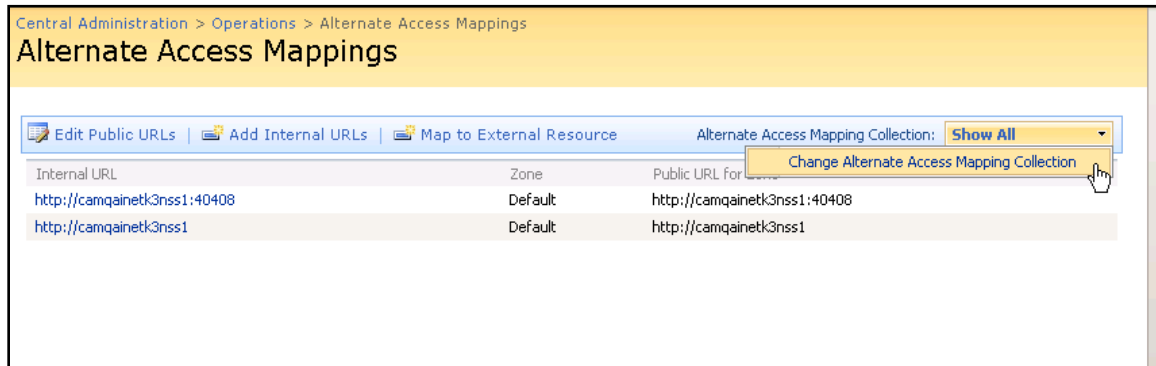
If you are doing a new multi-tier installation of Document Management 6.1 with MOSS 2007: When you install MOSS 2007 and create the Web application, the application pool by default is created using a domain account. Due to this configuration, it is necessary to register SPNs for this domain account. Otherwise, you will receive the same authentication errors when you attempt to configure Vision Document

Management. See the following Microsoft Support Article (<http://support.microsoft.com/?id=871179>).

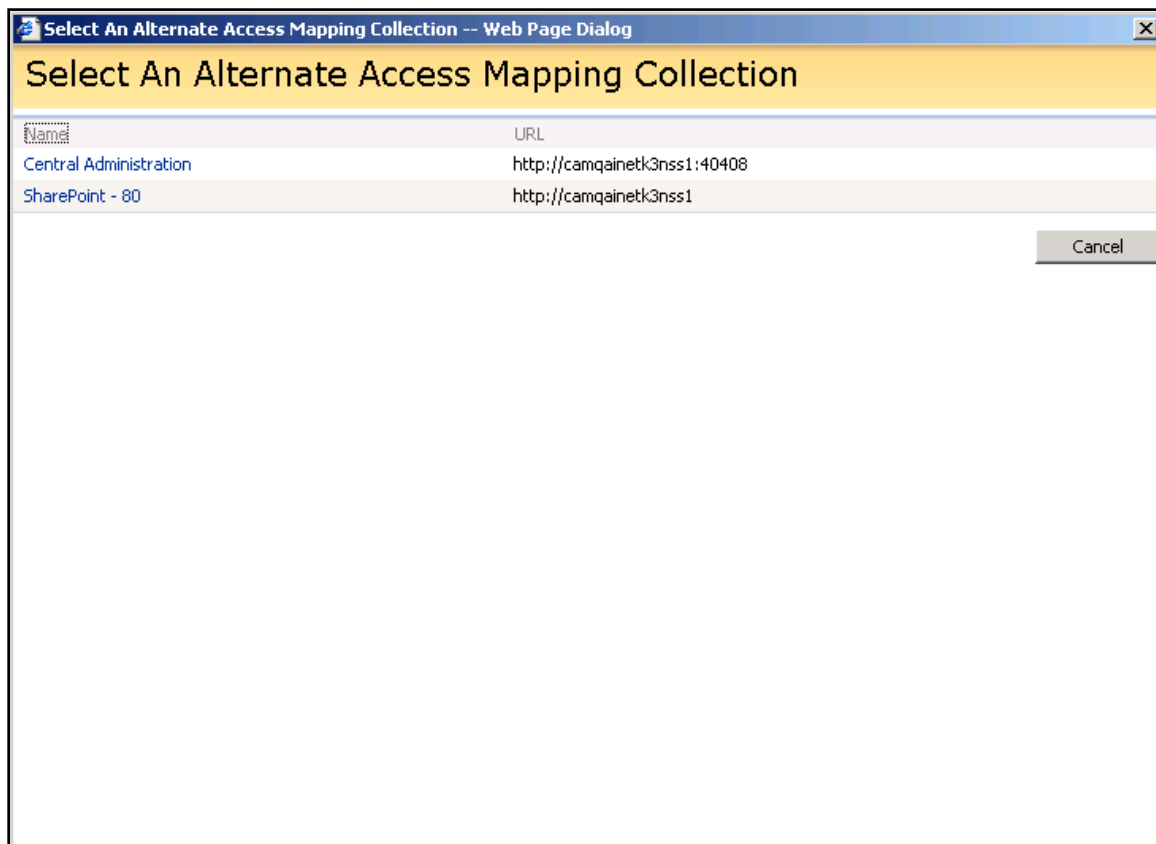
Create or Modify Alternate Access Mappings

To create or modify alternate access mappings, complete the following steps:

1. Click **Operations » Alternate Access Mappings**.



2. Click **Show All** and select **Change Alternate Access Mapping Collection**. The Select an Alternate Access Mapping Collection page displays.



3. Select the link for the new WSS site you created. In the above illustration, it is **SharePoint – 80**. This will filter the list to only show the mappings for this application. The Alternate Access Mapping page displays.

Central Administration > Operations > Alternate Access Mappings

Alternate Access Mappings

Edit Public URLs | Add Internal URLs | Map to External Resource Alternate Access Mapping Collection: **SharePoint - 80**

Internal URL	Zone	Public URL for Zone
http://camqainetk3nss1	Default	http://camqainetk3nss1

- Click the link for the Web application you created. The Edit Internal URLs page displays.

Central Administration > Operations > Alternate Access Mappings > Edit Internal URLs

Edit Internal URLs

Edit Internal URL
Change the zone that this URL is associated with.

URL protocol, host and port

Zone

Delete OK Cancel

- Modify the URL to specify the custom FQDN and click **OK**. If a port is specified, do not remove it.

Configure Delegation When Using a Custom DNS Record and a Domain Account as the Application Pool Identity

To configure delegation when using a custom DNS record and a domain account as the Application Pool Identity for the SharePoint Web application, complete the following steps:

- Open a command prompt to the c:\program files\resource kit directory, and run the following command:

Setspn -A HTTP/CustomDNSName SharePointServerAppPoolID

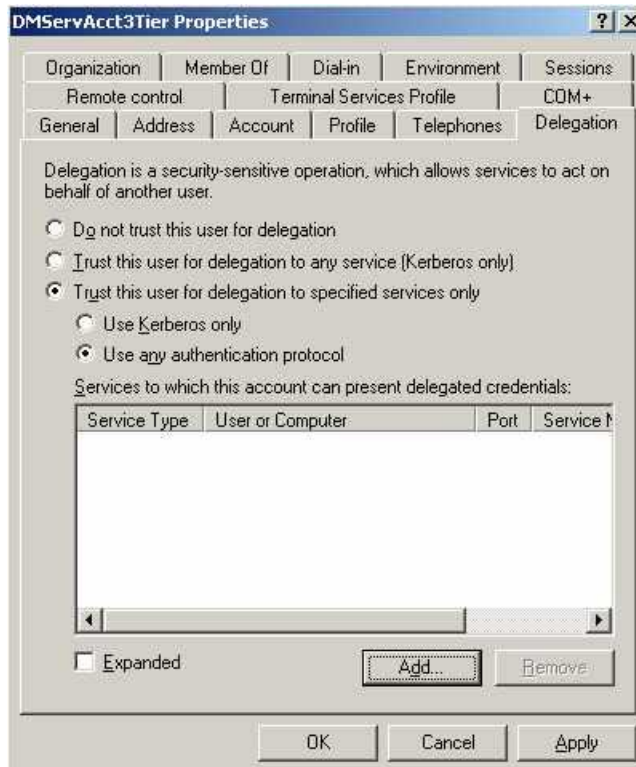
Example: setspn -A HTTP/visiondm.domain.com domain\user

Where *CustomDNSName* is the fully qualified domain name of the server (for example, Vision.company.com) .

Because the account is the Application Pool Identity for both applications ***and*** SharePoint is using a custom DNS record, the service account (Application Pool Identity) is effectively delegating to itself or, more accurately stated, is delegating to another SPN of which the account is the owner.

- Open the Active Directory Users and Computers MMC,
- Locate the service account (Application Pool Identity).
- Right-click and select **Properties**.

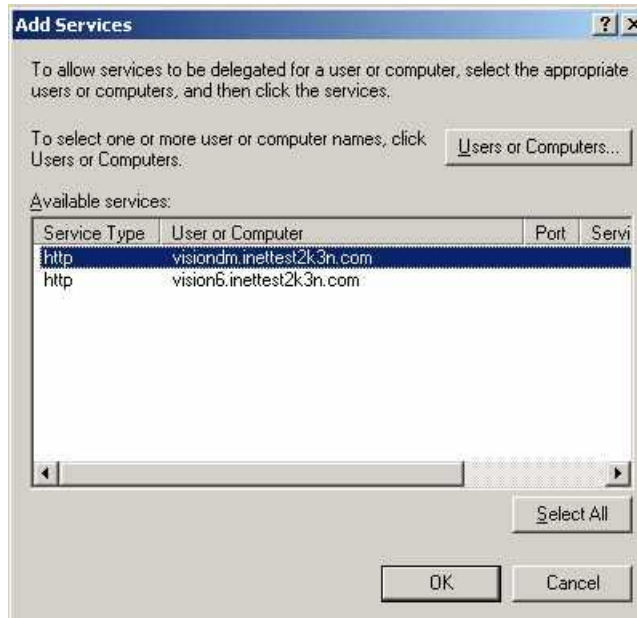
5. Click the Delegation tab:



6. Click **Add** and enter the service account name (Application Pool Identity). This is the same account for which you are viewing properties. Click **OK**.



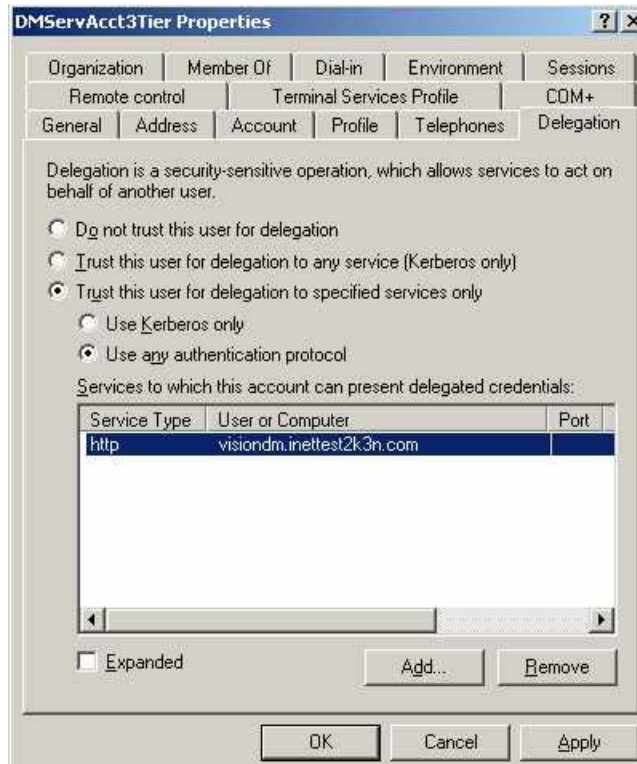
7. In the **Add Services** dialog box, select the SPN for the SharePoint server (**visiondm...**):



Note that this account also has an SPN for the Vision server because it is also the Application Pool Identity for the DeltekVisionAppPool.

8. Click **OK**.

The Delegation tab should look like this when you have completed this procedure:




Appendix D:

As of Vision 6.1 Sp4, SharePoint Foundation 2010 will be installed if the server is Windows Server 2008 x64 or Windows Server 2008 R2 x64. Refer to the following sections for detailed installation and configuration information.

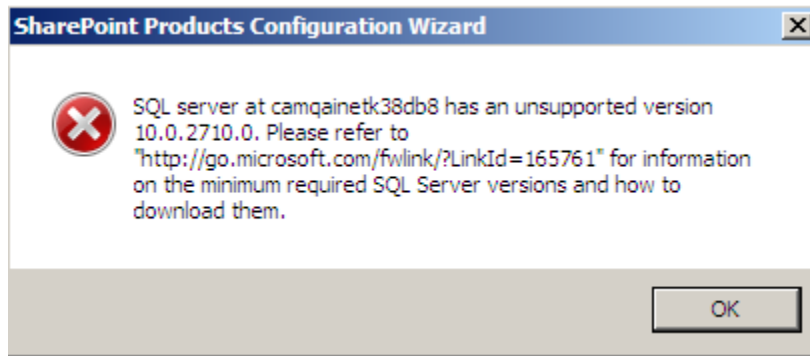
IMPORTANT NOTES:

1. Before proceeding please take a moment to understand the Hardware and Software Requirements for SharePoint Foundation 2010.

<http://technet.microsoft.com/en-us/library/cc288751.aspx>
2. To ensure that the SharePoint prerequisite install properly, it is highly recommended to make sure your SharePoint servers are current with all available Windows Updates.
3. Specific database server requirements that you should be aware of include the following:

Environment	Minimum requirement
Database server in a farm	<p>One of the following:</p> <ul style="list-style-type: none"> • The 64-bit edition of Microsoft SQL Server 2008 R2. • The 64-bit edition of Microsoft SQL Server 2008 with Service Pack 1 (SP1) and Cumulative Update 2. From the Cumulative update package 2 for SQL Server 2008 Service Pack 1 (http://go.microsoft.com/fwlink/?LinkId=165962) page, click the View and request hotfix downloads link and follow the instructions. On the Hotfix Request page, download the SQL_Server_2008_SP1_Cumulative_Update_2 file. When you install Microsoft SQL Server 2008 SP1 on Windows Server 2008 R2, you might receive a compatibility warning. You can disregard this warning and continue with your installation. <div style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;">  We do not recommend that you use CU3 or CU4, but instead CU2, CU5, or a later CU than CU5. For more information, see Cumulative update package 5 for SQL Server 2008 (http://go.microsoft.com/fwlink/?LinkId=196928). Download the SQL_Server_2008_RTM_CU5_SNAC file. </div> <ul style="list-style-type: none"> • The 64-bit edition of Microsoft SQL Server 2005 with Service Pack 3 (SP3). From the Cumulative update package 3 for SQL Server 2005 Service Pack 3 (http://go.microsoft.com/fwlink/?LinkId=165748) page, click the View and request hotfix downloads link and follow the instructions. On the Hotfix Request page, download the SQL_Server_2005_SP3_Cumulative_Update_3 file. <p>For more information about choosing a version of SQL Server, see SQL Server 2008 R2 and SharePoint 2010 Products: Better Together (white paper) (SharePoint Server 2010).</p>

Note that the Document Management installation does not check the edition, platform or version of your SharePoint database server but the SharePoint 2010 Products Configuration Wizard will and it will fail to configure SharePoint until the database prerequisites have been met. For example, an error similar to the following would be received:



Single Server — New Installation of Document Management 6.1 / SharePoint Foundation 2010

The following instructions assume that Vision and SharePoint Foundation 2010 will exist on the same Web server and also assume that you are deploying to Windows Server 2008 x64 or Windows Server 2008 R2 x64.



Vision and SharePoint Server 2010 are not supported on the same physical server.

If your SharePoint server is separate, use the multi-tier installation procedures beginning on page 146.

Prerequisites

- Install/upgrade to the current release of Vision 6.1.
- Change the Application Pool Identity for the DeltekVisionAppPool to be a domain account (the Vision 6.1 installation sets this to be the local DeltekVision account). This account will also be the SharePoint Service account. Add this user to the local Administrators and IIS_IUSRS group on the Vision server.

Configure Vision Application Pool Identity to Be a Domain Account

You must change the Vision Application Pool Identity to be a domain account. The default is for Vision to use a local DeltekVision user created during the Vision installation. This change is necessary because of the local account's inability to read the SPN configured in Active Directory.



For this account to be the Application Pool Identity it must be a member of the IIS_IUSRS group in IIS7.0/7.5, in addition to being a member of the local administrators group for Vision.

To change the Vision Application Pool Identity, complete the following steps:

1. Create a domain user account. This account must also be your SPF Service account. No domain Admin rights are needed for this account.
2. Log on to the domain on the Vision Web/application server using an Administrator account.
3. Open Internet Information Services: **Start » All Programs » Administrative Tools » Internet Information Services (IIS) Manager**.
4. Expand the Server name and then click **Application Pools**.
5. Select the **DeltekVisionAppPool** and select **Advanced Settings** from the Action pane on the right hand side. The following displays:

Advanced Settings

(General)

.NET Framework Version	v2.0
Managed Pipeline Mode	Integrated
Name	DeltekVisionAppPool
Queue Length	1000
Start Automatically	True

CPU

Limit	0
Limit Action	NoAction
Limit Interval (minutes)	5
Processor Affinity Enabled	False
Processor Affinity Mask	4294967295

Process Model

Identity	deltekvision
Idle Time-out (minutes)	0
Load User Profile	False
Maximum Worker Processes	1
Ping Enabled	True
Ping Maximum Response Time (seconds)	90
Ping Period (seconds)	30
Shutdown Time Limit (seconds)	90
Startup Time Limit (seconds)	90

Process Orphaning

Identity
[identityType, username, password] Configures the application pool to run as built-in account, i.e. Network Service (recommended), Local System, Local Service, or as a specific user identity.

OK Cancel

6. Place your cursor in the Identity field and then click the ellipses button to set the identity. The Application Pool Identify dialog box displays:

Application Pool Identity

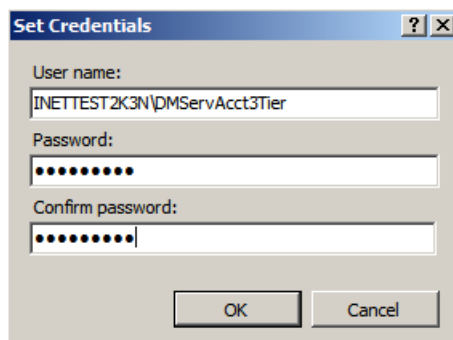
☐ Built-in account:

☐ Custom account:

deltekvision Set...

OK Cancel

7. Select the **Custom account** option and click **Set**. The Set Credentials dialog box displays.



8. In the **User name** field, enter the Application Pool Identity in the form <Domain><Username>. In the **Password** and **Confirm password** fields, enter that user's password. Then click **OK** three times to set the identity.

Configure SPN for Vision Application Pool Identity

As mentioned earlier in this document, it is necessary to create a Service Principal Name (SPN) for the domain user running the DeltekVisionAppPool. Please refer to the section in Appendix B titled "IIS 7.0 / 7.5 Kernel Mode Authentication" for important information of the use of Service Principal Names and Kernel Mode Authentication with your Application Pool Identity.

To add the Application Pool Identity as a Service Principal Name, complete the following steps:

1. Enter the following commands on the domain server where setspn is installed:
setspn -A http/<Vision Web/App Server name> <domain app pool identity>
 For example: **setspn -A http/camqainetk3nwb5 inettest2k3n\ldmservacct3tier**
2. Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>



If your Vision Web server is accessed by a DNS / FQDN (Fully Qualified Domain Name) that *does not match* the name of the server (for example, if your Vision Web server is named Server01 and its DNS name is Server01.Company.com, but you have added a custom DNS value Vision.Company.com), you must also add an SPN for this custom DNS name.

Install and Configure Vision 6.1 Document Management and SharePoint Foundation (SPF) 2010

When you install Vision 6.1 Document Management, SPF is automatically installed. If you already have SPF installed, no changes are made to your SPF installation. However, the Document Management installation will not automatically configure SPF. The steps to configure SharePoint are outlined in this document.

The Document Management installation does the following:

- Installs Web Service Extensions (WSE) 2.0 Sp3.
- Installs SPF 2010, if it is not already installed.

- Copies Document Management files to the SharePoint ISAPI folder (c:\program files\common files\microsoft shared\web service extensions\14\isapi).
- Copies Document Management files to the Vision Support folder (\program files\deltek\vision\support\DM\30).
- Modifies the SharePoint Web.config file in the ISAPI directory to work with Vision Document Management.
- Installs Deltek.Vision.WSS30.Server.dll into the Global Assembly Cache (GAC).

Install Vision Document Management and SharePoint Foundation

To install Vision Document Management and SPF, complete the following steps:

1. As indicated at the beginning of this Appendix, it is highly recommended that you install all available Windows Updates prior to proceeding with the installation.
2. Download the DeltekVision61SP4DM.exe file and run the setup on your Vision Web server.
3. The installation will check to ensure that the IIS Role service Windows Authentication. If the Role Service is not installed you will be prompted to install it and the setup will exit:



4. After installing the Windows Authentication IIS Role Service, re-run the Document Management installation. The installation will then check to ensure that Hotfix KB979917 is installed, which is a SPF 2010 Prerequisite not installed by the Prerequisite Installer. If it is not installed you will be prompted to install it, the setup will exit and a browser windows will open displaying the download site. Make sure to choose the correct x64 version, Vista is Server 2008 and Win7 is Server 2008 R2:



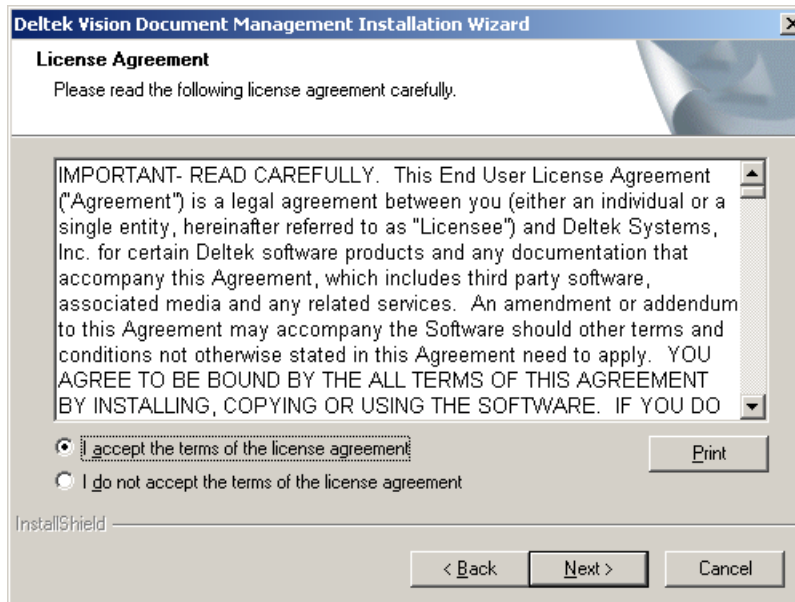
5. After installing the hotfix for KB979917, re-run the Document Management installation. The following dialog box displays, indicating the IIS licensing requirements for the use of Windows Integrated Authentication (required to use Vision Document Management):



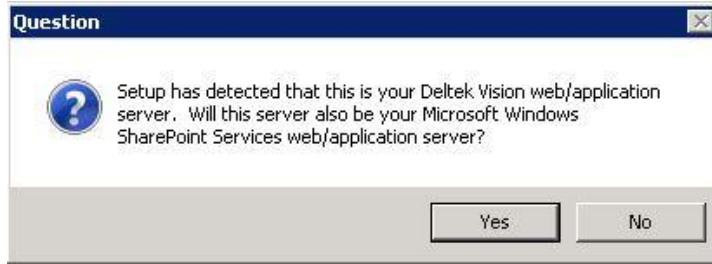
6. Click **OK**. The Document Management Installation Wizard displays.



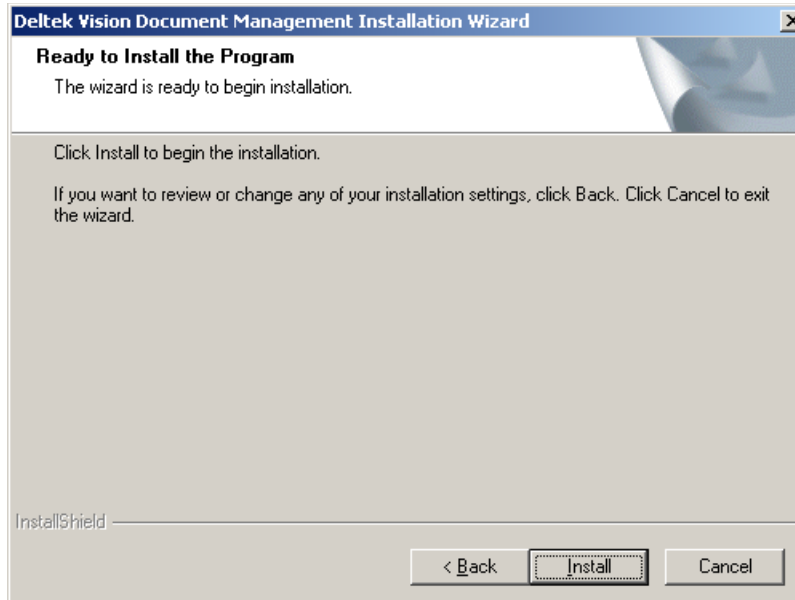
7. Click **Next**. The License Agreement page displays.



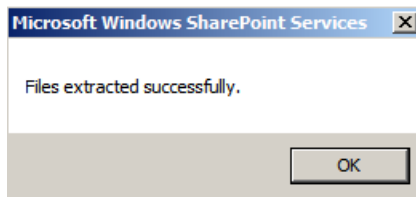
8. Accept the License Agreement and click **Next**. The Web/application server page displays, along with the following confirmation dialog box.



9. Click **Yes** since this is a single-tier installation of Vision Document Management and this server will host both Vision and SPF 2010. The Ready to Install the Program page displays.



10. Click **Install** to start the installation. The installation automatically downloads SharePoint Foundation 2010, extracts the setup files and installs Windows SharePoint Services. During the extraction process, you receive the following dialog box. You must click **OK** to continue the installation.



11. The installation will launch the SharePoint Foundation Prerequisite Installer to install all prerequisite components. If there are errors installing any of these components you will see a dialog indicating that the Prerequisite Installer failed and a link to open the log file and the installation will end. The following is an example:



An excerpt from the Prerequisite Installer log file related to this error is below which indicates a problem installing the Microsoft Chart Controls for Microsoft .Net Framework 3.5:

```
2010-08-26 08:58:54 - Beginning download of Microsoft Chart Controls for Microsoft .NET Framework 3.5
2010-08-26 08:58:54 - http://go.microsoft.com/fwlink/?LinkId=160383
2010-08-26 08:59:26 - Download timeout (0x80072EE2=-2147012894)
2010-08-26 08:59:26 - Retrying download from position (in bytes) (0x10B400=1094656)
2010-08-26 08:59:26 - Size of download of "Microsoft Chart Controls for Microsoft .NET Framework 3.5" in bytes is "1094656"
2010-08-26 08:59:26 - Download of "Microsoft Chart Controls for Microsoft .NET Framework 3.5" completed successfully
2010-08-26 08:59:26 - Installing Microsoft Chart Controls for Microsoft .NET Framework 3.5
2010-08-26 08:59:26 - "C:\users\ADMINI~1\INE\AppData\Local\Temp\2\cha2726.tmp.exe" /q /norestart
2010-08-26 08:59:26 - Error: unable to install (0XC1=193)
2010-08-26 08:59:26 - Error: [In HRESULT format] (0x800700C1=-2147024703)
2010-08-26 08:59:26 - Last return code (0XC1=193)
2010-08-26 08:59:26 - Error: The tool was unable to install Microsoft Chart Controls for Microsoft .NET Framework 3.5.
2010-08-26 08:59:26 - Last return code (0XC1=193)
2010-08-26 08:59:26 - Options for further diagnostics: 1. Look up the return code value 2. Download the prerequisite manually and vi
2010-08-26 08:59:26 - cannot retry
```

Should you need to locate the Prerequisite Installer log file, it can be found in `c:\users\<username>\appdata\local\temp\<numbered subdirectory>`.

NOTE: If there are errors installing any software prerequisites download and install them manually and then re-run the Document Management installation. Links to all software prerequisites can be found at the following URL, <http://technet.microsoft.com/en-us/library/cc288751.aspx>.

12. Additionally, if a reboot is necessary you will see a dialog indicating a reboot is required and the installation will end. The following is an example:



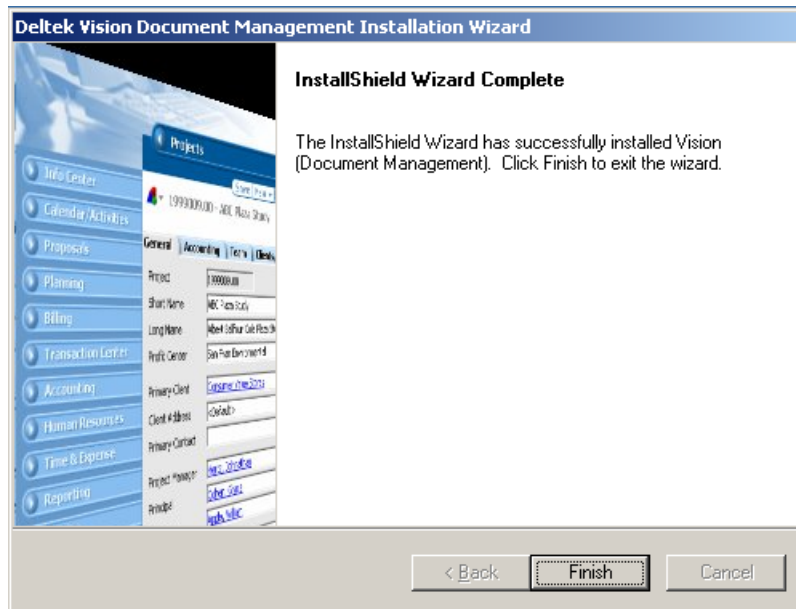
13. After resolving all issues with the prerequisite installations and/or rebooting as required, start the Document Management installation again to complete the installation.

NOTE: It may take running the installation several times to complete.

14. The installation will then launch the SharePoint Foundation installation routine. Again, if there are errors installing SharePoint a dialog will display with a link to open the log file.

After resolving any issues, start the Document Management installation again to complete the installation.

15. When the installation is complete, the InstallShield Wizard Complete page displays.

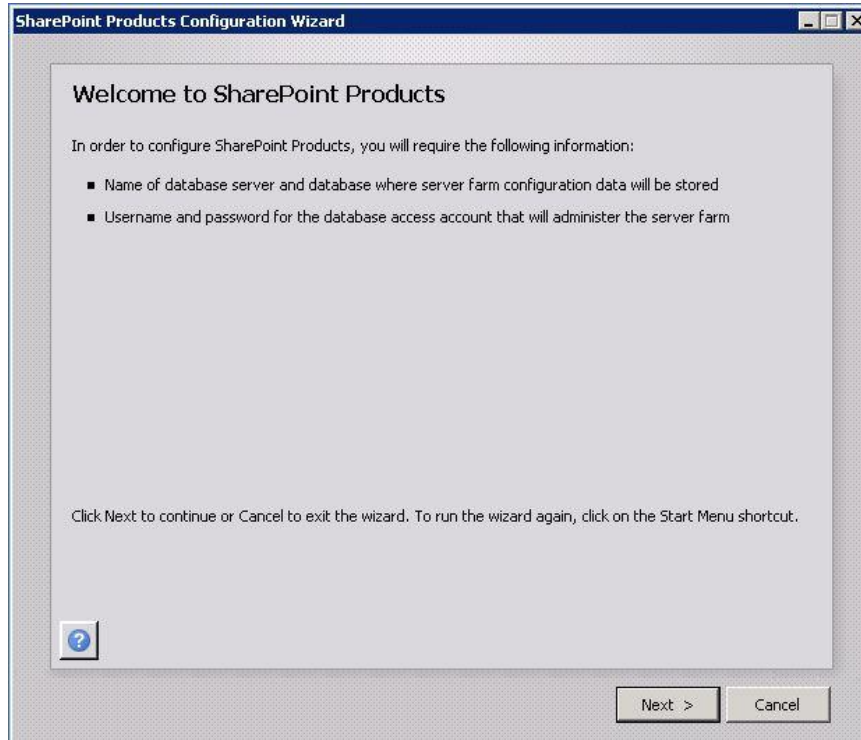


16. Click **Finish**.

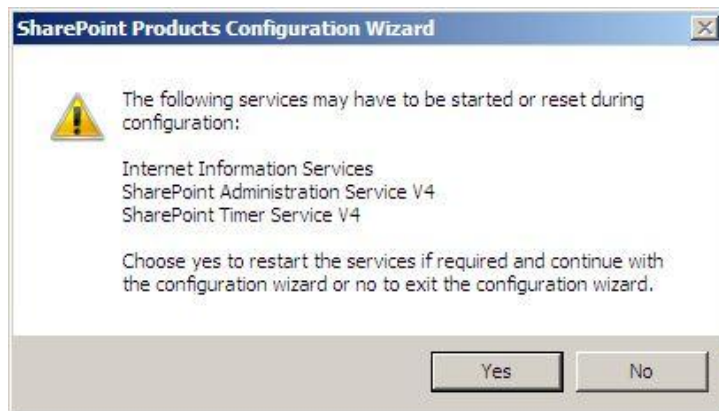
Run the SharePoint 2010 Products Configuration Wizard

To run the SharePoint 2010 Products Configuration Wizard, complete the following steps:

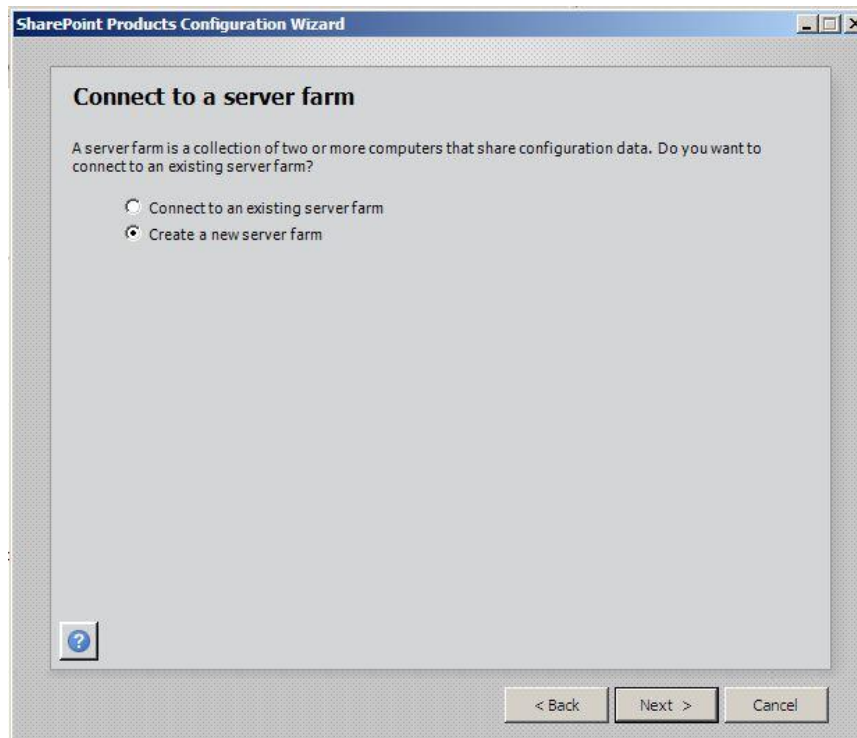
1. Click **Start » All Programs » Microsoft SharePoint 2010 Products » SharePoint 2010 Products Configuration Wizard**. The Welcome page displays.



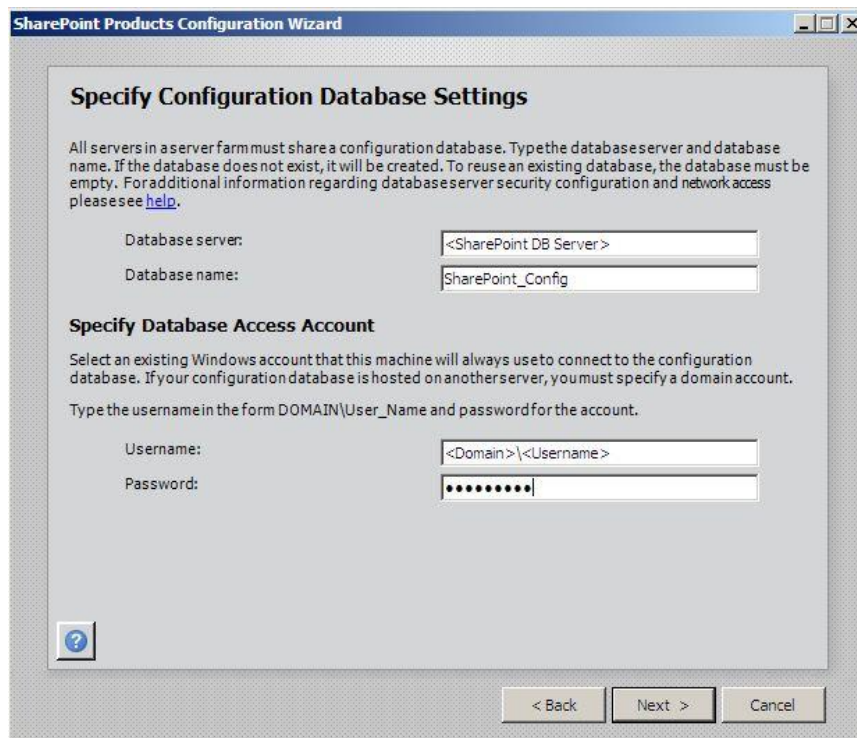
2. Click **Next**. The following dialog box displays.



3. Click **Yes**. The Connect to a server farm page displays.



4. Select the **Create a new server farm** option and click **Next**. The Specify Configuration Database Settings page displays.



5. Enter the name of the database server to host the SharePoint configuration database and accept the default database name: SharePoint_Config.



If you are using SQL Server 2008 your database access account will need to have the dbcreator and securityadmin SQL Server Roles. Additionally, SharePoint Foundation requires SQL Server 2008 x64 SP1 + CU2 or CU5 or later (Delttek recommends CU8) or SQL Server 2005 x64 SP3. Please refer to the SharePoint 2010 Foundation Hardware and Software Requirements referenced earlier in this document for detailed information.

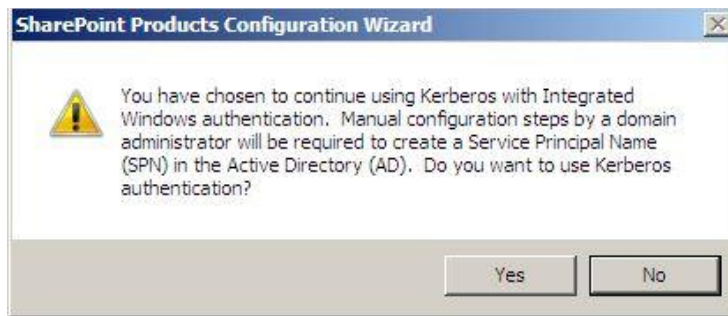
6. In **Username**, enter the domain and name of the Vision Application Pool Identity (as configured earlier) as the username for the SharePoint database access account, and enter the user's password in **Password**.
7. Click **Next**. The Specify Farm Security Settings page displays:

The screenshot shows a window titled "SharePoint Products Configuration Wizard". The main heading is "Specify Farm Security Settings". Below the heading, a paragraph states: "Please enter a new passphrase for the SharePoint Products farm. This passphrase is used to secure farm configuration data and is required for each server that joins the farm. The passphrase can be changed after the farm is configured." There are two text input fields: "Passphrase:" and "Confirm passphrase:". At the bottom left, there is a help icon (a question mark in a square). At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

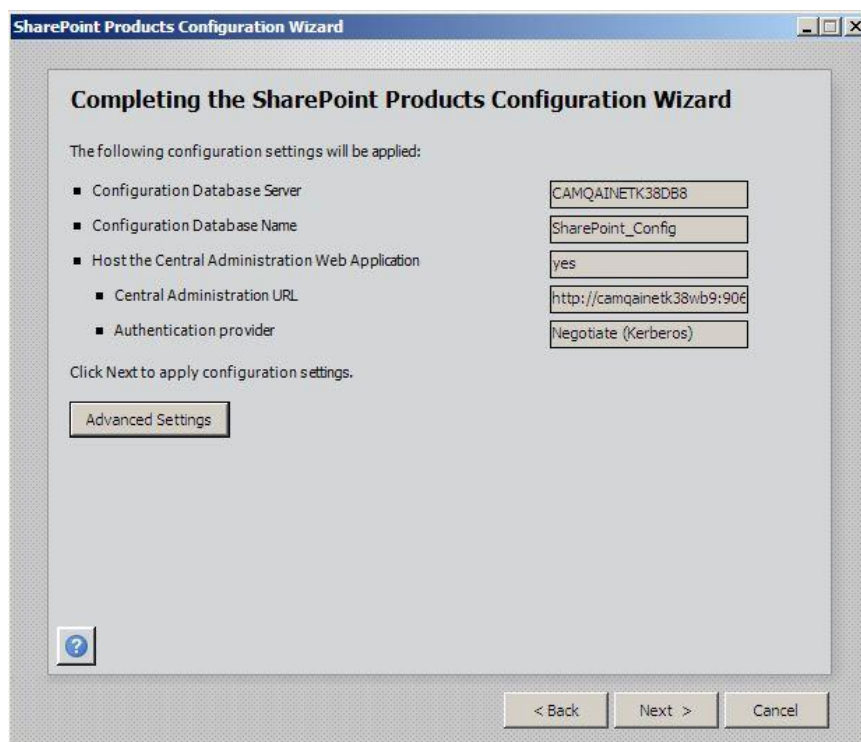
8. Enter a Passphrase for your Farm.
9. Click **Next**. The Configure SharePoint Central Administration Web Application page displays.



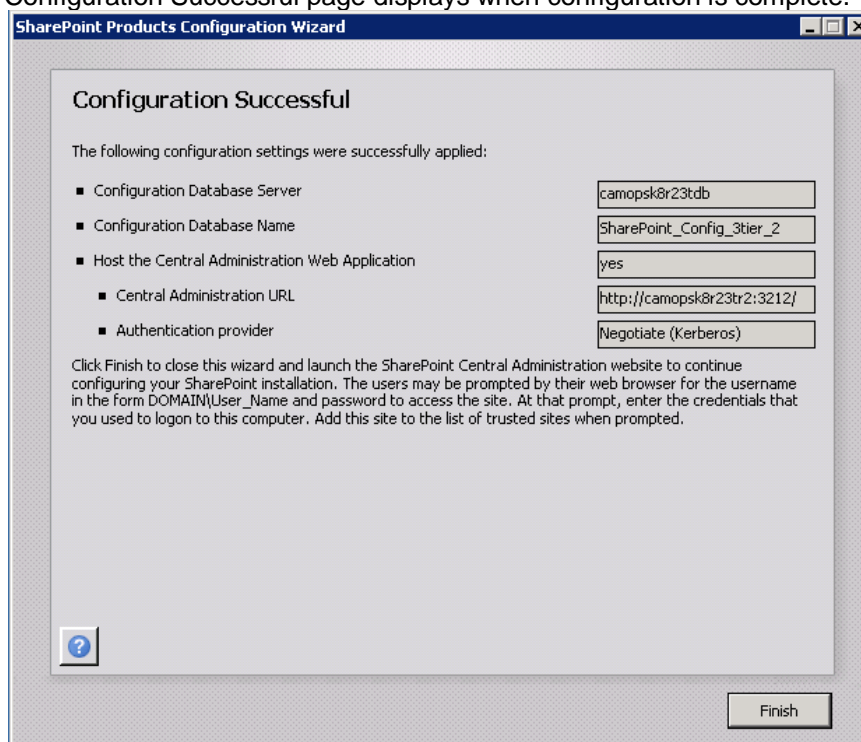
10. Select the **Specify port number** check box and enter the port to be used for the SharePoint Central Administration Web site.
11. Select the **Negotiate (Kerberos)** option for the Authentication provider to use.
12. Click **Next**. The following dialog box displays.



13. Click **Yes** to continue using Kerberos with Windows Authentication. The Completing the SharePoint Products and Technologies Configuration Wizard page displays.



14. Click **Next** to begin the configuration. This process may take some time to complete. The Configuration Successful page displays when configuration is complete.

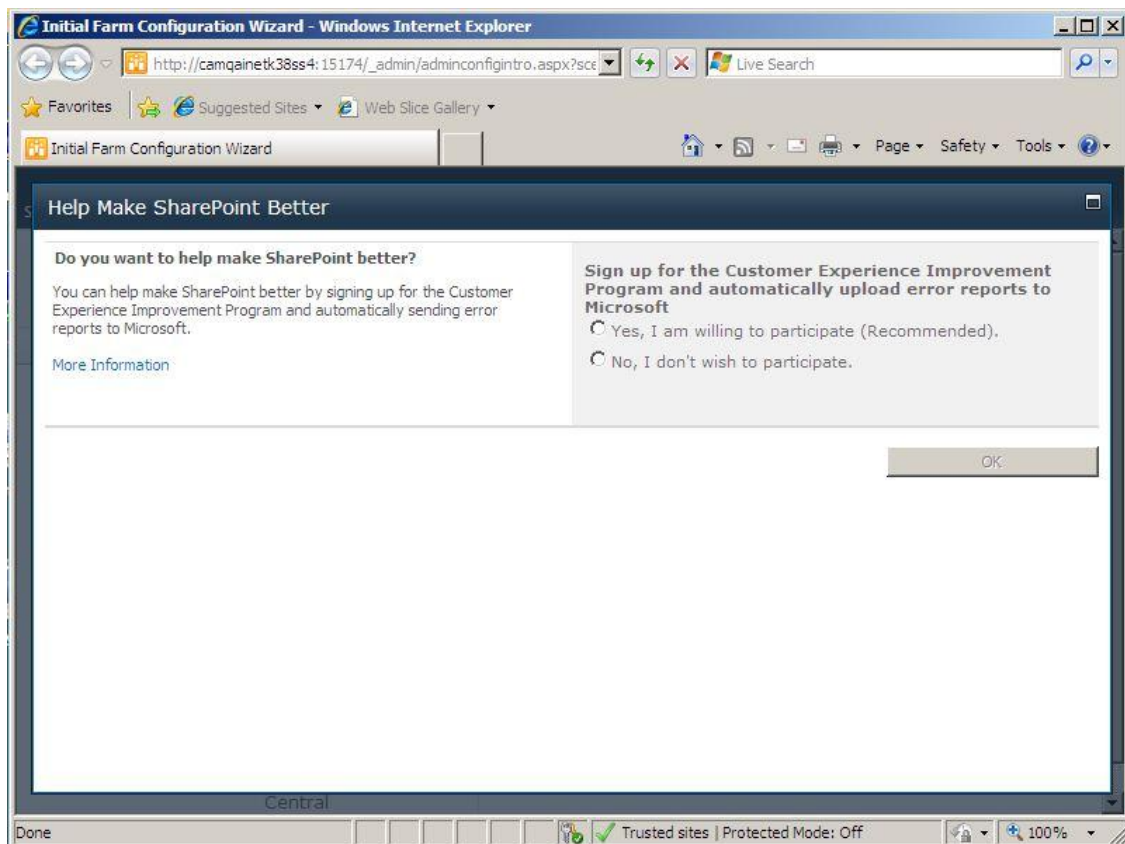


15. Click **Finish** to finish the configuration process. The SharePoint Central Administration page displays.

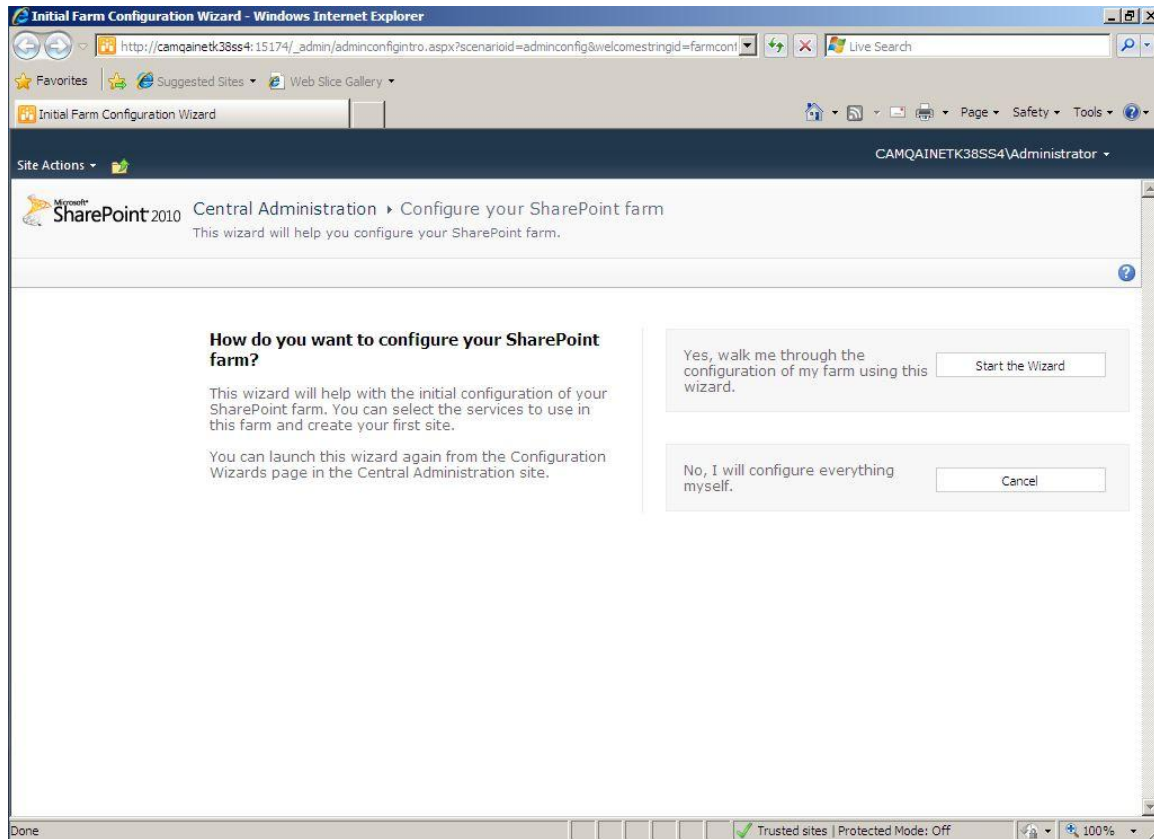
Use SharePoint Central Administration to Complete the SharePoint Configuration

To complete the SharePoint Configuration, complete the following steps:

1. When you click **Finish** in the preceding procedure, SharePoint Central Administration is launched.

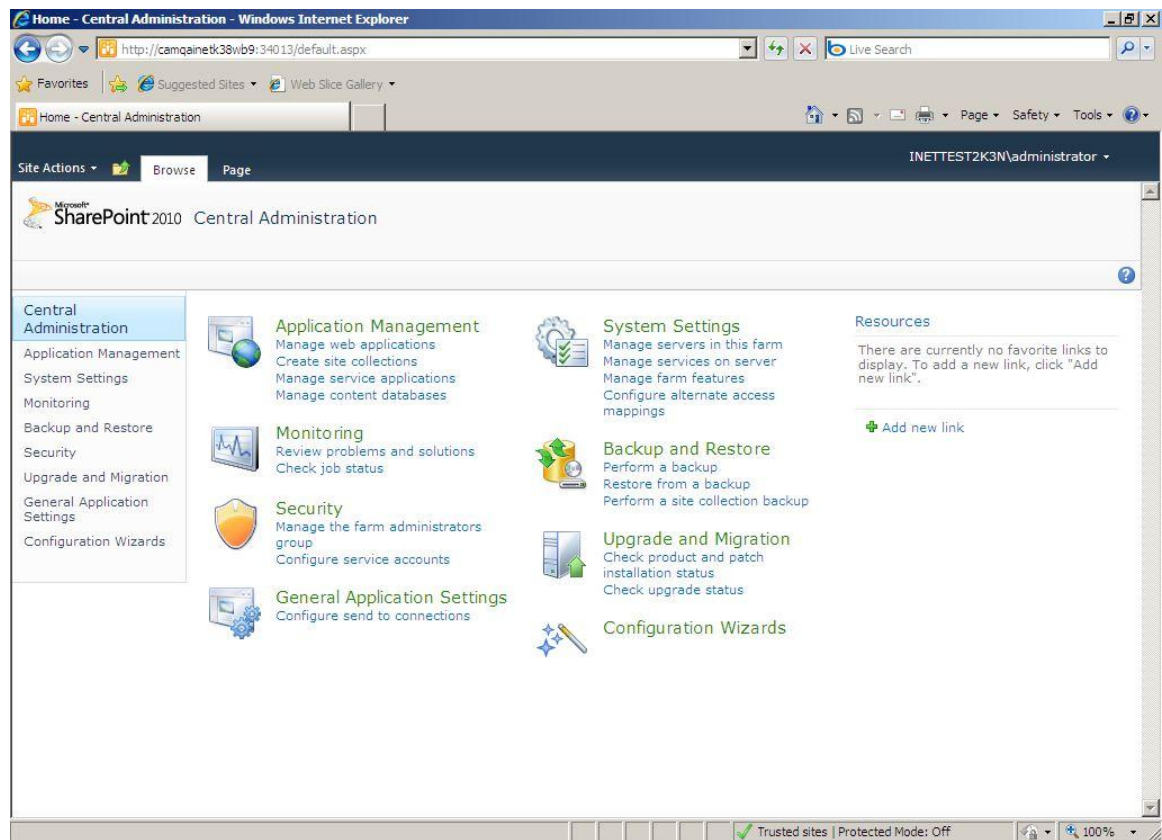


2. Decide whether to sign up for the SharePoint Customer Experience Program and Click **OK**. The Configure your SharePoint Farm Wizard page displays.



IMPORTANT! Do Not use the SharePoint Farm Wizard as this will cause Vision to no longer function. Click **Cancel** to configure everything yourself.

3. The main Central Administration page is displayed.



4. Select Manage Services on Server under System Settings. The Services on Server page displays:

The screenshot shows the 'Services on Server' page in a Windows Internet Explorer browser. The address bar displays the URL http://camqainetk38wb9:40885/_admin/Server.aspx. The page title is 'Services on Server - Windows Internet Explorer'. The SharePoint 2010 logo is visible in the top left corner. The breadcrumb navigation shows 'Central Administration > Services on Server: CAMQAINETK38WB9'. Below the breadcrumb, a message states: 'Use this page to start or stop instances of services on servers in the farm'. The left sidebar contains the 'Central Administration' menu with options: Application Management, System Settings, Monitoring, Backup and Restore, Security, Upgrade and Migration, General Application Settings, and Configuration Wizards. The main content area shows a table of services for the selected server 'CAMQAINETK38WB9'. The table has three columns: Service, Status, and Action. The services listed are: Business Data Connectivity Service (Stopped), Central Administration (Started), Claims to Windows Token Service (Stopped), Microsoft SharePoint Foundation Incoming E-Mail (Started), Microsoft SharePoint Foundation Sandboxed Code Service (Stopped), Microsoft SharePoint Foundation Subscription Settings Service (Stopped), Microsoft SharePoint Foundation Web Application (Started), Microsoft SharePoint Foundation Workflow Timer Service (Started), and SharePoint Foundation Search (Stopped). The status is indicated by a colored dot (red for Stopped, green for Started). The Action column provides links to 'Start' or 'Stop' the service.

Service	Status	Action
Business Data Connectivity Service	Stopped	Start
Central Administration	Started	Stop
Claims to Windows Token Service	Stopped	Start
Microsoft SharePoint Foundation Incoming E-Mail	Started	Stop
Microsoft SharePoint Foundation Sandboxed Code Service	Stopped	Start
Microsoft SharePoint Foundation Subscription Settings Service	Stopped	Start
Microsoft SharePoint Foundation Web Application	Started	Stop
Microsoft SharePoint Foundation Workflow Timer Service	Started	Stop
SharePoint Foundation Search	Stopped	Start

5. Locate SharePoint Foundation Search and click **Start**.

Configure Microsoft SharePoint Foundation Search Service Settings on server CAMQAINETK38WB9 - Windows Internet Explorer

http://camqainetk38wb9:40885/_admin/SPSearchServiceInstanceSettings.aspx?ServerId=22F40d31-a422-40be-4...

Site Actions

INETTEST2K3N\administrator

Central Administration > Configure Microsoft SharePoint Foundation Search Service Settings on server CAMQAINETK38WB9

Use this page to configure Microsoft SharePoint Foundation Search Service Settings.

Warning: this page is not encrypted for secure communication. User names, passwords, and any other information will be sent in clear text. For more information, contact your administrator.

Service Account

The search service will run using this account.

The search service account must not be a built-in account in order to access the database. Examples of built-in accounts are Local Service and Network Service.

Service Account: INETTEST2K3N\dmservacct2tier

[Register new managed account](#)

Content Access Account

The search service will access all content using this account.

The account will be added to the Full Read policy, giving it read-only access to all content.

For proper search functionality and information security, do not use an administrator account, and do not use accounts that can modify content.

Search Database

Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.

Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.

Database Server: camqainetk38db8

Database Name: WSS_Search_CAMQAINETK38WB9

Database authentication:

☒ Windows authentication (recommended)

☐ SQL authentication

Account:

Password:

Failover Server

You can choose to associate a database with a specific failover server that is used in conjunction with SQL Server database mirroring.

Failover Database Server:

Indexing Schedule

Configure the indexing Schedule.

Indexing schedule:

☐ Minutes Starting every hour between

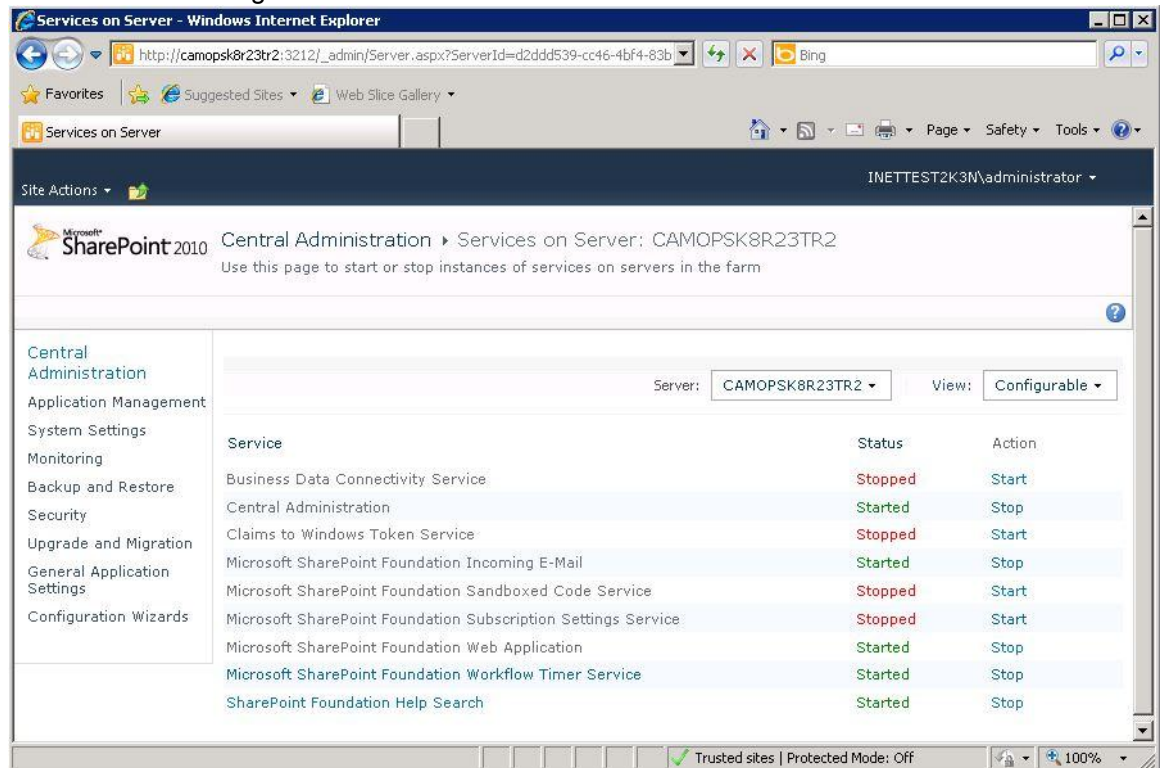
☒ Hourly 51 minutes past the hour

☐ Daily and no later than 51 minutes past the hour

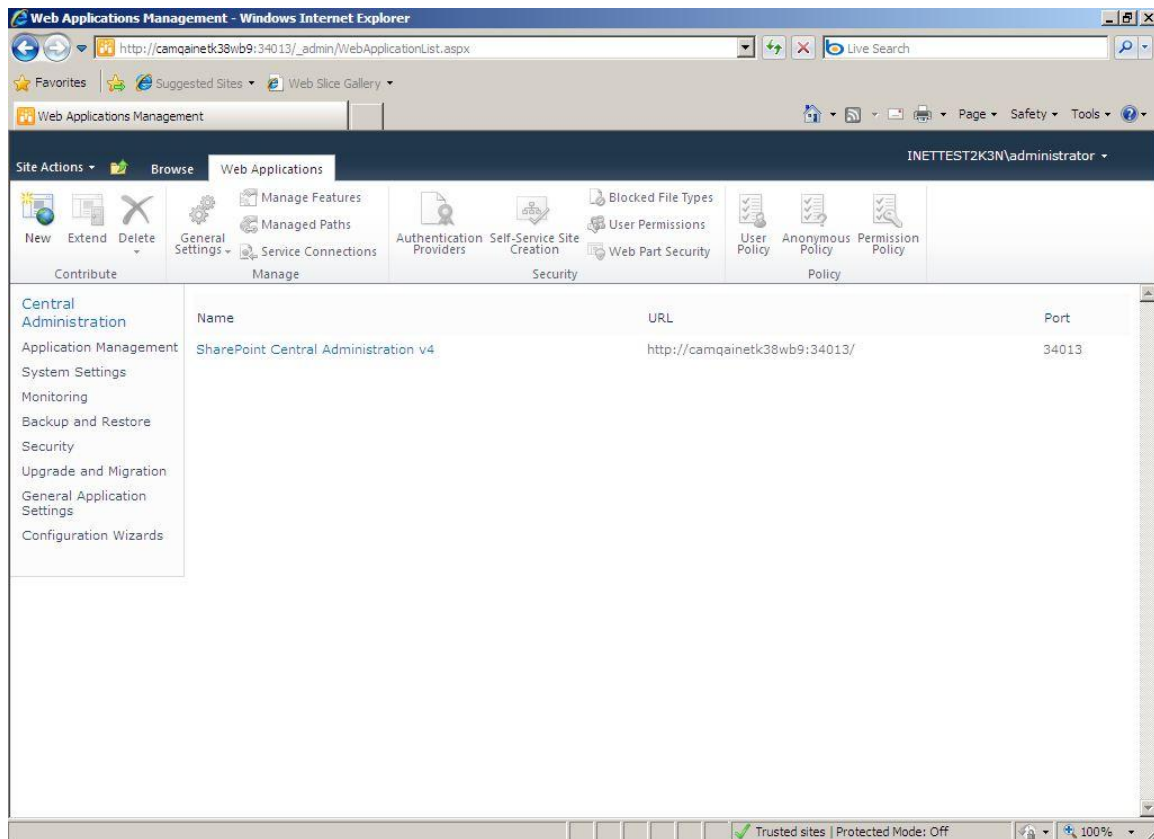
Start Cancel

6. Configure the search service to include the Service account and Content Access account (use the same account information as your Vision Application Pool Identity).

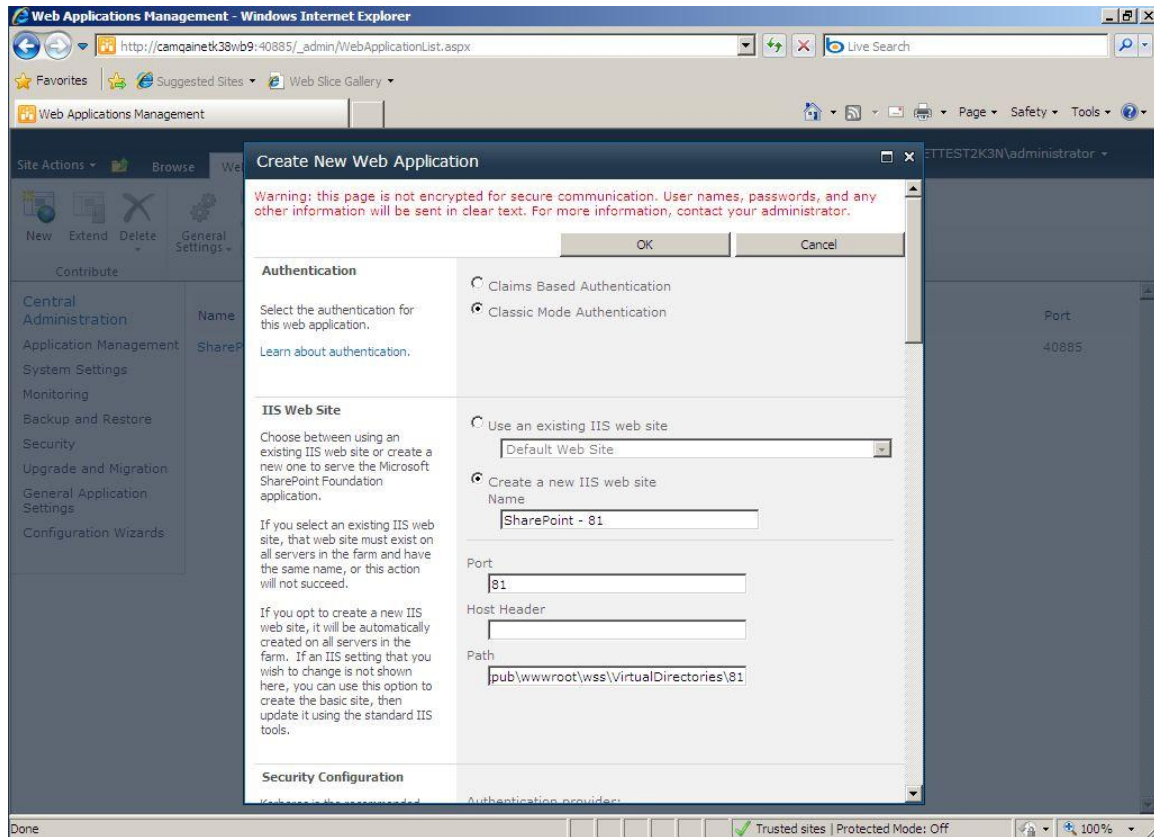
7. Configure **Search Database** as shown above and click **Start**. After a minute or so, the service's status changes to **Started**.



8. Click **Application Management** and then **Manage Web Applications**. The Web Applications page displays.



9. Select the **New** button. The Create New Web Application page displays.



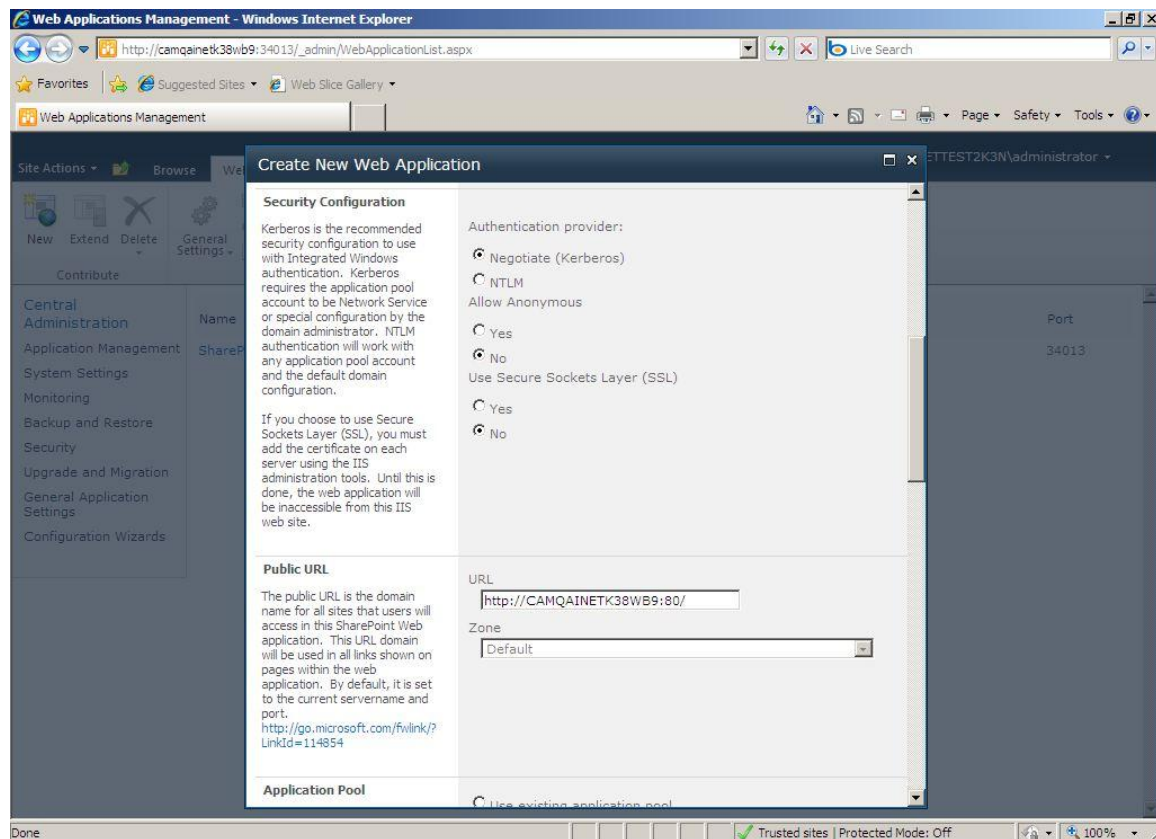
10. Select the **Create a new IIS web site** option. Enter a description for the Web site and specify a port in **Port**.



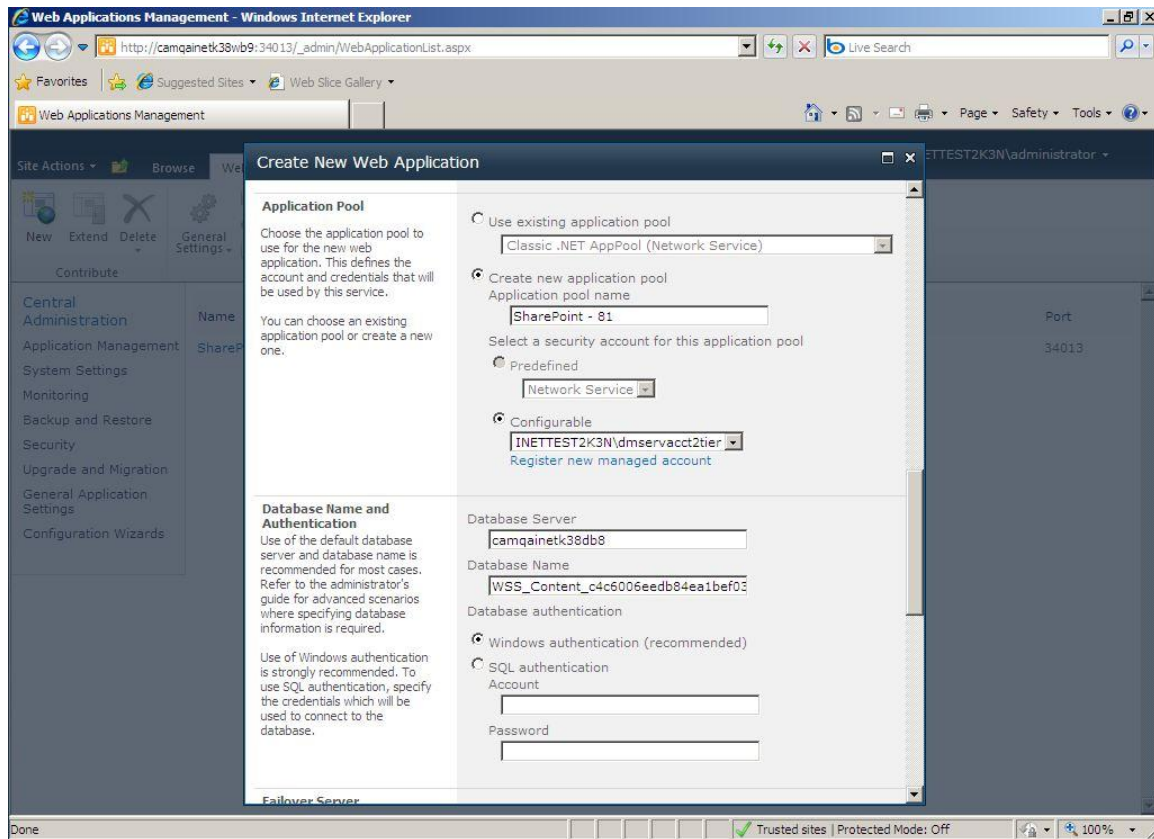
With SPF 2010, Vision and SharePoint **cannot** be installed to the same Web site. Choosing to install SPF to the same website as Vision will cause Vision to no longer function.

Alternatively, you can create a new Web site (different from the website Vision is installed to) ahead of time using a different IP address or port and select the option to **Use an existing IIS web site**.

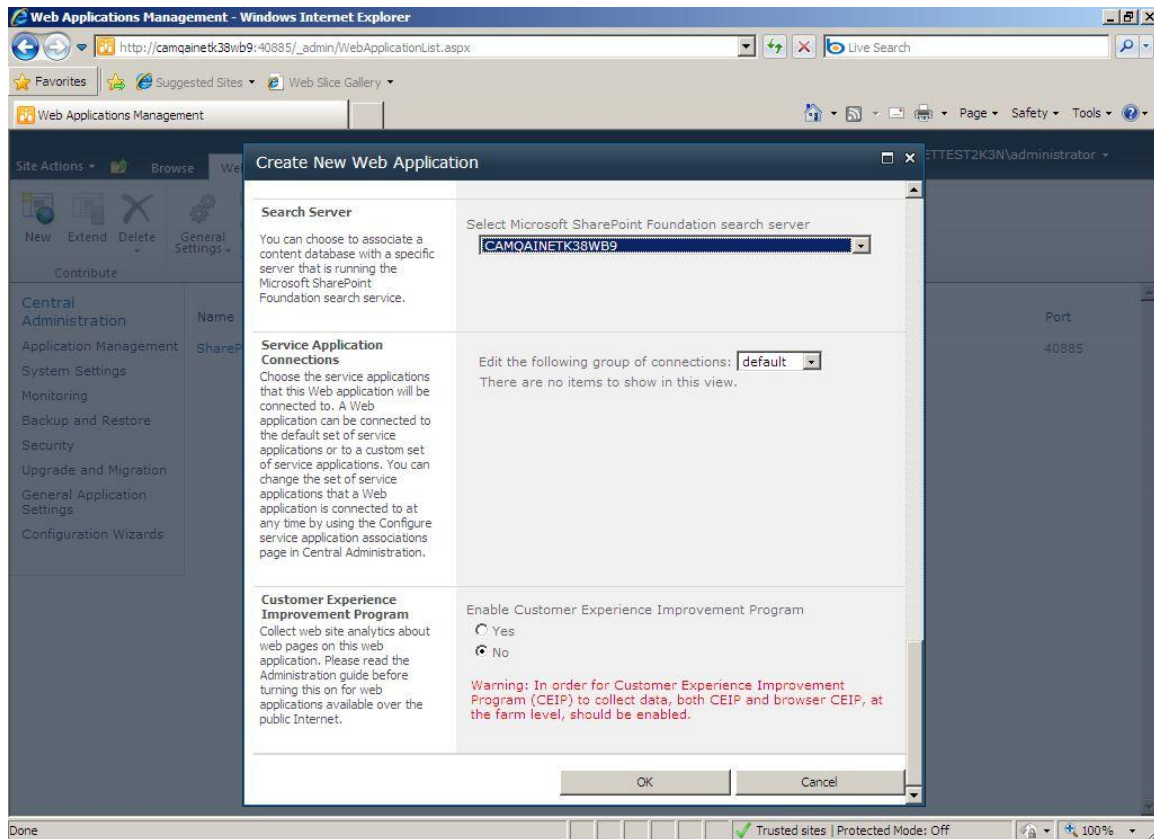
Note the entry in **Path**, which by default is the root of your WSS Web site in a directory named after the port chosen under c:\inetpub\wwwroot\wss\virtualdirectories.



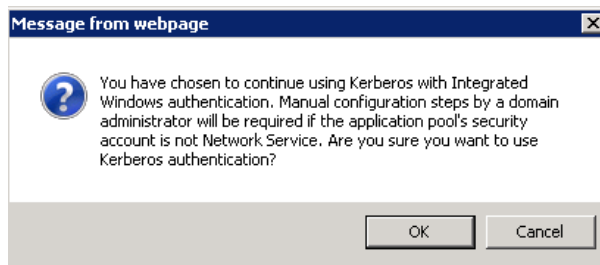
11. Select **Negotiate (Kerberos)** under **Authentication provider**.
12. For the **Allow Anonymous** and **Use Secure Sockets Layer (SSL)** options, accept the default of **No**. If you want to use SSL with SharePoint, you can configure SSL later, but you must not configure SSL to be required.



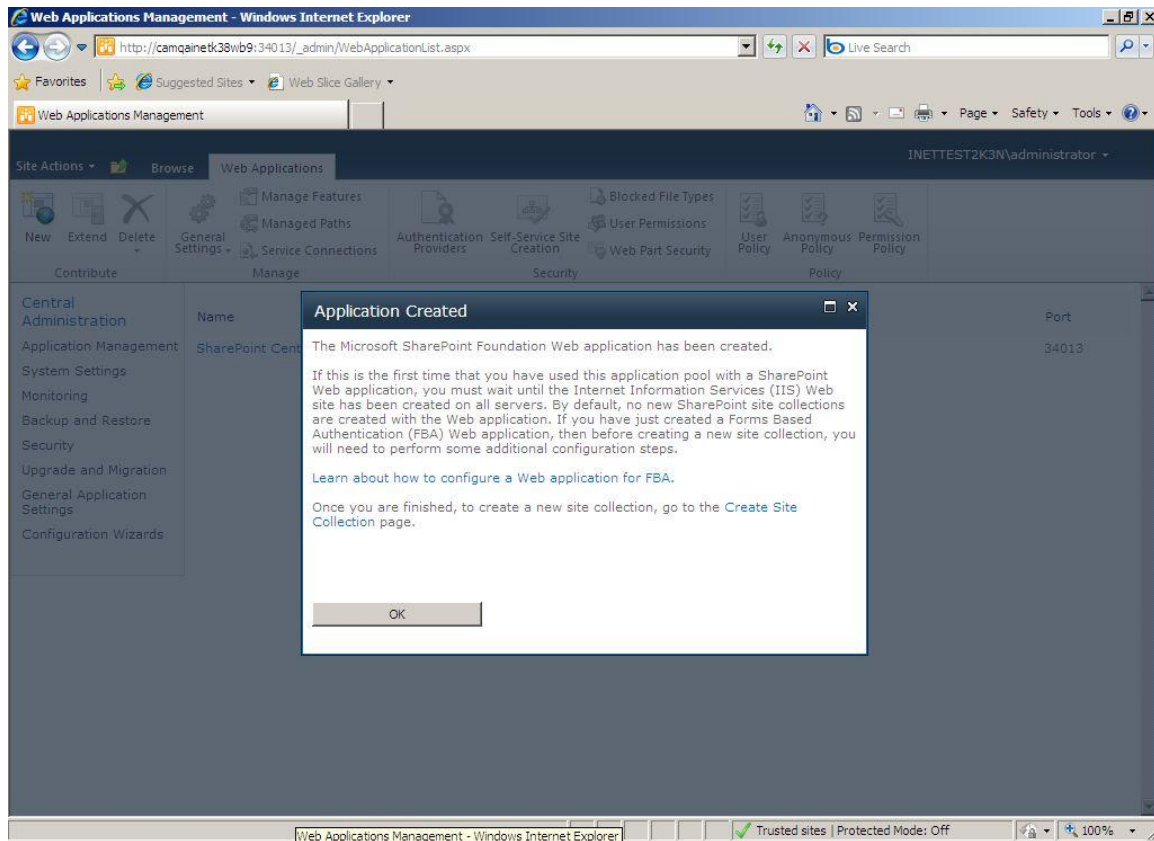
13. Select the **Create new application pool** option and provide a name (Deltek recommends using the same name as the Web site for consistence, for example, SharePoint - 81).
14. Using **Network Service** is not an option for SPF. Use the same account used for the Deltek Vision Application Pool.
15. Verify the name of the server in **Database Server**. (It should be the same as that used for the SharePoint configuration database server.) Accept the default in **Database Name** and it is recommended to modify the name of the Content database to something more recognizable (e.g. WSS_Content_SharePoint81).
16. Select **Windows authentication (recommended)** under **Database authentication**. (This will use the SharePoint service account and Vision Application Pool Identity configured previously.)



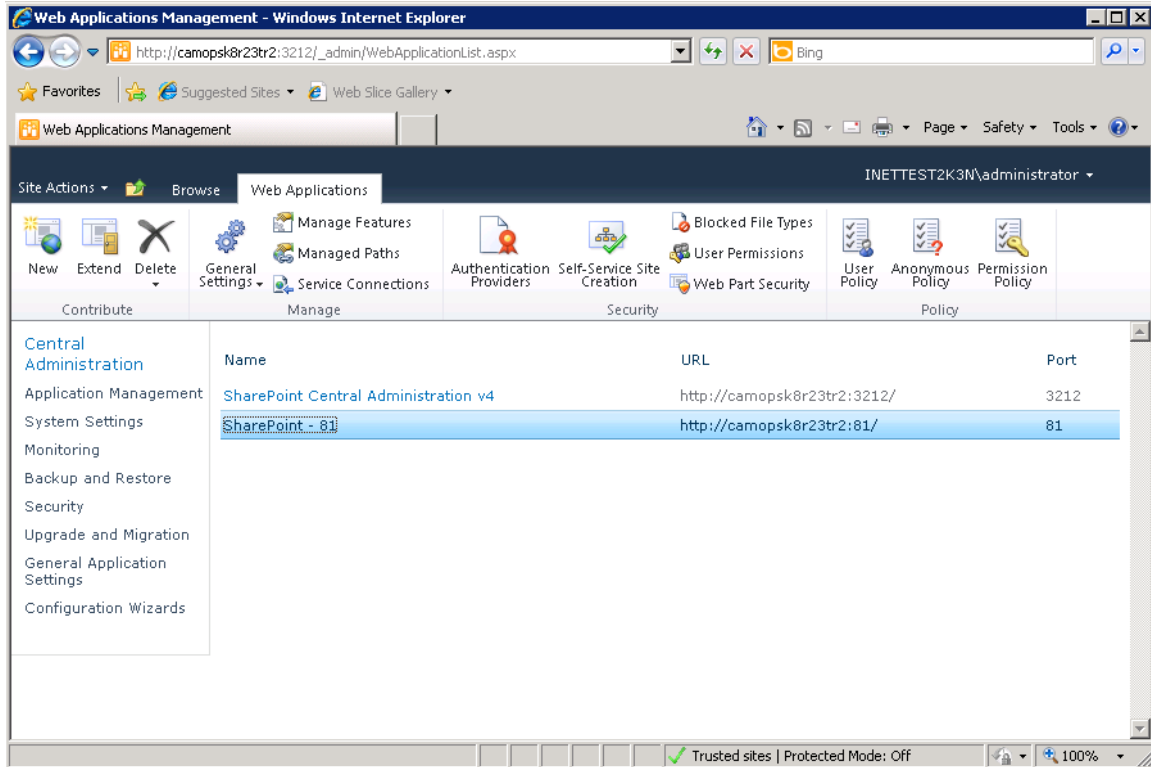
17. Select the search server in **Select Windows SharePoint Foundation search server** and click **OK**. The following dialog box displays.



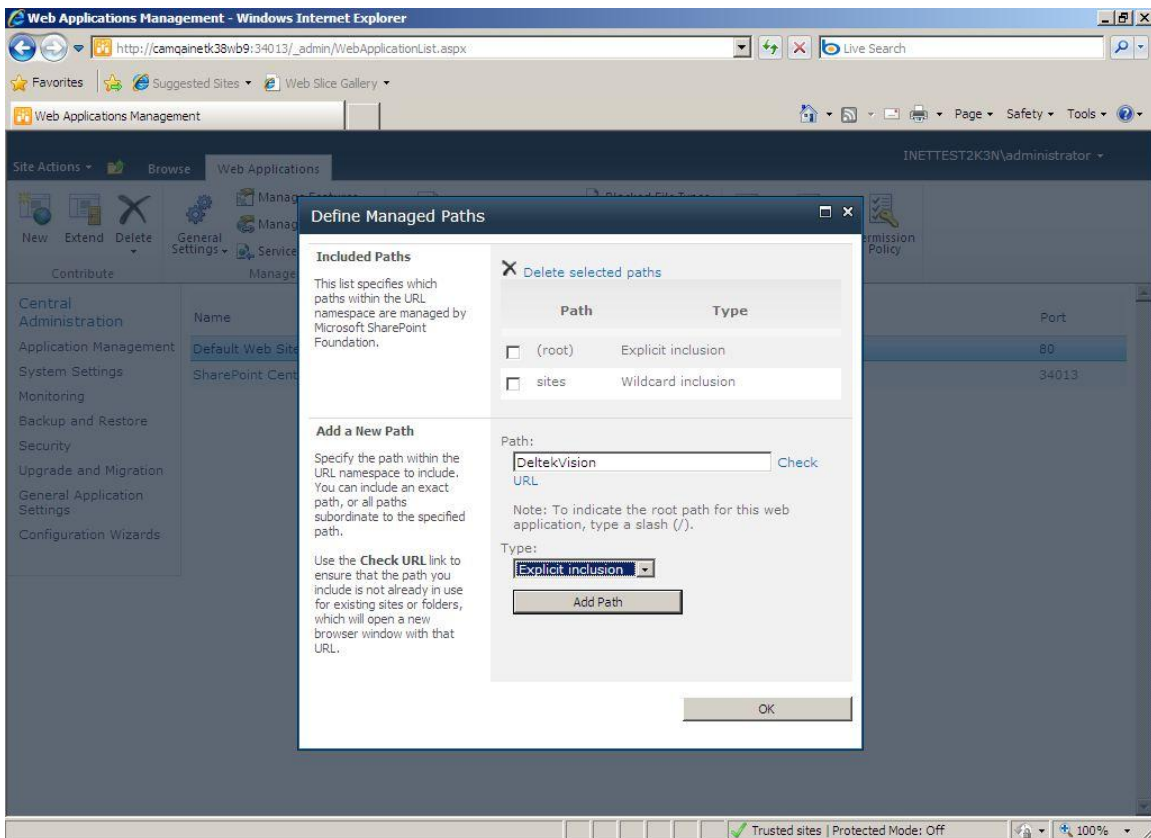
18. Click **OK** to use Kerberos for Windows Authentication. After a few minutes, the Application Created page displays. It indicates the status of the process to create a new Web application.



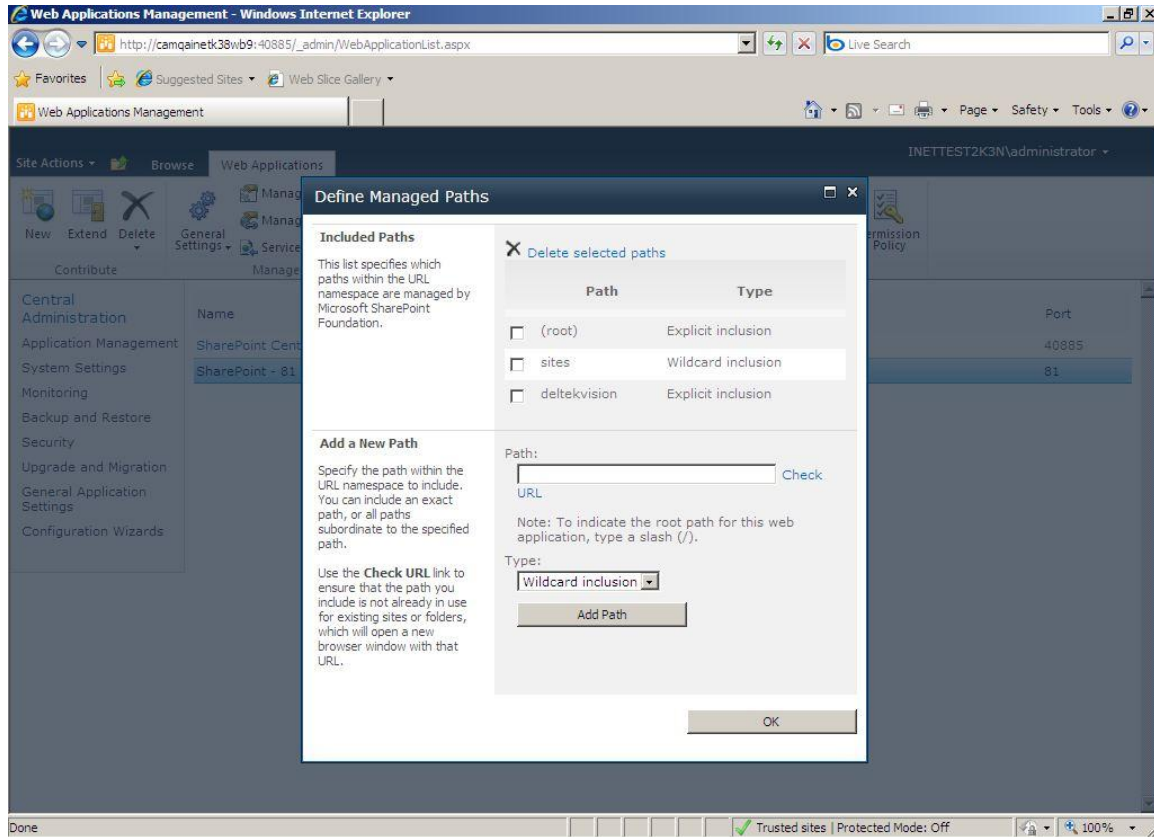
19. Do not click the link to **Create Site Collection** link at this time. It is still necessary to add DeltekVision as a managed path with explicit inclusion before you create the site collection. Click **OK**, the Web Applications page displays.



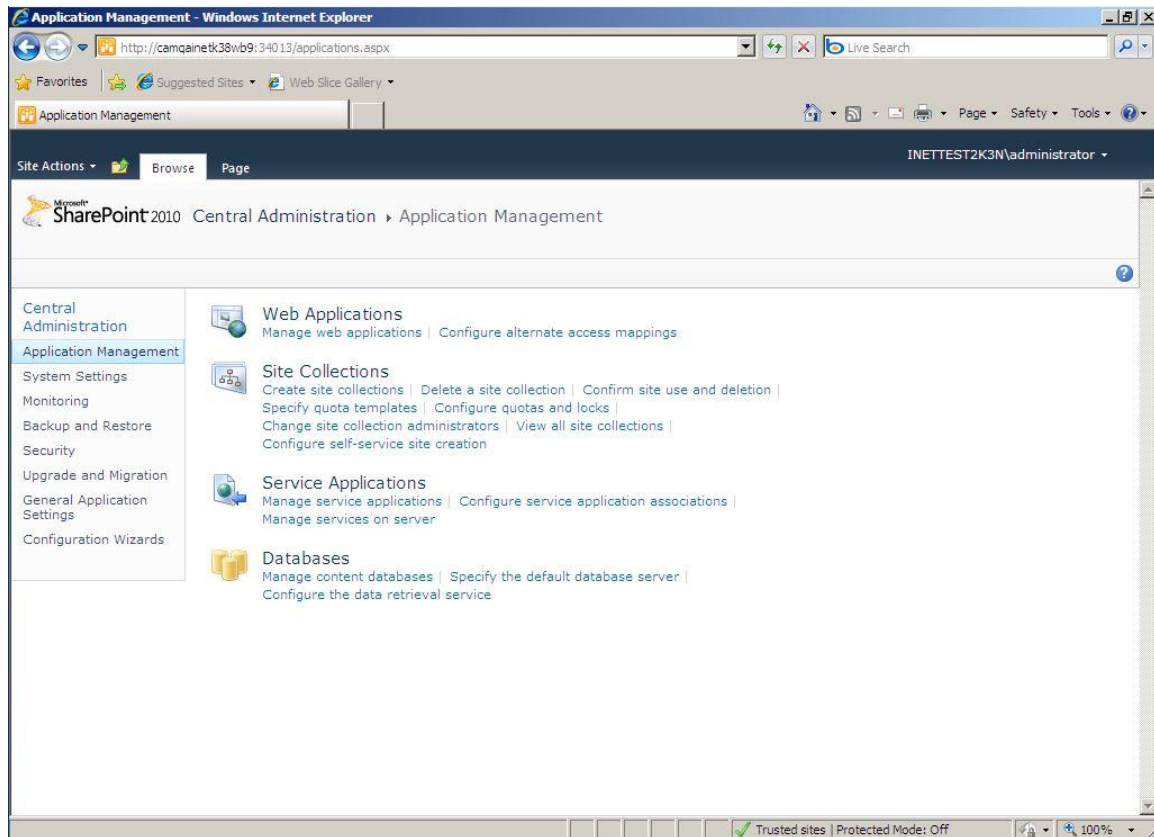
20. Select the SharePoint – 81 web application and click **Managed Paths**. The **Define Managed Paths** page displays.



21. Enter **DeltekJVision** in **Path** and select **Explicit inclusion** in **Type** and click Add Path.
22. Click **OK**.



23. Click **Application Management** and select the **Create Site Collection** option under **Site Collections**.



The Create Site Collection page displays.

Central Administration - Create Site Collection

Use this page to create a new top-level Web site.

Site Actions

Central Administration

Application Management

System Settings

Monitoring

Backup and Restore

Security

Upgrade and Migration

General Application Settings

Configuration Wizards

Web Application

Select a web application.

To create a new web application go to [New Web Application](#) page.

Web Application: <http://camqainetk38wb9/>

Title and Description

Type a title and description for your new site. The title will be displayed on each page in the site.

Title:

Description:

Web Site Address

Specify the URL name and URL path to create a new site, or choose to create a site at a specific path.

To add a new URL Path go to the [Define Managed Paths](#) page.

URL: <http://camqainetk38wb9/deltekvision>

Template Selection

A site template determines what lists and features will be available on your new site. Select a site template based on the descriptions of each template and how you intend to use the new site. Many aspects of a site can be customized after creation. However, the site template cannot be

Select a template:

Collaboration Meetings Custom

Team Site

Blank Site

OK Cancel

Trusted sites | Protected Mode: Off

24. Enter **Deltek Vision** in **Title** and enter a description, if appropriate.
25. From the **URL** drop-down list, select **/deltekvision**. This will be the top level root for Vision Document Management.

The screenshot shows the 'Create Site Collection' web application in Internet Explorer. The browser address bar shows the URL: http://camqainetk38wb9:34013/_admin/createsite.aspx. The page title is 'Create Site Collection - Windows Internet Explorer'. The page content includes a 'Site Actions' menu, a description of site templates, and three main sections: 'Primary Site Collection Administrator', 'Secondary Site Collection Administrator', and 'Quota Template'. The 'Select a template' section is expanded, showing a list of templates: 'Team Site', 'Blank Site', 'Document Workspace', 'Blog', and 'Group Work Site'. The 'Team Site' template is selected. The 'Primary Site Collection Administrator' and 'Secondary Site Collection Administrator' sections each have a 'User name' field. The 'Quota Template' section has a 'Select a quota template' dropdown set to 'No Quota', and fields for 'Storage limit' and 'Number of invited users'. The 'OK' and 'Cancel' buttons are at the bottom right.

Site Actions

INETTEST2K3N\administrator

A site template determines what lists and features will be available on your new site. Select a site template based on the descriptions of each template and how you intend to use the new site. Many aspects of a site can be customized after creation. However, the site template cannot be changed once the site is created.

Select a template:

Collaboration Meetings Custom

Team Site
Blank Site
Document Workspace
Blog
Group Work Site

A site for teams to quickly organize, author, and share information. It provides a document library, and lists for managing announcements, calendar items, tasks, and discussions.

Primary Site Collection Administrator

Specify the administrator for this site collection. Only one user login can be provided; security groups are not supported.

User name:

Secondary Site Collection Administrator

Optionally specify a secondary site collection administrator. Only one user login can be provided; security groups are not supported.

User name:

Quota Template

Select a predefined quota template to limit resources used for this site collection.

To add a new quota template, go to the [Manage Quota Templates](#) page.

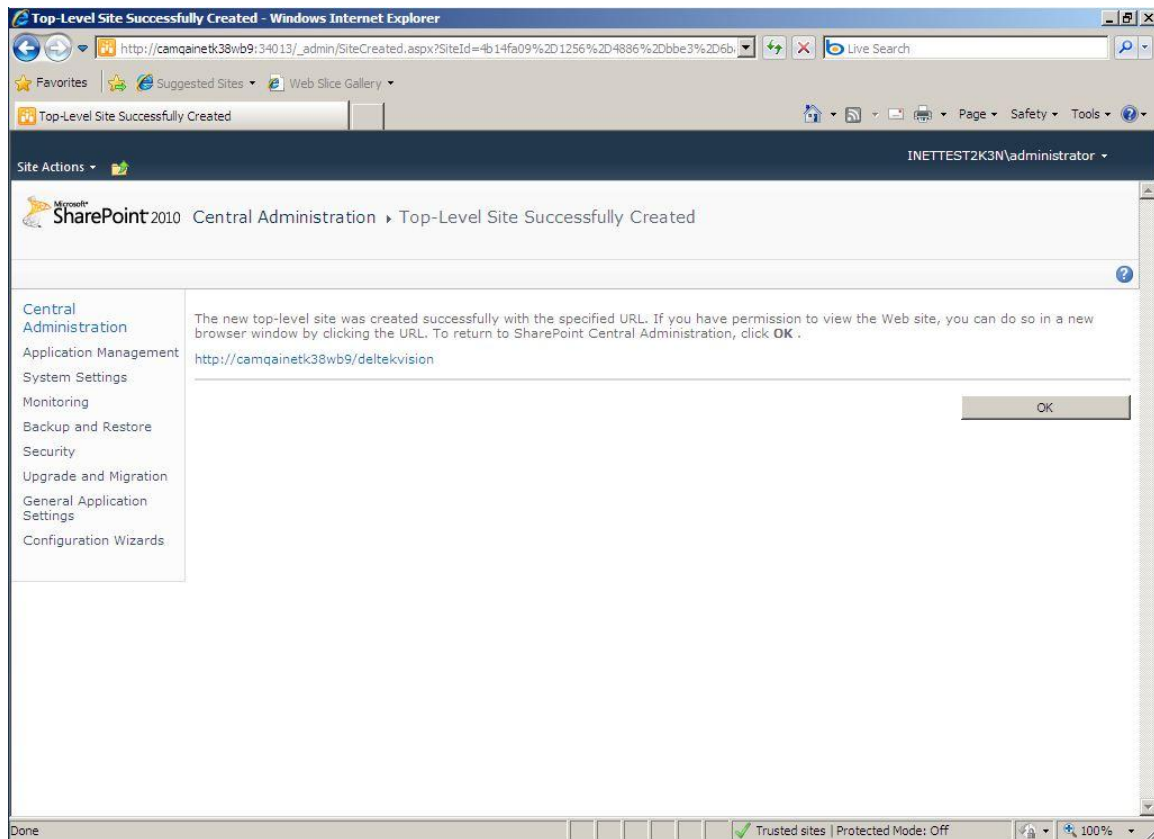
Select a quota template:
No Quota

Storage limit:
Number of invited users:

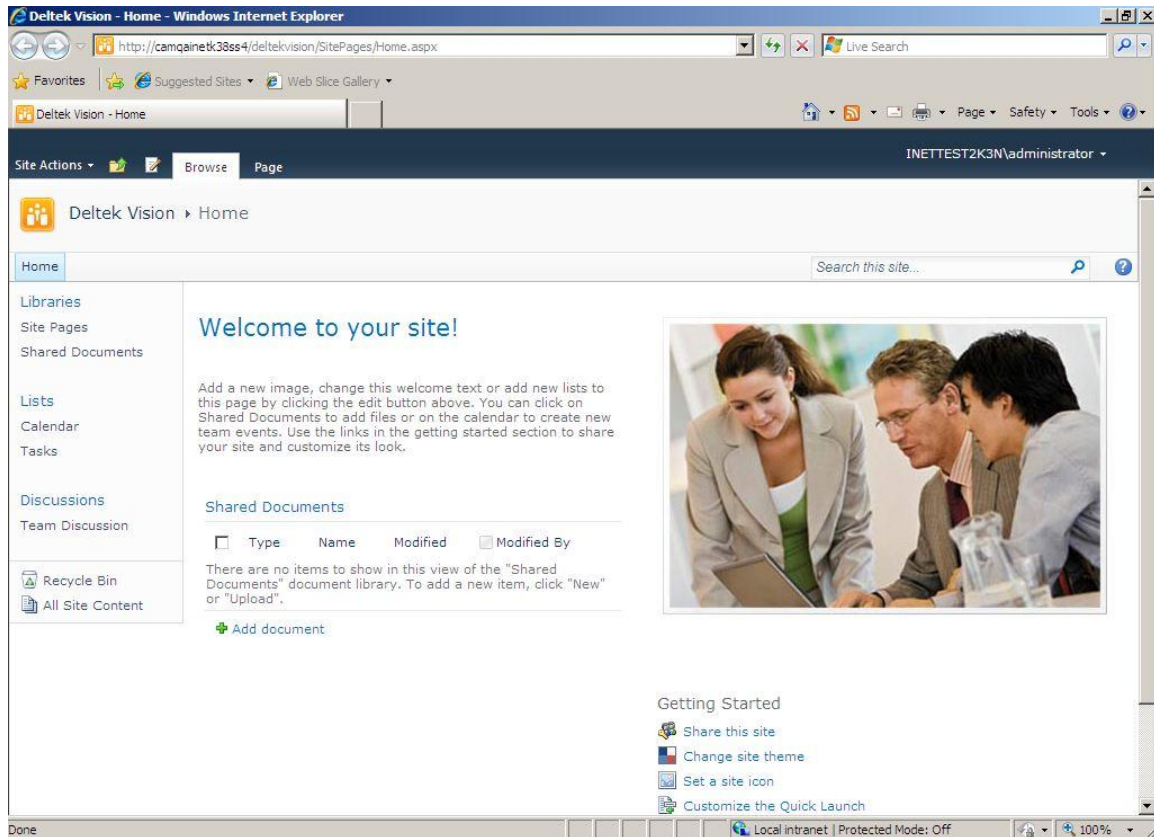
OK Cancel

Trusted sites | Protected Mode: Off | 100%

26. Under **Select a template**, accept the default of **Team Site** for the template to be used and enter a username in each of the **User name** fields for the primary and secondary site collection administrators.
27. Select **No Quota** in **Select a quota template** and click **OK**. The Top-Level Site Successfully Created page displays.



28. Click the link for the top level site (in our example it is <http://camqainetk38wb9:81/deltekvision>) to display the site.



29. The SharePoint configuration is complete. Close SharePoint Central Administration.

Configure SharePoint for a Fully Qualified Domain Name (FQDN) URL (Optional)

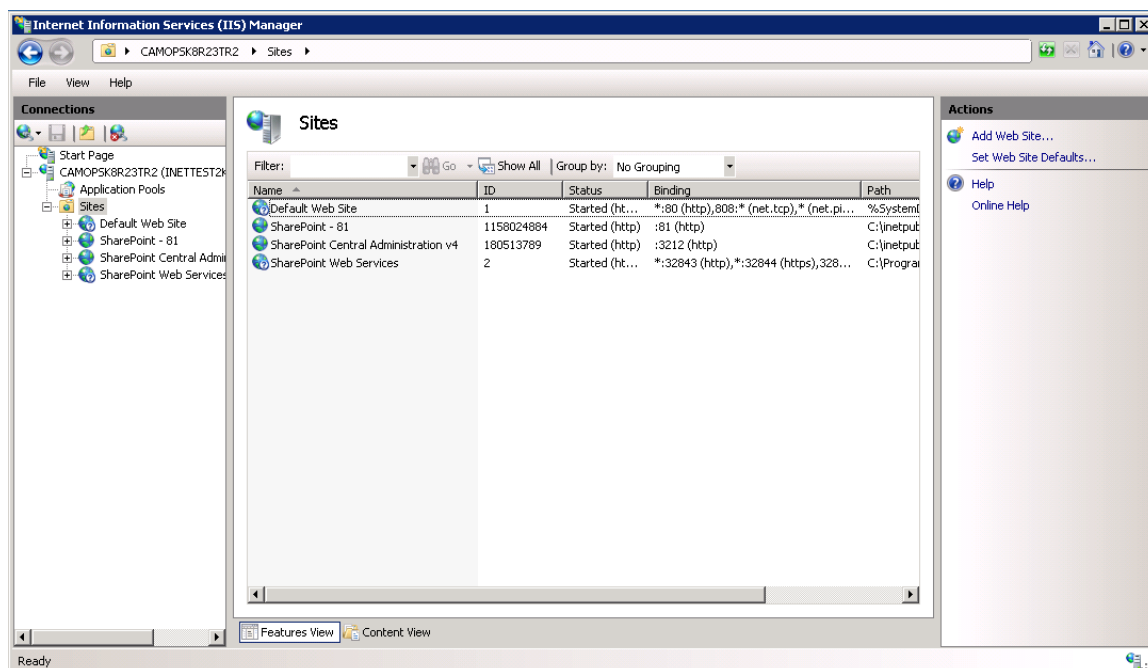
If you will be configuring your SharePoint server to use a custom DNS record for the URL, then you must create an additional SPN and also create Alternate Access Mappings in SharePoint.

See “Appendix C: SPN Configuration When Using Custom DNS Records” on page 100 for more information.

Verify IIS Configuration and Configure Deltek Vision Document Management .NET Assembly

To verify IIS configuration, complete the following steps:

1. Use the directions that follow to open Internet Information Services to view these Web sites:
 - **Default Web Site** — This is your Vision Web Site
 - **SharePoint – 81** — This is your SPF 2010 Web Site
 - **SharePoint Central Administration Web Site**



2. Copy the Vision Document Management .NET assembly to SharePoint site directory.
3. Copy Deltek.Vision.WSS30.Server.dll from <Vision Installation Directory>\Support\DM\30 to:

c:\inetput\wwwroot\wss\Virtual Directories\<site>\bin



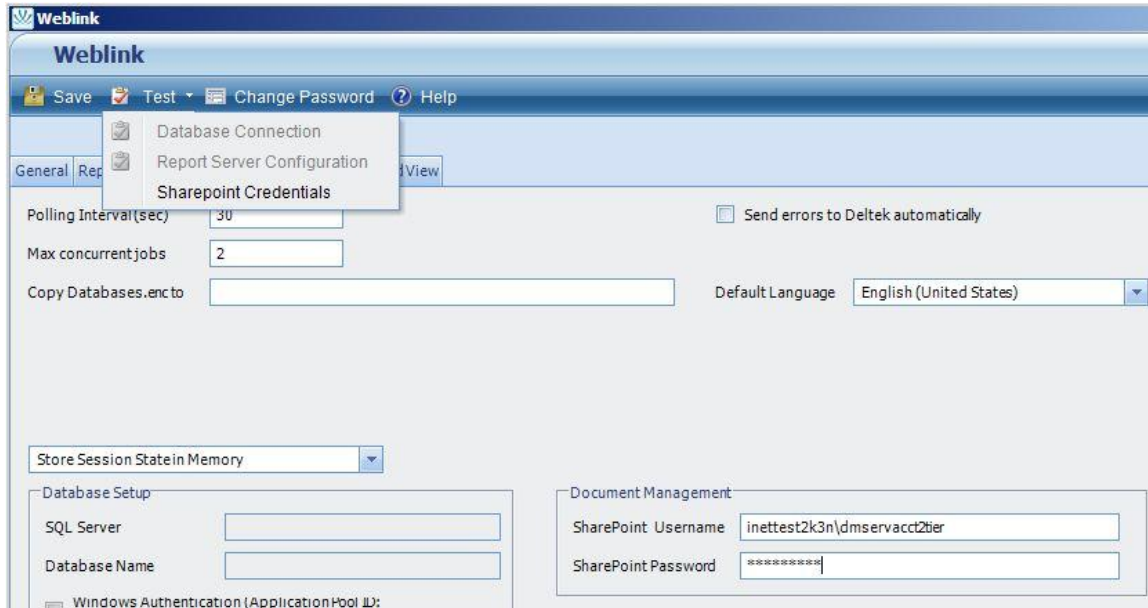
By default, the <site> directory will reference the port chosen. In our example, the port is 81.

Configure Document Management Service Account in Weblink

You must configure the Document Management service account (username/password) on the System Settings tab of the Deltek Vision Weblink utility. Follow the instructions below to configure this:

1. On the Vision Web server, launch Weblink from **Start » Programs » Deltek Vision**
2. Enter the Weblink password when prompted.
3. Click the System Settings tab.

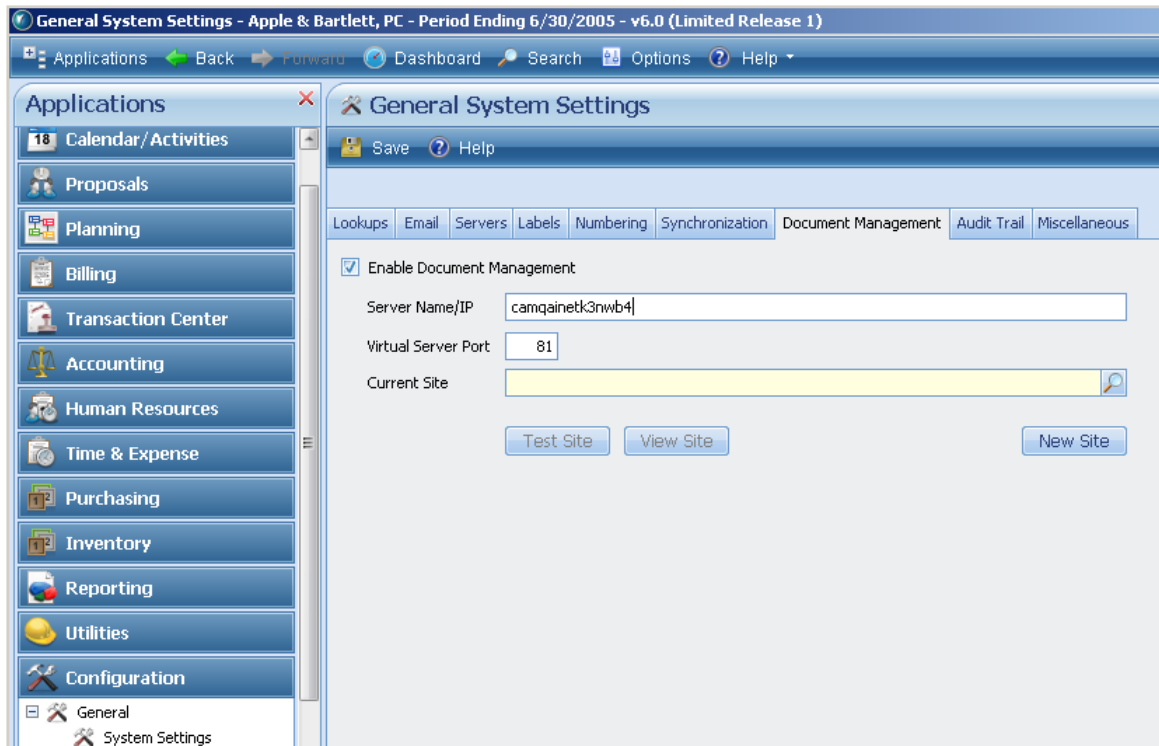
In the **Document Management** group box, enter your SharePoint username and password. This account is your SharePoint Service account/Deltek Vision Application Pool Identity. The click the Test button and SharePoint Credentials to validate the information entered is correct.



Configure Vision Document Management

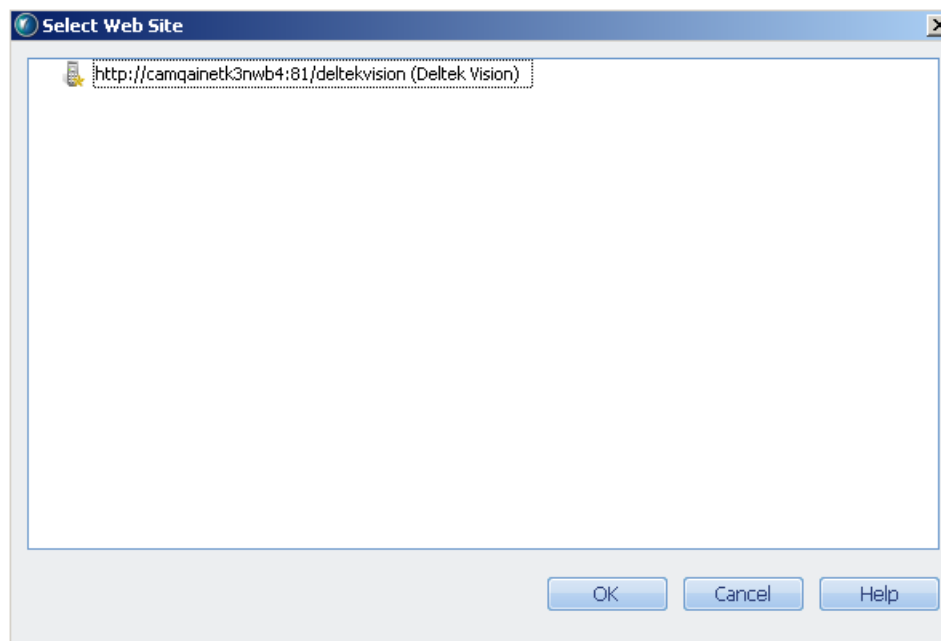
To configure Vision Document Management, complete the following steps:

1. Log in to Vision using an account that has access to the Configuration menus.
2. Click **Configuration » General » System Settings** and select the Document Management tab.



3. Select the **Enable Document Management** check box.

4. Enter the name of the server hosting Document Management. This can be the NetBIOS name, server name FQDN, or custom DNS/FQDN. Enter this value without the protocol prefix (for example, remove the http://). In the illustration above, the value is **camqainetk3nwb4**.
5. Enter the port in **Virtual Server Port**. In our example the port is 81.
6. Click the Lookup icon to select the current site.



7. The Select Web Site dialog box displays the available sites. Select a site and click **OK**.
8. Save your changes.

Optional: Configure Protocol Transition

If Vision Document Management functionality is required over the Internet and you will be using a custom DNS/FQDN for the SharePoint URL (as in our example, vision1.inettest2k3n.com), then you must configure a form of delegation referred to as Protocol Transition. If Document Management functionality is not required, you can skip this step.

The Kerberos authentication protocol must be used to authenticate from the Vision Web server to the SharePoint server. However, if Vision is deployed in an Internet scenario and there are users outside of the firewall that need to access Document Management features, Kerberos authentication cannot be used to authenticate the client to the Web server. This is because the client needs to have the ability to negotiate a Kerberos ticket with the Key Distribution Center (KDC), which is a service running on a Domain Controller. This requires port 88 to be opened inbound on the firewall to the Domain Controller, which is not an advisable configuration.

To get around this, you must be running a Native Windows Server 2003 functional domain.

To configure Protocol Transition, select the **Use any authentication protocol** option instead of the **Use Kerberos only** option that is used to configure Constrained Delegation. This allows the client to authenticate to the Vision Web server using NTLM instead of Kerberos, and that authentication is then “transitioned” over to Kerberos for Delegation to the SharePoint server.

To configure Protocol Transition, complete the following steps:

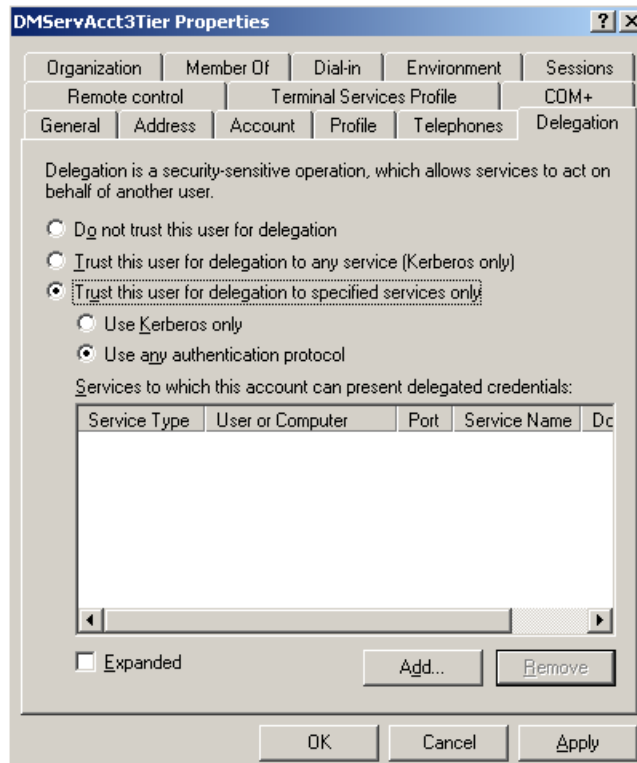
1. Open the Active Directory Users and Computers MMC on a Domain Controller.

2. Locate the User account for the Vision Application Pool Identity (WSS Service account).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for delegation to specified services only** option.

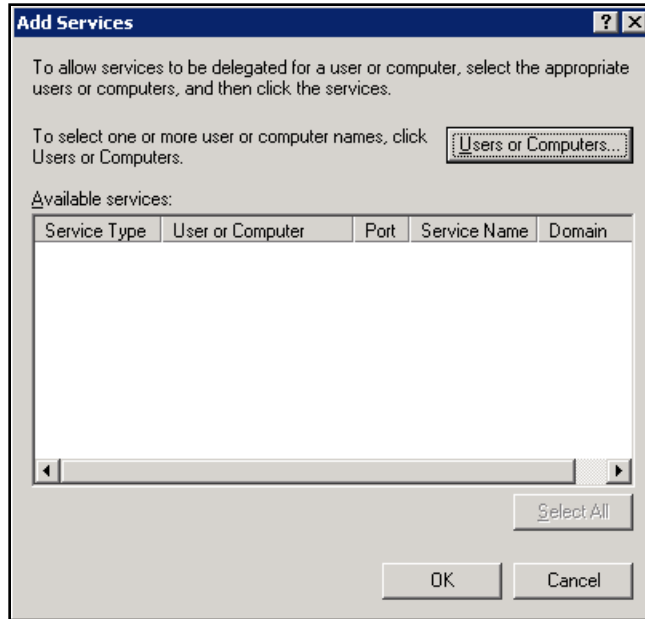


If you click the second option, you will be configuring Unconstrained Delegation, which would be the equivalent of Delegation in a Windows 2000 or Mixed domain. The Constrained Delegation feature of Windows Server 2003 Native domain is more secure and therefore recommended.

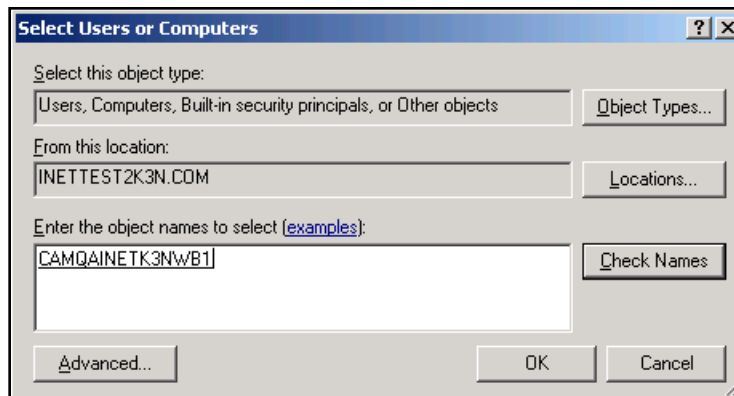
5. Select the **Use any authentication protocol** option.



6. Click **Add**. The **Add Services** dialog box displays.

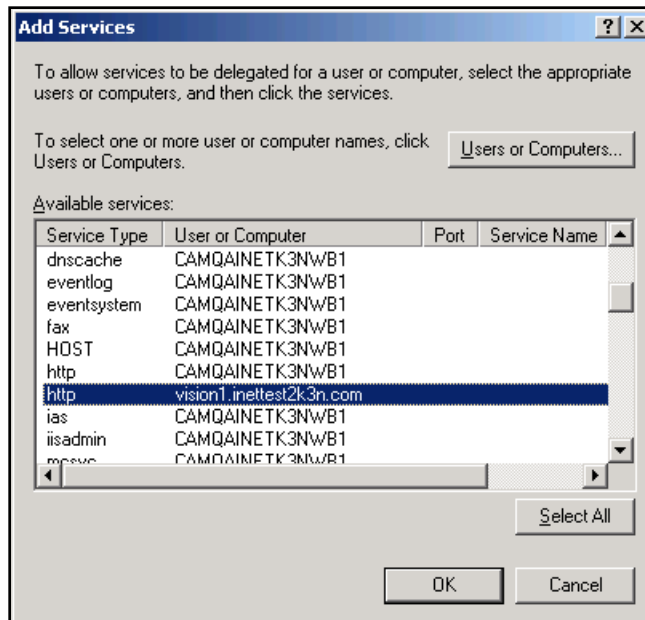


7. Click **Users or Computers**. The Select Users or Computers dialog box displays.



8. Search for the SharePoint server and click **OK**.
9. Locate the http service for the SPN (FQDN) you created earlier (in our example, vision1.inetest2k3n.com), select it, and click **OK**.

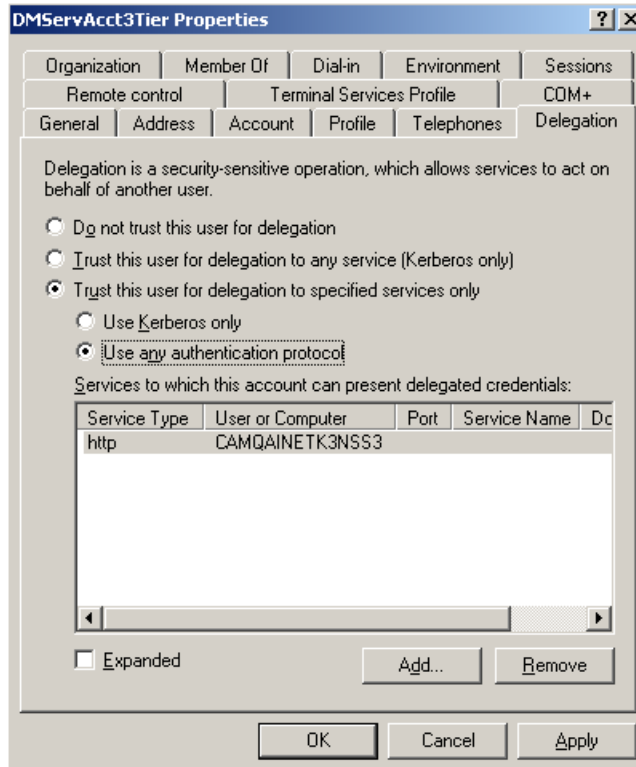
In the following screenshot, there are two http service types listed. Unless you have registered a custom FQDN using the setspn utility, only the server name displays. These service types are known as Service Principal Names (SPNs).



The SPN referencing CAMQAINETK3NWB1.inettest2k3n.com was created automatically when the server was added to the domain and the http service (IIS) was installed.

The second SPN referencing vision1.inettest2k3n.com is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

The Delegation tab options should be selected as follows:



Because we are explicitly specifying the http service and not all services on the SharePoint server, and because we are using the **Use any authentication protocol option** and not Kerberos, this is known as "Protocol Transition."

Multi-Tier—New Installation of Document Management 6.1 with SharePoint Foundation 2010

The following instructions assume that Vision and Windows SharePoint Foundation 2010 exist on separate servers and assume that you are deploying to Windows Server 2008 x64 or Windows Server 2008 R2 x64.

Prerequisites

- Install/upgrade to the current release of Vision 6.1.
- Change the Application Pool Identity for the DeltekVisionAppPool to be a domain account. (The Vision 6.1 installation sets this to be the local DeltekVision account.) This account will also be the SharePoint Service account. Add this user to the local Administrators and IIS_WPG groups on the Vision server and local Administrators group on the SPF server.

Configure Vision Application Pool Identity to Be a Domain Account

You must change the Vision Application Pool Identity to be a domain account. The default is for Vision to use a local DeltekVision user created during the Vision installation. This change is necessary because of the local account's inability to read the SPN configured in Active Directory.



For this account to be the Application Pool Identity it must be a member of the IIS_IUSRS group in IIS7.0, in addition to being a member of the local administrators group for Vision.

To change the Vision Application Pool Identity, complete the following steps:

1. Create a domain user account. This account must also be your SPF Service account. No domain Admin rights are needed for this account.
2. Log on to the domain on the Vision Web/application server using an Administrator account.
3. Open Internet Information Services: **Start » All Programs » Administrative Tools » Internet Information Services (IIS) Manager**.
4. Expand the Server name and then click **Application Pools**.
5. Select the **DeltekVisionAppPool** and select **Advanced Settings** from the Action pane on the right hand side. The following displays:

Advanced Settings

(General)	
.NET Framework Version	v2.0
Managed Pipeline Mode	Integrated
Name	DeltekVisionAppPool
Queue Length	1000
Start Automatically	True
CPU	
Limit	0
Limit Action	NoAction
Limit Interval (minutes)	5
Processor Affinity Enabled	False
Processor Affinity Mask	4294967295
Process Model	
Identity	deltekvision
Idle Time-out (minutes)	0
Load User Profile	False
Maximum Worker Processes	1
Ping Enabled	True
Ping Maximum Response Time (seconds)	90
Ping Period (seconds)	30
Shutdown Time Limit (seconds)	90
Startup Time Limit (seconds)	90
Process Orphaning	
Identity [identityType, username, password] Configures the application pool to run as built-in account, i.e. Network Service (recommended), Local System, Local Service, or as a specific user identity.	

OK Cancel

6. Place your cursor in the Identity field and then click the ellipses button to set the identity. The Application Pool Identity dialog box displays:

Application Pool Identity

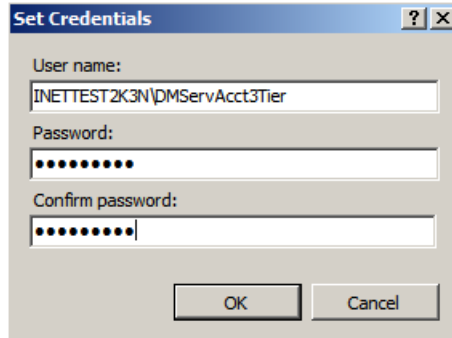
☐ Built-in account:

☐ Custom account:

deltekvision Set...

OK Cancel

7. Select the **Custom account** option and click **Set**. The Set Credentials dialog box displays.



The image shows a 'Set Credentials' dialog box with three input fields: 'User name:', 'Password:', and 'Confirm password:'. The 'User name' field contains the text 'INETTEST2K3N\DMServAcct3Tier'. The 'Password' and 'Confirm password' fields are filled with dots. At the bottom are 'OK' and 'Cancel' buttons.

8. In **User name**, enter the Application Pool Identity in the form <Domain>\<Username>. In **Password** and **Confirm password**, enter that user's password. Then click **OK** three times to set the identity.

Configure SPN for Vision Application Pool Identity

As mentioned earlier in this document, it is necessary to create a Service Principal Name (SPN) for the domain user running the DeltekVisionAppPool. Please refer to the section in Appendix B titled "IIS 7.0 / 7.5 Kernel Mode Authentication" for important information of the use of Service Principal Names and Kernel Mode Authentication with your Application Pool Identity.

To add the Application Pool Identity as a Service Principal Name, complete the following steps:

1. Enter the following commands on the domain server where setspn is installed:
`setspn -A http/<Vision Web/App Server name> <domain app pool identity>`
 For example: `setspn -A http/camqainetk3nwb5 inettest2k3n\dmservacct3tier`
2. Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>



If your Vision Web server is accessed by a DNS / FQDN (Fully Qualified Domain Name) that *does not match* the name of the server (for example, if your Vision Web server is named Server01 and its DNS name is Server01.Company.com, but you have added a custom DNS value Vision.Company.com), then you must also add an SPN for this custom DNS name.

Install and Configure Vision 6.1 Document Management and SharePoint Foundation (SPF) 2010

When you install Vision 6.1 Document Management, SPF is automatically installed. If you already have SPF installed, no changes are made to your SPF installation. However, the Document Management installation will not automatically configure SPF. The steps to configure SharePoint are outlined in this document.

The Document Management installation does the following:

- Installs Web Service Extensions (WSE) 2.0 SP3.
- Installs SPF 2010, if it is not already installed.
- Copies Document Management files to the SharePoint ISAPI folder (c:\program files\common files\microsoft shared\web service extensions\14\isapi).

- Copies Document Management files to the Vision Support folder (\program files\deltek\vision\support\DM\30).
- Modifies the SharePoint Web.config file in the ISAPI directory to work with Vision Document Management.
- Installs Deltek.Vision.WSS30.Server.dll into the Global Assembly Cache (GAC).

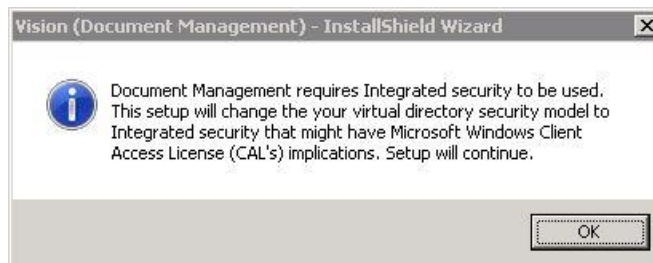
Install Vision 6.1 Document Management on the Vision Web Server

To install Vision 6.1 Document Management, complete the following steps:

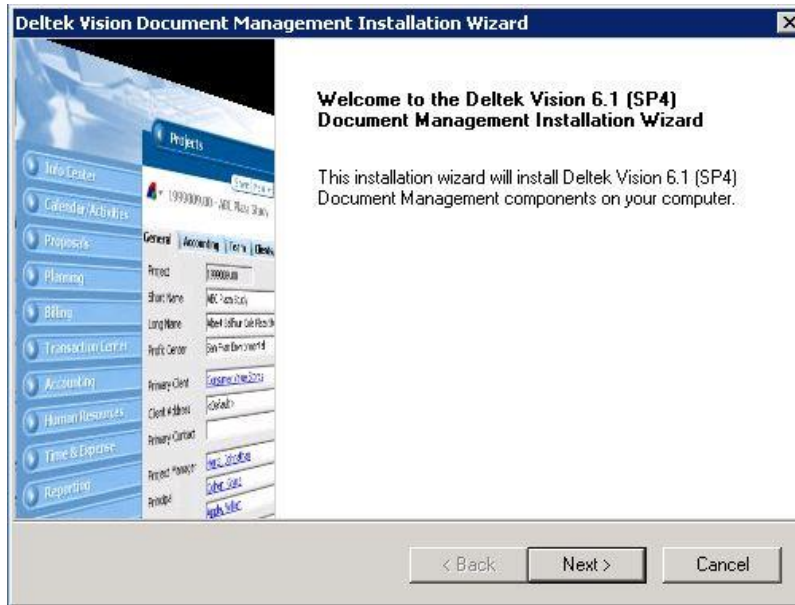
1. Download the DeltekVision61SP4DM.exe file and run the setup on your Vision Web server.
2. The installation will check to ensure that the IIS Role service Windows Authentication. If the Role Service is not installed you will be prompted to install it and the setup will exit:



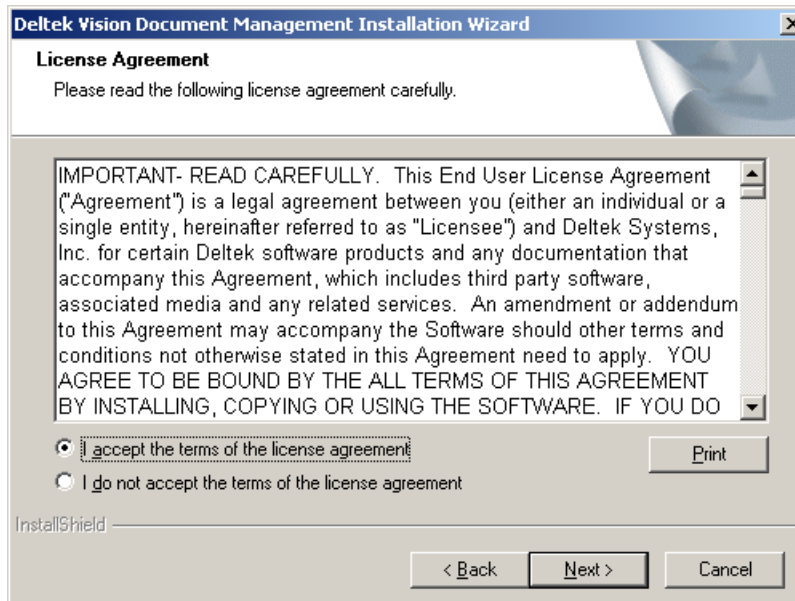
3. The following dialog box then indicates the IIS licensing requirements for the use of Windows Integrated Authentication (required to use Vision Document Management):



4. Click **OK**. The Welcome page displays.



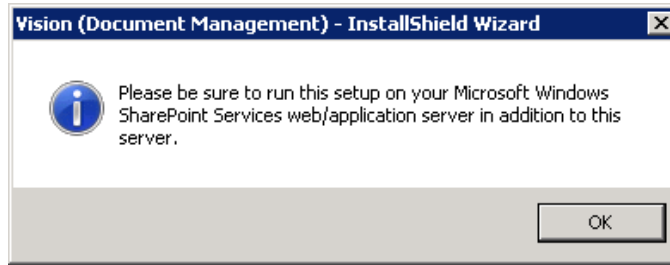
5. Click **Next**. The License Agreement page displays.



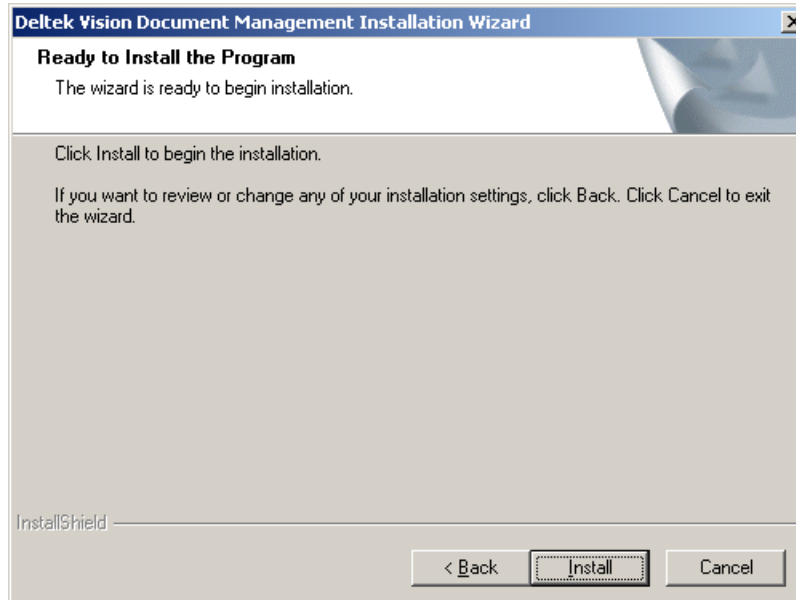
6. Select **I accept the terms of the license agreement** and click **Next**. The following dialog box displays.



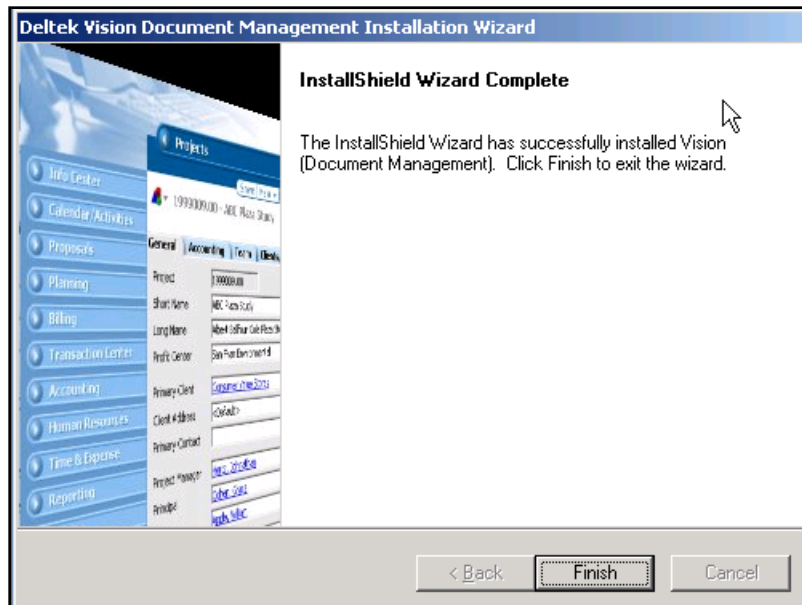
7. Click **No** because this is a multi-tier installation of Vision Document Management and your Vision Web server will not host SPF 2010. The following dialog box displays to remind you to run the setup on the SPF server.



8. Click **OK** to display the Ready to Install the Program page.



9. Click **Install** to start the installation.
10. Click **Finish** when the installation is completed.



Install Vision Document Management on the SPF Server

To install Vision Document Management on the SPF server, complete the following steps:

1. As indicated at the beginning of this Appendix, it is highly recommended that you install all available Windows Updates prior to proceeding with the installation.
2. Download the DeltekVision61SP4DM.exe file and run the setup on your Vision Web server.
3. The installation will check to ensure that the IIS Role service Windows Authentication. If the Role Service is not installed you will be prompted to install it and the setup will exit:



4. After installing the Windows Authentication IIS Role Service, re-run the Document Management installation. The installation will then check to ensure that Hotfix KB979917 is installed, which is a SPF 2010 Prerequisite not installed by the Prerequisite Installer. If it is not installed you will be prompted to install it, the setup will exit and a browser windows will open displaying the download site. Be sure to choose the correct x64 version, Vista is Server 2008 and Win7 is Server 2008 R2:



5. After installing the hotfix for KB979917, re-run the Document Management installation. The following dialog box displays, indicating that the IIS licensing requirements for the use of Windows Integrated Authentication (required to use Vision Document Management):



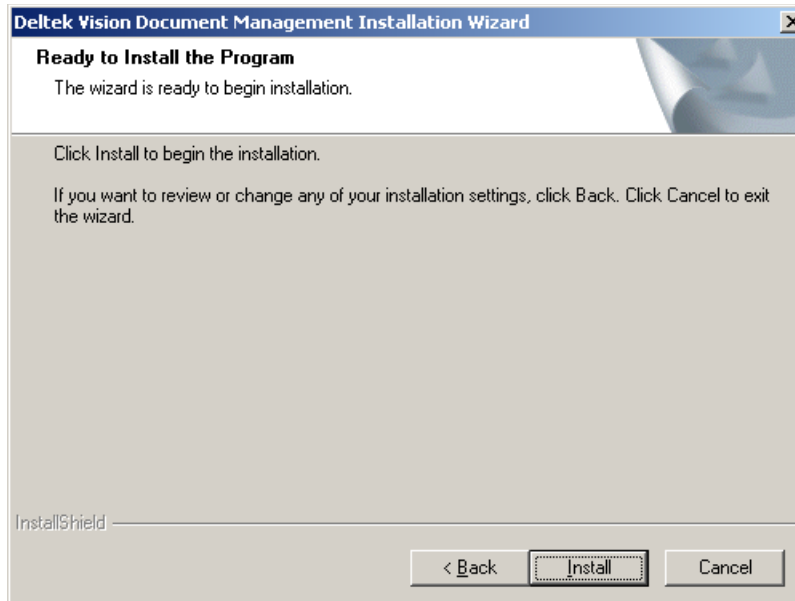
6. Click **OK**. The Document Management Installation Wizard displays.



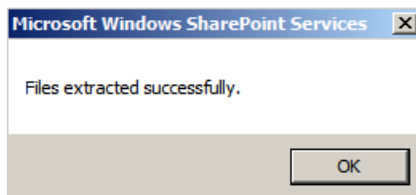
7. Click **Next**. The License Agreement page displays.



8. Accept the License Agreement and click **Next**.
9. The Ready to Install the Program page displays.



10. Click **Install** to start the installation. The installation automatically downloads SharePoint Foundation 2010, extracts the setup files and installs Windows SharePoint Services. During the extraction process, you receive the following dialog box. You must click **OK** to continue the installation.



11. The installation will launch the SharePoint Foundation Prerequisite Installer to install all prerequisite components. If there are errors installing any of these components you will see a dialog indicating that the Prerequisite Installer failed and a link to open the log file and the installation will end. The following is an example:



An excerpt from the Prerequisite Installer log file related to this error is below which indicates a problem installing the Microsoft Chart Controls for Microsoft .Net Framework 3.5:

```
2010-08-26 08:58:54 - Beginning download of Microsoft Chart Controls for Microsoft .NET Framework 3.5
2010-08-26 08:58:54 - http://go.microsoft.com/fwlink/?LinkId=160383
2010-08-26 08:59:26 - download timeout (0x80072EE2=-2147012894)
2010-08-26 08:59:26 - Retrying download from position (in bytes) (0x10B400=1094656)
2010-08-26 08:59:26 - Size of download of "Microsoft Chart Controls for Microsoft .NET Framework 3.5" in bytes is "1094656"
2010-08-26 08:59:26 - Download of "Microsoft Chart Controls for Microsoft .NET Framework 3.5" completed successfully
2010-08-26 08:59:26 - Installing Microsoft Chart Controls for Microsoft .NET Framework 3.5
2010-08-26 08:59:26 - "c:\users\ADMINI~1\INE\AppData\Local\Temp\2\Cha2726.tmp.exe" /q /norestart
2010-08-26 08:59:26 - Error: Unable to install (0XC1=193)
2010-08-26 08:59:26 - Error: [In HRESULT Format] (0x800700C1=-2147024703)
2010-08-26 08:59:26 - Last return code (0XC1=193)
2010-08-26 08:59:26 - Error: The tool was unable to install Microsoft Chart Controls for Microsoft .NET Framework 3.5.
2010-08-26 08:59:26 - Last return code (0XC1=193)
2010-08-26 08:59:26 - Options for further diagnostics: 1. Look up the return code value 2. Download the prerequisite manually and vi
2010-08-26 08:59:26 - Cannot retry
```

Should you need to locate the Prerequisite Installer log file, it can be found in `c:\users\<username>\appdata\local\temp\<numbered subdirectory>`.

NOTE: If there are errors installing any software prerequisites download and install them manually and then re-run the Document Management installation. Links to all software prerequisites can be found at the following URL, <http://technet.microsoft.com/en-us/library/cc288751.aspx>.

12. Additionally, if a reboot is necessary you will see a dialog indicating a reboot is required and the installation will end. The following is an example:



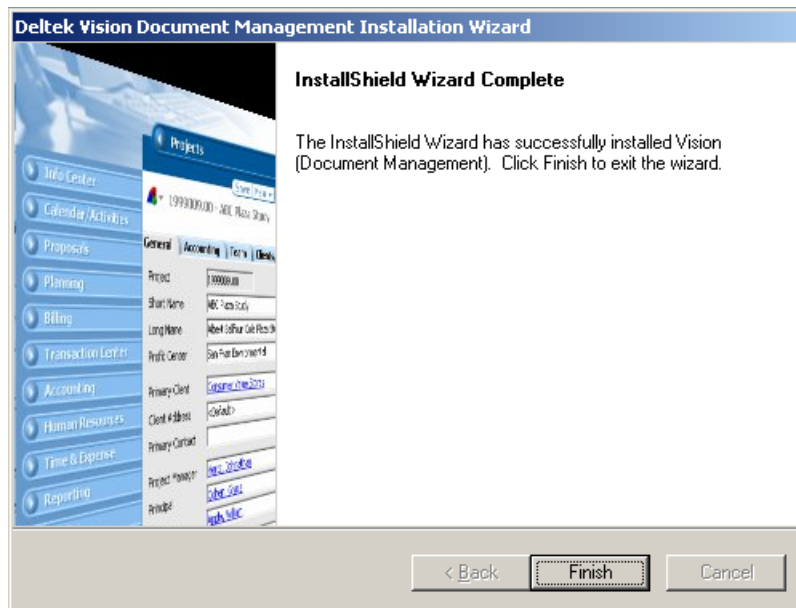
13. After resolving all issues with the prerequisite installations and/or rebooting as required, start the Document Management installation again to complete the installation.

NOTE: It may take running the installation several times to complete.

14. The installation will then launch the SharePoint Foundation installation routine. If there are errors installing SharePoint, a dialog will display with a link to open the log file.

After resolving any issues, start the Document Management installation again to complete the installation.

15. When the installation is complete, the InstallShield Wizard Complete page displays.

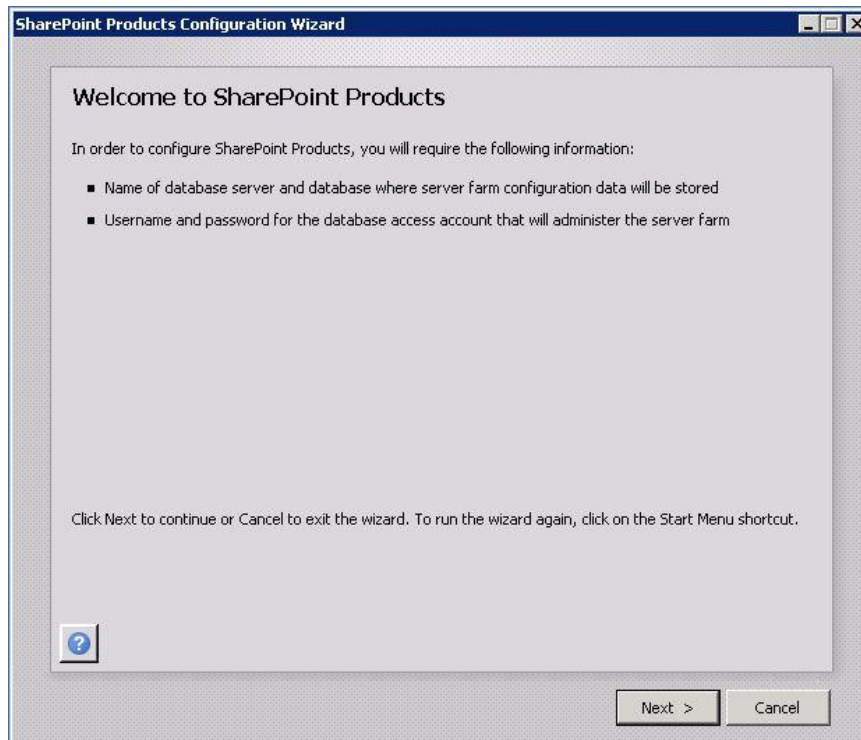


16. Click **Finish**.

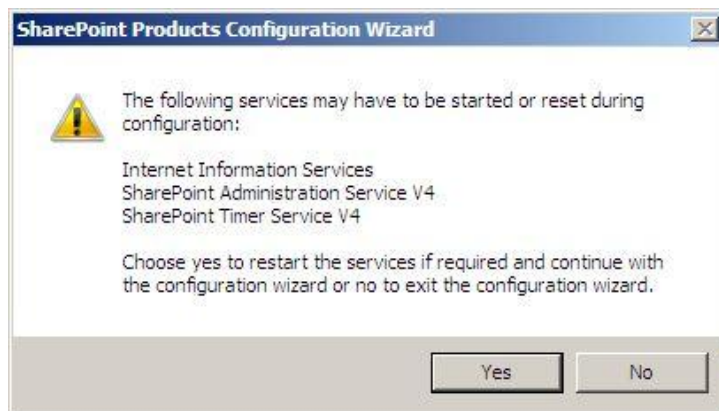
Run the SharePoint 2010 Products Configuration Wizard

To run the SharePoint 2010 Products Configuration Wizard, complete the following steps:

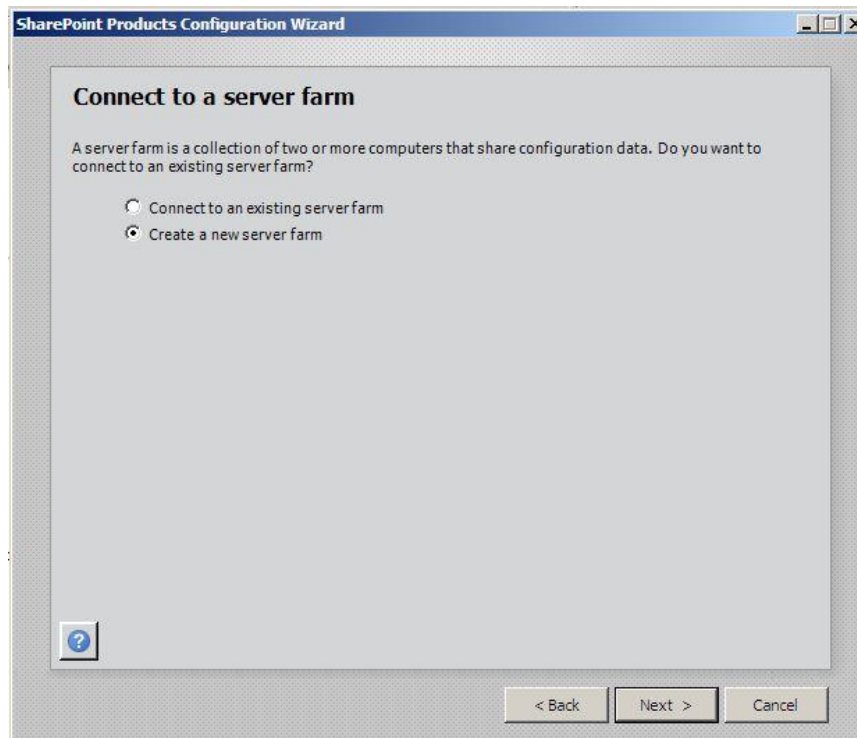
1. Click **Start » All Programs » Microsoft SharePoint 2010 Products » SharePoint 2010 Products Configuration Wizard**. The Welcome page displays.



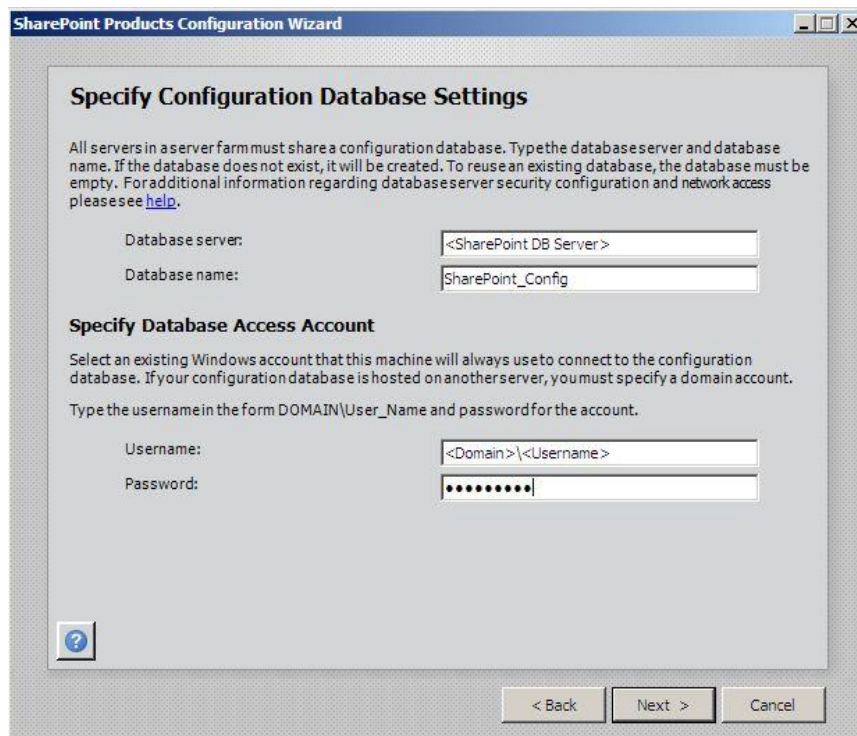
2. Click **Next**. The following dialog box displays.



3. Click **Yes**. The Connect to a server farm page displays.



4. Select the **Create a new server farm** option and click **Next**. The Specify Configuration Database Settings page displays.



5. Enter the name of the database server to host the SharePoint configuration database and accept the default database name: SharePoint_Config.

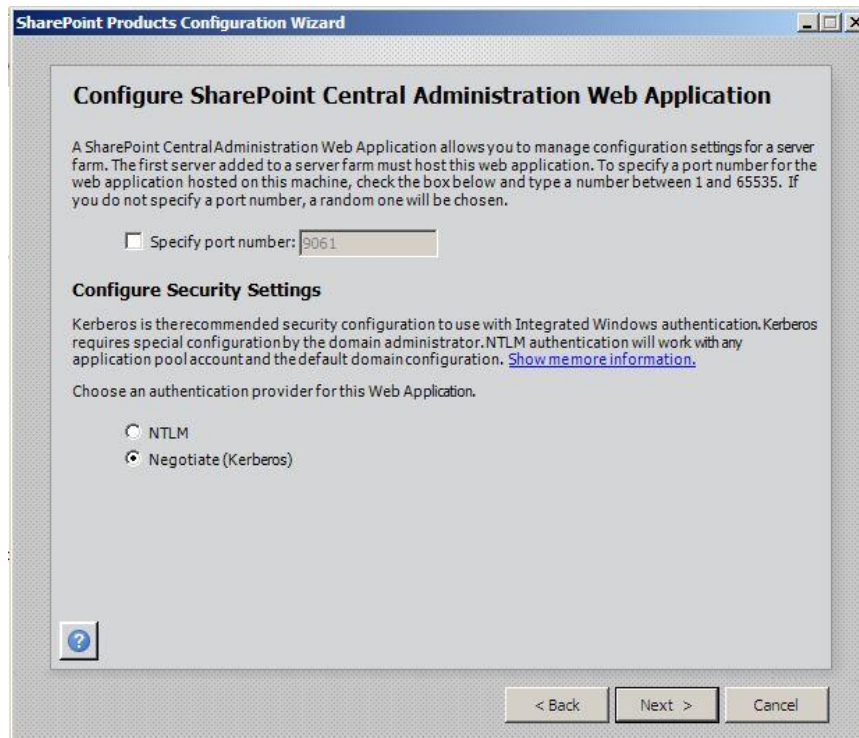


If you are using SQL Server 2008, your database access account will need to have the dbcreator and securityadmin SQL Server Roles. Additionally, SharePoint Foundation requires SQL Server 2008 x64 SP1 + CU2 or CU5 or later (Deltek recommends CU8) or SQL Server 2005 x64 SP3. Please refer to the SharePoint 2010 Foundation Hardware and Software Requirements referenced earlier in this document for detailed information.

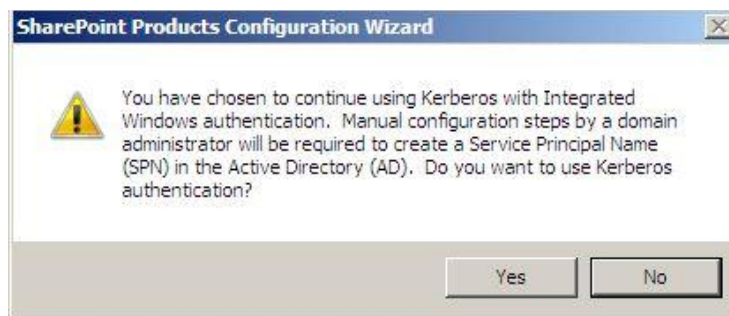
6. In the **Username** field, enter the domain and name of the Vision Application Pool Identity (as configured earlier) as the username for the SharePoint database access account, and enter the user's password in the **Password** field.
7. Click **Next**. The Specify Farm Security Settings page displays

The screenshot shows the 'Specify Farm Security Settings' window of the SharePoint Products Configuration Wizard. The window has a title bar with the text 'SharePoint Products Configuration Wizard'. Inside, the title 'Specify Farm Security Settings' is displayed. Below the title, a paragraph explains that a new passphrase must be entered for the SharePoint Products farm, which is used to secure farm configuration data and is required for each server joining the farm. The passphrase can be changed after the farm is configured. There are two text input fields: 'Passphrase:' and 'Confirm passphrase:'. At the bottom left, there is a help icon (a question mark in a square). At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

8. Enter a Passphrase for your Farm.
9. Click **Next**. The Configure SharePoint Central Administration Web Application page displays.



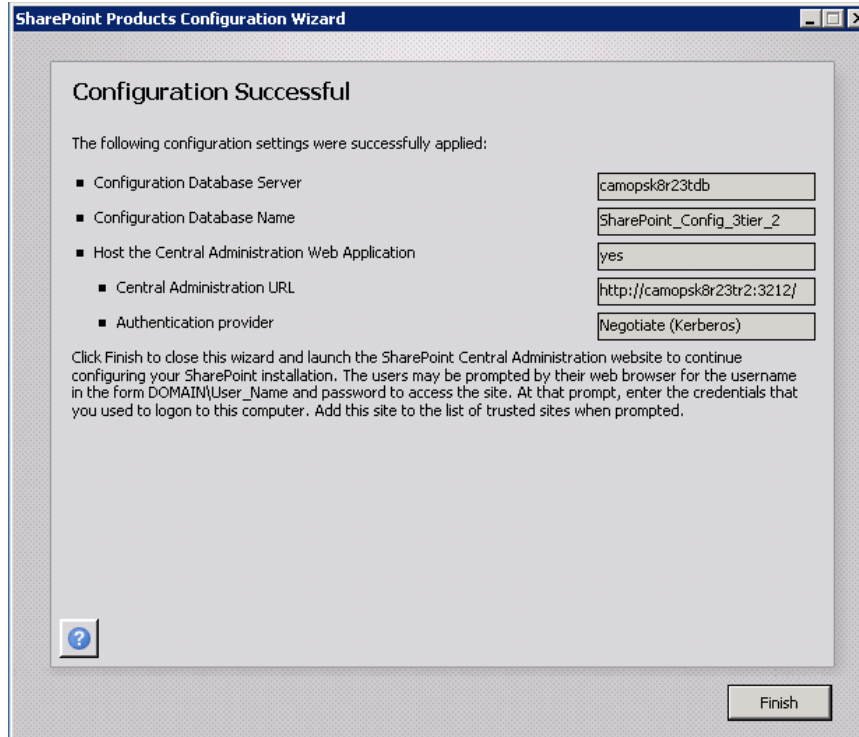
10. Select the **Specify port number** check box and enter the port to be used for the SharePoint Central Administration Web site.
11. Select the **Negotiate (Kerberos)** option for the Authentication provider to use.
12. Click **Next**. The following dialog box displays.



13. Click **Yes** to continue using Kerberos with Windows Authentication. The Completing the SharePoint Products and Technologies Configuration Wizard page displays.



14. Click **Next** to begin the configuration. This process may take some time to complete. The Configuration Successful page displays when configuration is complete.

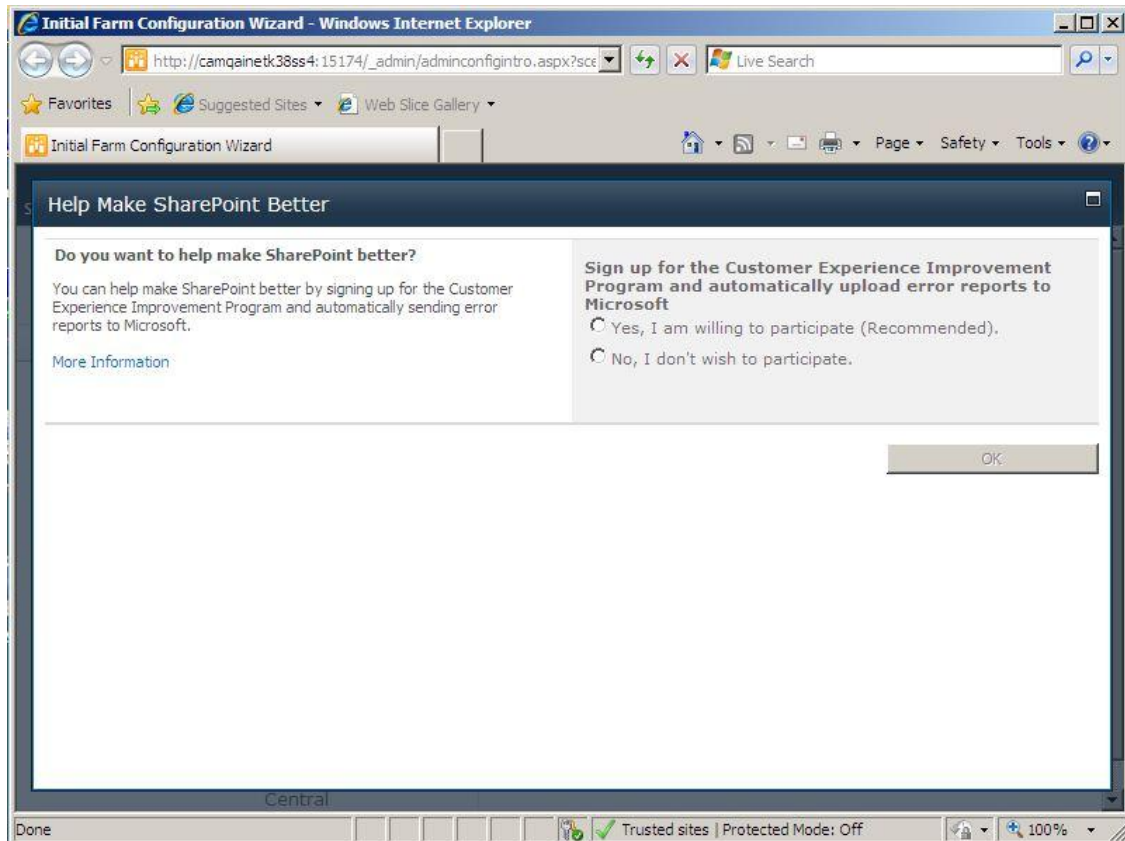


15. Click **Finish** to finish the configuration process. The SharePoint Central Administration page displays.

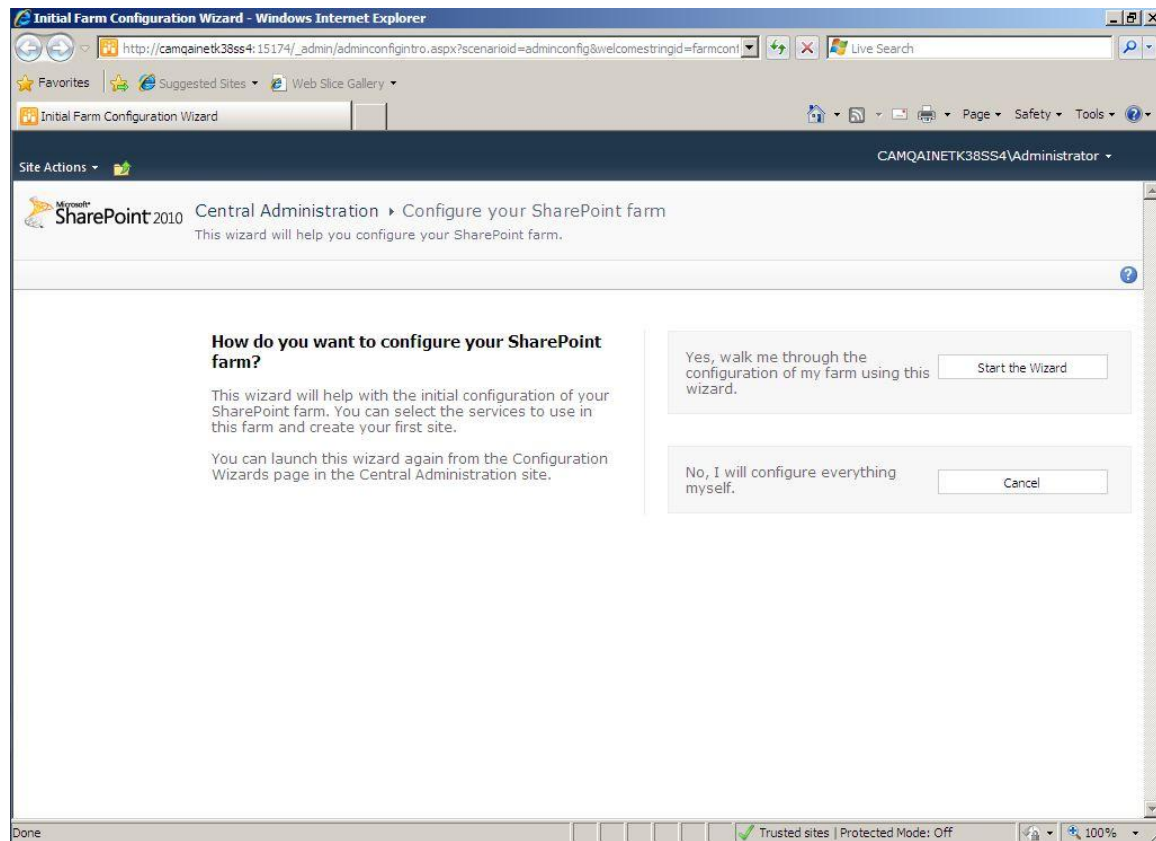
Use SharePoint Central Administration to Complete the SharePoint Configuration

To complete the SharePoint Configuration, complete the following steps:

1. When you click **Finish** in the preceding procedure, SharePoint Central Administration is launched.

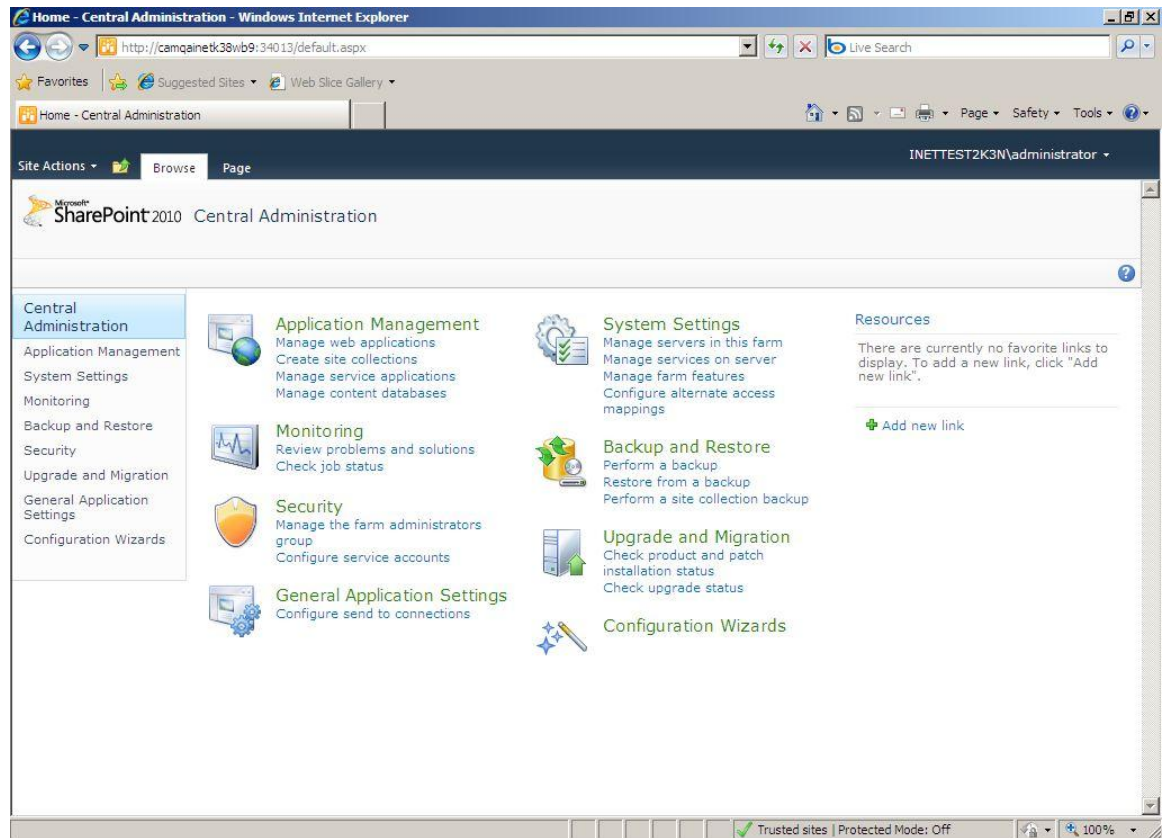


2. Decide whether to sign up for the SharePoint Customer Experience Program and Click **OK**. The Configure your SharePoint Farm Wizard page displays.



Click **Cancel** to configure everything yourself.

3. The main Central Administration page is displayed.



4. Select Manage Services on Server under System Settings. The Services on Server page displays:

The screenshot shows the 'Services on Server' page in a Windows Internet Explorer browser. The address bar displays the URL http://camqainetk38wb9:40885/_admin/Server.aspx. The page title is 'Services on Server - Windows Internet Explorer'. The SharePoint 2010 logo is visible in the top left corner. The breadcrumb navigation shows 'Central Administration > Services on Server: CAMQAINETK38WB9'. Below the breadcrumb, a message states: 'Use this page to start or stop instances of services on servers in the farm'. The left sidebar contains the 'Central Administration' menu with options: Application Management, System Settings, Monitoring, Backup and Restore, Security, Upgrade and Migration, General Application Settings, and Configuration Wizards. The main content area shows a table of services for the selected server 'CAMQAINETK38WB9'. The table has three columns: Service, Status, and Action. The services listed are: Business Data Connectivity Service (Stopped), Central Administration (Started), Claims to Windows Token Service (Stopped), Microsoft SharePoint Foundation Incoming E-Mail (Started), Microsoft SharePoint Foundation Sandboxed Code Service (Stopped), Microsoft SharePoint Foundation Subscription Settings Service (Stopped), Microsoft SharePoint Foundation Web Application (Started), Microsoft SharePoint Foundation Workflow Timer Service (Started), and SharePoint Foundation Search (Stopped). The status is indicated by a colored dot (red for Stopped, green for Started). The Action column provides links to 'Start' or 'Stop' the service.

Service	Status	Action
Business Data Connectivity Service	Stopped	Start
Central Administration	Started	Stop
Claims to Windows Token Service	Stopped	Start
Microsoft SharePoint Foundation Incoming E-Mail	Started	Stop
Microsoft SharePoint Foundation Sandboxed Code Service	Stopped	Start
Microsoft SharePoint Foundation Subscription Settings Service	Stopped	Start
Microsoft SharePoint Foundation Web Application	Started	Stop
Microsoft SharePoint Foundation Workflow Timer Service	Started	Stop
SharePoint Foundation Search	Stopped	Start

5. Locate SharePoint Foundation Search and click **Start**.

Configure Microsoft SharePoint Foundation Search Service Settings on server CAMQAINETK38WB9 - Windows Internet Explorer

http://camqainetk38wb9:40885/_admin/SPSearchServiceInstanceSettings.aspx?ServerId=22F40d31-a422-40be-4...

Site Actions

INETTEST2K3N\administrator

Central Administration > Configure Microsoft SharePoint Foundation Search Service Settings on server CAMQAINETK38WB9

Use this page to configure Microsoft SharePoint Foundation Search Service Settings.

Warning: this page is not encrypted for secure communication. User names, passwords, and any other information will be sent in clear text. For more information, contact your administrator.

Service Account

The search service will run using this account.

The search service account must not be a built-in account in order to access the database. Examples of built-in accounts are Local Service and Network Service.

Service Account: INETTEST2K3N\dmservacct2tier

[Register new managed account](#)

Content Access Account

The search service will access all content using this account.

The account will be added to the Full Read policy, giving it read-only access to all content.

For proper search functionality and information security, do not use an administrator account, and do not use accounts that can modify content.

Search Database

Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.

Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.

Database Server: camqainetk38db8

Database Name: WSS_Search_CAMQAINETK38WB9

Database authentication:

☒ Windows authentication (recommended)

☐ SQL authentication

Account:

Password:

Failover Server

You can choose to associate a database with a specific failover server that is used in conjunction with SQL Server database mirroring.

Failover Database Server:

Indexing Schedule

Configure the indexing Schedule.

Indexing schedule:

☐ Minutes Starting every hour between

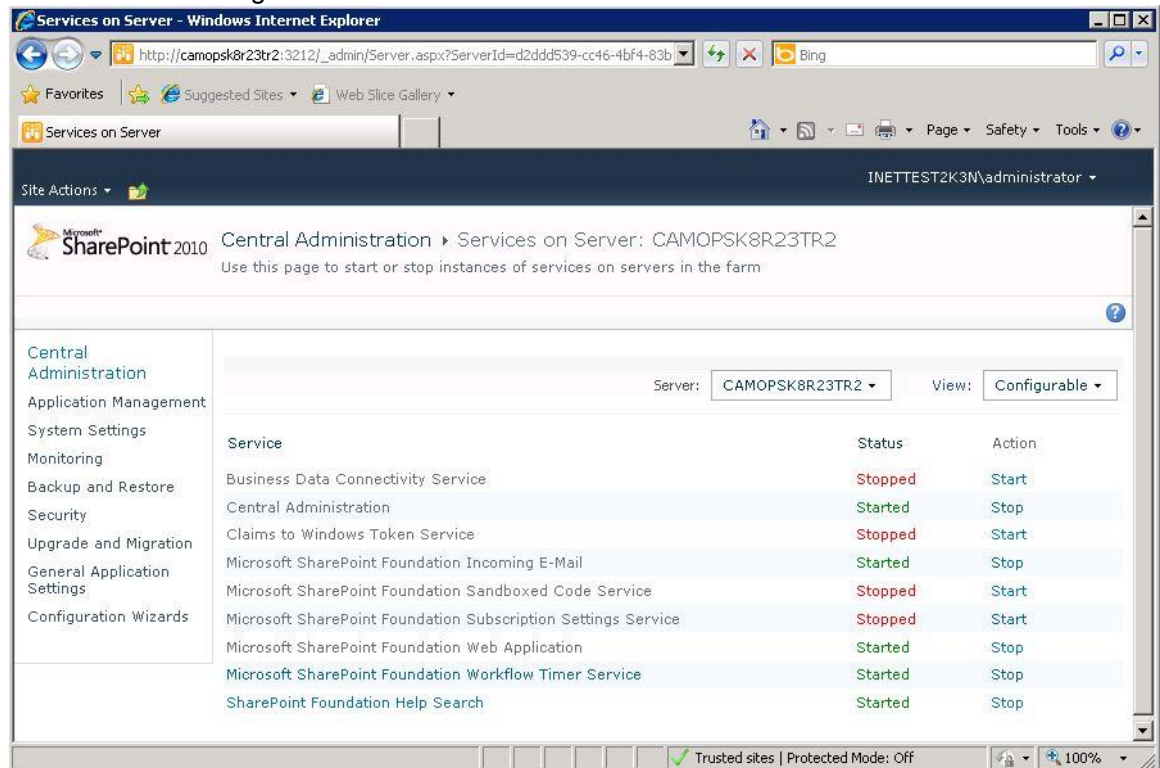
☒ Hourly 51 minutes past the hour

☐ Daily and no later than 51 minutes past the hour

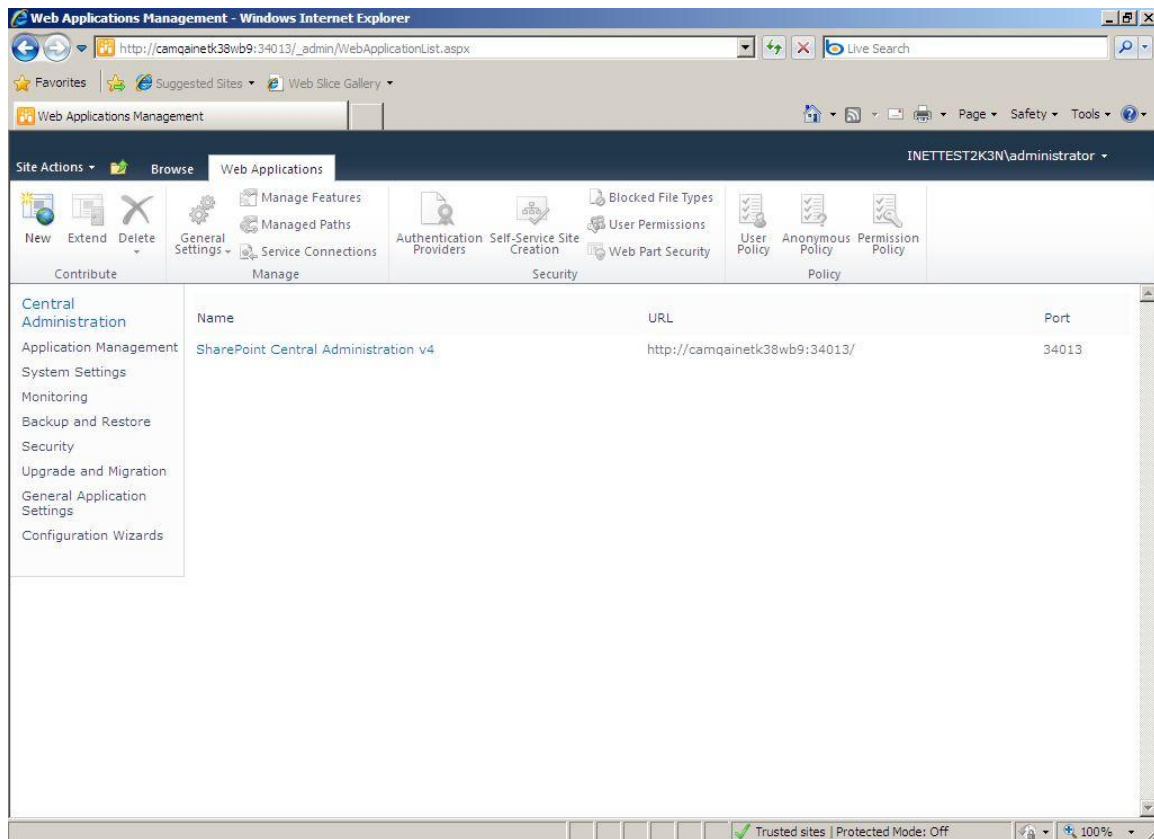
Start Cancel

6. Configure the search service to include the Service account and Content Access account (use the same account information as your Vision Application Pool Identity).

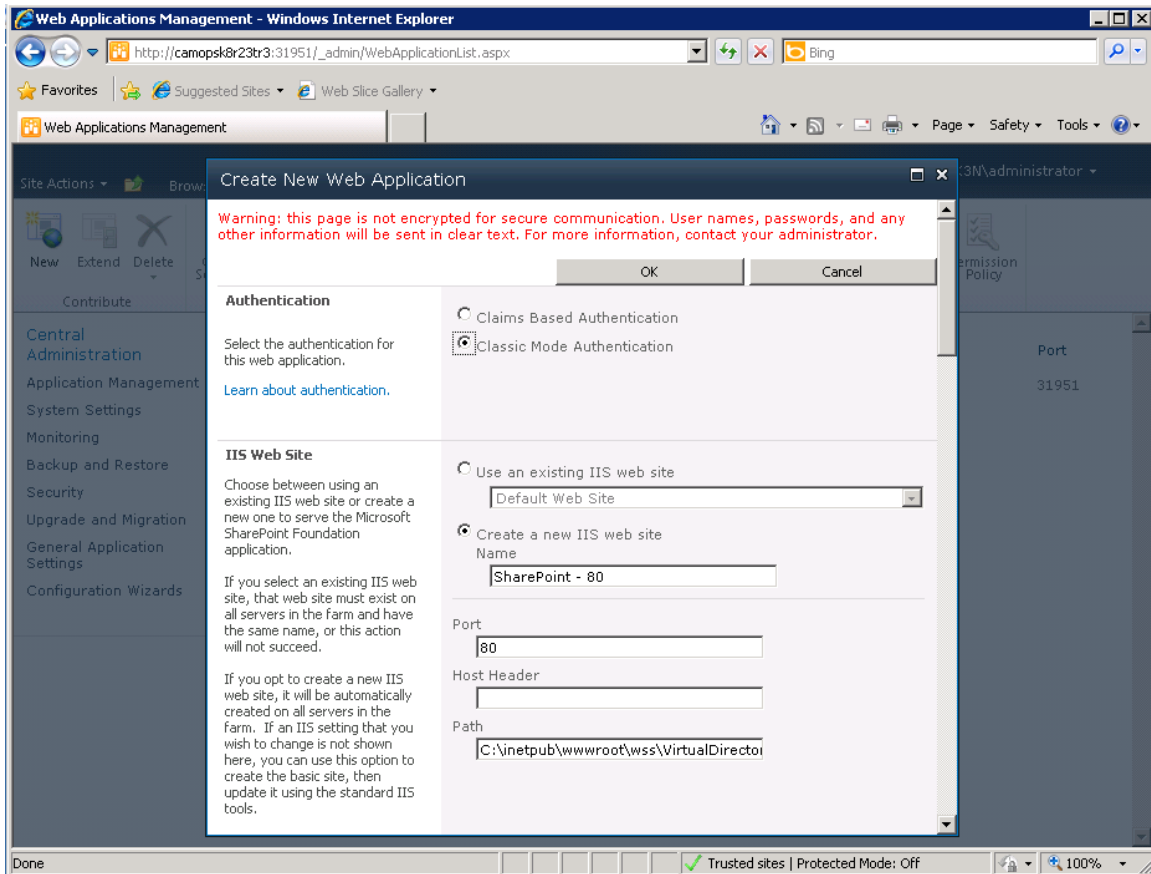
7. Configure **Search Database** as shown above and click **Start**. After a minute or so, the service's status changes to **Started**.



8. Click **Application Management** and then **Manage Web Applications**. The Web Applications page displays.



9. Select **New**. The Create New Web Application page displays.



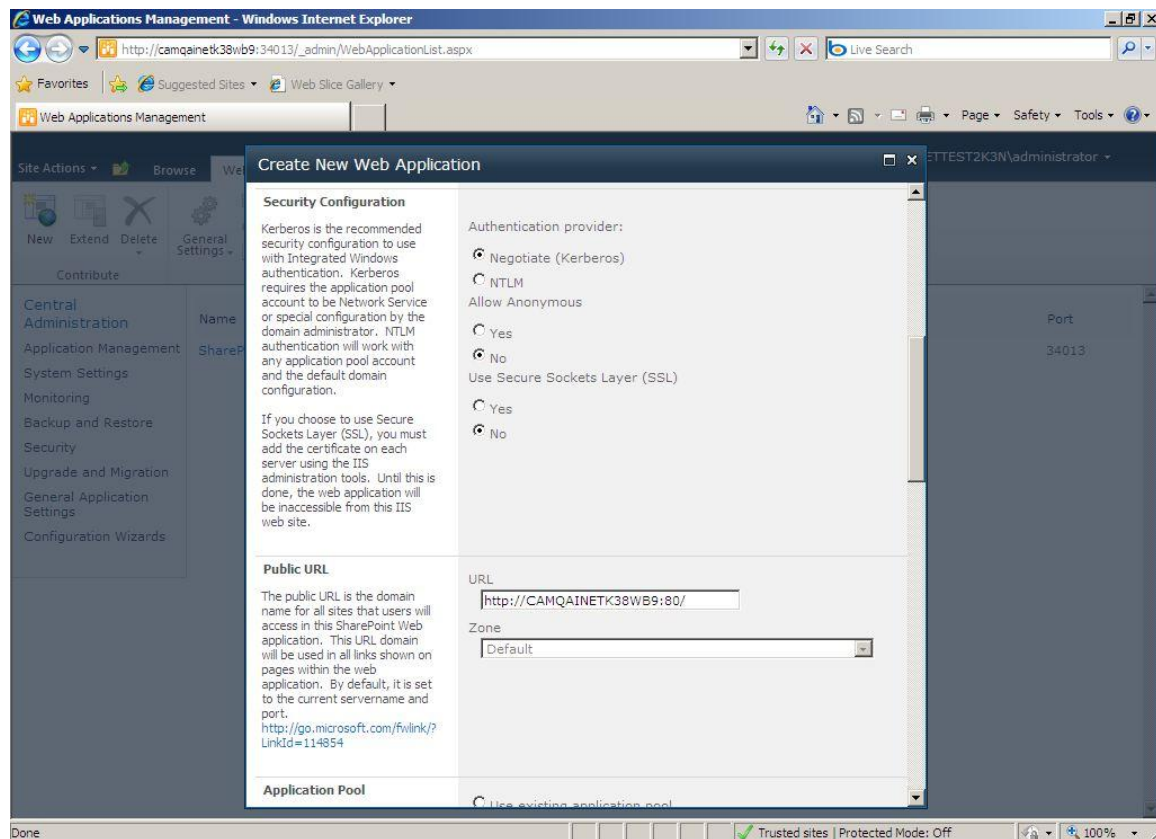
10. Select the **Create a new IIS web site** option. Enter a description for the Web site and specify a port in **Port**.



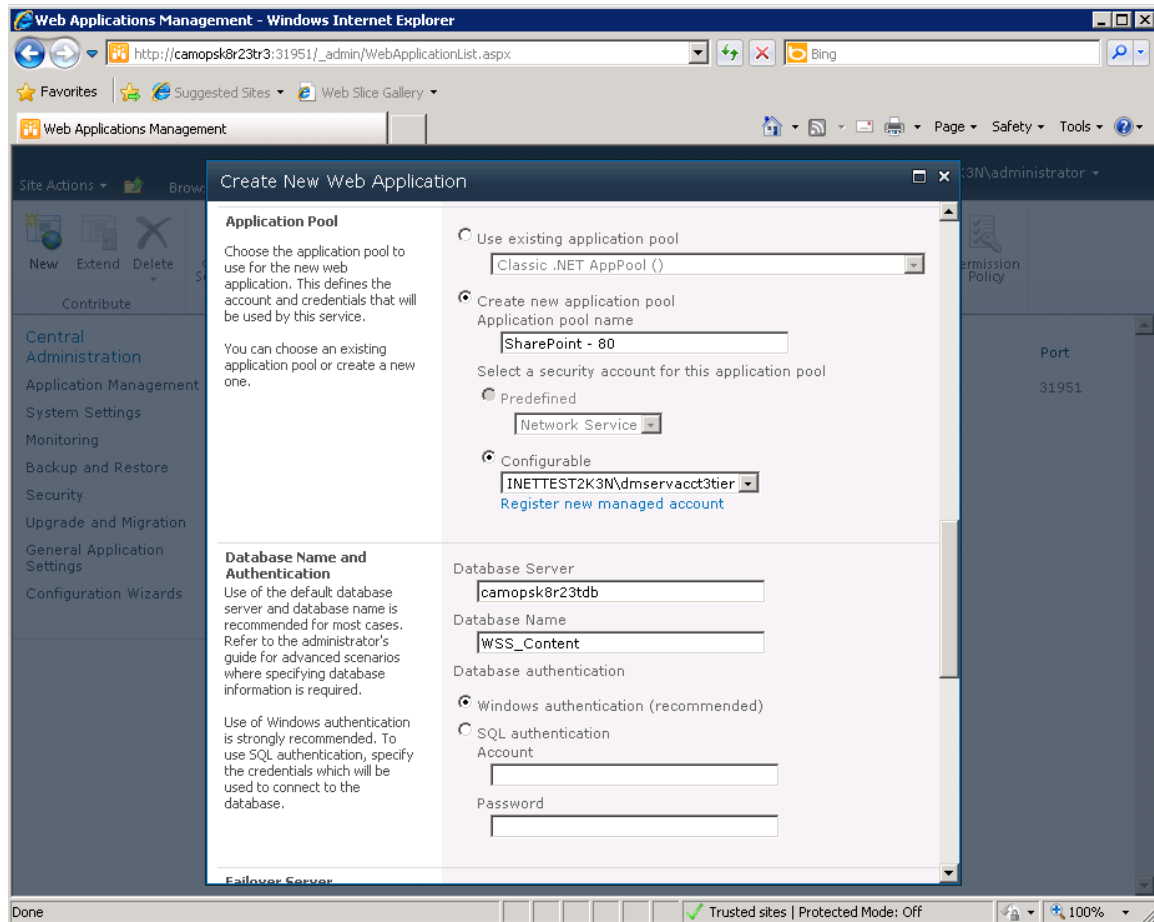
If no other web applications are installed on this server you may choose to install SPF into the Default Web Site.

WARNING! If other web applications are installed to the Default Web Site, SPF will render them unusable.

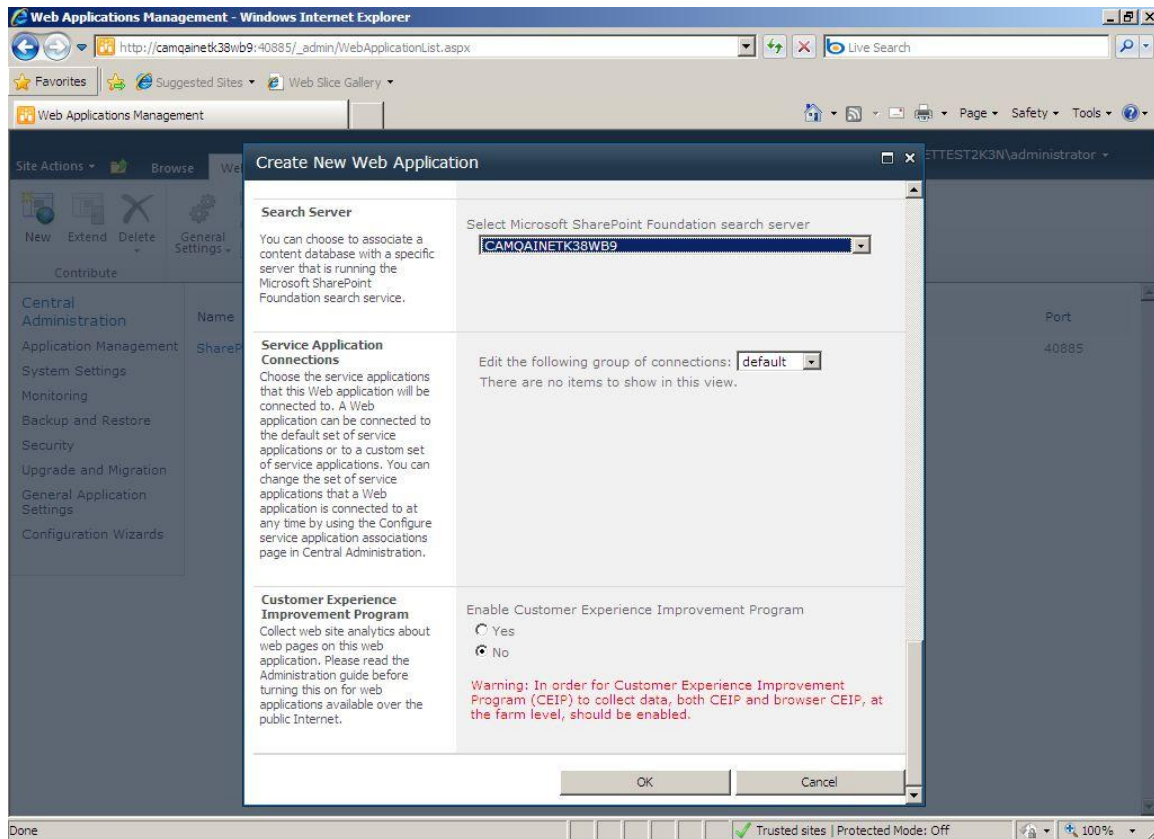
Note the entry in **Path**, which by default is the root of your WSS Web site in a directory named after the port chosen under `c:\inetpub\wwwroot\wss\virtualdirectories`.



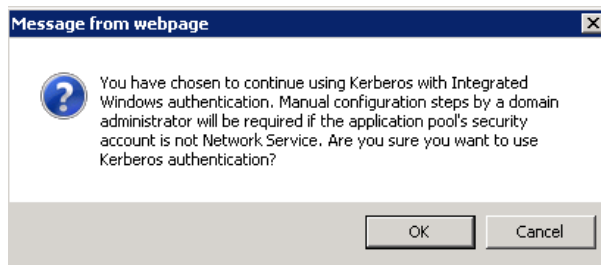
11. Select **Negotiate (Kerberos)** under **Authentication provider**.
12. For the **Allow Anonymous** and **Use Secure Sockets Layer (SSL)** options, accept the default of **No**. If you want to use SSL with SharePoint, then you can configure SSL later, but you must not configure SSL to be required.



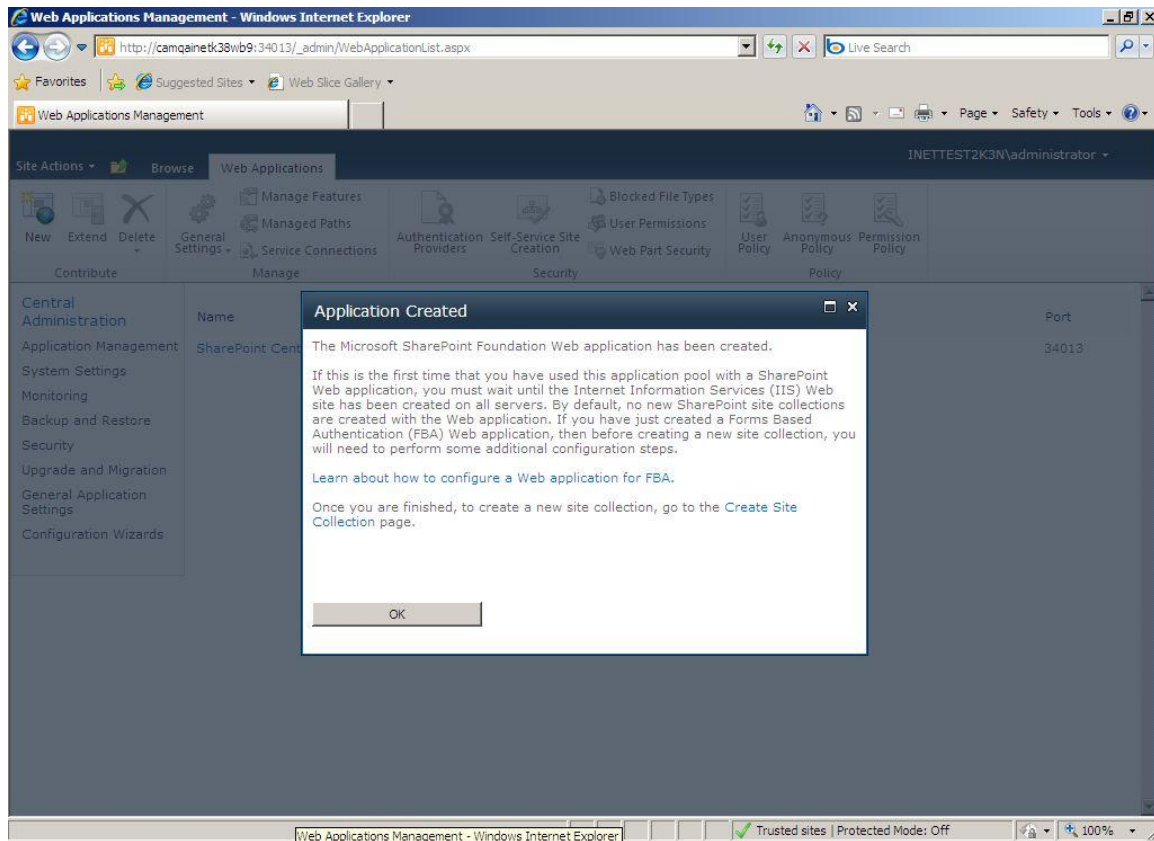
13. Select the **Create new application pool** option and provide a name (Deltek recommends using the same name as the Web site for consistence, for example, SharePoint - 81).
14. Using **Network Service** is not an option for SPF. Use the same account used for the Deltek Vision Application Pool.
15. Verify the name of the server in **Database Server** (it should be the same as that used for the SharePoint configuration database server) Accept the default in **Database Name**. It is recommended that you modify the name of the Content database to something more recognizable (WSS_Content_SharePoint81, for example).
16. Select **Windows authentication (recommended)** under **Database authentication**. This will use the SharePoint service account and the Vision Application Pool Identity configured previously.



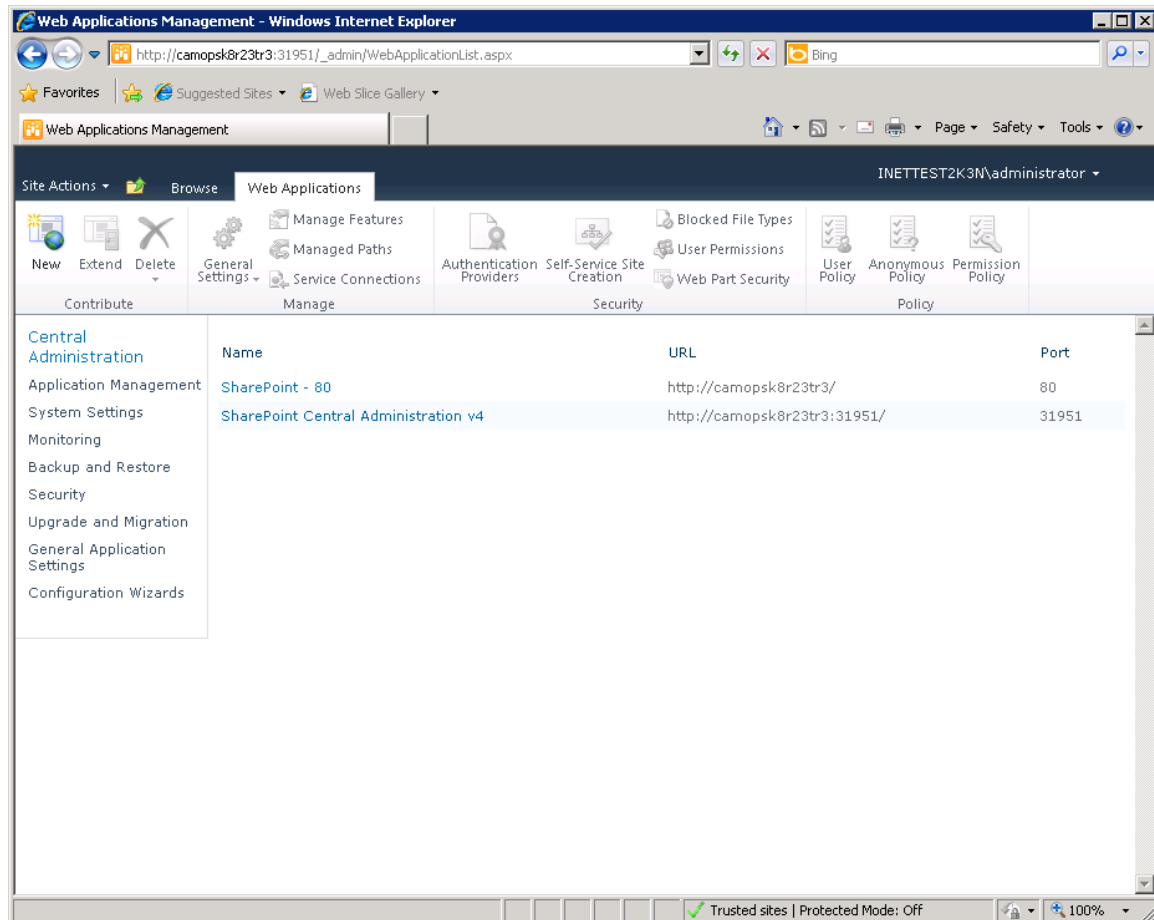
17. Select the search server in **Select Windows SharePoint Foundation search server** and click **OK**. The following dialog box displays.



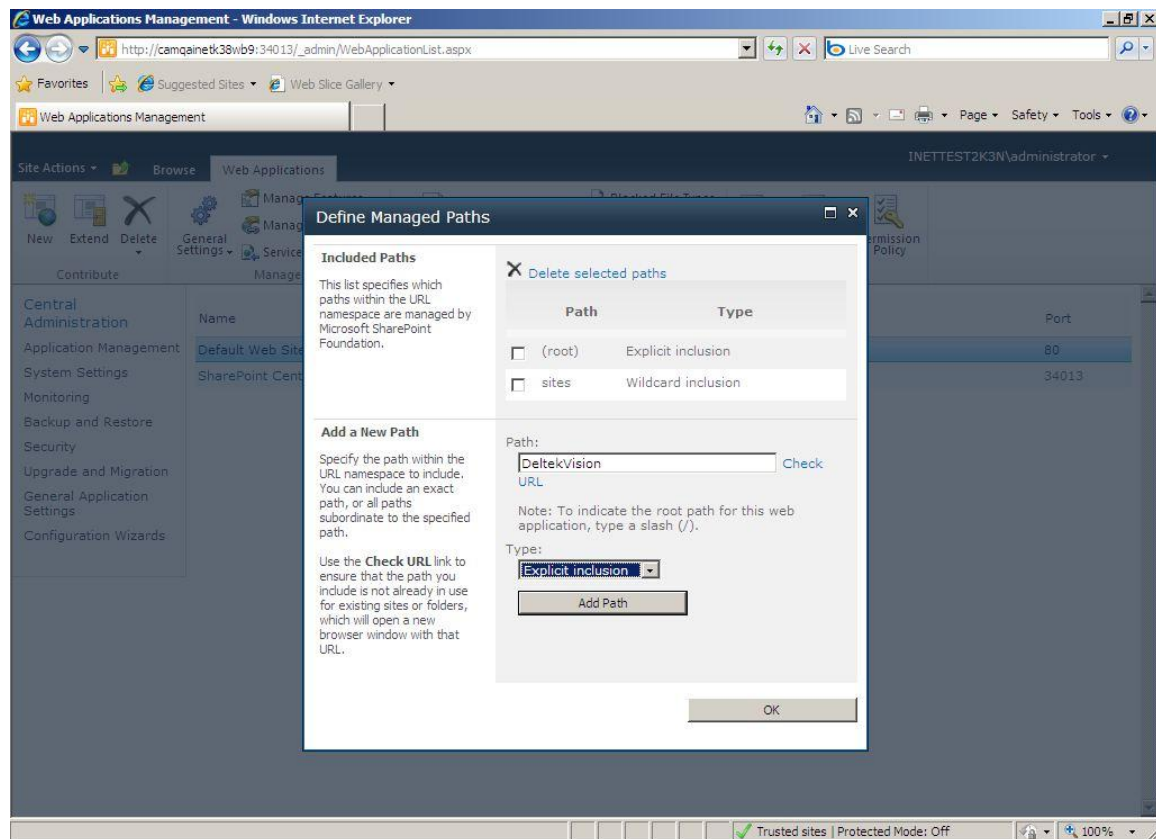
18. Click **OK** to use Kerberos for Windows Authentication. After a few minutes, the Application Created page displays. This page indicates the status of the process to create a new Web application.



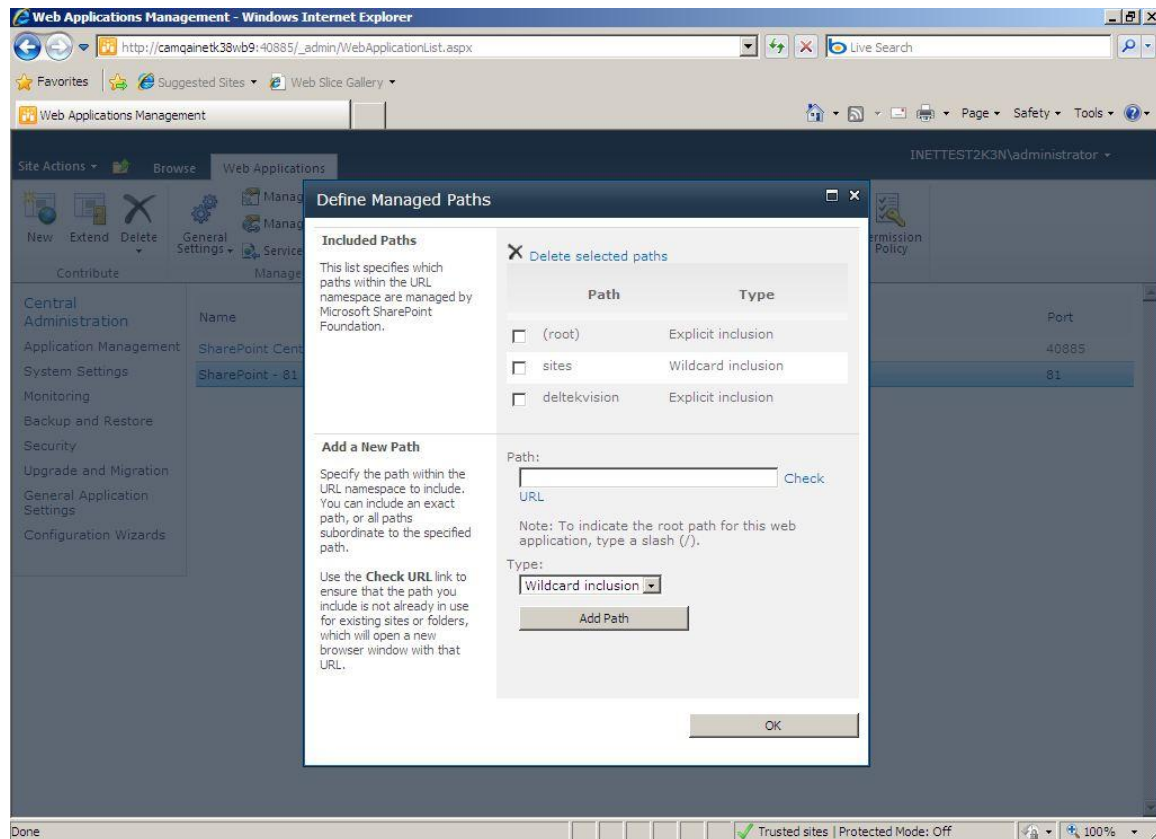
19. Do not click the link to **Create Site Collection** link at this time. It is still necessary to add DeltekVision as a managed path with explicit inclusion before you create the site collection. Click **OK**. The Web Applications page displays.



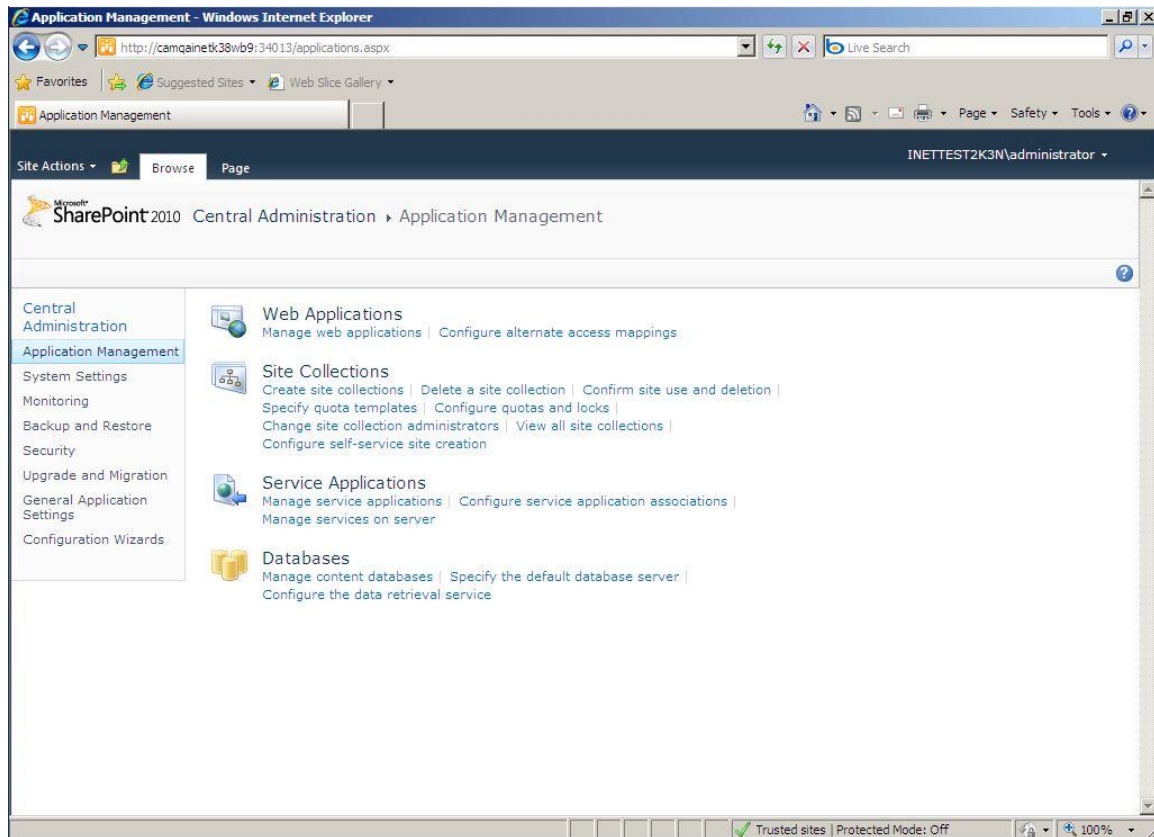
20. Select the SharePoint – 80 web application and click **Managed Paths**. The **Define Managed Paths** page displays.



21. Enter **DeltekVision** in **Path** and select **Explicit inclusion** in **Type** and click **Add Path**.
22. Click **OK**.



23. Click **Application Management** and select the **Create Site Collection** option under **Site Collections**.



The Create Site Collection page displays.

Central Administration > Create Site Collection

Use this page to create a new top-level Web site.

Web Application: **http://camqainetk38wb9/**

Title: **Deltek Vision**

Description:

URL: **http://camqainetk38wb9//deltekvision**

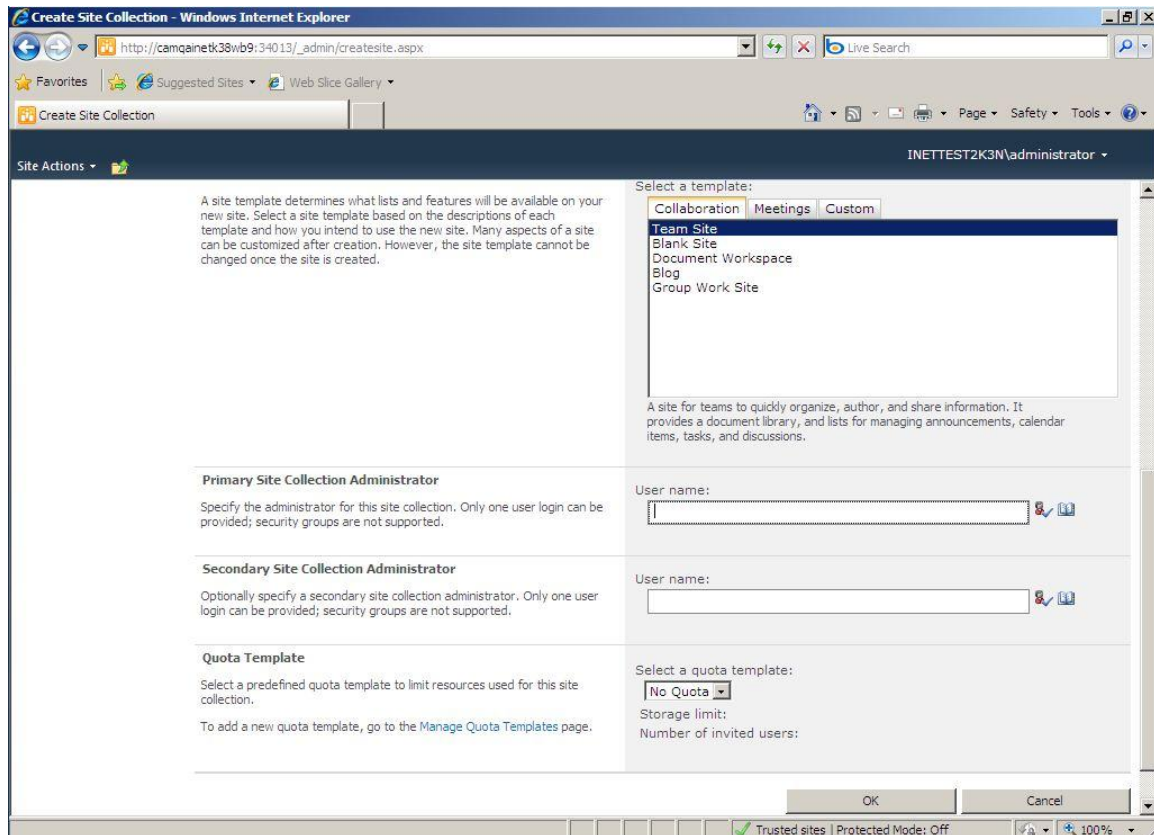
Select a template:

Collaboration Meetings Custom

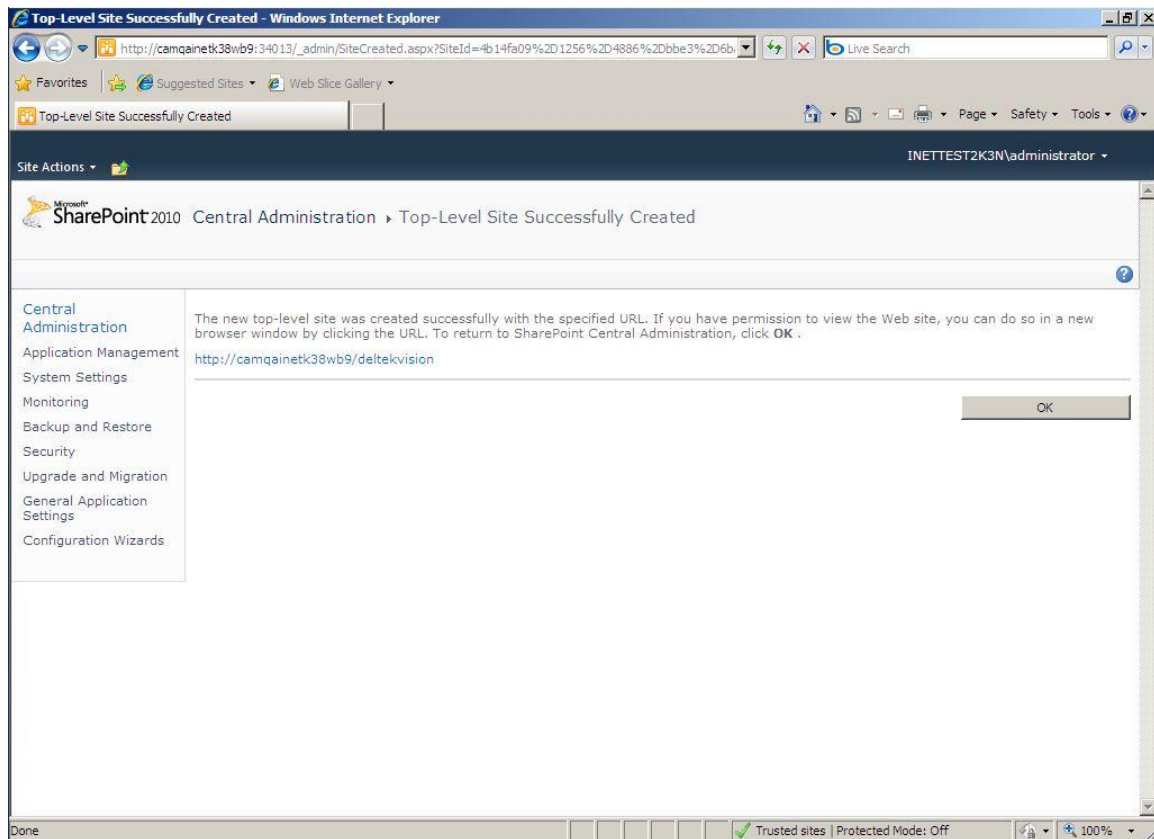
Team Site

Blank Site

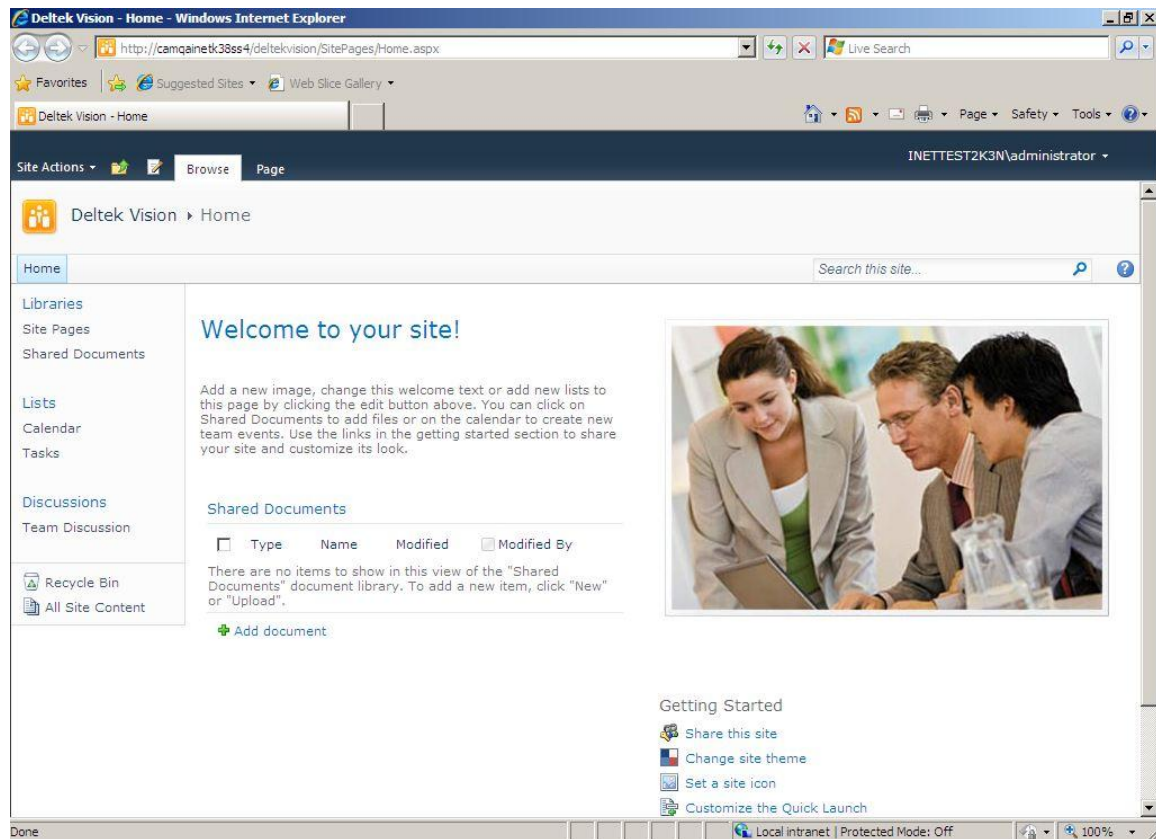
24. Enter **Deltek Vision** in **Title** and enter a description, if appropriate.
25. From the **URL** drop-down list, select **/deltekvision**. This will be the top level root for Vision Document Management.



26. Under **Select a template**, accept the default of **Team Site** for the template to be used and enter a username in each of the **User name** fields for the primary and secondary site collection administrators.
27. Select **No Quota** in **Select a quota template** and click **OK**. The Top-Level Site Successfully Created page displays.



28. Click the link for the top level site (in our example it is <http://camqainetk38wb9/deltekvision>) to display the site.



29. The SharePoint configuration is complete. Close SharePoint Central Administration.

Configure SharePoint for a Fully Qualified Domain Name (FQDN) URL (Optional)

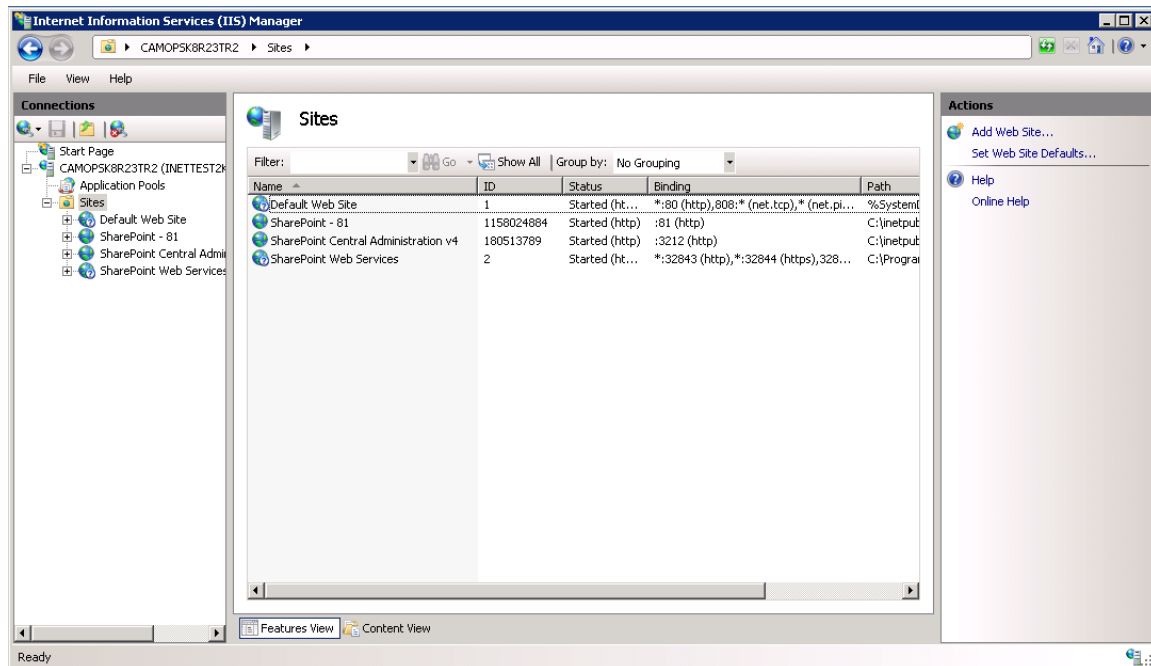
If you will be configuring your SharePoint server to use a custom DNS record for the URL then you must create an additional SPN and also to create Alternate Access Mappings in SharePoint.

See "Appendix C: SPN Configuration When Using Custom DNS Records" on page 100 for more information.

Verify IIS Configuration and Configure Deltek Vision Document Management .NET Assembly

To verify IIS configuration, complete the following steps:

1. Use the directions that follow to open Internet Information Services to view these Web sites:
 - **Default Web Site** — This is your Vision Web Site
 - **SharePoint – 80** — This is your SPF 2010 Web Site
 - **SharePoint Central Administration Web Site**



2. Copy the Vision Document Management .NET assembly to SharePoint site directory.
3. Copy Deltek.Vision.WSS30.Server.dll from <Vision Installation Directory>\Support\DM\30 to:

c:\inetput\wwwroot\wss\Virtual Directories\<site>\bin



By default, the <site> directory will reference the port chosen. In our example, the port is 80.

Configure Document Management Service Account in Weblink

You must configure the Document Management service account (username/password) on the System Settings tab of the Deltek Vision Weblink utility. Follow the instructions below to configure this:

1. On the Vision Web server, launch Weblink from **Start » Programs » Deltek Vision**
2. Enter the Weblink password when prompted.
3. Click the System Settings tab.

In the **Document Management** group box, enter your SharePoint username and password. This account is your SharePoint Service account/Deltek Vision Application Pool Identity.

4. Click **Test** and **SharePoint Credentials** to validate that the information entered is correct.

The screenshot shows the 'Weblink' configuration window. A dropdown menu is open under the 'Test' button, showing options: 'Database Connection', 'Report Server Configuration', and 'Sharepoint Credentials'. The 'Sharepoint Credentials' option is selected. The window contains various configuration fields: 'Polling Interval(sec)' set to 30, 'Max concurrent jobs' set to 2, 'Copy Databases.enc to' (empty), 'Default Language' set to 'English (United States)', 'Store Session State in Memory' (dropdown), 'Database Setup' section with 'SQL Server' and 'Database Name' fields, and 'Document Management' section with 'SharePoint Username' set to 'inetttest2k3n\dmservacct2tier' and 'SharePoint Password' masked with asterisks. There is also a checkbox for 'Send errors to Deltek automatically'.

Configure Vision Document Management

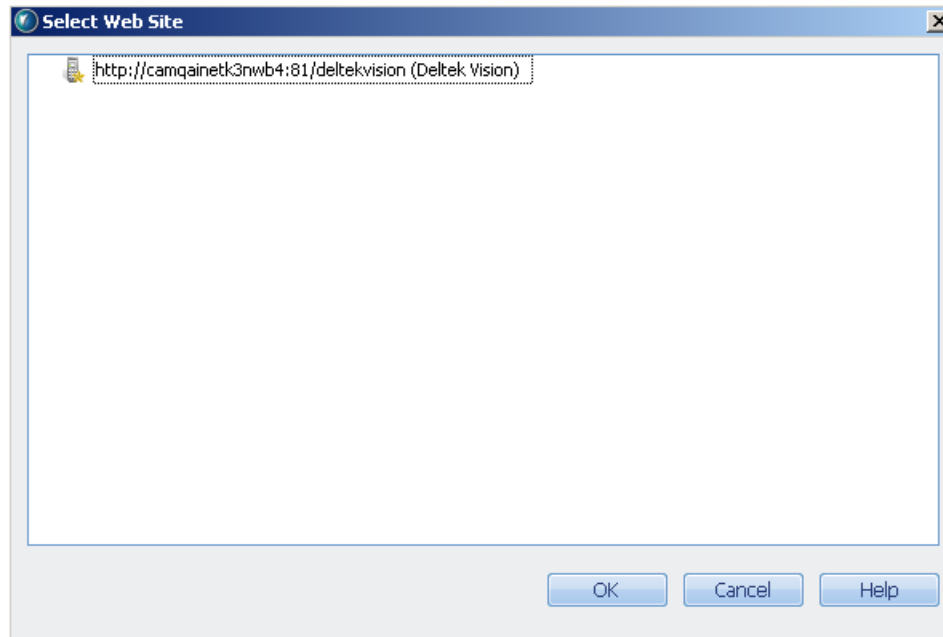
To configure Vision Document Management, complete the following steps:

1. Log in to Vision using an account that has access to the Configuration menus.
2. Click **Configuration » General » System Settings** and select the Document Management tab.

The screenshot shows the 'General System Settings' window in Vision. The 'Document Management' tab is selected. The 'Enable Document Management' checkbox is checked. The 'Server Name/IP' field contains 'camqainetk3nwb4'. The 'Virtual Server Port' field contains '81'. The 'Current Site' field is empty with a search icon. There are buttons for 'Test Site', 'View Site', and 'New Site'. The left sidebar shows the 'Configuration' menu expanded, with 'System Settings' selected.

3. Select the **Enable Document Management** check box.

4. Enter the name of the server hosting Document Management. This can be the NetBIOS name, server name FQDN, or custom DNS/FQDN. Enter this value without the protocol prefix (for example, remove the http://). In the illustration above, the value is **camqainetk3nwb4**.
5. Enter the **Virtual Server Port**. In the illustration above, the port is 80.
6. Click the Lookup icon to select the current site.



7. The Select Web Site dialog box displays the available sites. Select a site, and click **OK**.
8. Save your changes.

Configure Constrained Delegation

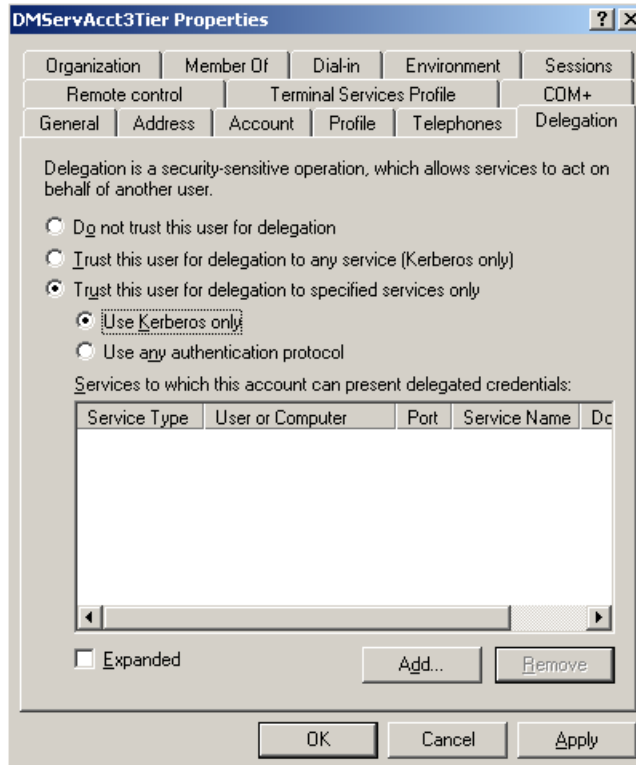
Because your SPF server is on a separate physical server and because the Vision Web server needs to pass the domain credentials of your Vision Document Management users on to the SPF server, you must configure Constrained Delegation.



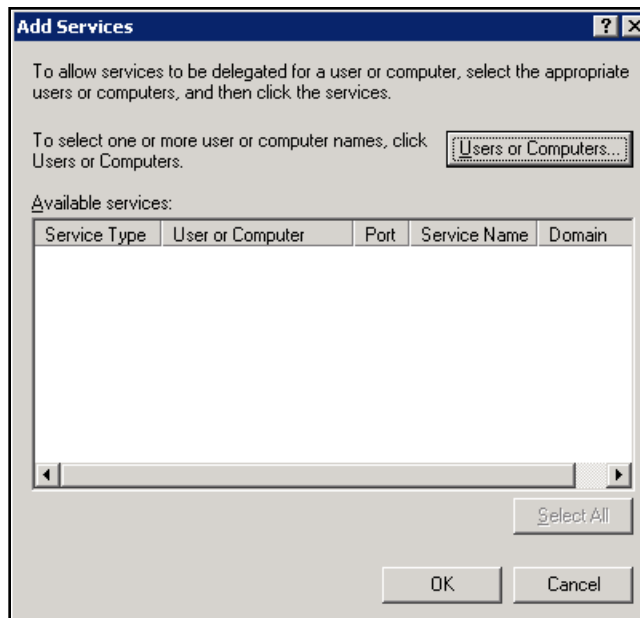
This assumes a non-Internet deployment of Vision Document Management using Kerberos authentication. If you are deploying Vision Document Management so that it is accessible over the Internet, you need to skip ahead to “Configure Protocol Transition” on page 86.

To configure Constrained Delegation, complete the following steps:

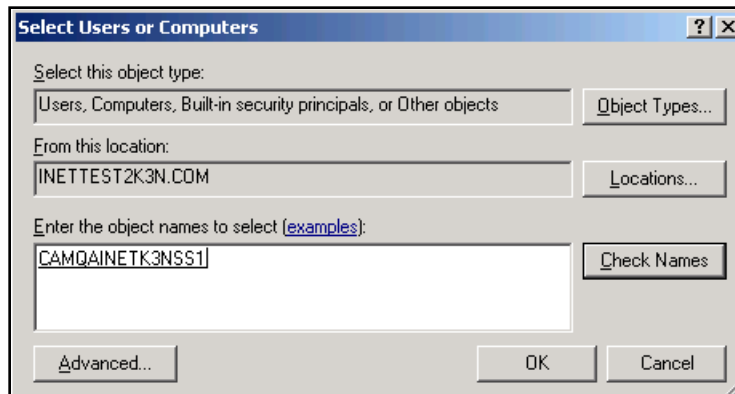
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (SPF Service account).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for delegation to specified services only** option.
5. Select the **Use Kerberos only** option.



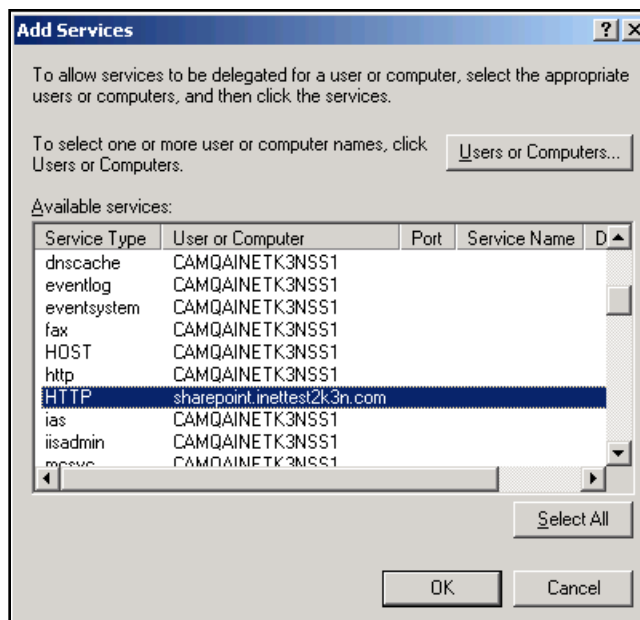
6. Click the **Add** button. The **Add Services** dialog box displays.



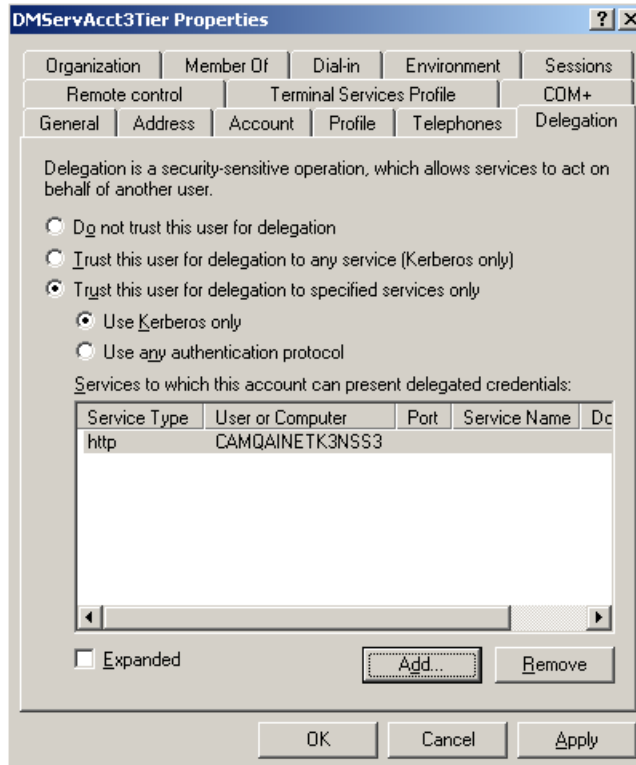
7. Click **Users or Computers**. The Select Users or Computers dialog box displays.



8. Locate the http service, select it, and click **OK**.



The Delegation tab should look like this:



Because we are explicitly specifying the http service and not all services on the SharePoint server, this is known as Constrained Delegation.

There are two http service types listed. These service types are known as Service Principal Names (SPNs). The SPN referencing CAMQAINETK3NSS1.inetest2k3n.com was created automatically when the server was added to the domain and the http service (IIS) was installed. The second SPN referencing sharepoint.inetest2k3n.com is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

Configure Protocol Transition

If Vision Document Management functionality is required over the Internet and you will be using a custom DNS/FQDN for the SharePoint URL (as in our example, vision1.inetest2k3n.com), then you need to configure a form of delegation referred to as Protocol Transition. If Document Management functionality is not required, you can skip this step.

The Kerberos authentication protocol must be used to authenticate from the Vision Web server to the SharePoint server. However, if Vision is deployed in an Internet scenario and there are users outside of the firewall who need to access Document Management features, Kerberos authentication cannot be used to authenticate the client to the Web server. This is because the client needs to have the ability to negotiate a Kerberos ticket with the Key Distribution Center (KDC), which is a service running on a Domain Controller. This requires port 88 to be opened inbound on the firewall to the Domain Controller, which is not an advisable configuration.

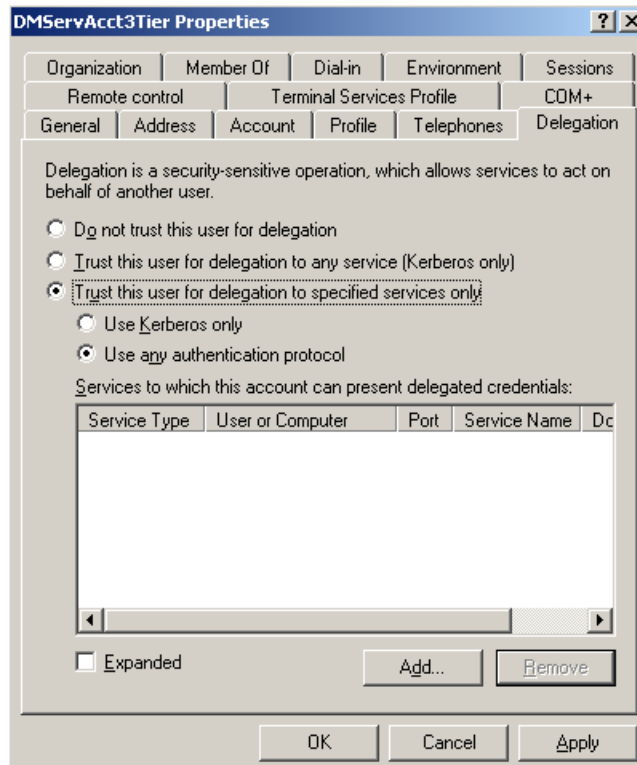
To get around this, you must be running a Native Windows Server 2003 functional domain.

Protocol Transition is configured by selecting the **Use any authentication protocol** option instead of the **Use Kerberos only** option, which is used to configure Constrained Delegation. This allows the client to authenticate to the Vision Web server using NTLM instead of Kerberos,

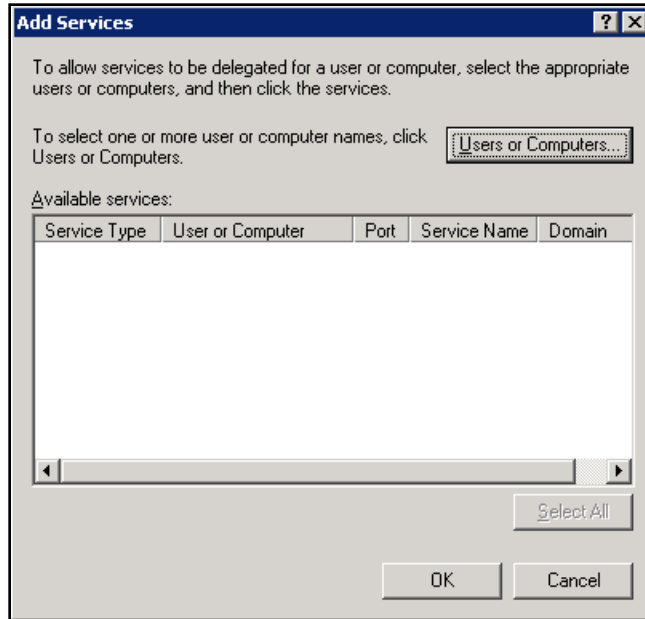
and that authentication is then “transitioned” over to Kerberos for Delegation to the SharePoint server.

To configure Protocol Transition, complete the following steps:

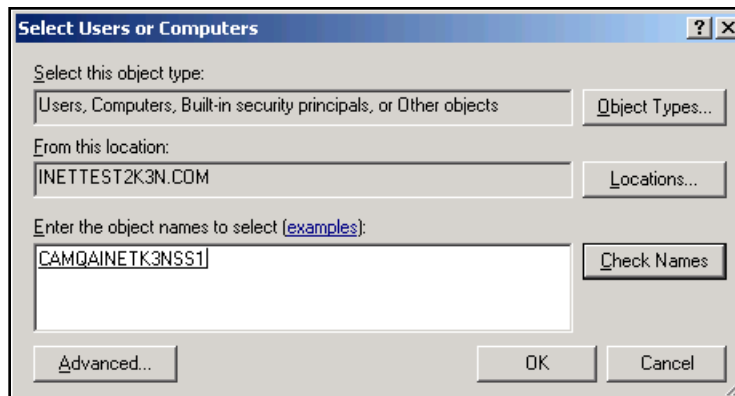
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (WSS Service account), which is most likely under the Computers Organizational Unit (OU).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for delegation to specified services only** option.
5. Select the **Use any authentication protocol** option.



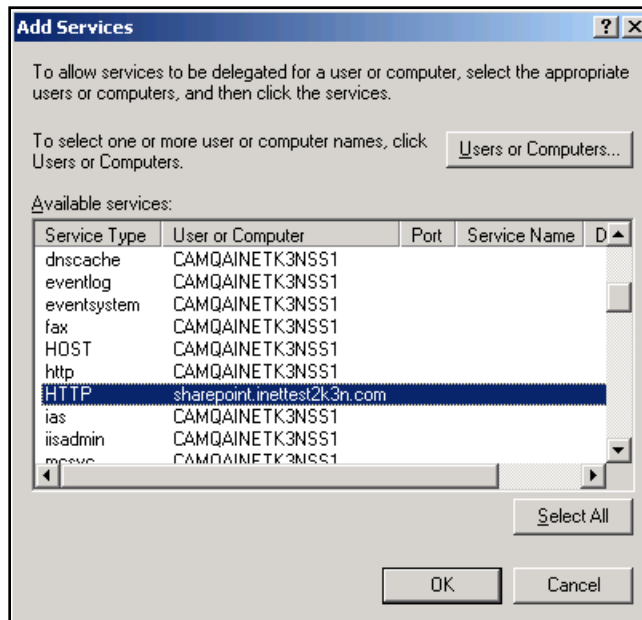
6. Click **Add**. The **Add Services** dialog box displays.



7. Click **Users or Computers**, search for the SharePoint server, and click **OK**.



8. Locate the http service for the SPN (FQDN) you created earlier (in our example, **sharepoint.inetest2k3n.com**), select it, and click **OK**.

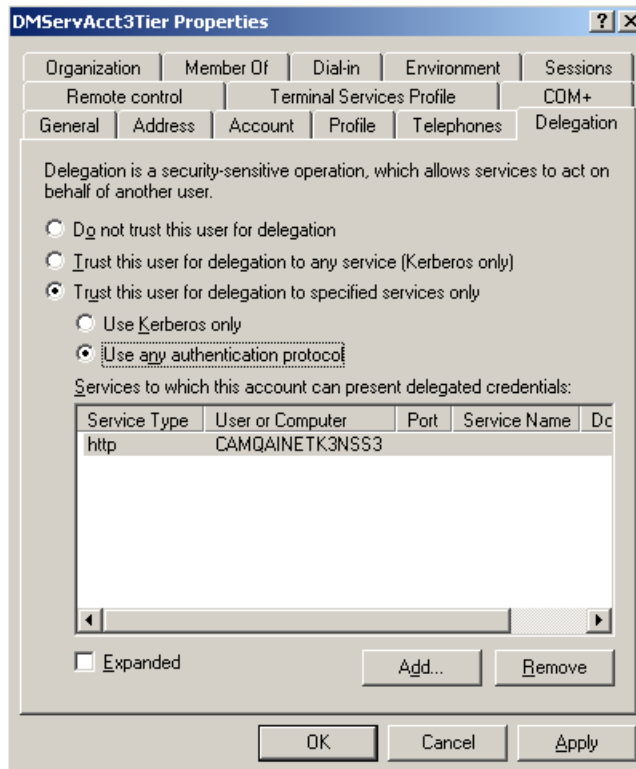


This illustration shows two http service types. Unless you have registered a custom FQDN using the setspn utility, only the server name displays. These service types are known as Service Principal Names (SPNs).

The SPN referencing **CAMQAINETK3NSS1.inettest2k3n.com** was created automatically when the server was added to the domain and the http service (IIS) was installed.

The second SPN referencing **sharepoint.inettest2k3n.com** is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

The Delegation tab should look like this:



Because you explicitly specified the http service and not all services on the SharePoint server and because you selected the **Use any authentication protocol** option and not Kerberos, this is known as Protocol Transition.

Multi-Tier—New Installation of Document Management 6.1 with SharePoint Server 2010

The following instructions assume that Vision and SharePoint Server 2010 exist on separate servers as they are not supported on the same physical server and assume that SharePoint Server 2010 is already installed and configured.

Prerequisites

- Install and configure SharePoint Server 2010.
- Install/upgrade to the current release of Vision 6.1.
- Change the Application Pool Identity for the DeltekVisionAppPool to be a domain account. (The Vision 6.1 installation sets this to be the local DeltekVision account.) This account will also be the SharePoint Service account. Add this user to the local Administrators group on the Vision server (and WSS server if running on a separate server).

Configure Vision Application Pool Identity to Be a Domain Account

You must change the Vision Application Pool Identity to be a domain account. The default is for Vision to use a local DeltekVision user created during the Vision installation. This change is necessary because of the local account's inability to read the SPN configured in Active Directory.



For this account to be the Application Pool Identity it must be a member of the IIS_IUSRS group in IIS7.0, in addition to being a member of the local administrators group for Vision.

To change the Vision Application Pool Identity, complete the following steps:

1. Create a domain user account. This account must also be your SPF Service account. No domain Admin rights are needed for this account.
2. Log on to the domain on the Vision Web/application server using an Administrator account.
3. Open Internet Information Services: **Start » All Programs » Administrative Tools » Internet Information Services (IIS) Manager**.
4. Expand the Server name and then click **Application Pools**.
5. Select the **DeltekVisionAppPool** and select **Advanced Settings** from the Action pane on the right hand side. The following displays:

Advanced Settings

(General)	
.NET Framework Version	v2.0
Managed Pipeline Mode	Integrated
Name	DeltekVisionAppPool
Queue Length	1000
Start Automatically	True
CPU	
Limit	0
Limit Action	NoAction
Limit Interval (minutes)	5
Processor Affinity Enabled	False
Processor Affinity Mask	4294967295
Process Model	
Identity	deltekvision
Idle Time-out (minutes)	0
Load User Profile	False
Maximum Worker Processes	1
Ping Enabled	True
Ping Maximum Response Time (seconds)	90
Ping Period (seconds)	30
Shutdown Time Limit (seconds)	90
Startup Time Limit (seconds)	90
Process Orphaning	
Identity [identityType, username, password] Configures the application pool to run as built-in account, i.e. Network Service (recommended), Local System, Local Service, or as a specific user identity.	

OK Cancel

6. Place your cursor in the **Identity** field and then click the ellipses button to set the identity. The Application Pool Identify dialog box displays:

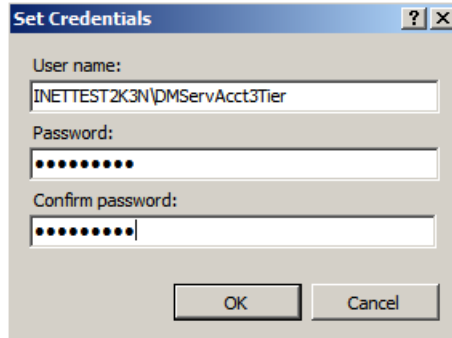
Application Pool Identity

☐ Built-in account:

☒ Custom account:

OK Cancel

7. Select the **Custom account** option and click **Set**. The Set Credentials dialog box displays.



The image shows a 'Set Credentials' dialog box with three input fields: 'User name:', 'Password:', and 'Confirm password:'. The 'User name' field contains the text 'INETTEST2K3N\DMServAcct3Tier'. The 'Password' and 'Confirm password' fields are filled with dots. At the bottom are 'OK' and 'Cancel' buttons.

8. In the **User name** field, enter the Application Pool Identity in the form <Domain><Username>. In the **Password** and **Confirm password** fields, enter that user's password. Then click **OK** three times to set the identity.

Configure SPN for Vision Application Pool Identity

As mentioned earlier in this document, it is necessary to create a Service Principal Name (SPN) for the domain user running the DeltekVisionAppPool. Please refer to the section in Appendix B titled "IIS 7.0 / 7.5 Kernel Mode Authentication" for important information of the use of Service Principal Names and Kernel Mode Authentication with your Application Pool Identity.

To add the Application Pool Identity as a Service Principal Name, complete the following steps:

1. Enter the following commands on the domain server where setspn is installed:
setspn -A http<Vision Web/App Server name> <domain app pool identity>
 For example: setspn -A http/camqainetk3nwb5 inettest2k3n\dmservacct3tier
2. Repeat for the FQDN of the server.

Refer to the following related Microsoft Knowledge Base article:

<http://support.microsoft.com/?id=871179>



If your Vision Web server is accessed by a DNS / FQDN (Fully Qualified Domain Name) that *does not match* the name of the server (for example, if your Vision Web server is named Server01 and its DNS name is Server01.Company.com, but you have added a custom DNS value Vision.Company.com), you must also add an SPN for this custom DNS name.

Install and Configure Vision 6.1 Document Management and the SharePoint Server 2010 Site Collection

When you install Vision 6.1 Document Management on your SharePoint 2010 server, only the necessary components are installed. Post-installation configuration is necessary. The steps to configure SharePoint Server 2010 to work with Vision Document Management are outlined below.

The Document Management installation does the following:

- Installs Web Service Extensions (WSE) 2.0 SP3.
- Copies Document Management files to the SharePoint ISAPI folder (c:\program files\common files\microsoft shared\web service extensions\14\isapi).

- Copies Document Management files to the Vision Support folder (\program files\deltek\vision\support\DM\30).
- Modifies the SharePoint Web.config file in the ISAPI directory to work with Vision Document Management.
- Installs Deltek.Vision.WSS30.Server.dll into the Global Assembly Cache (GAC).

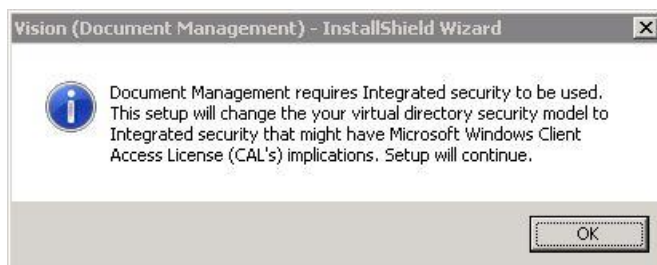
Install Vision 6.1 Document Management on the Vision Web Server

To install Vision 6.1 Document Management, complete the following steps:

1. Download the DeltekVision61SP4DM.exe file and run the setup on your Vision Web server.
2. The installation will check to ensure that the IIS Role service Windows Authentication. If the Role Service is not installed you will be prompted to install it and the setup will exit:



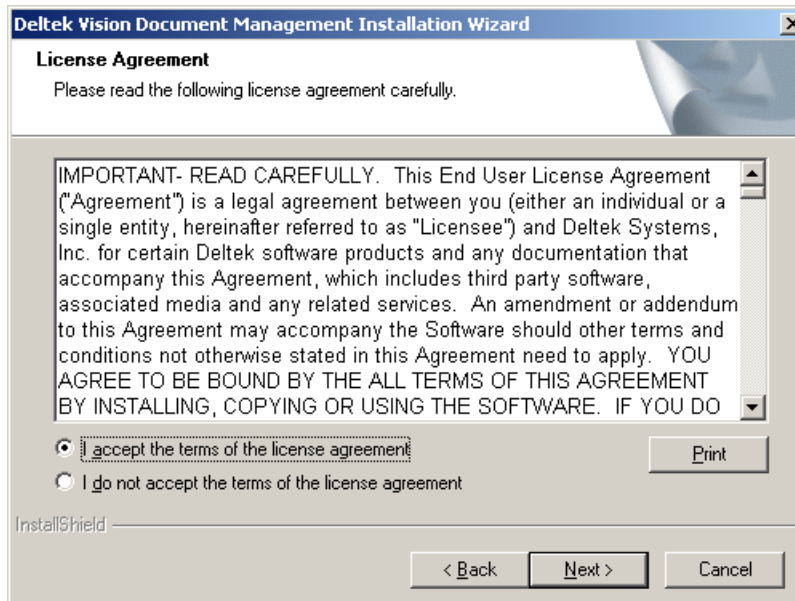
3. The following dialog box then indicates the IIS licensing requirements for the use of Windows Integrated Authentication (required to use Vision Document Management):



4. Click **OK**. The Welcome page displays.



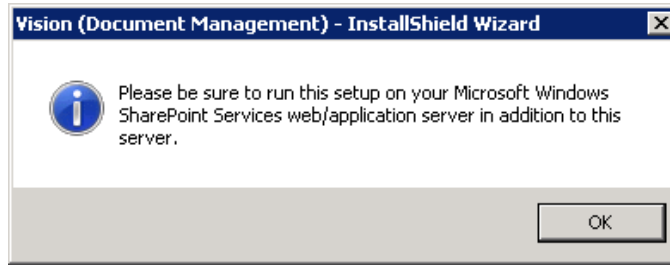
5. Click **Next**. The License Agreement page displays.



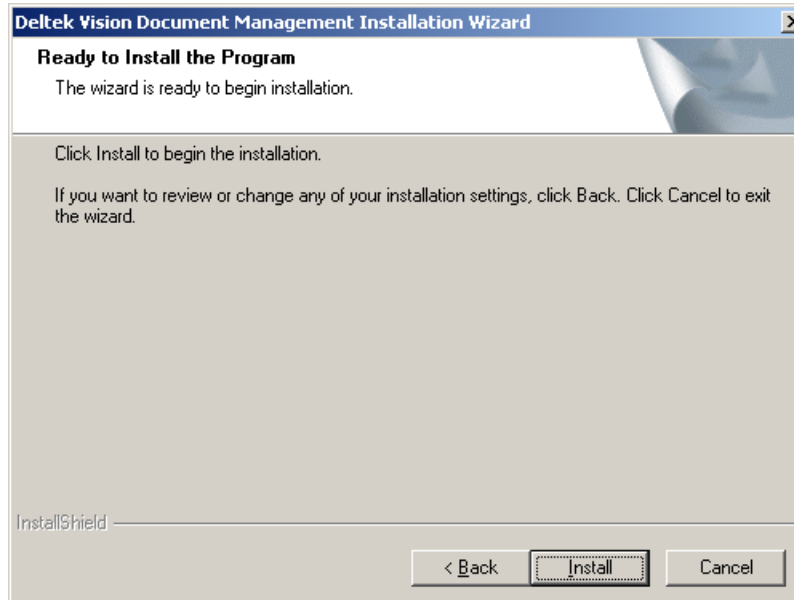
6. Select **I accept the terms of the license agreement** and click **Next**. The following dialog box displays.



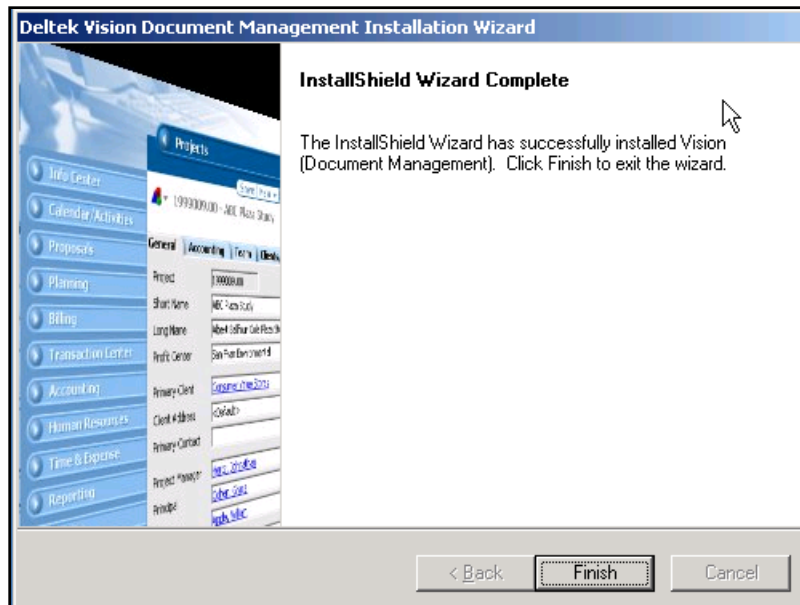
7. Click **No** because this is a multi-tier installation of Vision Document Management and your Vision Web server will not host SPF 2010. The following dialog box displays to remind you to run the setup on the SPF server.



8. Click **OK** to display the Ready to Install the Program page.



9. Click **Install** to start the installation.
10. Click **Finish** when the installation is completed.



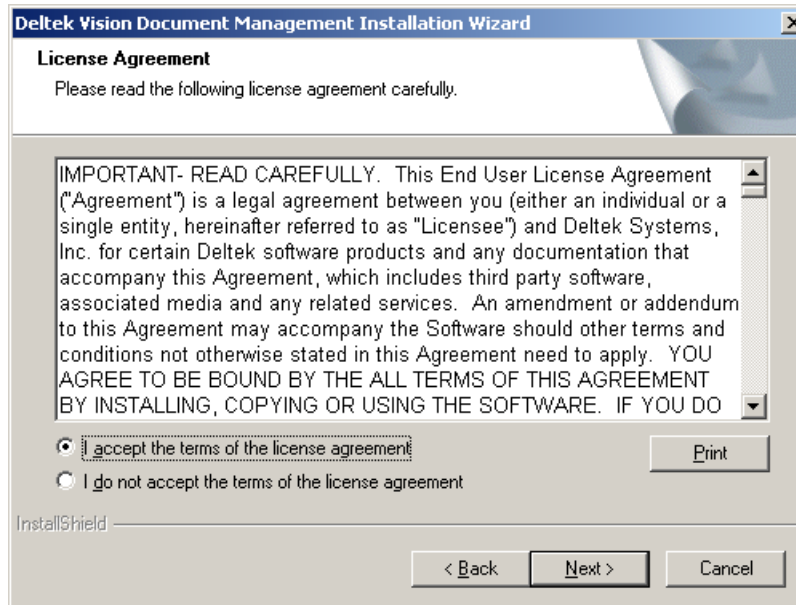
Install Vision Document Management on the SharePoint 2010 Server

To install Vision Document Management on the SharePoint server, complete the following steps:

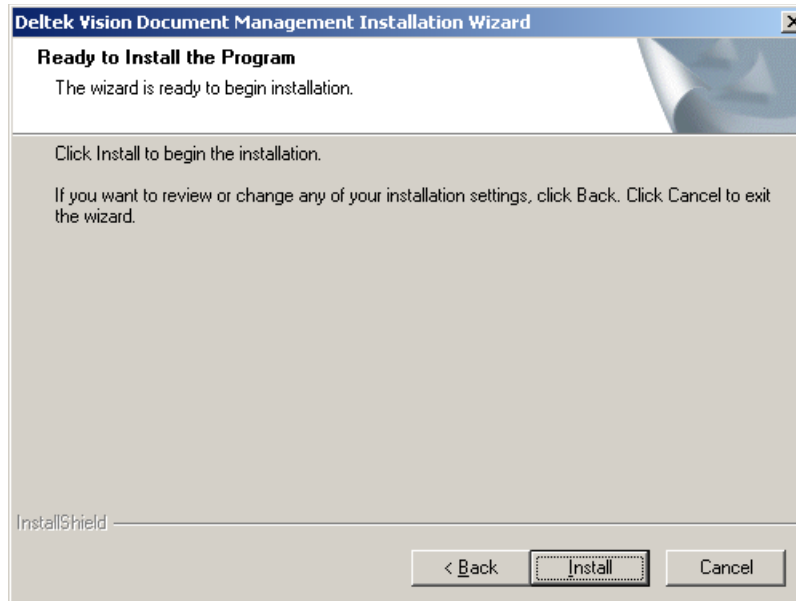
1. Download the DeltekVision61SP4DM.exe file and run the setup on your Vision Web server.
2. The Document Management Installation Wizard displays.



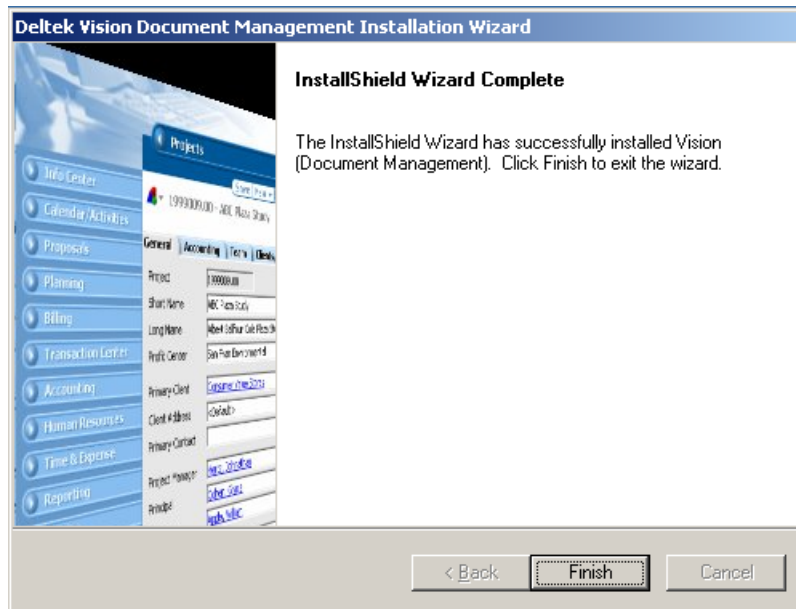
3. Click **Next**. The License Agreement page displays.



4. Accept the License Agreement and click **Next**.
5. The Ready to Install the Program page displays.



6. When the installation is complete, the InstallShield Wizard Complete page displays.



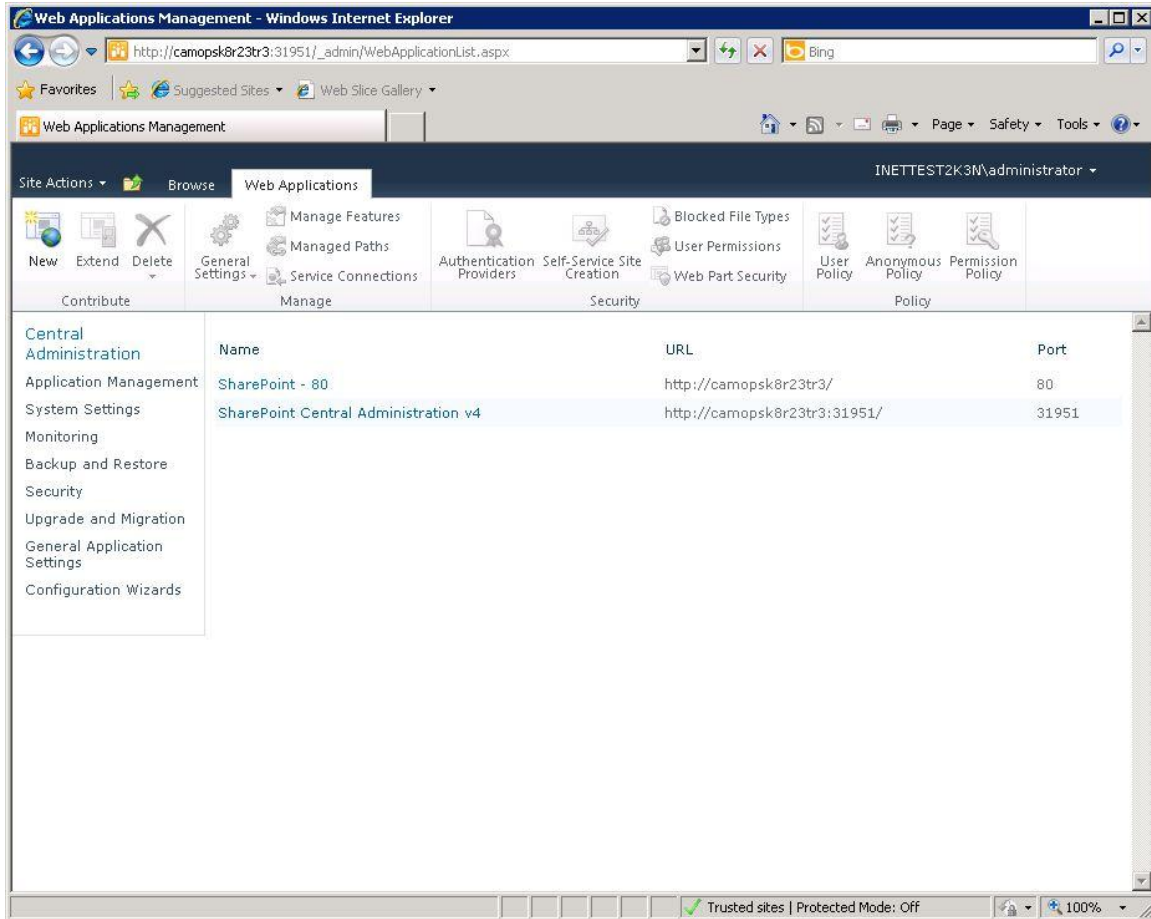
7. Click **Finish**.

Use SharePoint Central Administration to Complete the SharePoint Configuration

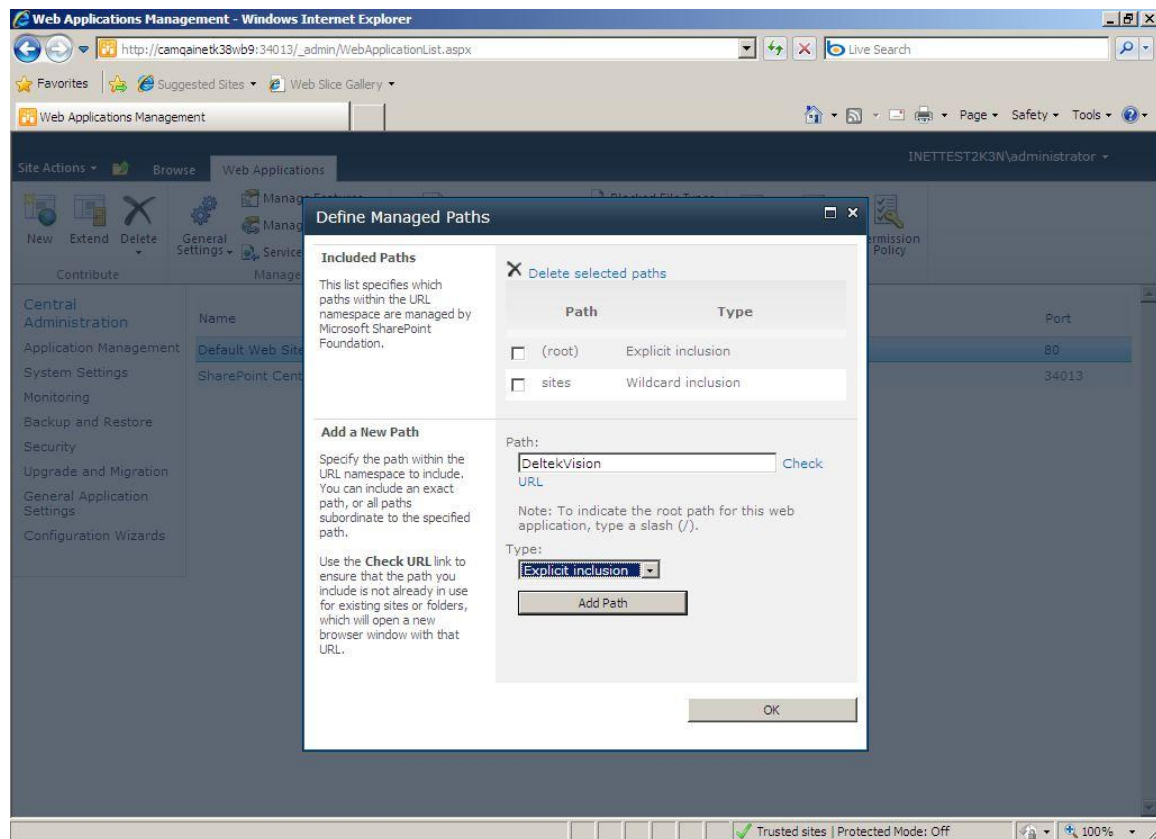
Complete the SharePoint configuration using SharePoint Central Administration. This section assumes that SharePoint Server 2010 has already been installed and configured.

To complete the SharePoint configuration, complete the following steps:

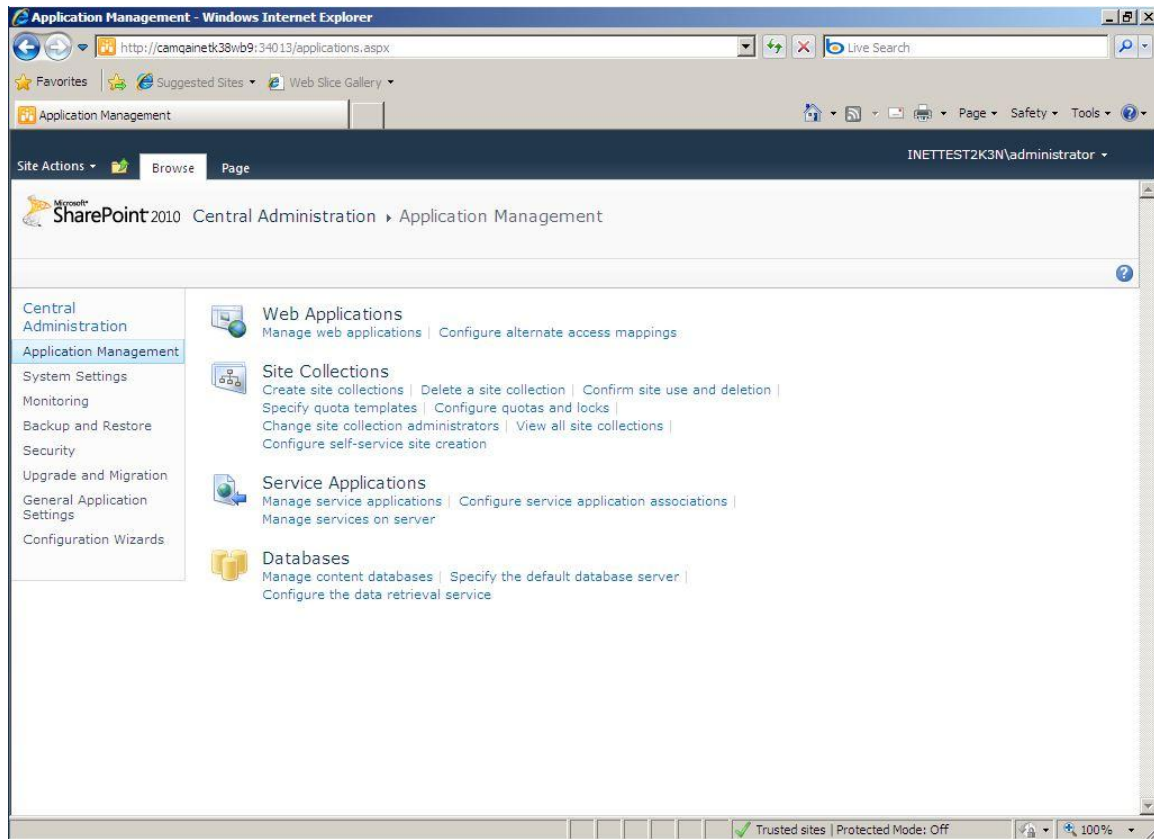
1. In SharePoint Central Administration, select **Application Management** and **Manage Web Applications**.



2. Select the web application that you would like to create the Deltek Vision site collection in and then select **Managed Paths** option. This will create a specific URL for your Vision Document Management site collection (for example, <http://SharePointServer/DeltekVision>).



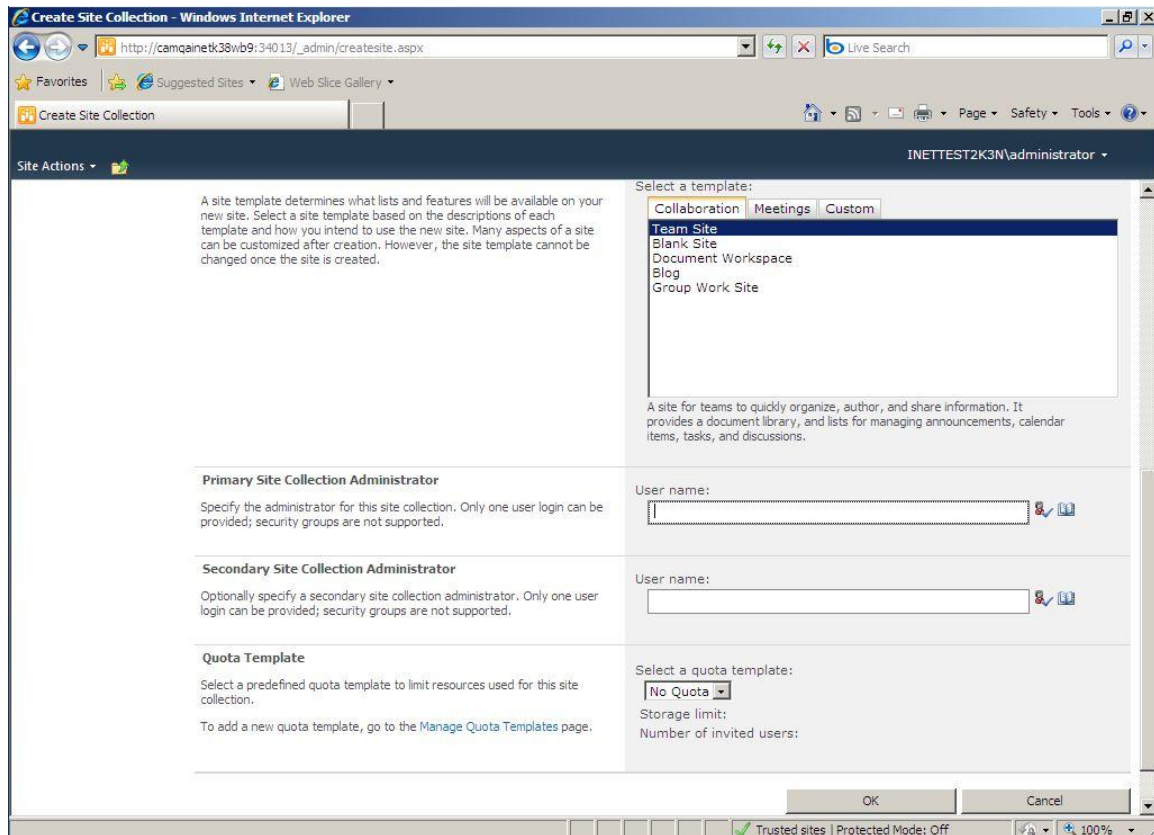
3. Enter **DeltekVision** in **Path** and select **Explicit inclusion** from the **Type** drop-down list and click **Add Path**.
4. Click **OK**.
5. Click **Application Management** and select the **Create Site Collection** option under **Site Collections**.



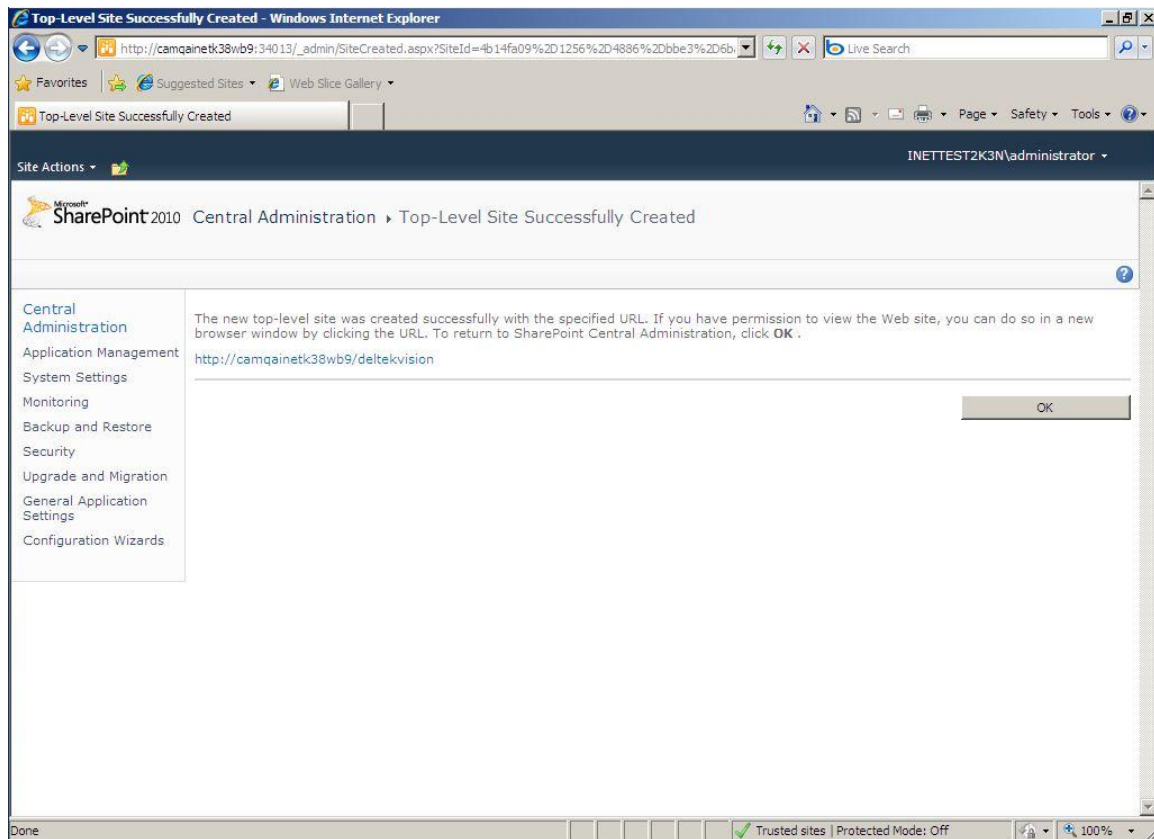
The Create Site Collection page displays.

The screenshot shows the 'Create Site Collection' page in a Windows Internet Explorer browser. The address bar shows the URL `http://camqainetk38wb9:34013/_admin/createsite.aspx`. The page title is 'Create Site Collection - Windows Internet Explorer'. The browser's address bar shows the URL `http://camqainetk38wb9:34013/_admin/createsite.aspx`. The page is titled 'Create Site Collection' and includes a navigation pane on the left with links to 'Central Administration', 'Application Management', 'System Settings', 'Monitoring', 'Backup and Restore', 'Security', 'Upgrade and Migration', 'General Application Settings', and 'Configuration Wizards'. The main content area is titled 'Central Administration > Create Site Collection' and includes a sub-header 'Use this page to create a new top-level Web site.' The page is divided into several sections: 'Web Application' (with a dropdown menu showing 'http://camqainetk38wb9/'), 'Title and Description' (with a text box for 'Title' containing 'Deltek Vision' and a text area for 'Description'), 'Web Site Address' (with a dropdown menu for 'URL' showing 'http://camqainetk38wb9/deltekvision'), and 'Template Selection' (with a dropdown menu showing 'Team Site' selected). The 'Team Site' option is highlighted in blue. The page also includes 'OK' and 'Cancel' buttons at the top right.

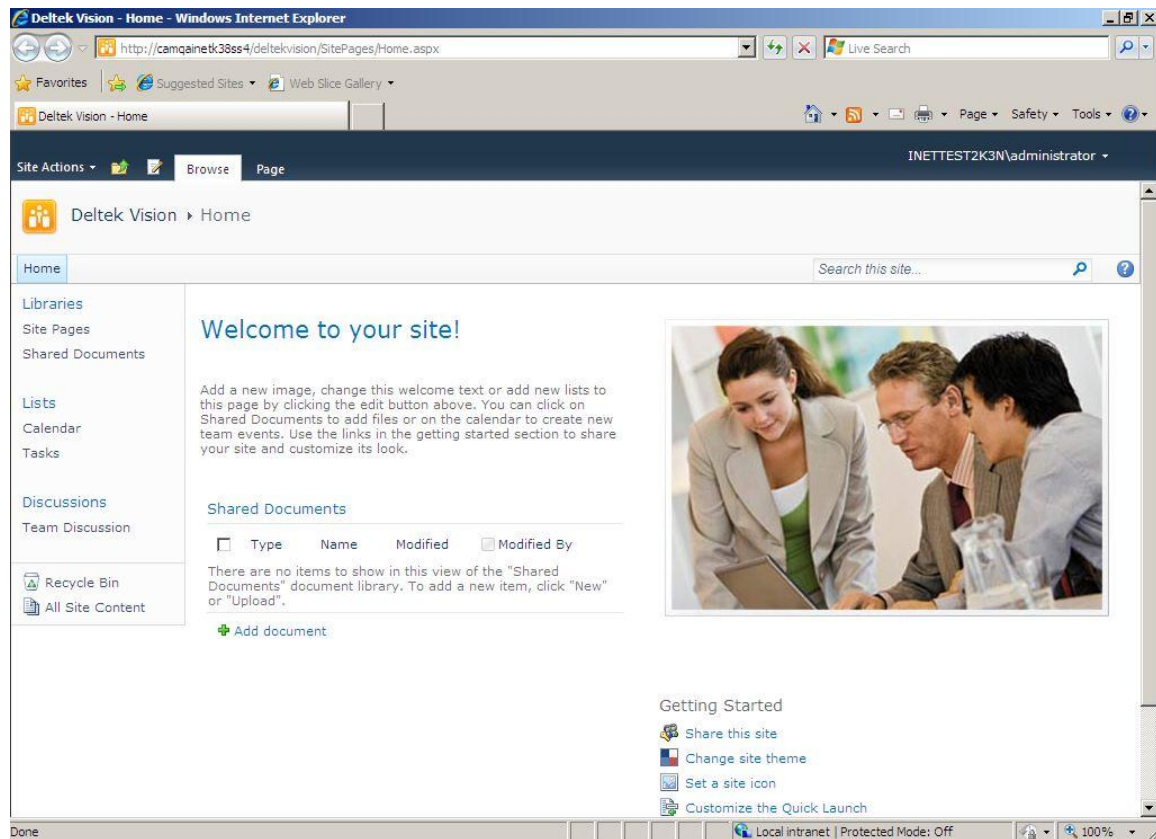
6. Enter **Deltek Vision** in **Title** and enter a description, if appropriate.
7. From the **URL** drop-down list, select **/deltekvision**. This will be the top level root for Vision Document Management.



8. Under **Select a template**, accept the default of **Team Site** for the template to be used and enter a username in each of the **User name** fields for the primary and secondary site collection administrators.
9. Select **No Quota** in **Select a quota template** and click **OK**. The Top-Level Site Successfully Created page displays.



10. Click the link for the top level site (in our example it is <http://camqainetk38wb9/deltekvision>) to display the site.



11. The SharePoint configuration is complete. Close SharePoint Central Administration.

Configure SharePoint for a Fully Qualified Domain Name (FQDN) URL (Optional)

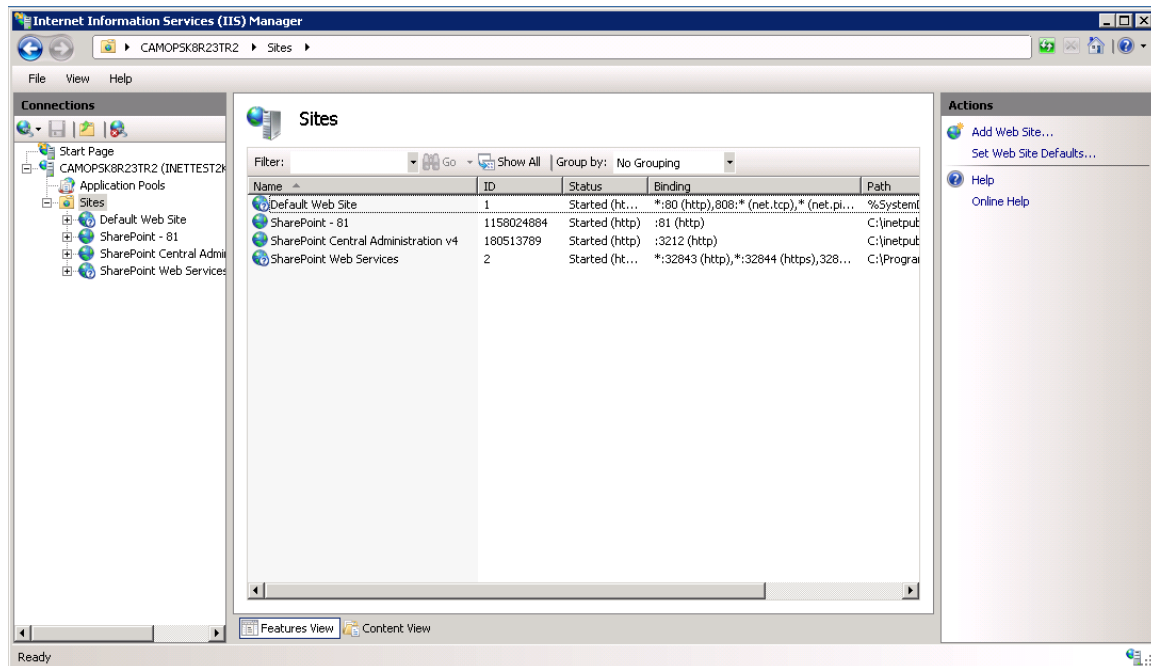
If you will be configuring your SharePoint server to use a custom DNS record for the URL, then you must create an additional SPN and also create Alternate Access Mappings in SharePoint.

See “Appendix C: SPN Configuration When Using Custom DNS Records” on page 100 for more information.

Verify IIS Configuration and Configure Deltek Vision Document Management .NET Assembly

To verify IIS configuration, complete the following steps:

1. Use the directions that follow to open Internet Information Services to view these Web sites:
 - **Default Web Site** — This is your Vision Web Site
 - **SharePoint – 80** — This is your SPF 2010 Web Site
 - **SharePoint Central Administration Web Site**



2. Copy the Vision Document Management .NET assembly to SharePoint site directory.
3. Copy Deltek.Vision.WSS30.Server.dll from <Vision Installation Directory>\Support\DM\30 to:

c:\inetput\wwwroot\wss\Virtual Directories\<site>\bin



By default, the <site> directory will reference the port chosen. In our example, the port is 80.

Configure Document Management Service Account in Weblink

You must configure the Document Management service account (username/password) on the System Settings tab of the Deltek Vision Weblink utility. Follow the instructions below to configure this:

1. On the Vision Web server, launch Weblink from **Start » Programs » Deltek Vision**
2. Enter the Weblink password when prompted.
3. Click the System Settings tab.
4. In the **Document Management** group box, enter your SharePoint username and password. This account is your SharePoint Service account/Deltek Vision Application Pool Identity.
5. Click **Test** and **SharePoint Credentials** to validate that the information entered is correct.

The screenshot shows the 'Weblink' configuration window. A dropdown menu is open under the 'Test' button, showing options: 'Database Connection', 'Report Server Configuration', and 'Sharepoint Credentials'. The 'Sharepoint Credentials' option is selected. The window contains various configuration fields: 'Polling Interval(sec)' set to 30, 'Max concurrent jobs' set to 2, 'Copy Databases.enc to' (empty), 'Default Language' set to 'English (United States)', 'Store Session State in Memory' (dropdown), 'Database Setup' section with 'SQL Server' and 'Database Name' fields, and 'Document Management' section with 'SharePoint Username' (inettetst2k3n\dmservacct2tier) and 'SharePoint Password' (masked with asterisks).

Configure Vision Document Management

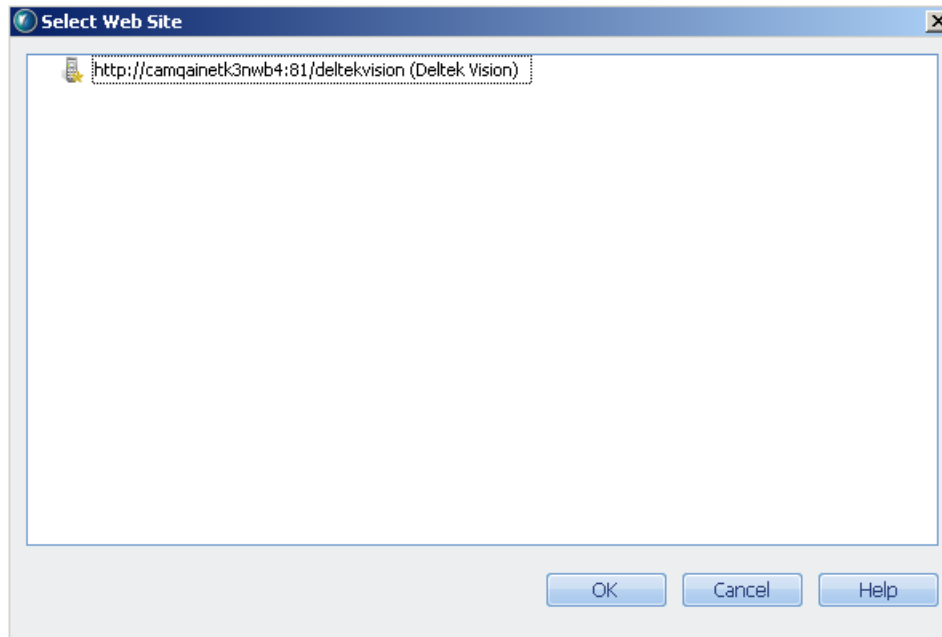
To configure Vision Document Management, complete the following steps:

1. Log in to Vision using an account that has access to the Configuration menus.
2. Click **Configuration » General » System Settings** and select the Document Management tab.

The screenshot shows the 'General System Settings' window. The 'Document Management' tab is selected. The 'Enable Document Management' checkbox is checked. The 'Server Name/IP' field contains 'camqainetk3nwb4'. The 'Virtual Server Port' field contains '81'. The 'Current Site' field is empty. There are buttons for 'Test Site', 'View Site', and 'New Site'. The left sidebar shows a list of applications including 'Calendar/Activities', 'Proposals', 'Planning', 'Billing', 'Transaction Center', 'Accounting', 'Human Resources', 'Time & Expense', 'Purchasing', 'Inventory', 'Reporting', 'Utilities', and 'Configuration'. The 'Configuration' section is expanded, showing 'General' and 'System Settings'.

3. Select the **Enable Document Management** check box.

4. Enter the name of the server hosting Document Management. This can be the NetBIOS name, server name FQDN, or custom DNS/FQDN. Enter this value without the protocol prefix (for example, remove the http://). In the illustration above, the value is **camqainetk3nwb4**.
5. Enter the **Virtual Server Port**. In the illustration above, the port is 80.
6. Click the Lookup icon to select the current site.



7. The Select Web Site dialog box displays the available sites. Select a site, and click **OK**.
8. Save your changes.

Configure Constrained Delegation

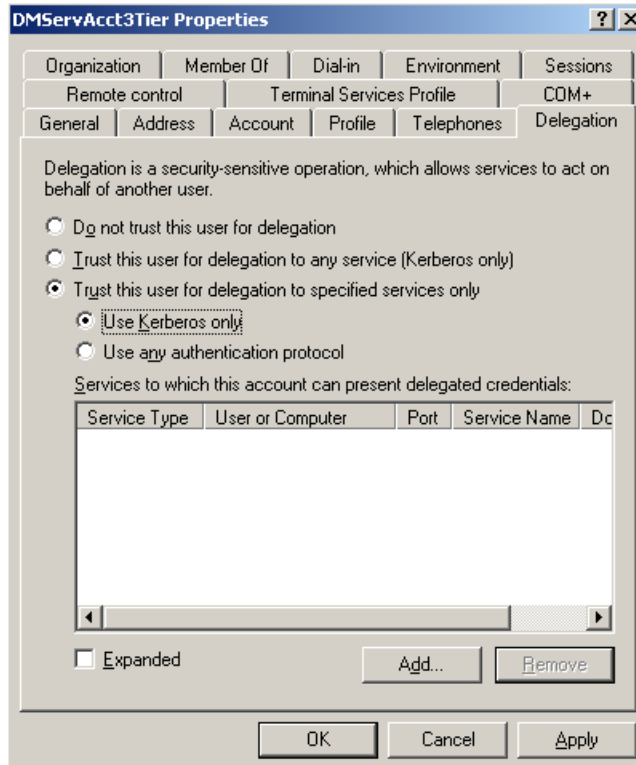
Because your SharePoint server is on a separate physical server and because the Vision Web server needs to pass the domain credentials of your Vision Document Management users on to the SharePoint server, you must configure Constrained Delegation.



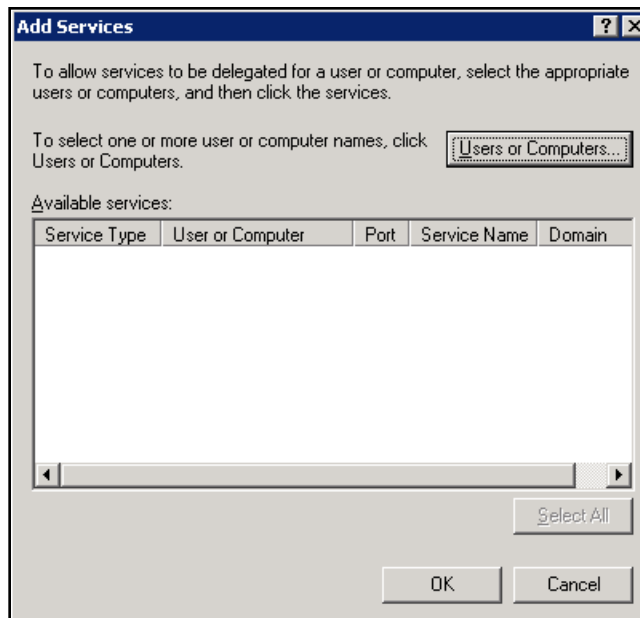
This assumes a non-Internet deployment of Vision Document Management using Kerberos authentication. If you are deploying Vision Document Management so that it is accessible over the Internet, then you need to skip ahead to “Configure Protocol Transition” on page 86.

To configure Constrained Delegation, complete the following steps:

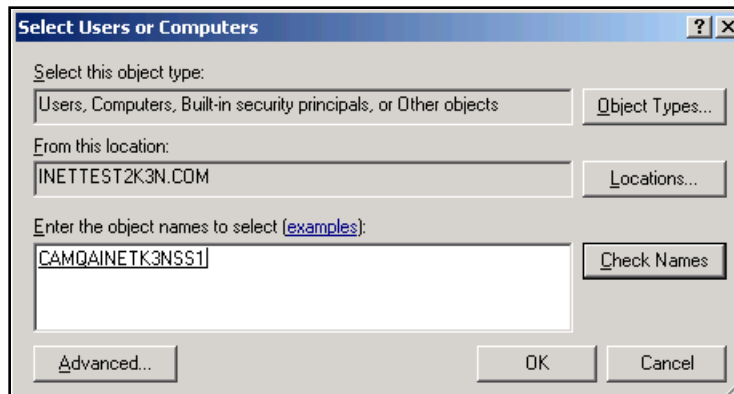
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (MOSS Service account), which is most likely under the Computers Organizational Unit (OU).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for delegation to specified services only** option.
5. Select the **Use Kerberos only** option.



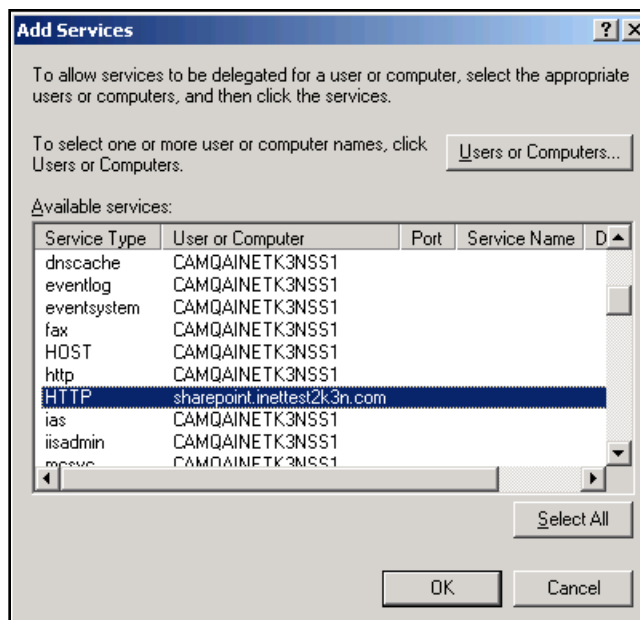
6. Click **Add**. The **Add Services** dialog box displays.



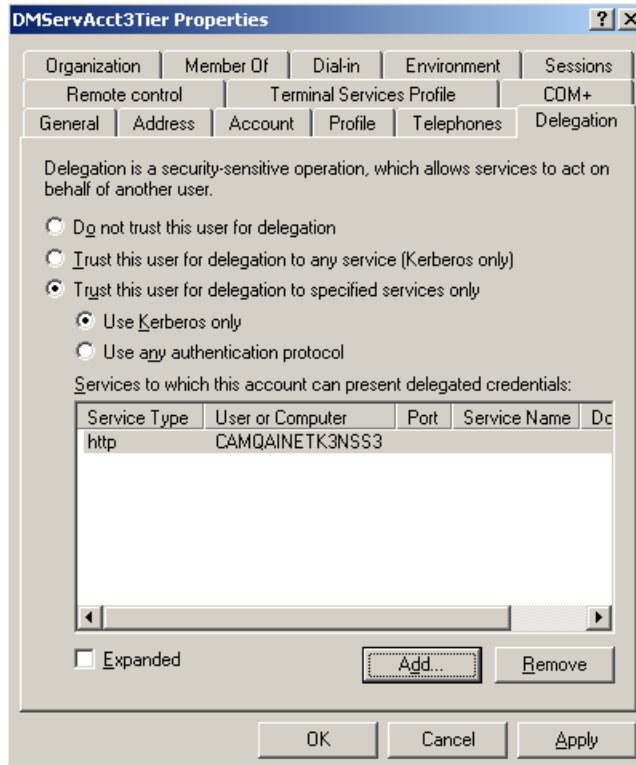
7. Click **Users or Computers**. The Select Users or Computers dialog box displays.



8. Locate the http service, select it, and click **OK**.



9. The Delegation tab should look like this:



Because we are explicitly specifying the http service and not all services on the SharePoint server, this is known as Constrained Delegation.

There are two http service types listed. These service types are known as Service Principal Names (SPNs). The SPN referencing CAMQAINETK3NSS1.inetest2k3n.com was created automatically when the server was added to the domain and the http service (IIS) was installed. The second SPN referencing sharepoint.inetest2k3n.com is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

Configure Protocol Transition

If Vision Document Management functionality is required over the Internet and you will be using a custom DNS/FQDN for the SharePoint URL (as in our example, vision1.inetest2k3n.com), then you need to configure a form of delegation referred to as Protocol Transition. If Document Management functionality is not required, you can skip this step.

The Kerberos authentication protocol must be used to authenticate from the Vision Web server to the SharePoint server. However, if Vision is deployed in an Internet scenario and there are users outside of the firewall who need to access Document Management features, then Kerberos authentication cannot be used to authenticate the client to the Web server. This is because the client needs to have the ability to negotiate a Kerberos ticket with the Key Distribution Center (KDC), which is a service running on a Domain Controller. This requires port 88 to be opened inbound on the firewall to the Domain Controller, which is not an advisable configuration.

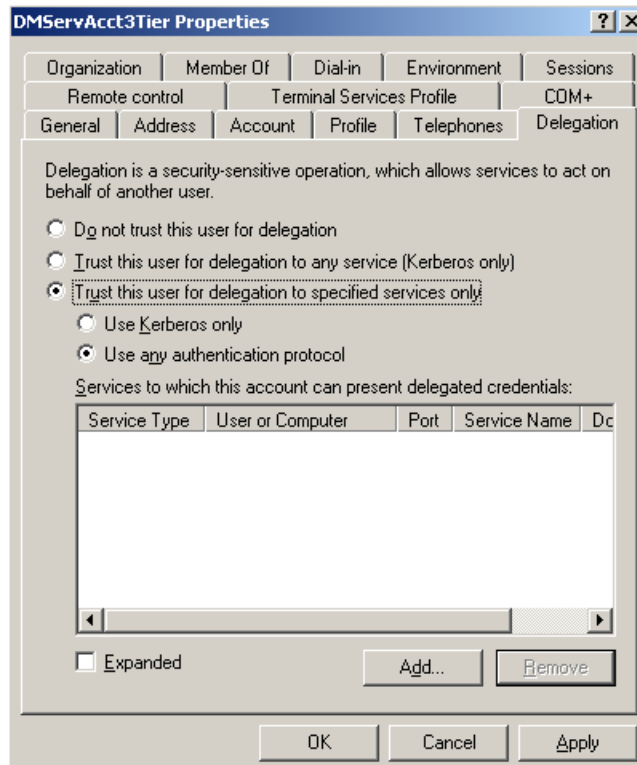
To get around this, you must be running a Native Windows Server 2003 functional domain.

Protocol Transition is configured by selecting the **Use any authentication protocol** option instead of the **Use Kerberos only** option, which is used to configure Constrained Delegation. This allows the client to authenticate to the Vision Web server using NTLM instead of Kerberos,

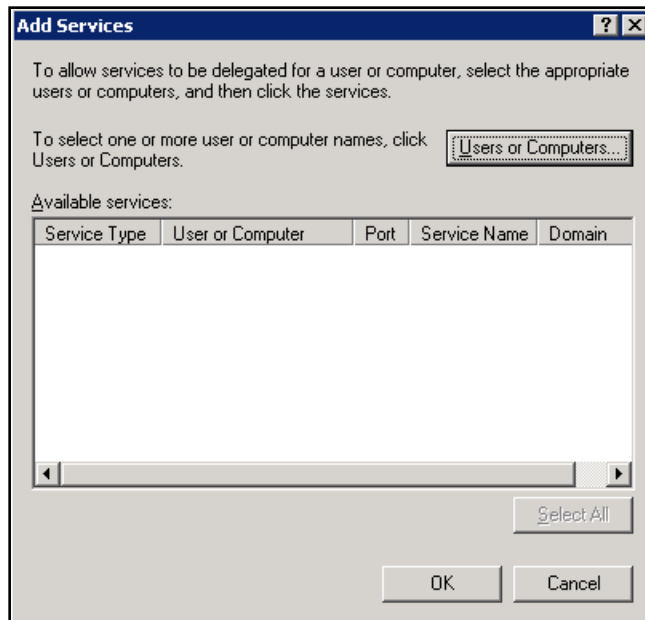
and that authentication is then “transitioned” over to Kerberos for Delegation to the SharePoint server.

To configure Protocol Transition, complete the following steps:

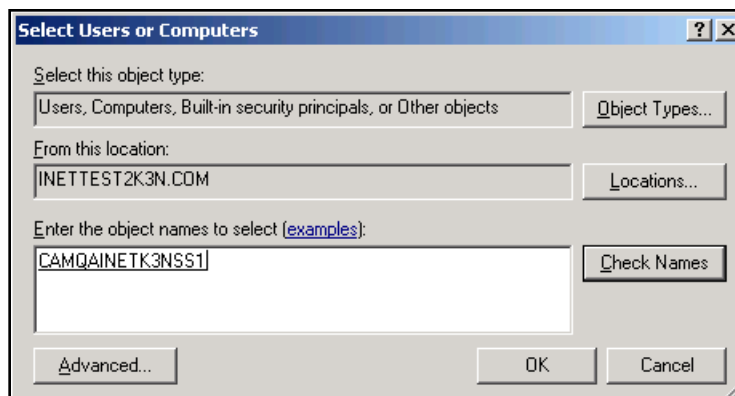
1. Open the Active Directory Users and Computers MMC on a Domain Controller.
2. Locate the User account for the Vision Application Pool Identity (MOSS Service account), which is most likely under the Computers Organizational Unit (OU).
3. Right-click and select **Properties**.
4. On the Delegation tab, select the **Trust this user for Delegation to specified services only** option.
5. Select the **Use any authentication protocol** option.



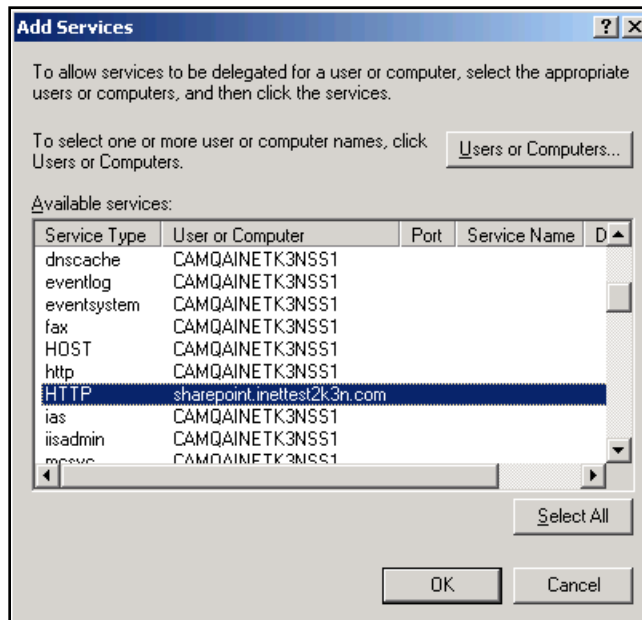
6. Click **Add**. The **Add Services** dialog box displays.



7. Click **Users or Computers**, search for the SharePoint server, and click **OK**.



8. Locate the http service for the SPN (FQDN) you created earlier (in our example, **sharepoint.inetest2k3n.com**) select it, and click **OK**.

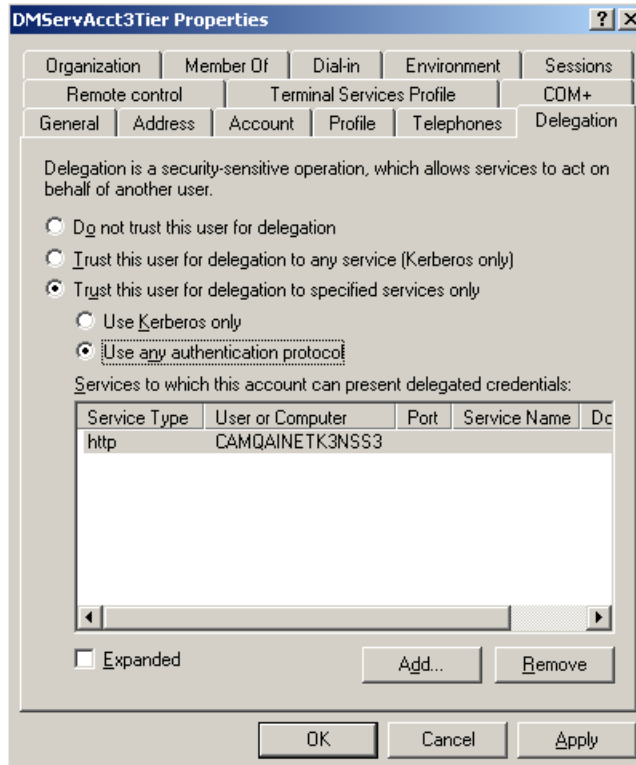


This illustration shows two http service types. Unless you have registered a custom FQDN using the setspn utility, only the server name displays. These service types are known as Service Principal Names (SPNs).

The SPN referencing **CAMQAINETK3NSS1.inettest2k3n.com** was created automatically when the server was added to the domain and the http service (IIS) was installed.

The second SPN referencing **sharepoint.inettest2k3n.com** is a new SPN that was created using the setspn utility that allows us to register the custom FQDN of the server, which provides more meaning than the actual machine name.

The Delegation tab should look like this:



Because we are explicitly specifying the http service and not all services on the SharePoint server, and because we are using the **Use any authentication protocol** option and not Kerberos, this is known as Protocol Transition.