

**District Five**

**Florida Department of Transportation**

**FDOT GIS Framework Install Guide**

**September 2011**



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**Document Revision History:**

<b>Version</b>	<b>Date</b>	<b>Revised By</b>	<b>Description of Changes</b>
0.1	9/8/11	J. Engerski	Initial compilation
0.2	10/3/11	J. Engerski	Inclusion of comments from John Clapham, Simone Babb, Mark Ma, Mark Herring, Joe Duncan and Doni Laney
1.0	10/3/2011	J. Engerski	Final formatting, edits and sensitive information removal.

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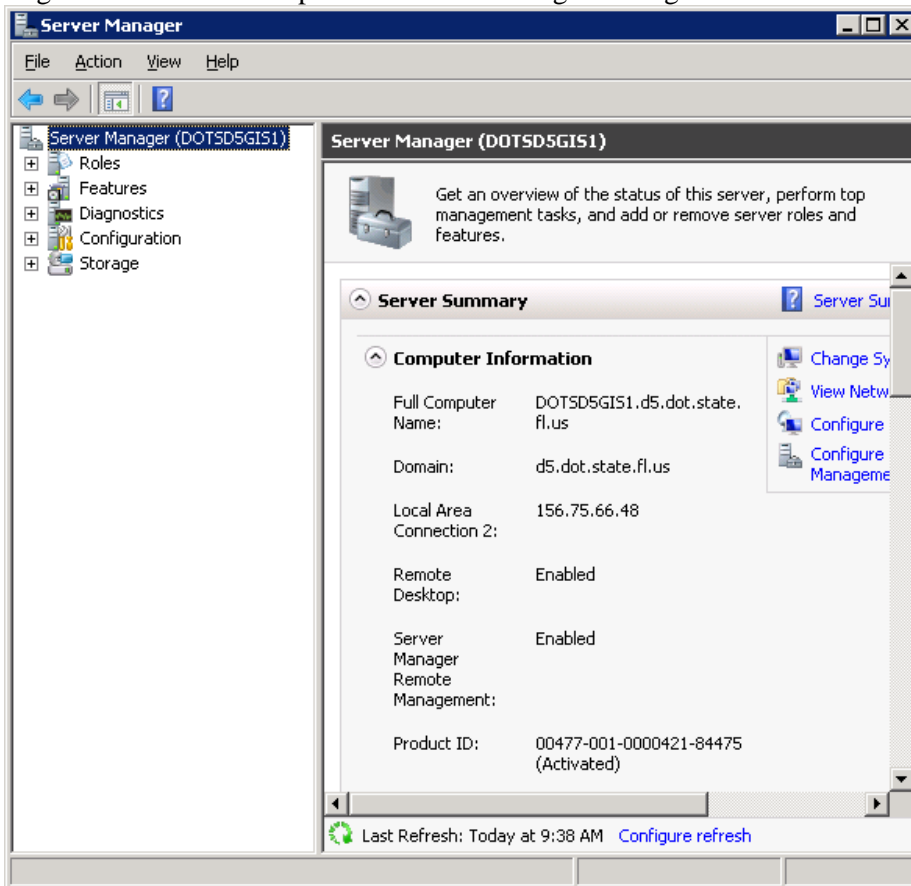
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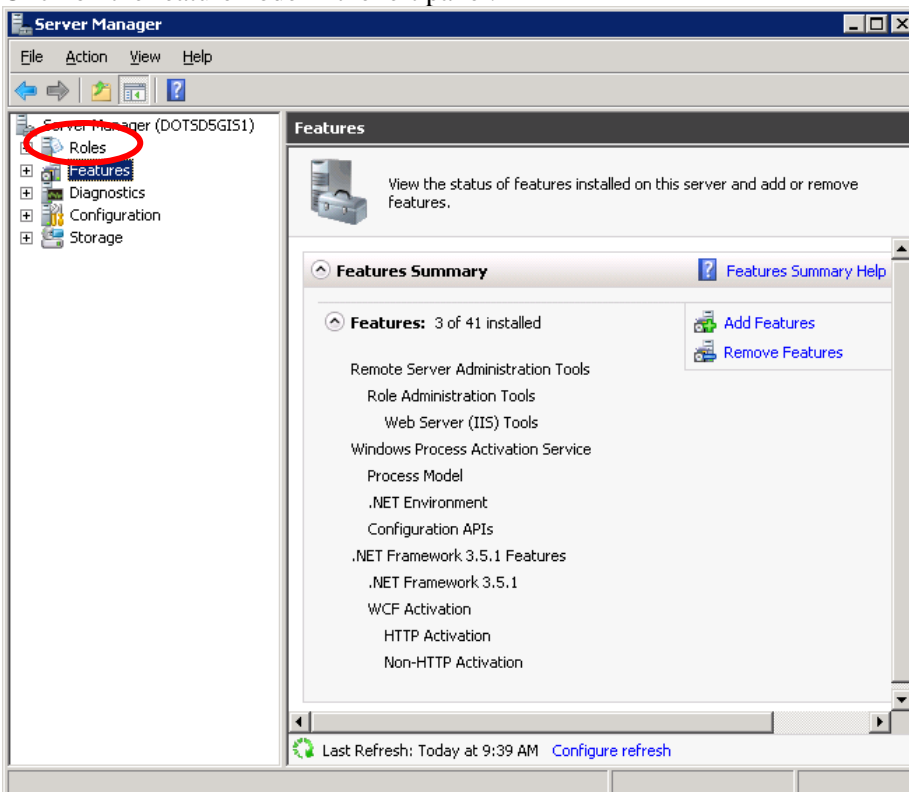
# 1.0 Server Configuration

## 1.1 .NET 3.5 SP1 Install & IIS 7 Install

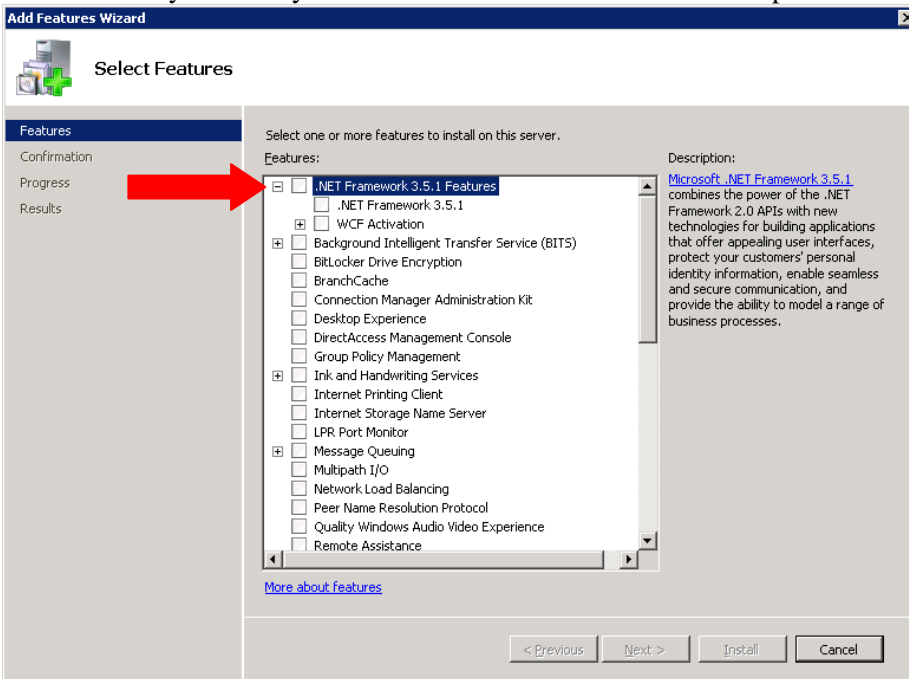
1. Log into the server and open the Servers Manager Management Console.



2. Click on the feature node in the left panel.

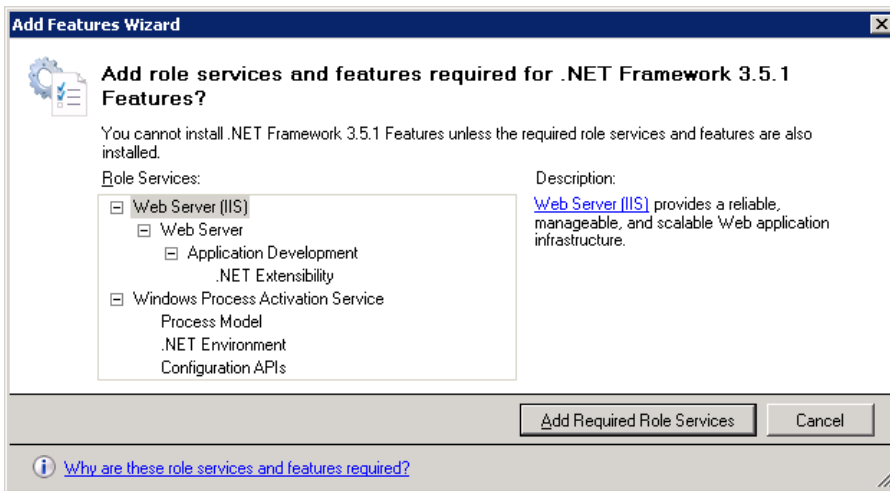


3. If .NET Framework 3.5 SP1 is not installed press the Add Features button on the right side of the panel to install it. If you already have .NET 3.5 SP1 click on Roles and press Add roles then skip to step 6

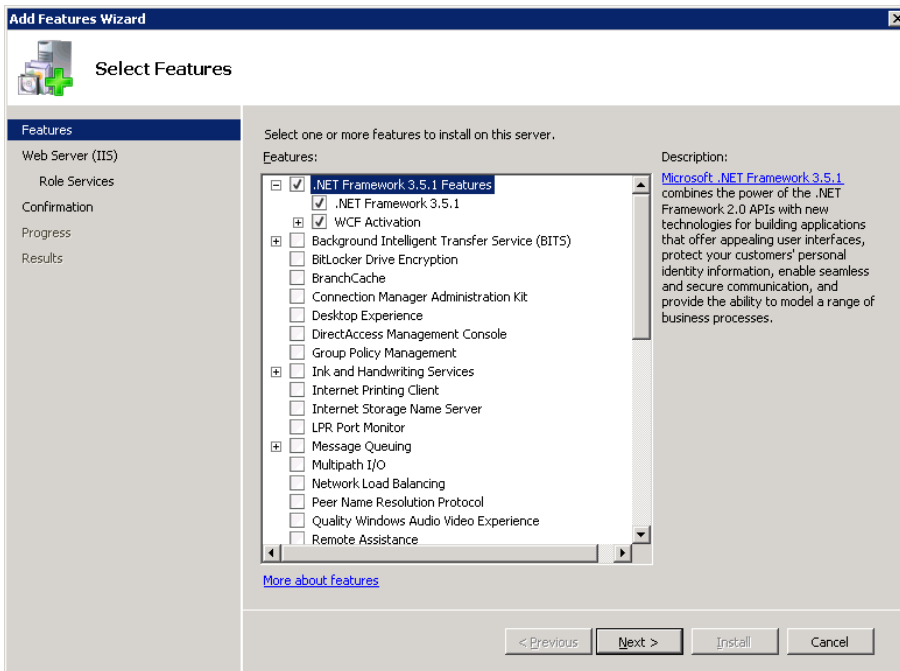


4. On the Select Feature window check the box next to .NET Framework 3.5.1 Features. When you do this the following window will appear if you do not have IIS 7 installed. Click the **Add Required Role**

Services button.

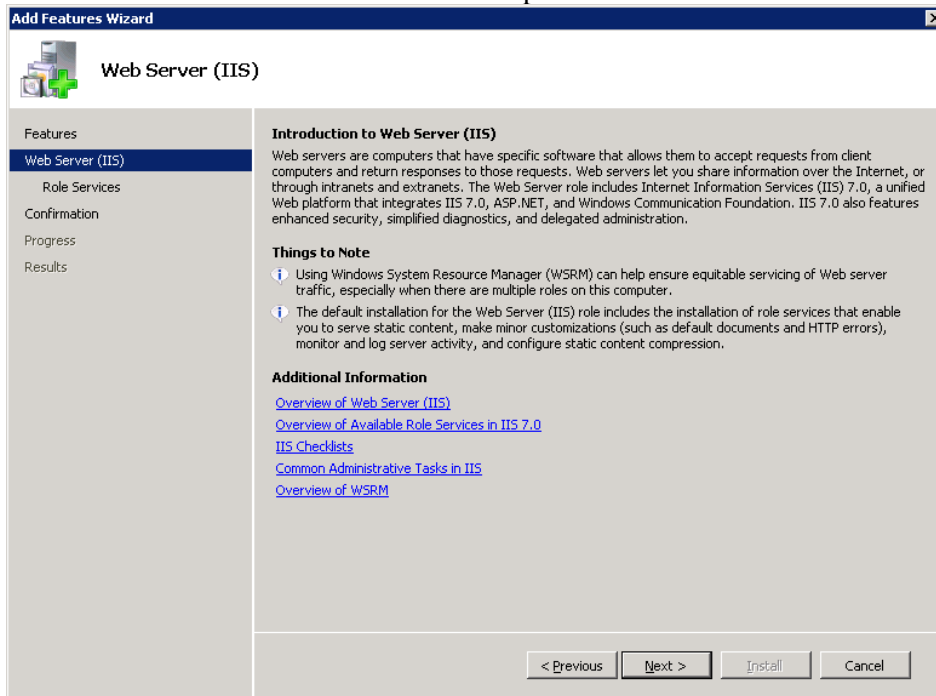


5. Your Select features window should look the same as the window below. Press NEXT



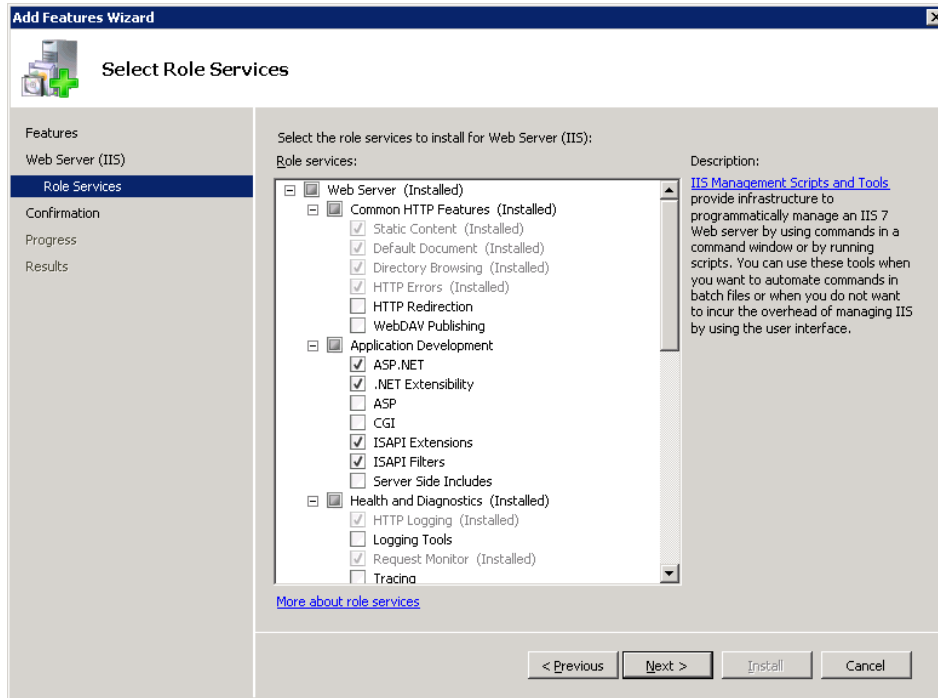


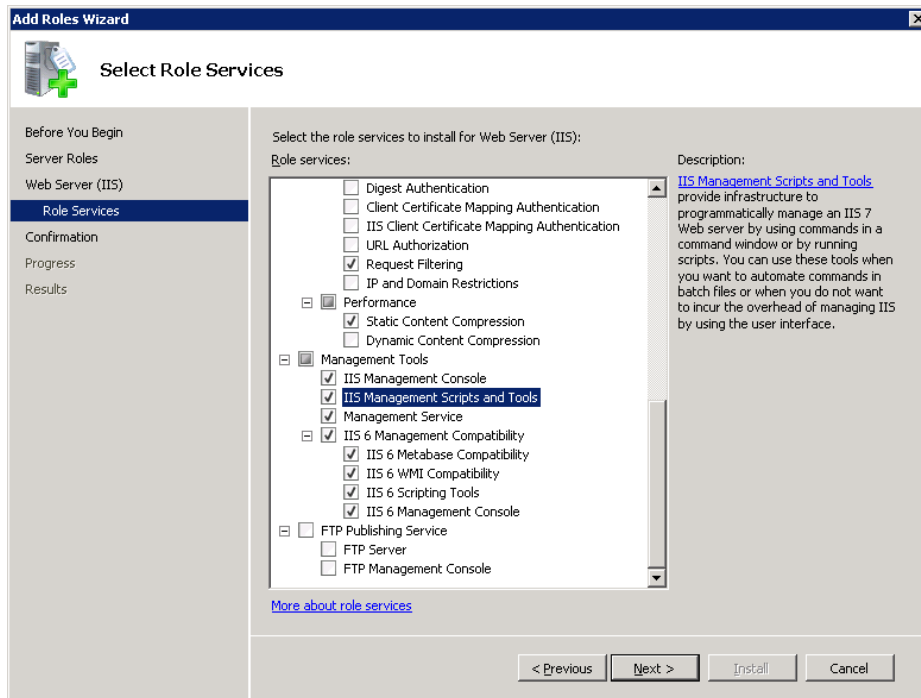
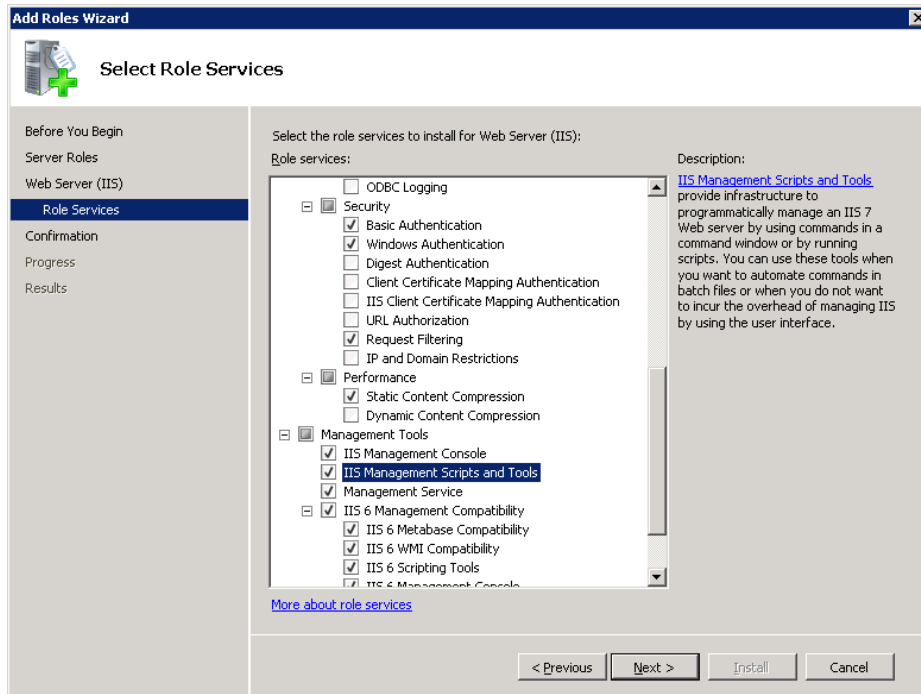
6. On the Introduction to Web Server window press NEXT.



7. On the Select Role Services window make sure to check the following list of items.
- a. Web Server
    - i. Common HTTP Features
    - ii. Static Content
  - b. Application Development
    - i. ASP.NET
    - ii. .NET Extensibility
    - iii. ISAPI Extensions
    - iv. ISAPI Filters
  - c. Security
    - i. Basic Authentication
    - ii. Windows Authentication
    - iii. Request Filtering
  - d. Management Tools
    - i. IIS Management Console
    - ii. IIS Management Scripts and Tools
    - iii. Management Service

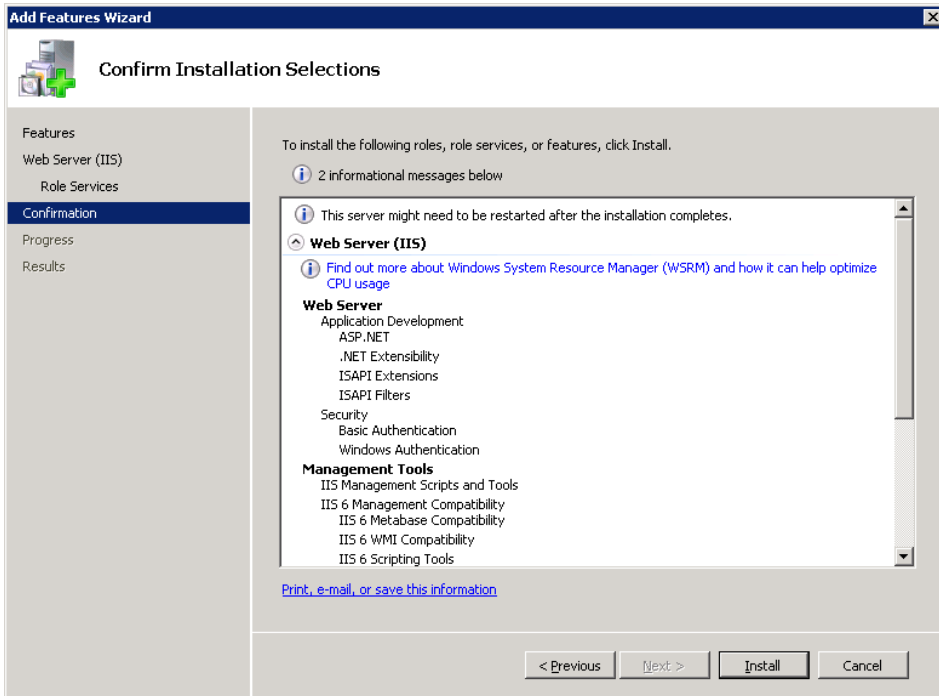
b. IIS 6 Management Compatibility



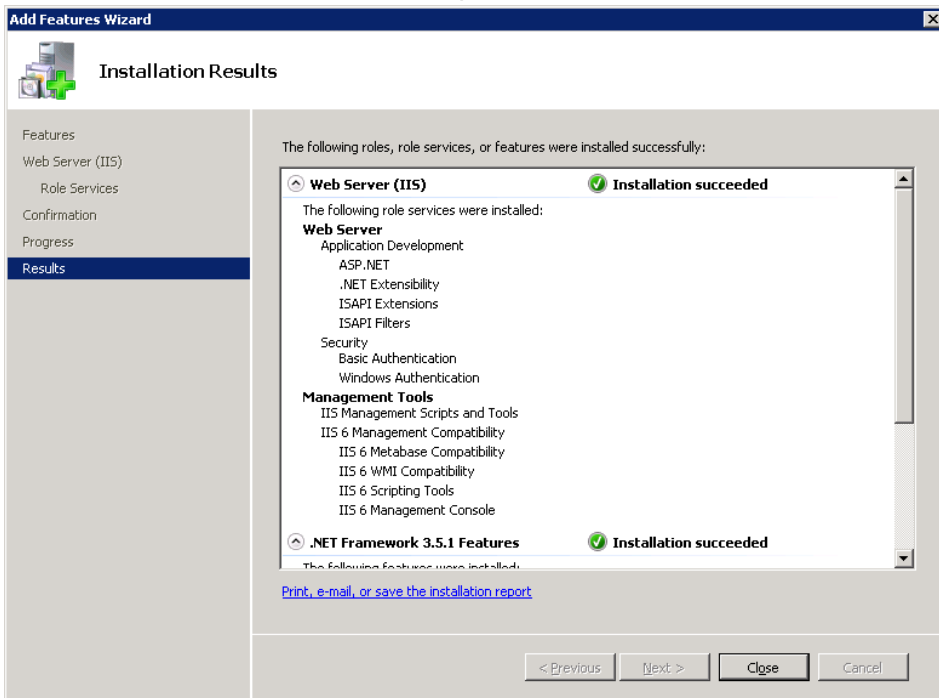


8. After all the listed items are selected press NEXT

9. On the Confirm Installation Selections Window press INSTALL

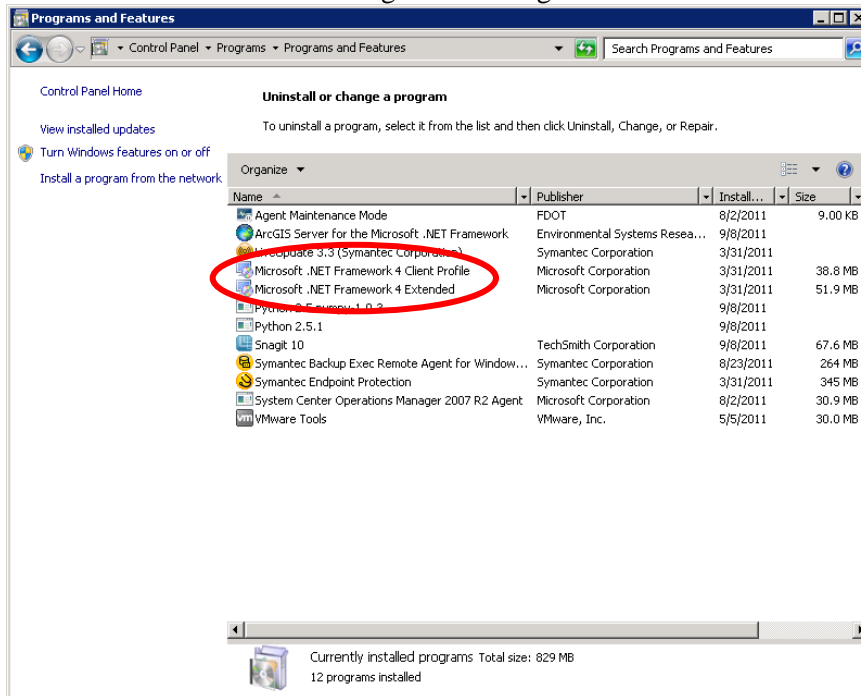


10. On the installation Results window press CLOSE. IIS and .NET 3.5 SP1 are now installed.



## 1.2 .NET 4.0 Install

1. By default .NET 4.0 is installed on Windows Server 2008R2. Please verify that it is installed by going to Start → Control Panel → Programs → Programs and Features.

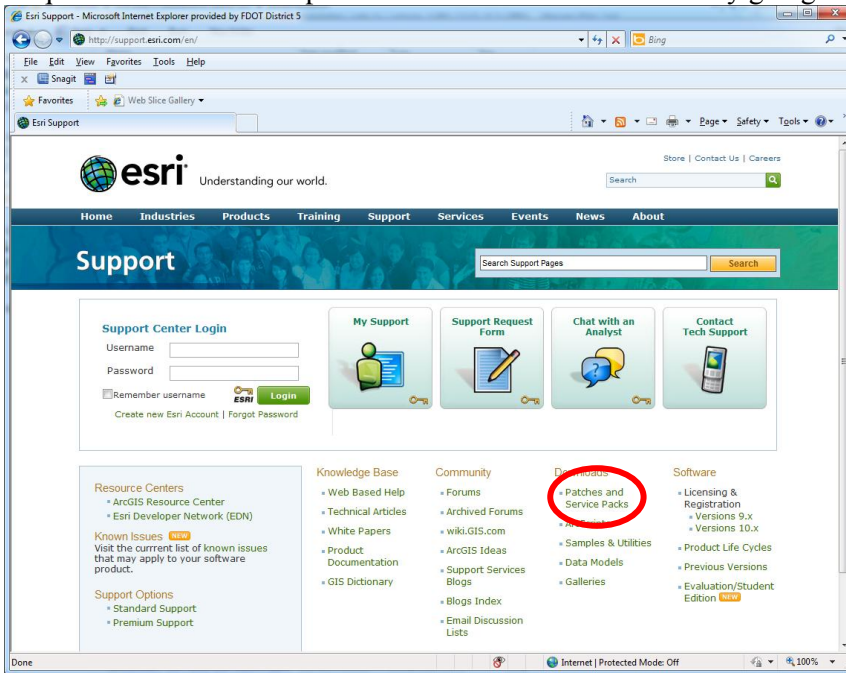


2. If you do not see Microsoft .NET Framework 4 Client Profile and Extended in the list of installed programs go to Microsoft's website, download and install the .NET 4.0 Framework.

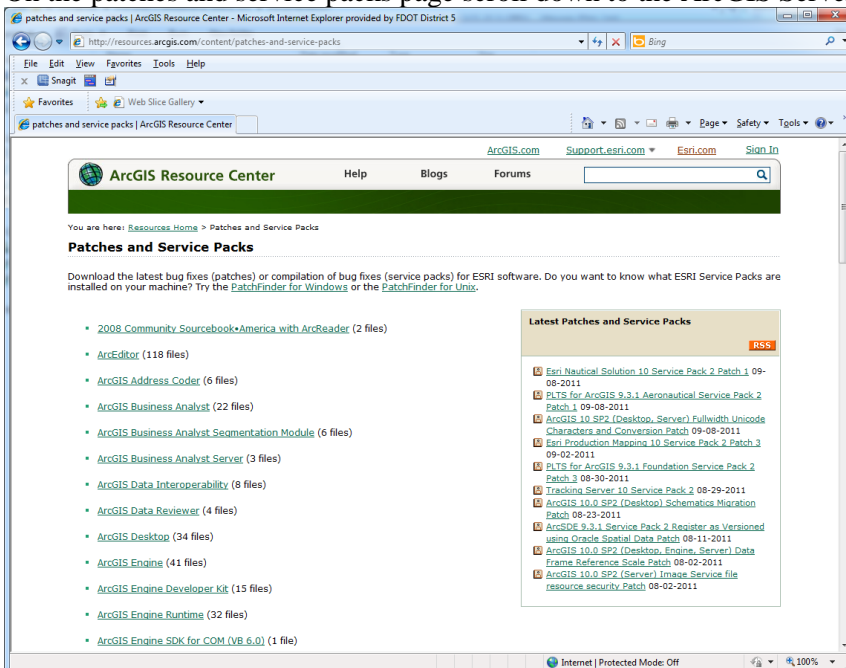
## 2.0 ArcGIS Server Install

### 2.1 Preparation

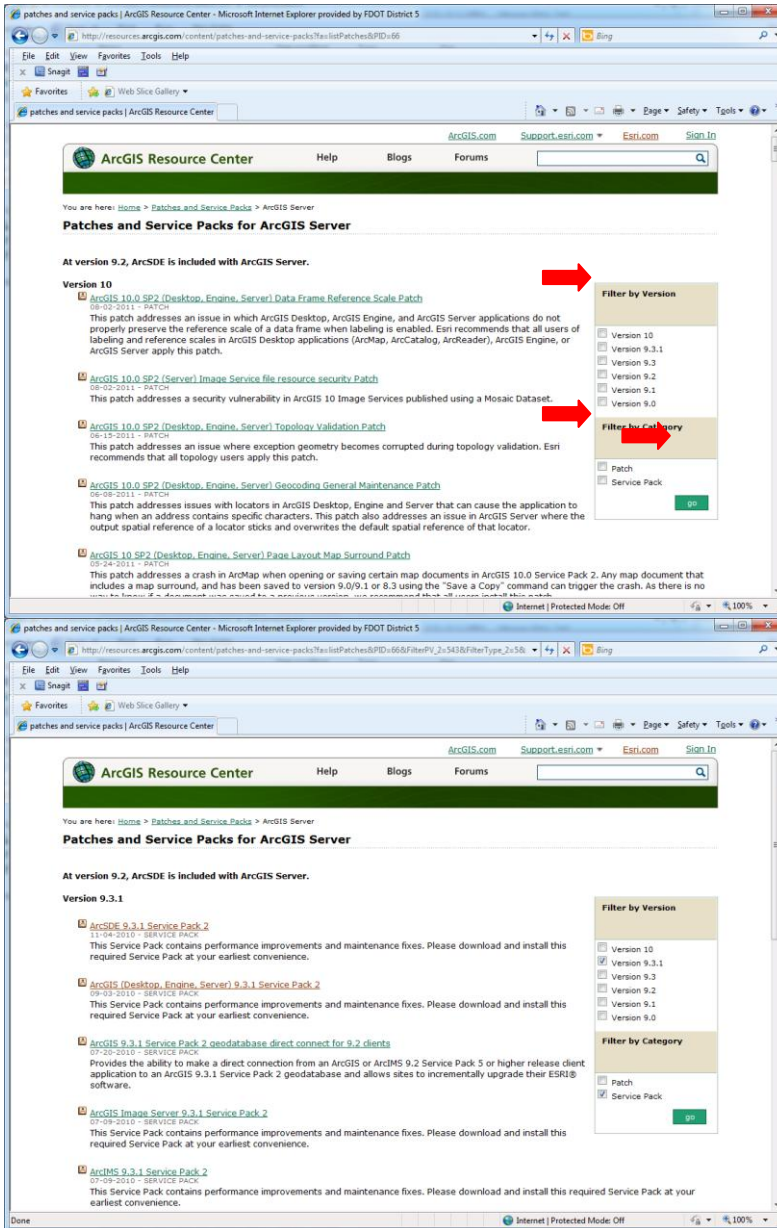
1. Either copy the installation CD for ArcGIS Server 9.3 to your install share or insert the disk in the CD Drive of the server.
2. Also copy the ArcGIS Server for the .NET Framework 9.3.1 install to the install share. ArcGISServerDotNet931.msi
3. Acquire the 9.3.1 service pack installs from ESRI's website by going to <http://support.esri.com>



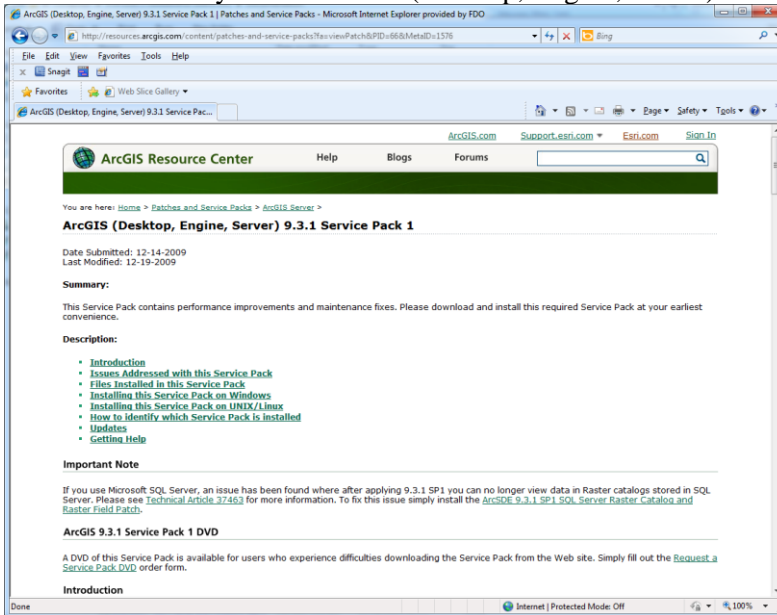
4. Under Downloads click on Patches and Service Packs
5. On the patches and service packs page scroll down to the ArcGIS Server link and click it.



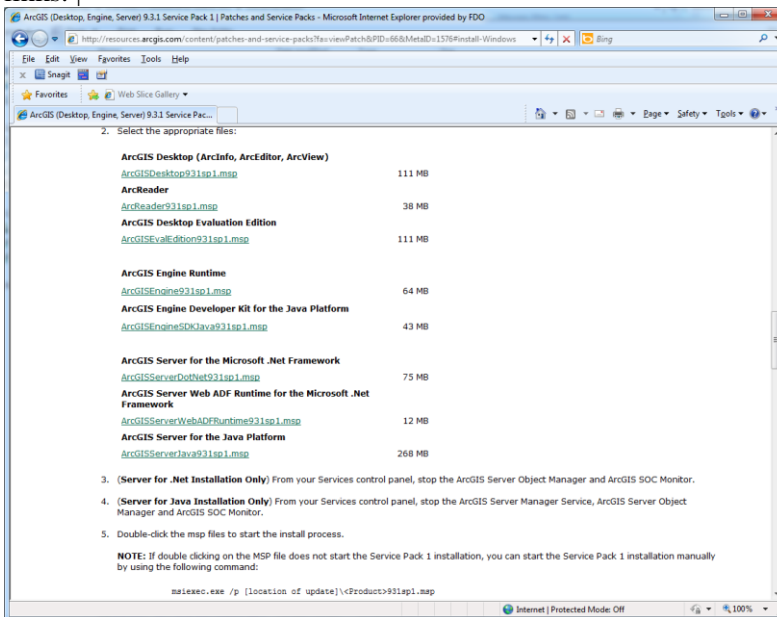
- In the Filter by version panel on the right check the box next to Version 9.3.1 and Service Pack then click GO.



7. Scroll down until you see ArcGIS (Desktop, Engine, Server) 9.3.1 Service Pack 1 and click the link.

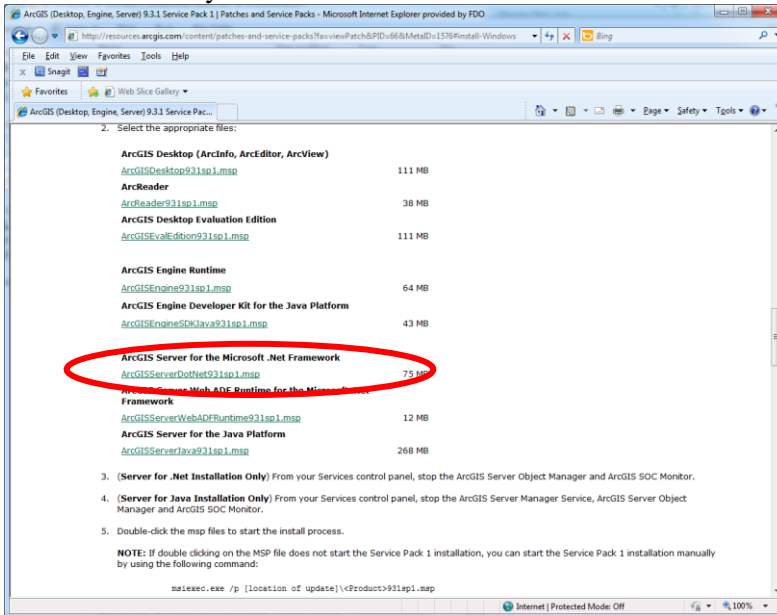


8. Click the **Install this Service pack on Windows** link and then scroll down until you see the download links.

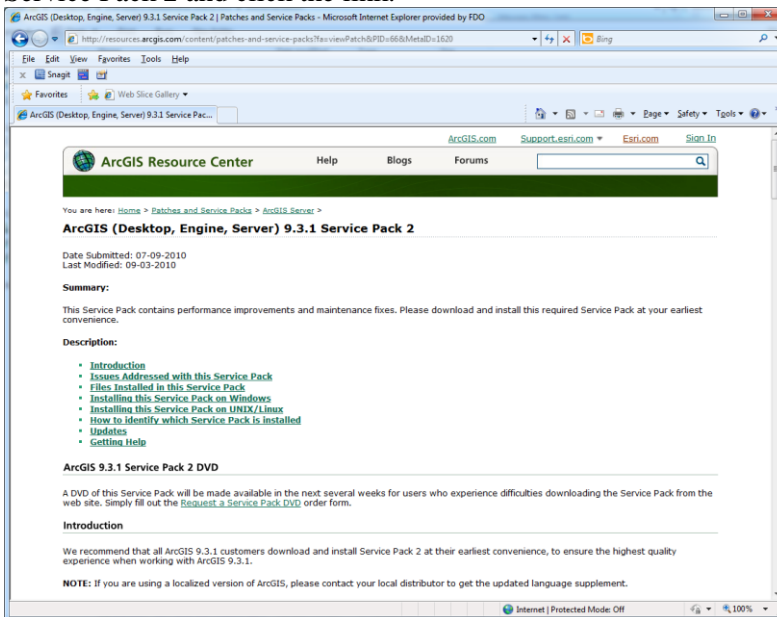




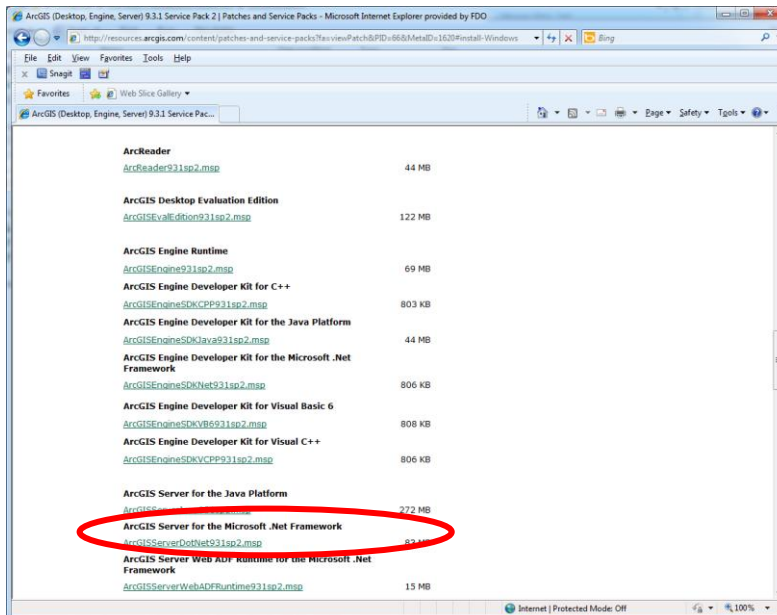
- Click the **ArcGISServerDotNet931sp1.msp** link to download the service pack. Make sure to save it to a location where you will be able to access it and install it from the server.



- After the download completes hit the back button and find the ArcGIS (Desktop, Engine, Server) 9.3.1 Service Pack 2 and click the link.



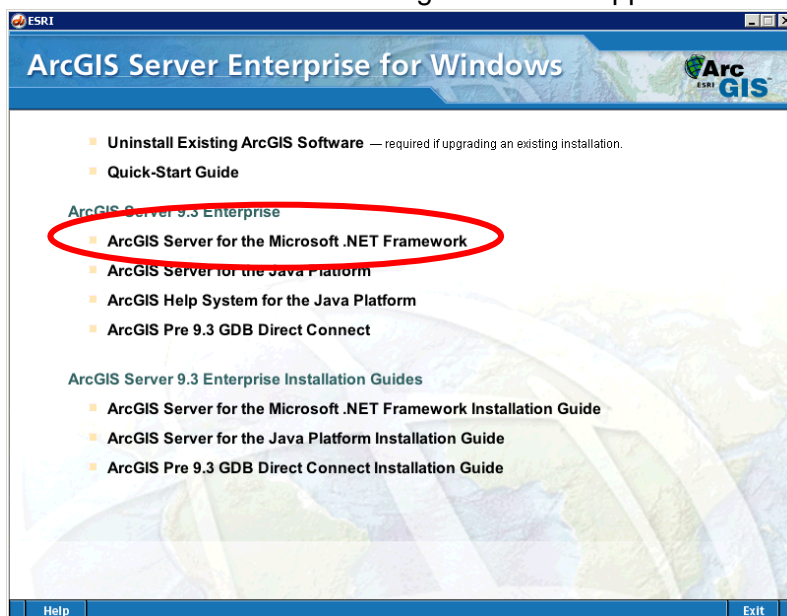
- Click the **Installing this Service Pack on Windows** link then scroll down until you see the downloads link. The SP2 link toward the end of the links.



- Click the **ArcGISServerDotNet931sp2.msp** link to begin the download. Make sure to save it to a location where you will be able to access it and install it from the server.
- Make sure you get the ArcGIS Server license number so you can use it during the install. Also make sure to generate you domain IDs for the GIS Service accounts if you are going to use Domain IDs. DxGISWEB, DxGISSOC, DxGISSOM

## 2.2 ArcGIS Server Base Install

- Navigate to the location where you copied the ArcGIS Server 9.3 installation CD and double click the ESRI.exe. The following window will appear.

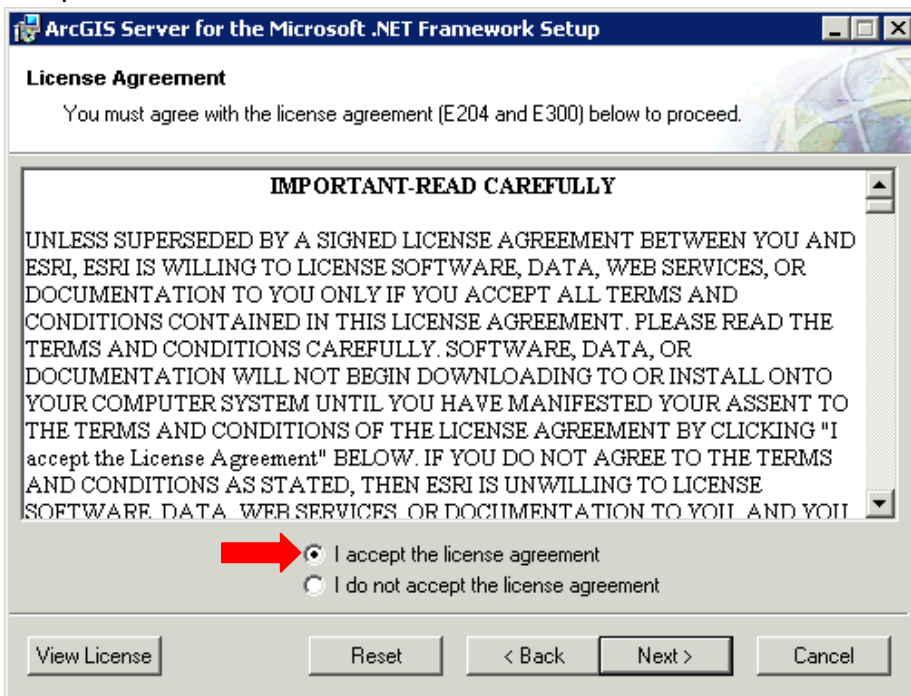


- On the window click the link for ArcGIS Server for the Microsoft .NET Framework.

- When the Welcome to the ArcGIS Server for the Microsoft .NET Framework Setup Program welcome window appears press NEXT.

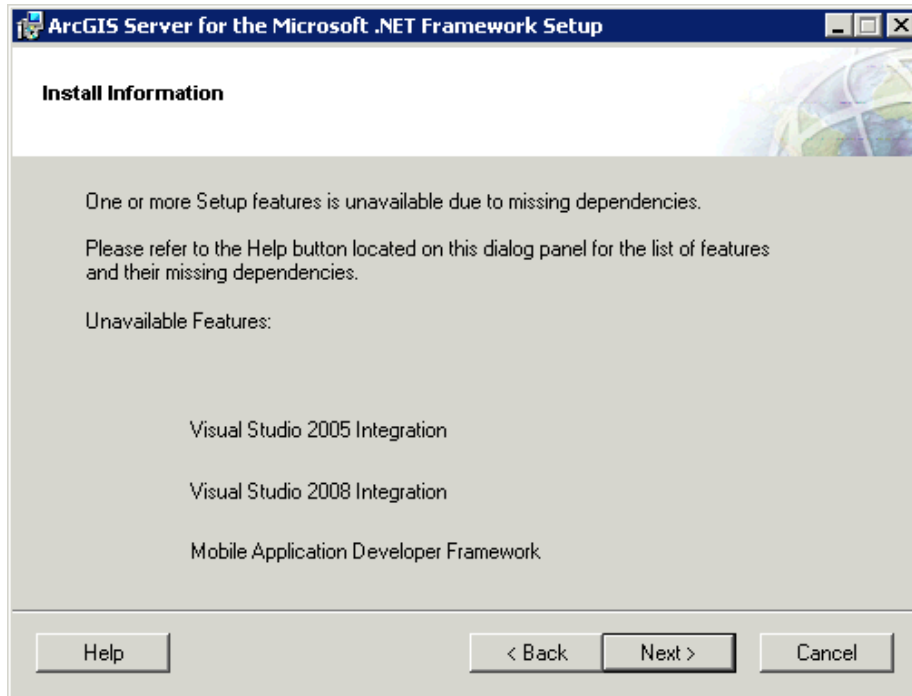


- Read the Licensing Agreement and select the "I accept the licensing agreement" radio button. and press NEXT.

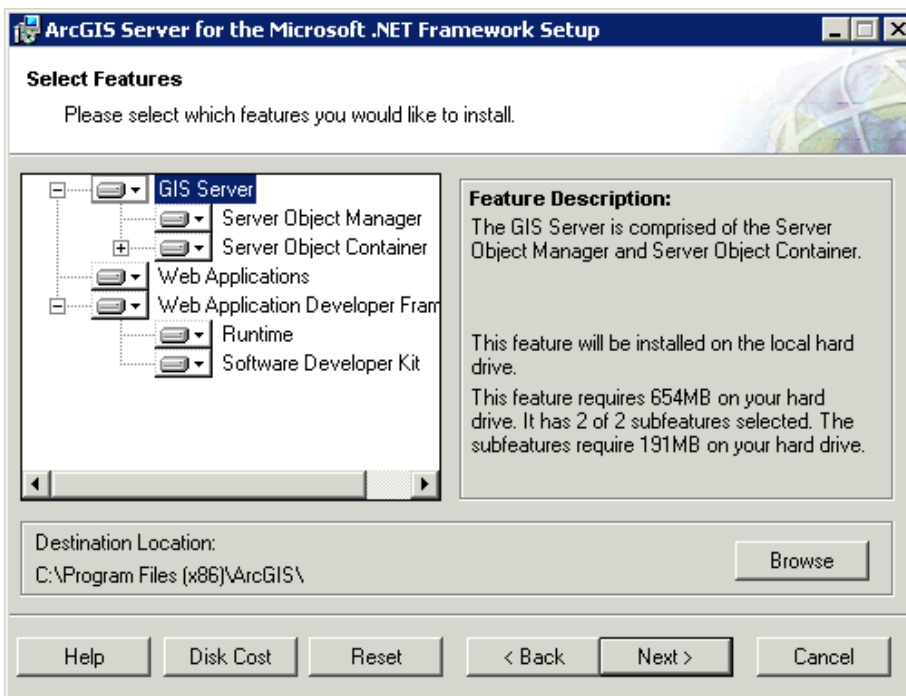


- The Install Information window will advise on the items that will not be installed. Press NEXT.

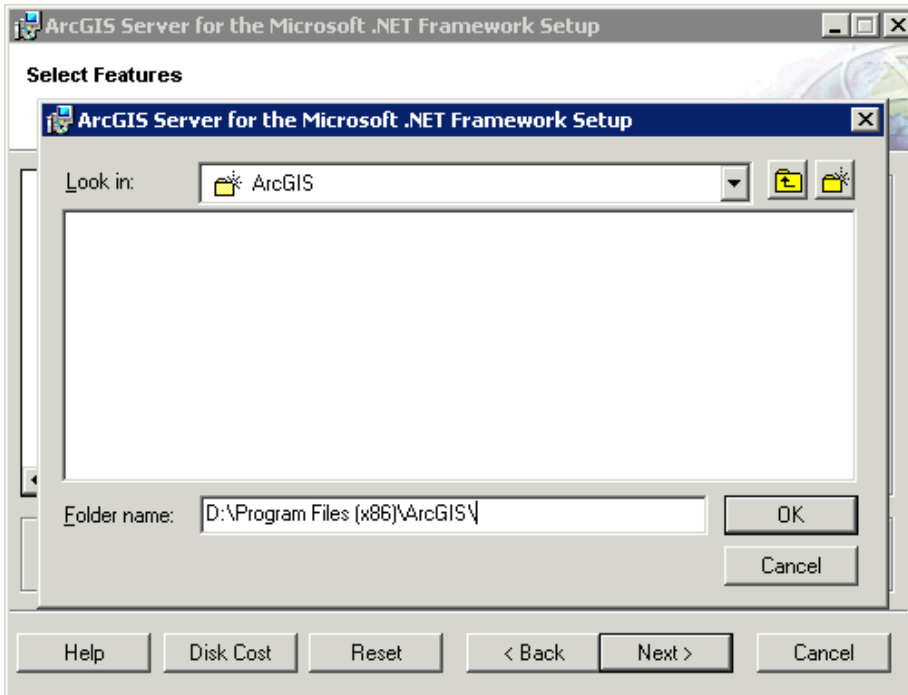
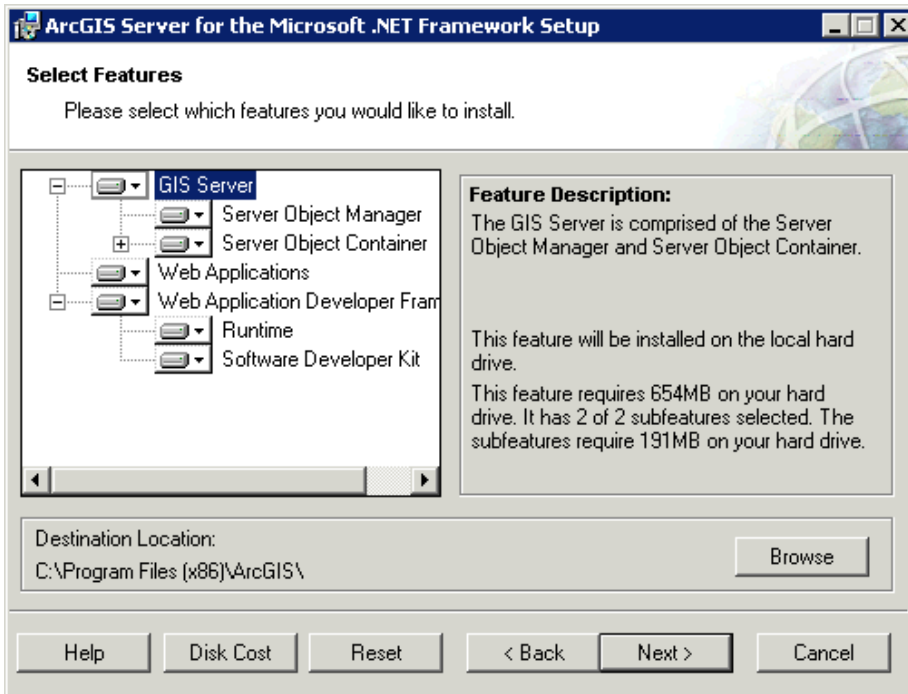
- a. To install the Visual Studio Integration pieces and the Mobile Developer Framework you will need to have a Visual Studio version on the server.

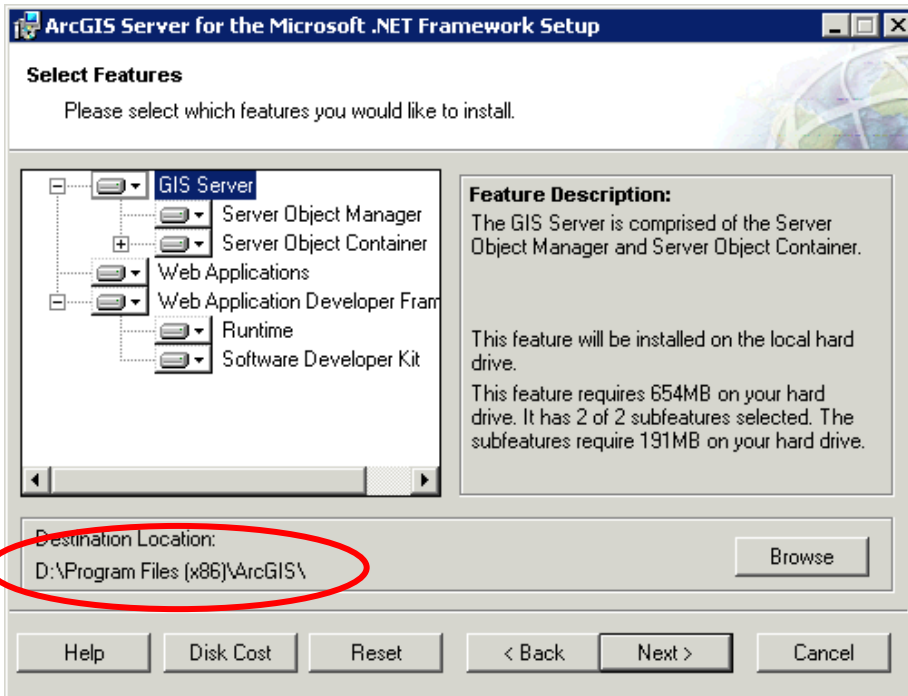


- 6. On the Select Features window verify all features are set to be installed on the local hard drive.

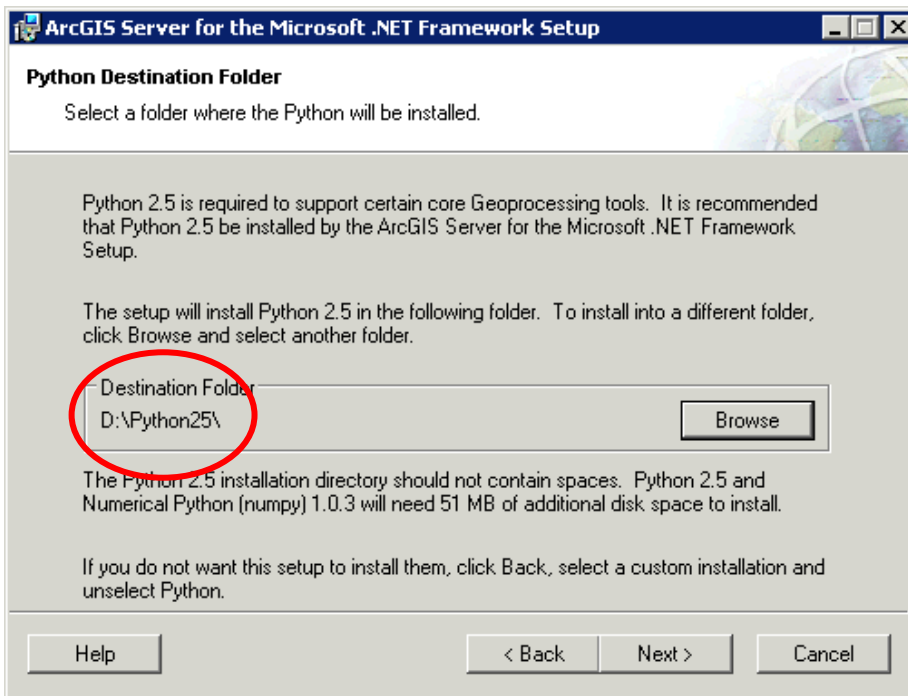


- 7. Change the install location so that it points to the Software Installation drive. First click browse and then change C:\ to D:\ or the location of your install.



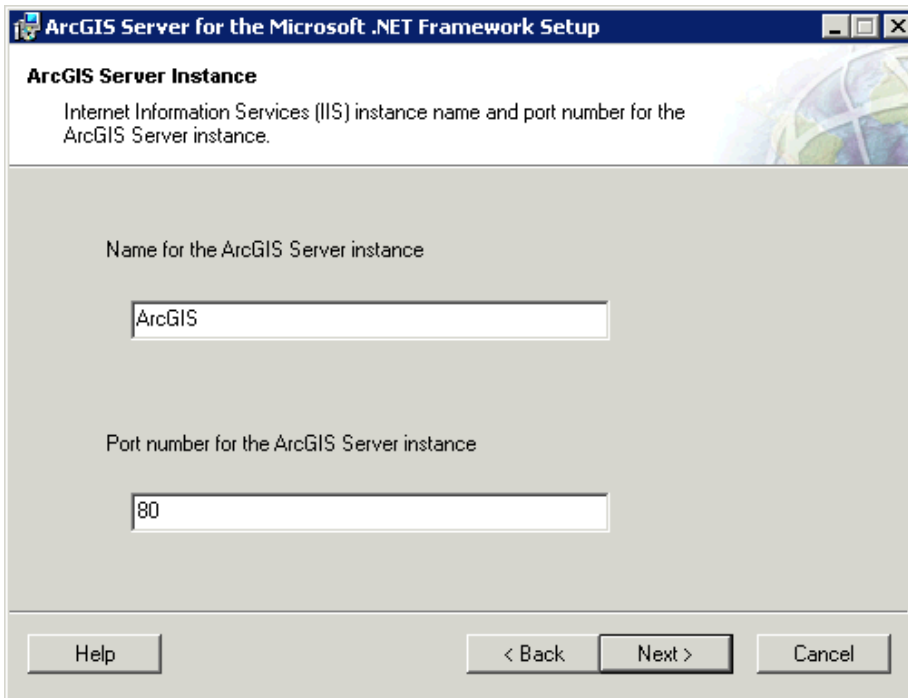


8. Once the directory is changed press NEXT.
9. Change the Python destination disk so that it points to the programs install disk and press NEXT.

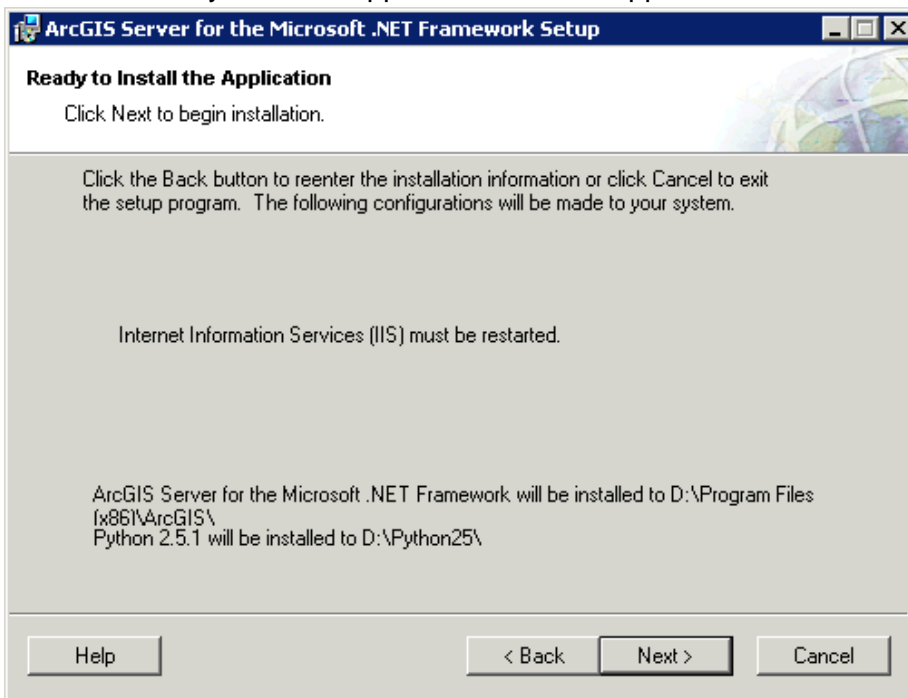


10. Review the ArcGIS Server Instance information and press NEXT  
**NOTE: If the default instance is changed make sure to document it. As changing the**

**instance name can cause issues.**



11. When the Ready to Install Application Window appears click NEXT



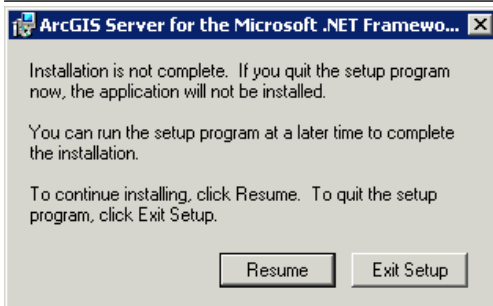
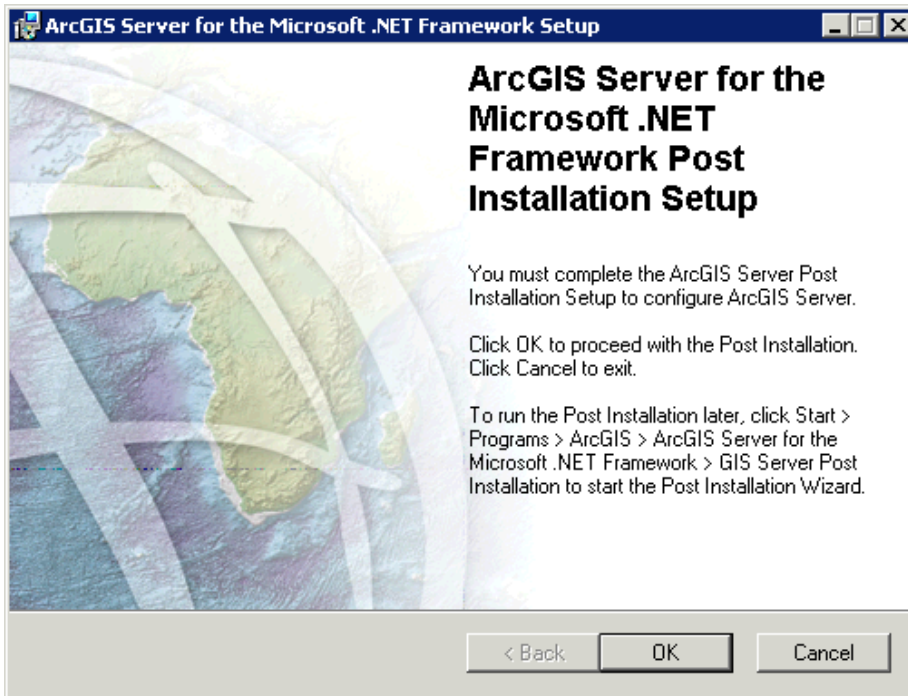
12. Wait for the install to complete.

13. Click FINISH when the install completes.



14. Click CANCEL on the ArcGIS Server for the Microsoft .NET Framework Post Installation Setup window and then press EXIT SETUP on the pop-up window.

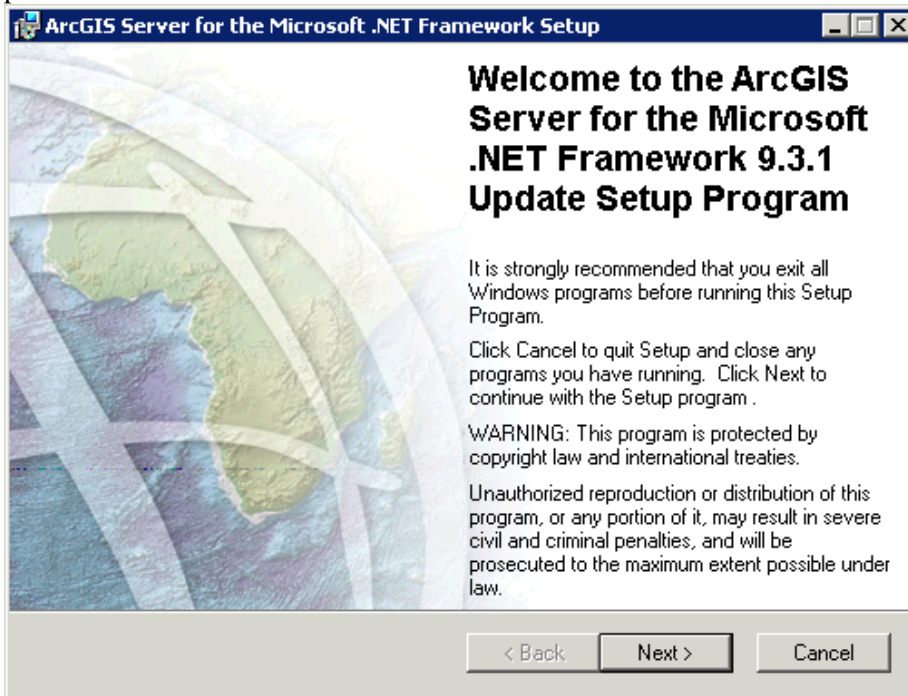




15. Now begin the ArcGIS Server 9.3.1 Install.

### 2.3 ArcGIS Server 9.3.1 Install

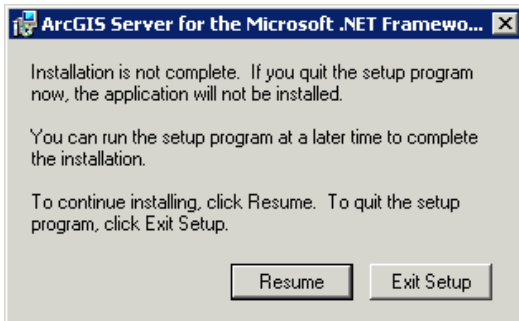
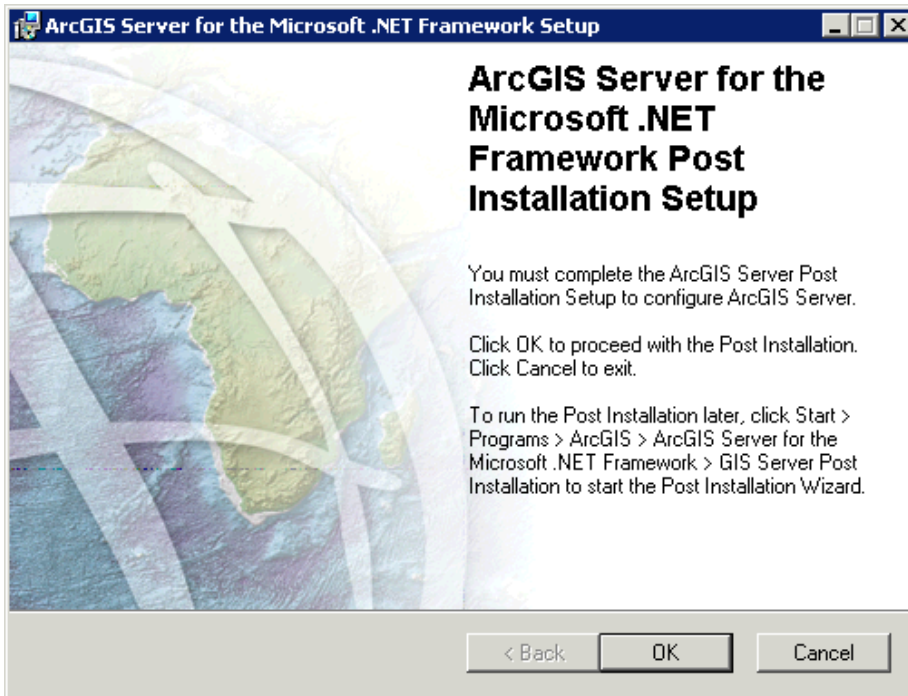
1. Navigate to where you saved the 9.3.1 install for ArcGIS Server, **ArcGISServerDotNet931.msp**, and double click it to begin the install. Press YES on any security warning. If the file will not run make sure to R-Click the file and press the unblock button.
2. On the Welcome to the ArcGIS Server for the Microsoft .NET Framework 9.3.1 Update Setup Program press NEXT



3. The install will begin.
4. Once the install is complete press FINISH.



5. Click CANCEL on the ArcGIS Server for the Microsoft .NET Framework Post Installation Setup window and then press EXIT SETUP on the pop-up window.



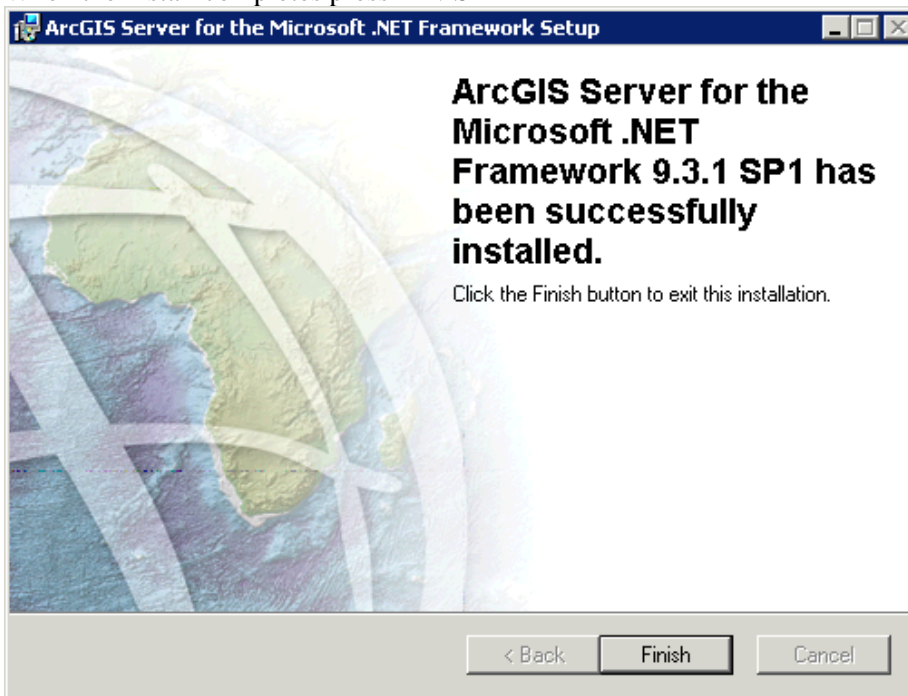
6. Now begin the 9.3.1 SP1 Install

## 2.4 ArcGIS Server 9.3.1 SP1 Install

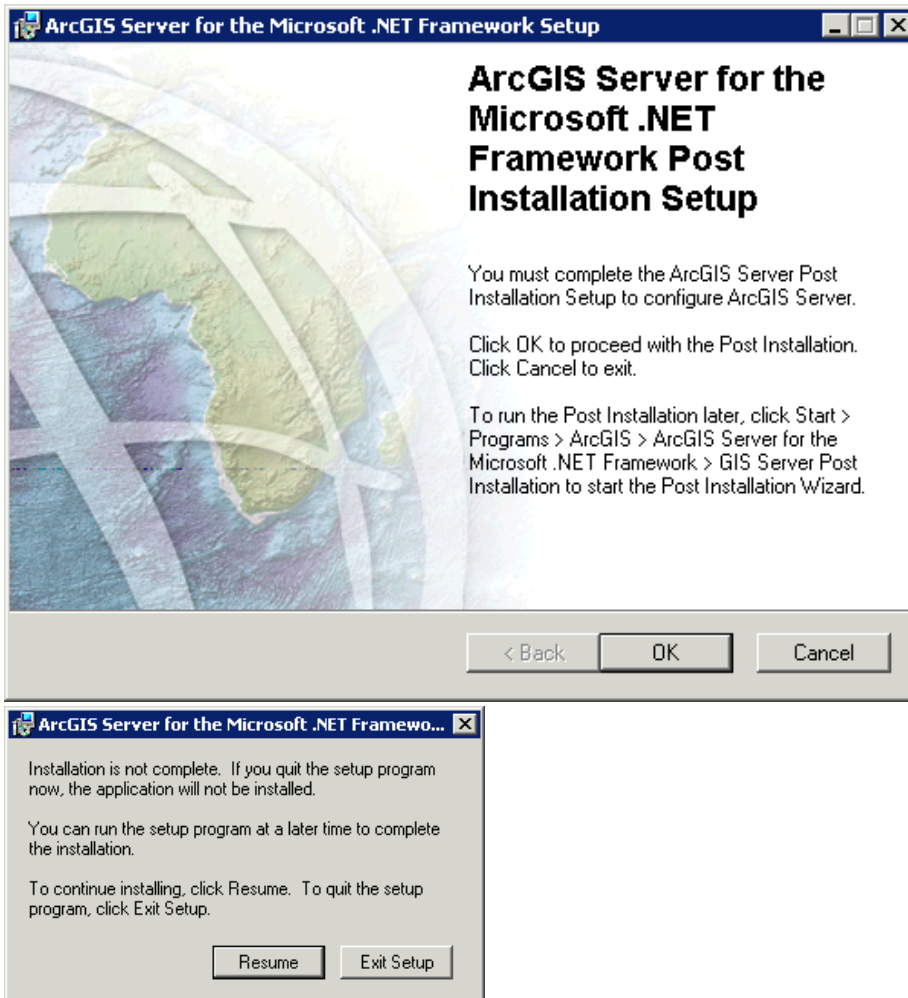
1. Navigate to where you saved the 9.3.1 SP 1 install for ArcGIS Server, **ArcGISServerDotNet931sp1.msp**, and double click it to begin the install. Press YES on any security warning. If the file will not run make sure to R-Click the file and press the unblock button.
2. On the Welcome to the ArcGIS Server for the Microsoft .NET Framework 9.3.1 SP1 Setup Program press NEXT.



3. The install will begin.
4. When the install completes press FINISH



5. Click CANCEL on the ArcGIS Server for the Microsoft .NET Framework Post Installation Setup window and then press EXIT SETUP on the pop-up window.



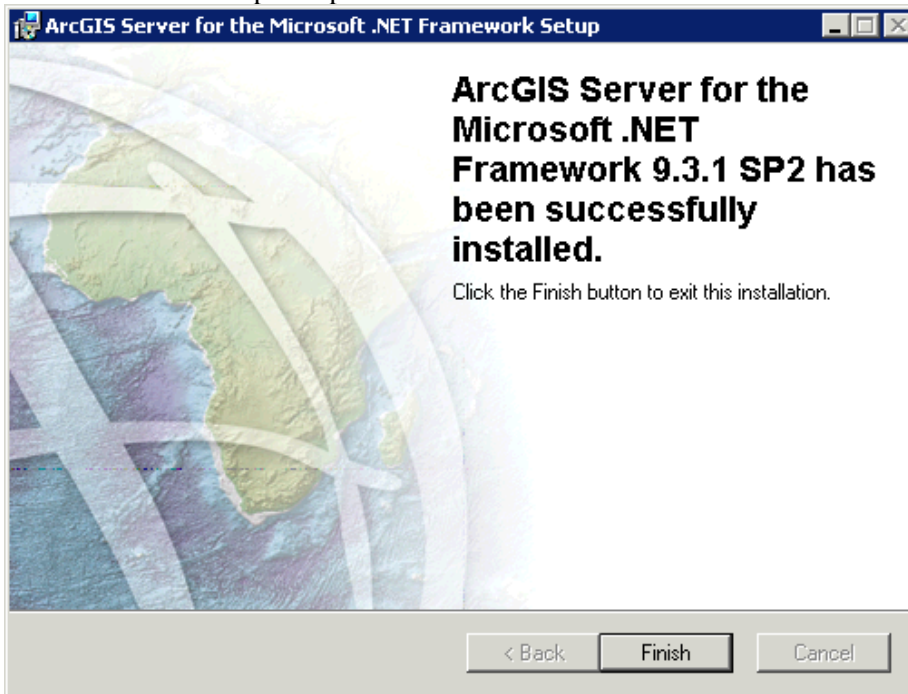
6. Now begin the 9.3.1 SP2 install.

## 2.5 ArcGIS Server 9.3.1 SP2 Install

1. Navigate to where you saved the 9.3.1 SP 2 install for ArcGIS Server, **ArcGISServerDotNet931sp2.msp**, and double click it to begin the install. Press YES on any security warning. If the file will not run make sure to R-Click the file and press the unblock button.
2. On the Welcome to the ArcGIS Server for the Microsoft .NET Framework 9.3.1 SP2 Setup Program press NEXT.



3. The install will begin.
4. When the install completes press FINISH

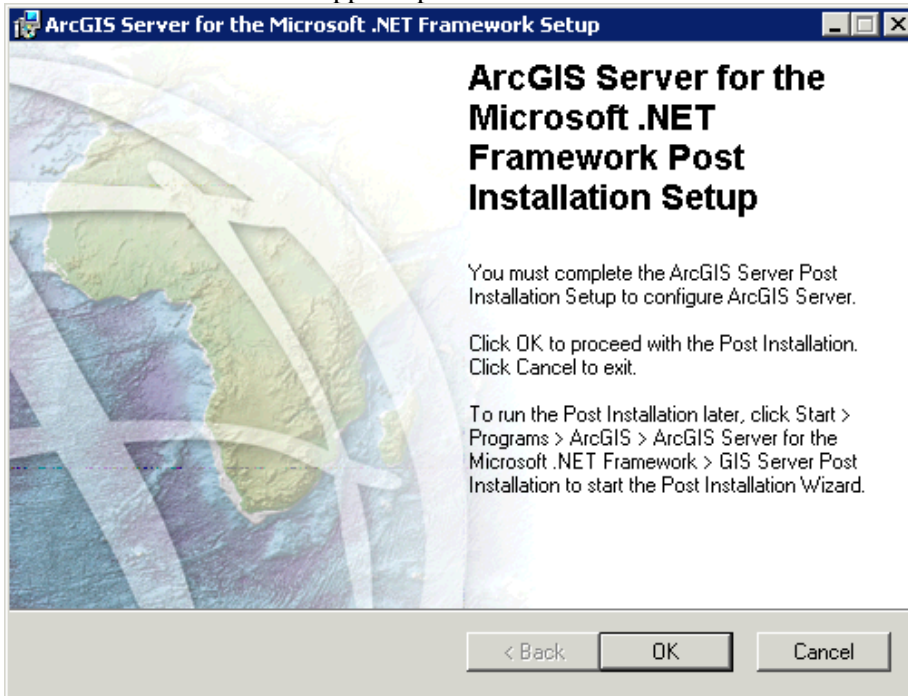


5. When the Post Install window appears follow the post install instructions

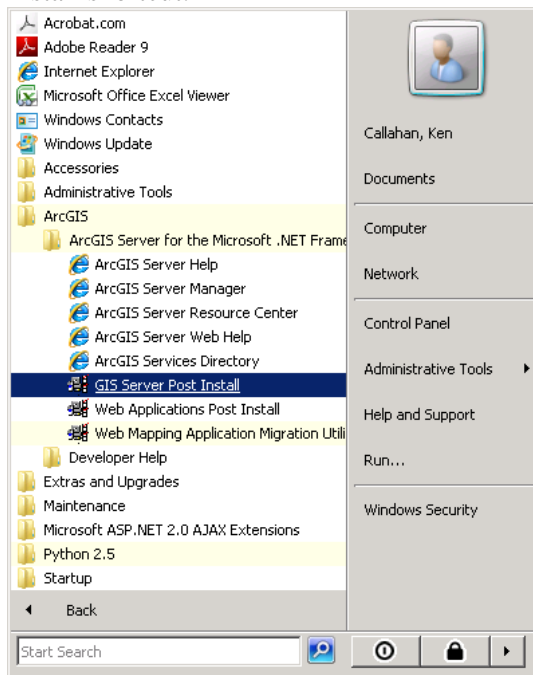
## 2.6 ArcGIS Server Post Install

**NOTE: If you install the 9.3.1 SP2 Quality Service Improvement patch and you use Mr. SID files you will no longer be able to use Mr. SID files. Do not install the 9.3.1 SP2 QIP**

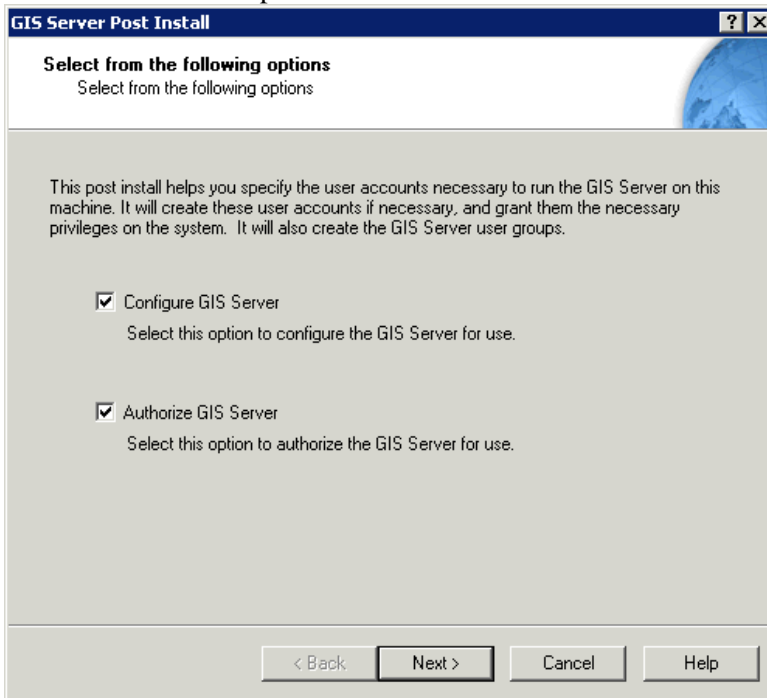
1. When the welcome screen appears press OK.



- a. If the ArcGIS Server Post Install does not begin automatically go to Start → Programs → ArcGIS → ArcGIS Server for the Microsoft .NET Framework and click the GIS Server Post Install shortcut.

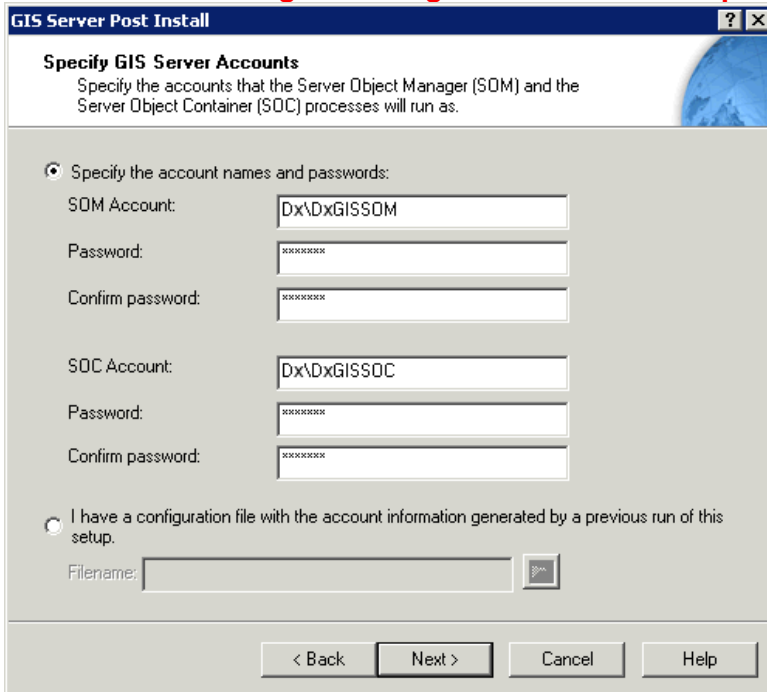


2. On the options window make sure the boxes are checked next to **Configure GIS Server** and **Authorize GIS Server** and then press NEXT.



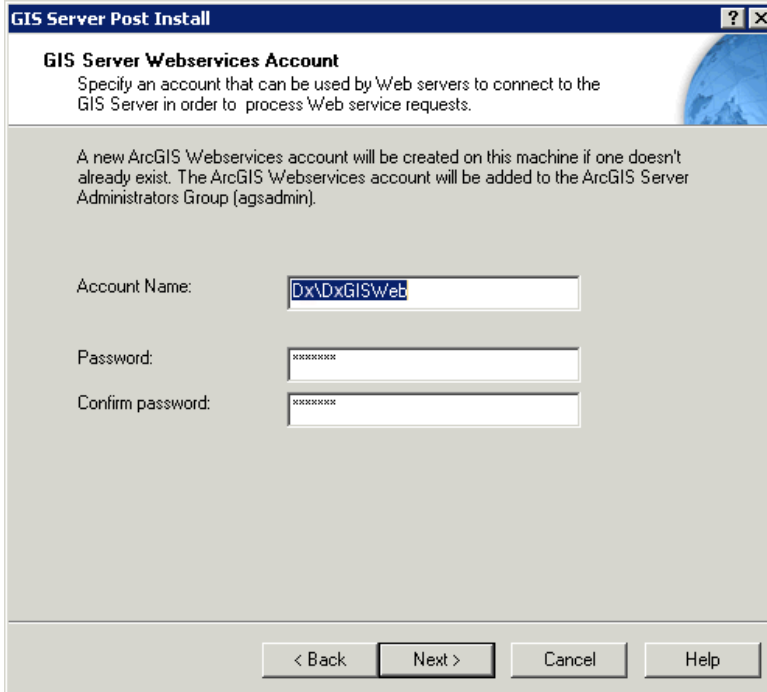
3. On the Specify GIS Server Accounts screen give passwords to the two user accounts. The accounts should follow the FDOT naming standard DxGISSOM and DxGISSOC. It is up to each district to decide if they want these accounts to be local or domain.

**NOTE: If you are rerunning the post install on an ArcGIS Server installation that is already running it is advised that you use a configuration file from the original install. You can find the original configuration in a later step of this install.**

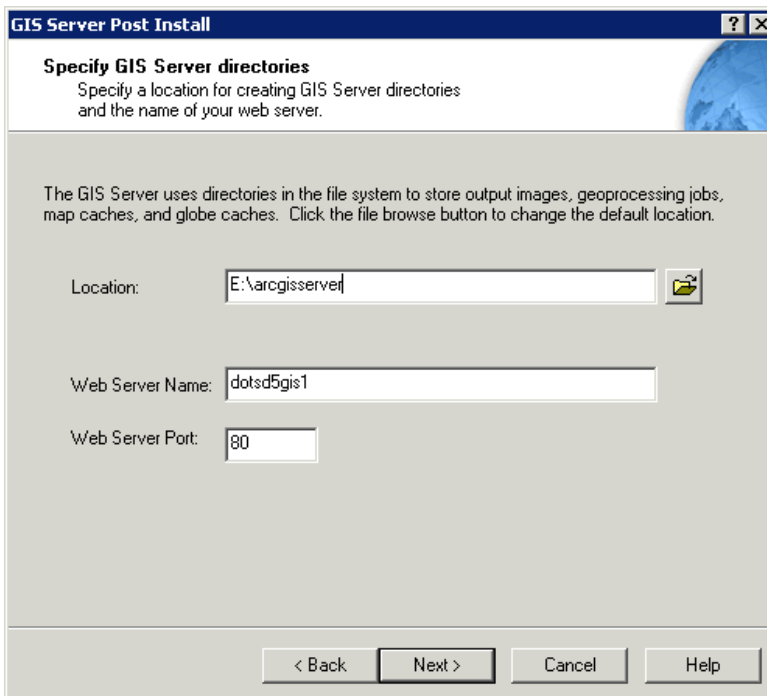




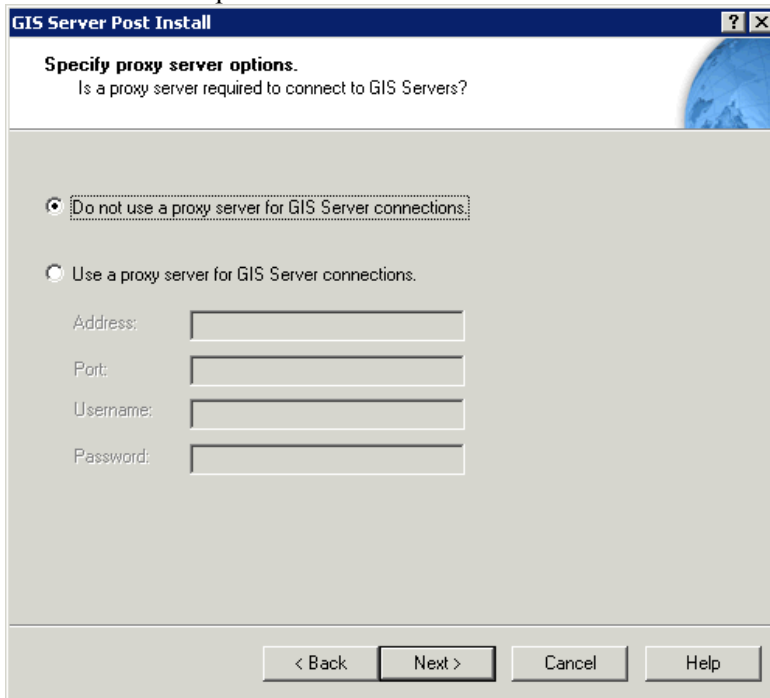
4. On the GIS Server Webservices Account window update the Account name to reflect the proper DxGISWEB. It is up to each district to decide if they want these accounts to be local or domain.



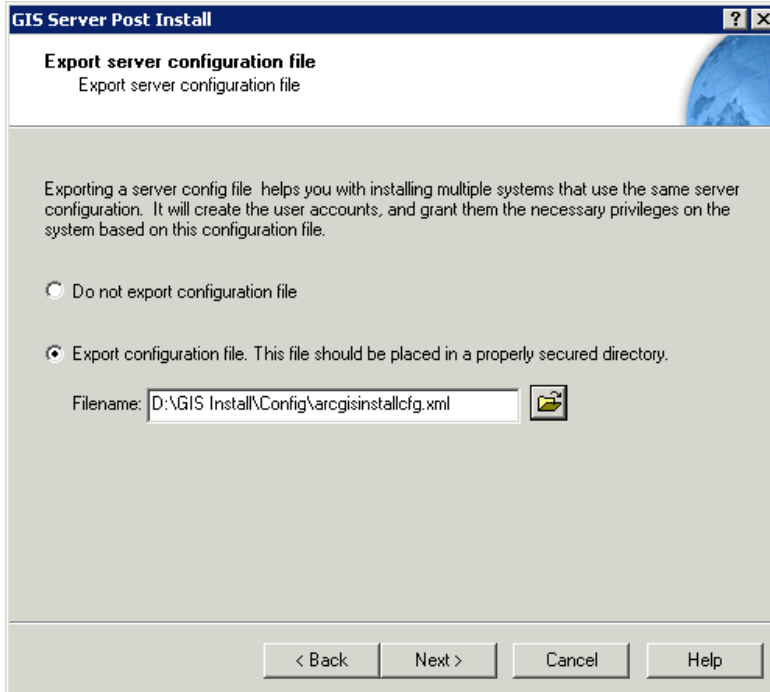
5. On the specify GIS Server directories window modify the location so that it points to the data drive on the server.



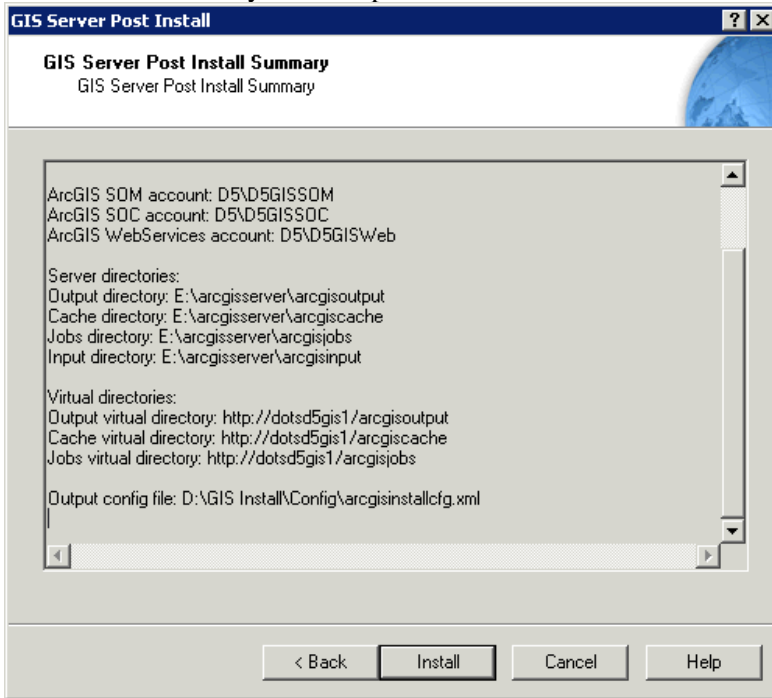
6. In the Specify Proxy Server Options window select the “Do not use a proxy server for GIS Server connections” and press NEXT.



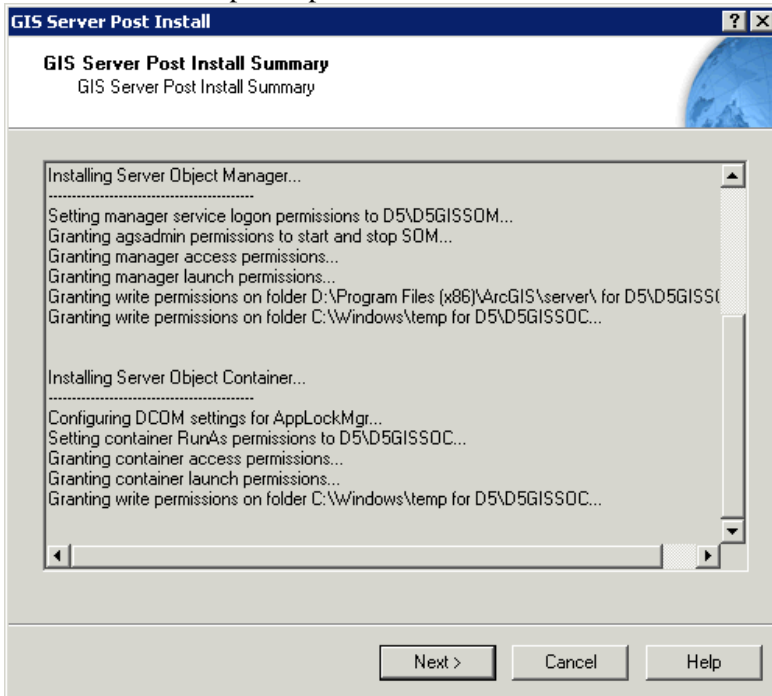
7. On the Export Server Configuration file window select the radio button next to “Export configuration file. This file should be placed in a properly secured directory” then click the browse button and create the file.



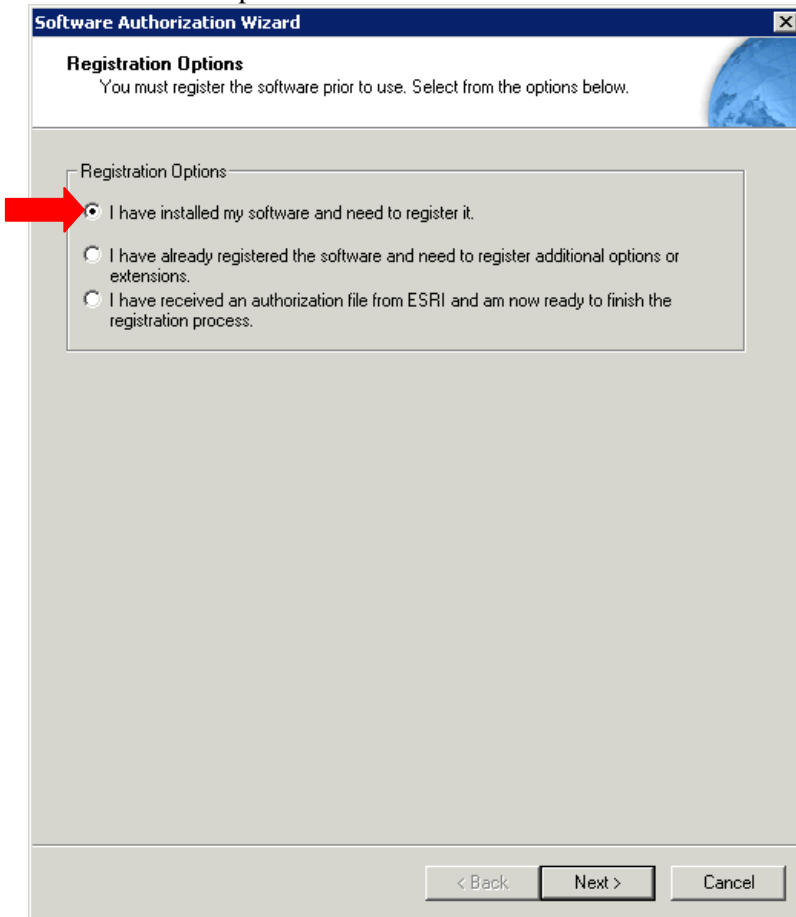
8. On the install summary window press INSTALL



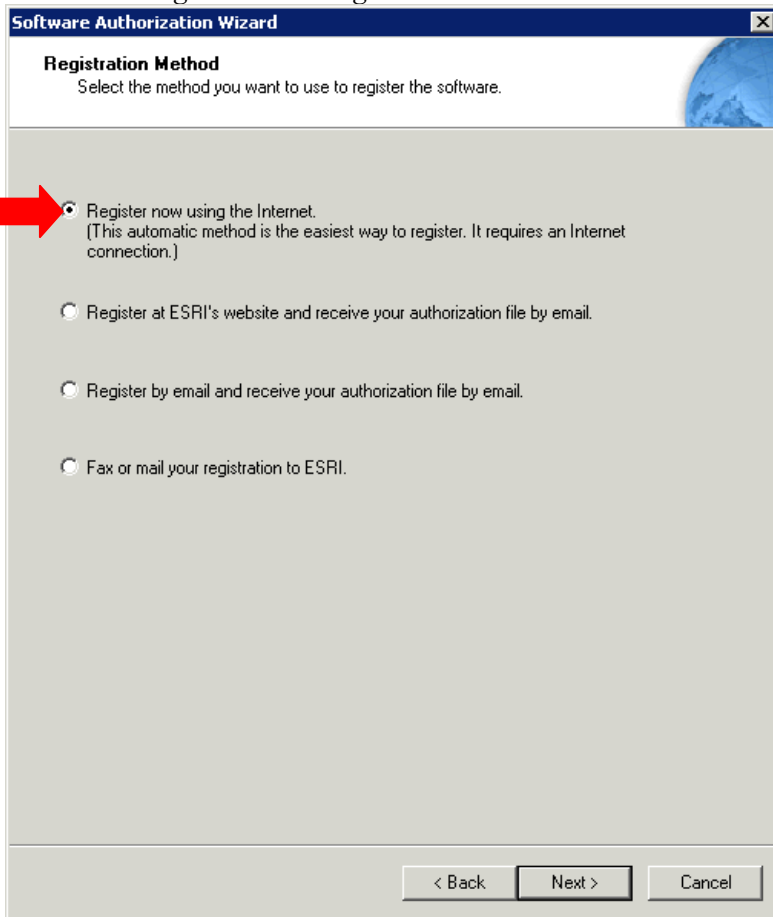
9. Once the install completed press NEXT.



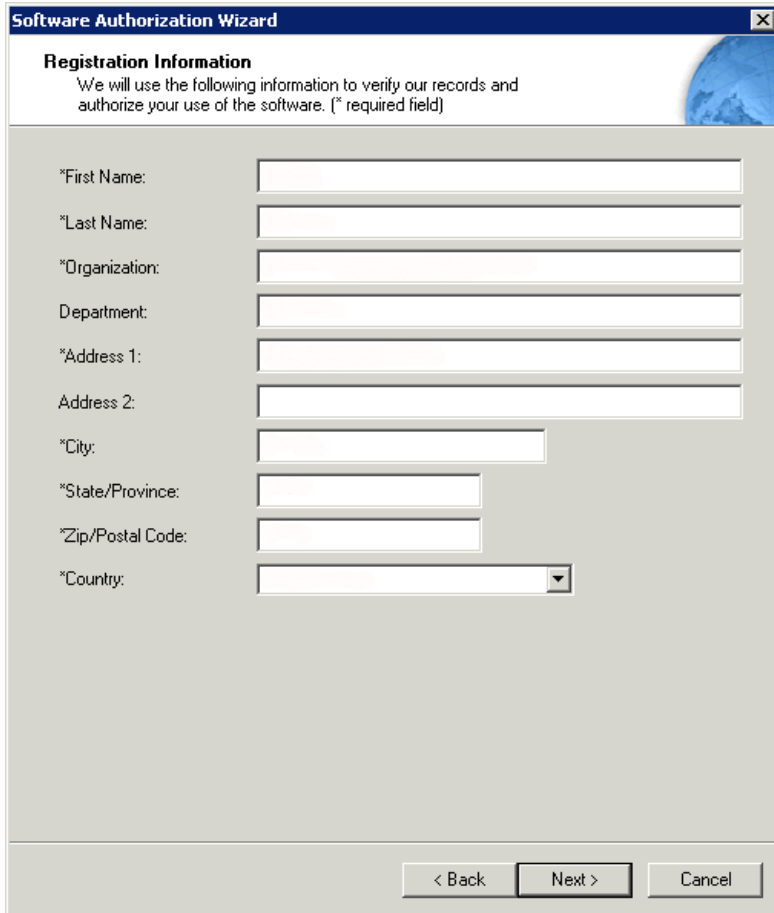
10. When the authorization window opens select the *“I have installed my software and need to register it”* radio button. The press the NEXT button.



11. Select the “*Register now using the Internet*” radio button and then press NEXT.



12. In the registration information window fill out your information and press NEXT. Continue filling out your information on the next window and press NEXT.



**Software Authorization Wizard** [X]

**Registration Information**  
We will use the following information to verify our records and authorize your use of the software. (\* required field)

\*First Name:

\*Last Name:

\*Organization:

Department:

\*Address 1:

Address 2:

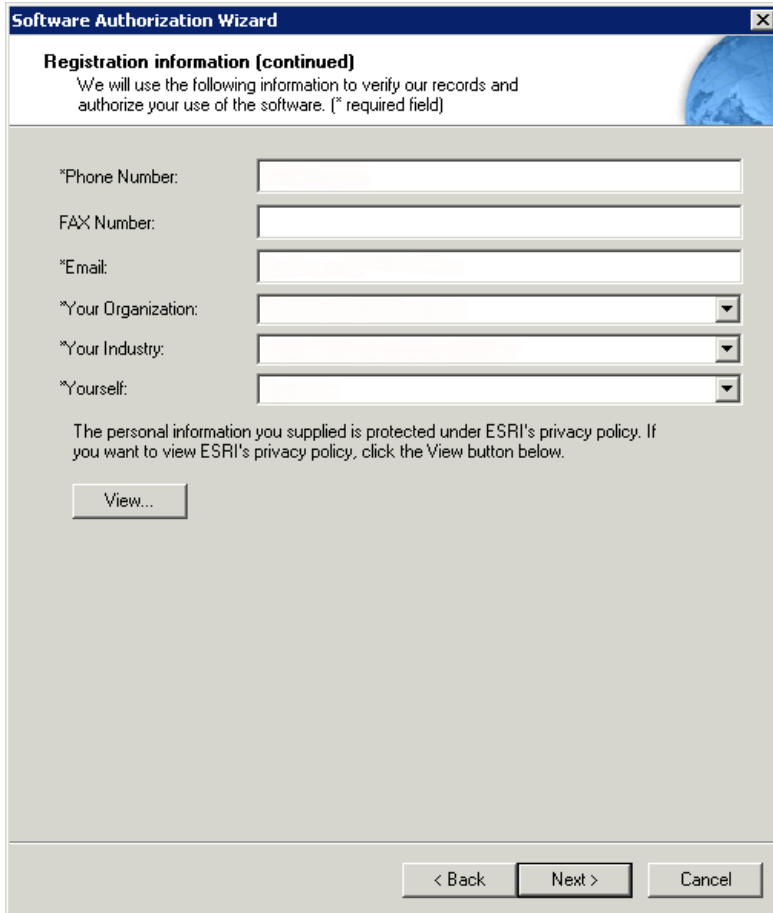
\*City:

\*State/Province:

\*Zip/Postal Code:

\*Country:

< Back   Next >   Cancel



**Software Authorization Wizard** [X]

**Registration information (continued)**  
We will use the following information to verify our records and authorize your use of the software. (\* required field)

\*Phone Number:

FAX Number:

\*Email:

\*Your Organization:

\*Your Industry:

\*Yourself:

The personal information you supplied is protected under ESRI's privacy policy. If you want to view ESRI's privacy policy, click the View button below.

< Back    Next >    Cancel

13. In the Software Registration Number window enter your license number and press NEXT.



The screenshot shows a window titled "Software Authorization Wizard" with a close button (X) in the top right corner. The main title is "Software Registration Number" and the subtitle is "Enter the registration number for your software product". Below this, there is a small globe icon. The text reads: "The registration number consists of three letters and a series of numbers; similar to ABC123456789." Below this text, the product name "ArcGIS Server" is displayed above a text input field. At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel".



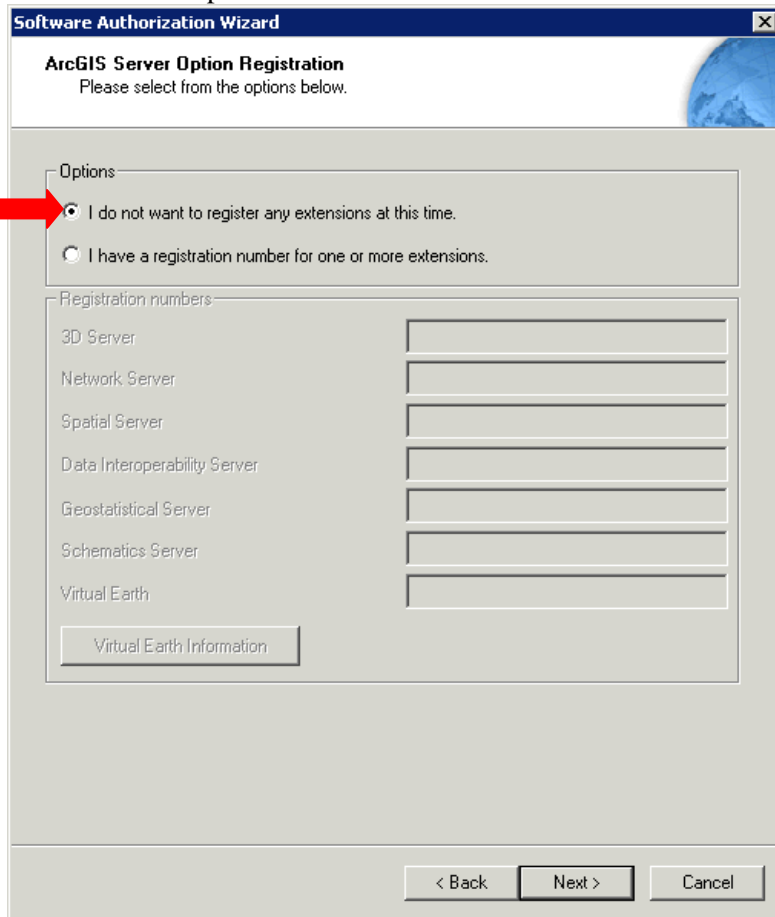
14. Answer the questions on the ArcGIS Server Registration page and press NEXT.

The image shows a 'Software Authorization Wizard' dialog box titled 'ArcGIS Server Registration'. It contains several sections for configuration:

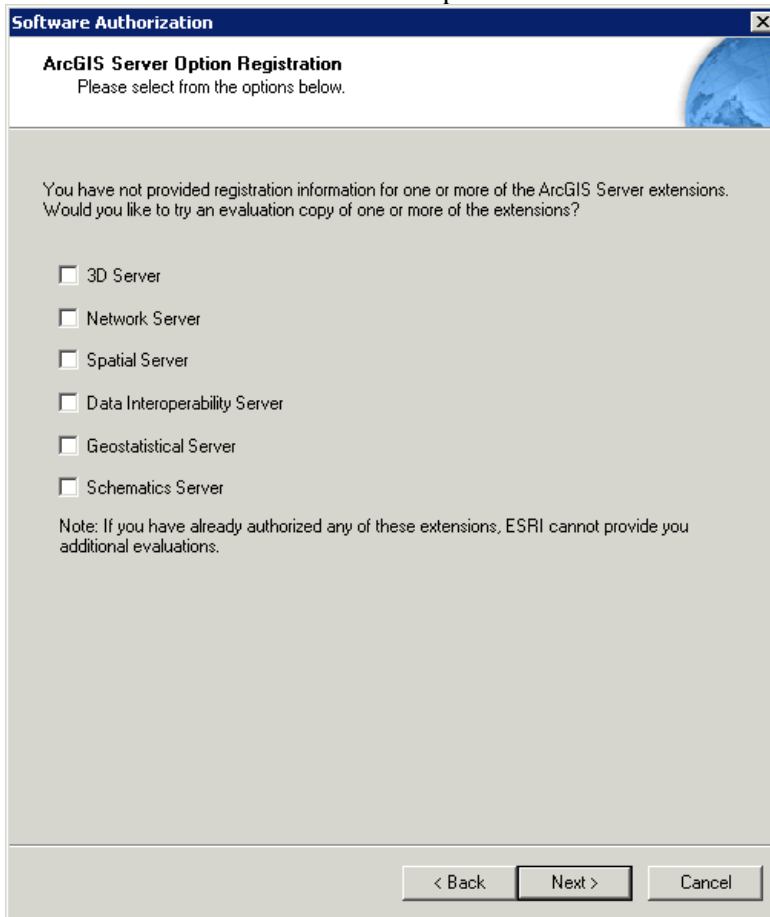
- Which platform do you plan to use?**: Radio buttons for '.Net' (selected) and 'Java'.
- Operating System**: A dropdown menu for 'What operating system do you use for the SOM,SOC and Web ADF Runtime?' with 'PC-Intel Windows' selected.
- RDBMS**: A dropdown menu for 'What RDBMS do you use?' with 'Oracle' selected.
- Number of users**: A dropdown menu for 'How many users do you plan on serving?' with '501-1000' selected.
- Primary deployment plan**: Radio buttons for 'Internet only', 'Intranet only' (selected), and 'Both'.

At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

15. On the extension registration window select the *“I do not want to register any extensions at this time”* radio button and press NEXT.

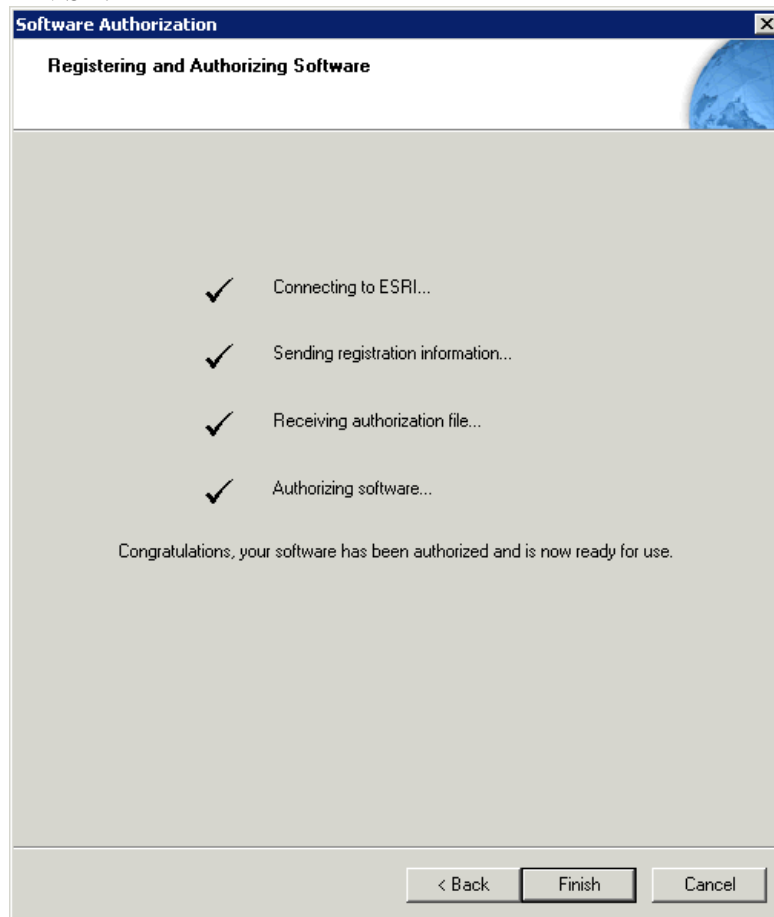


16. On the extension evaluation window press NEXT.

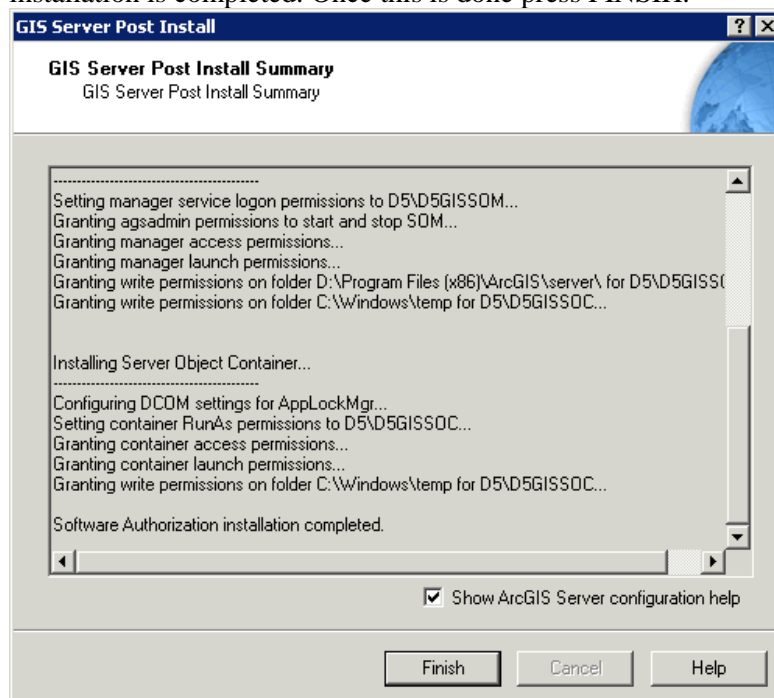


17. The authorization process will now execute. Please not that firewalls and enhanced security settings can hinder the authorization process and cause it to fail. When the authorization is complete press

FINISH.



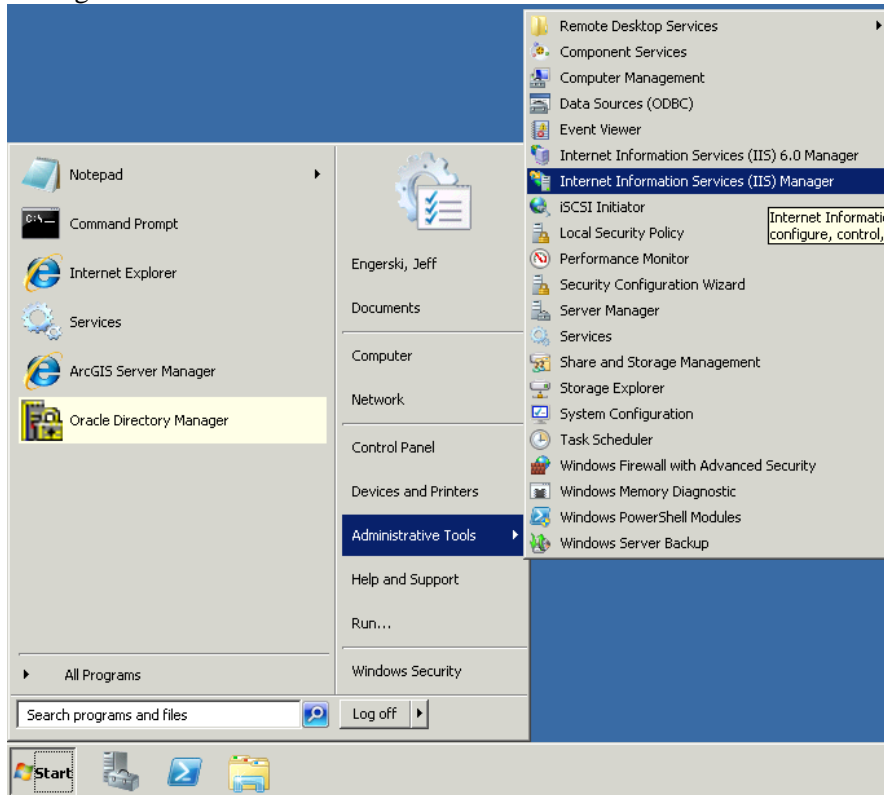
18. When the summary window appears scroll to the bottom and verify that the Software Authorization installation is completed. Once this is done press FINISH.



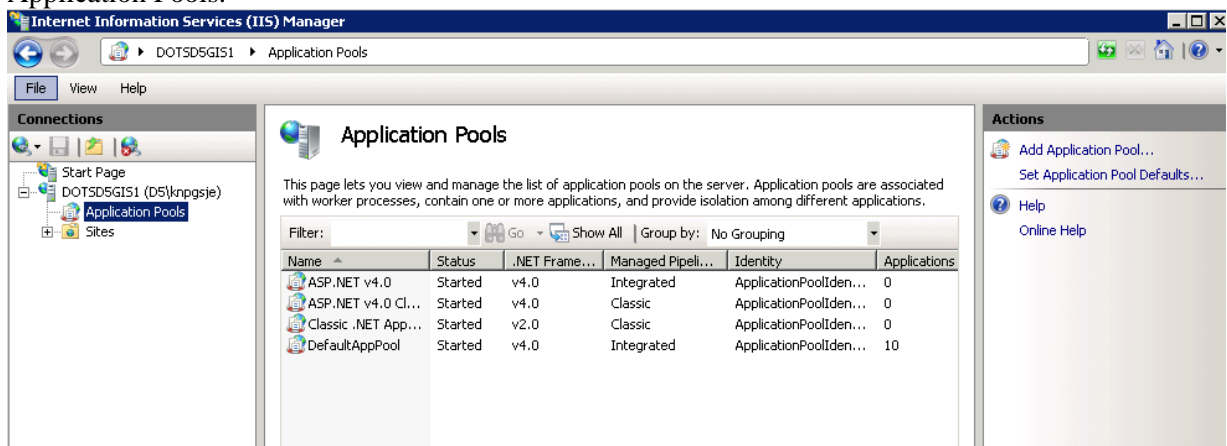
## 2.7 ArcGIS Server Manager Configuration - IIS

In order to use the ArcGIS Server Manager and connect to the service application in ArcGIS Server 9.3.1 the following steps must be taken. Taking these additional steps will allow the administrator to use the web manager and access rest and soap endpoints and will allow all users the ability to connect to the Server via ArcCatalog to browse and use services. Administrators will be able to create an administrative connection.

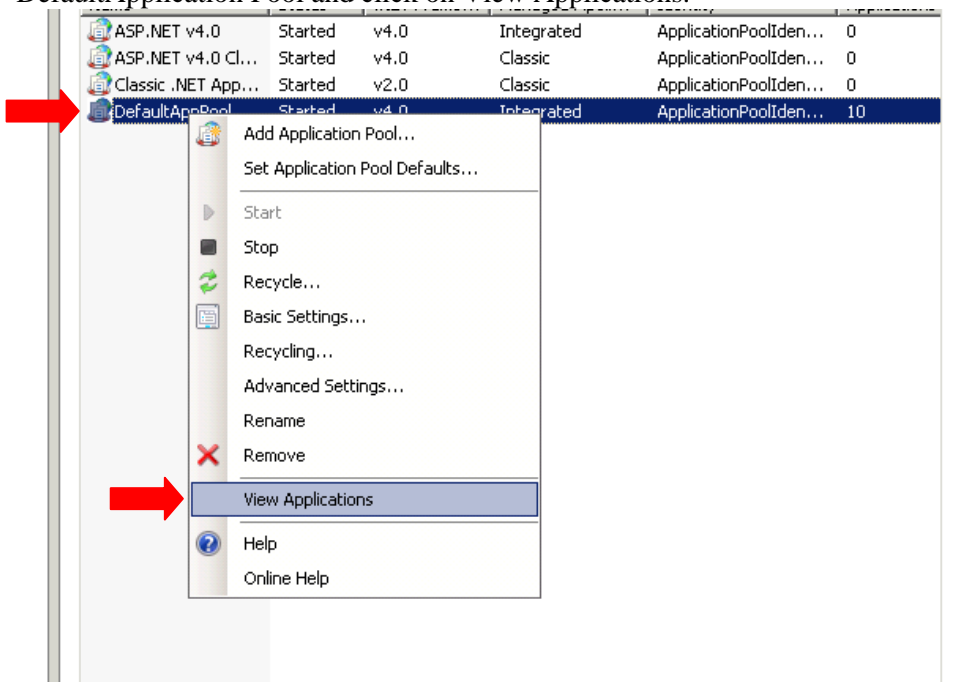
1. Open IIS Manager by going to Start → Administrative Tools → Internet Information Services (IIS) Manager.



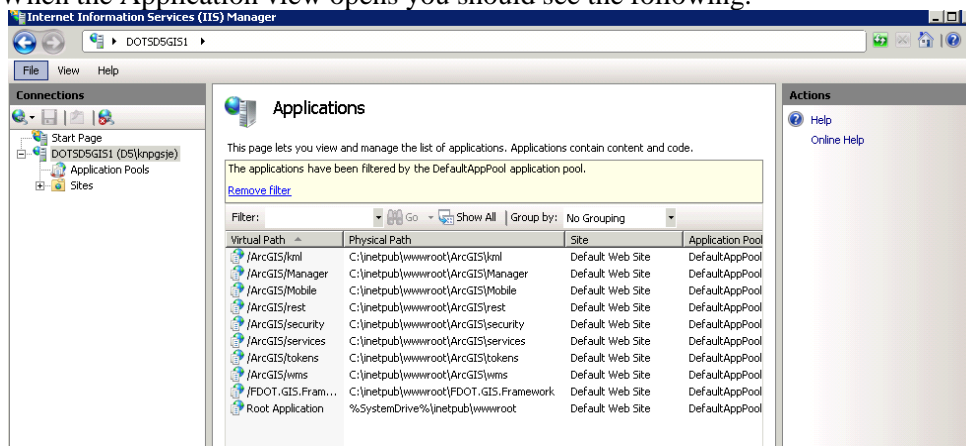
2. When the IIS Manager opens in the left panel navigate through the tree to DOTSD5GIS1 → Application Pools.



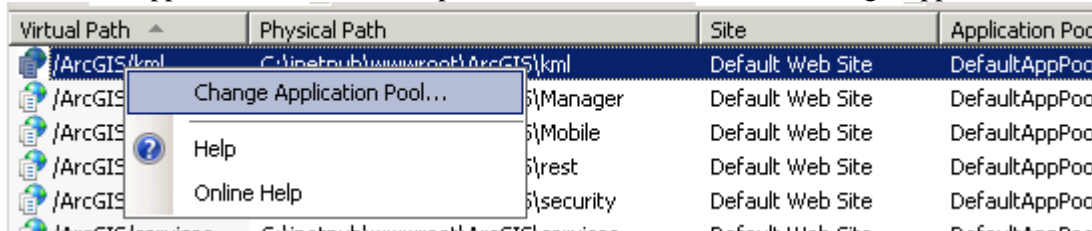
- In application pools you will see the DefaultAppPool has 10 applications. R-Click the DefaultApplication Pool and click on View Applications.



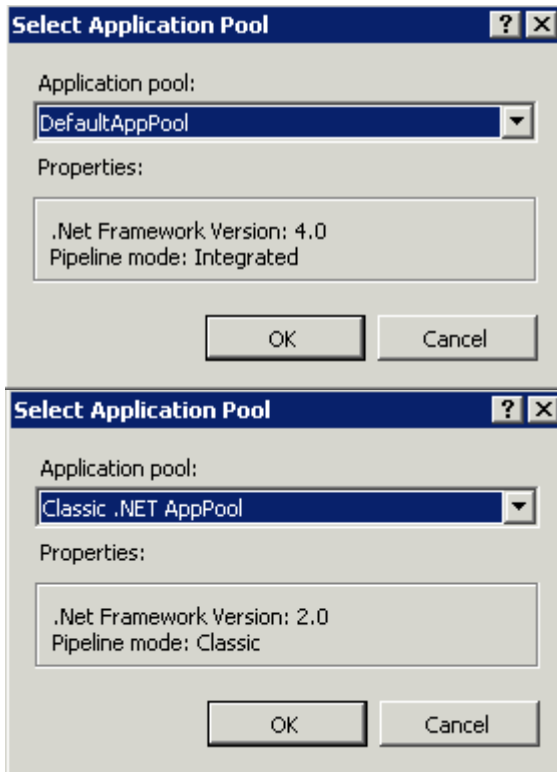
- When the Application view opens you should see the following.



- R-Click the application with a virtual path of /ArcGIS/kml and click Change Application Pool.



- When the change application pool window appears click the dropdown and select the "Classic ASP.NET Application Pool"



7. Once you select the new application pool press OK.
8. Repeat steps 5-8 for the following Applications.
  - a. /ArcGIS/Manager
  - b. /ArcGIS/Mobile
  - c. /ArcGIS/rest
  - d. /ArcGIS/security
  - e. /ArcGIS/services
  - f. /ArcGIS/tokens
  - g. /ArcGIS/wms

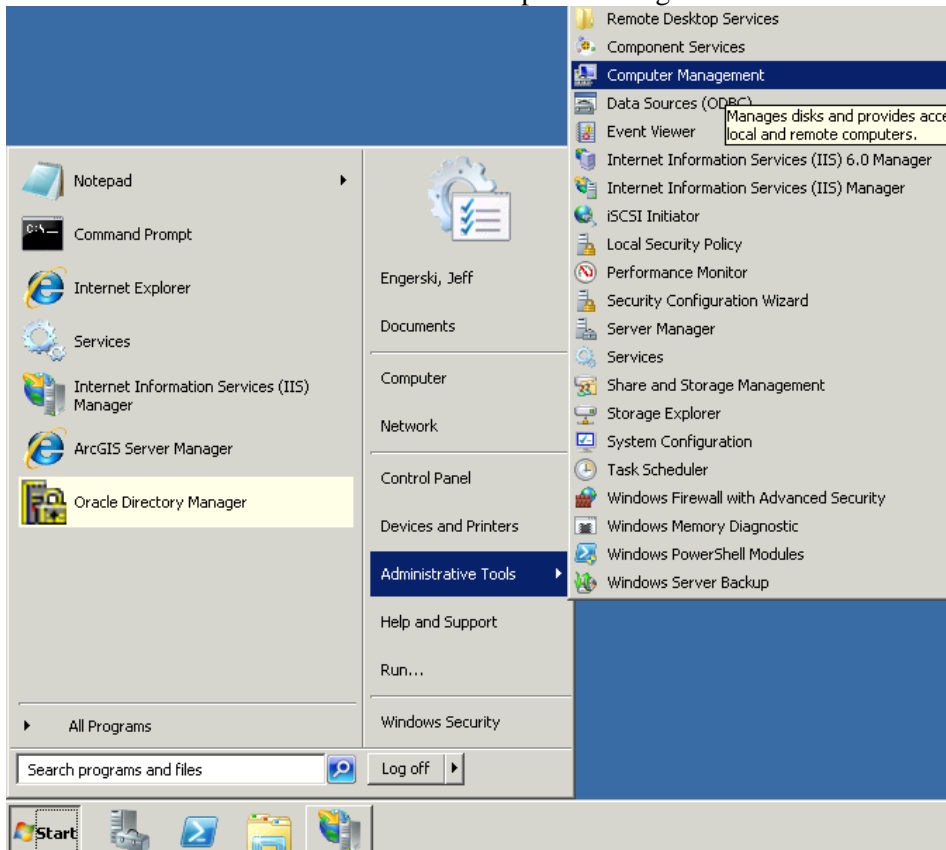
Virtual Path	Physical Path	Site	Application Pool
/ArcGIS/kml	C:\inetpub\wwwroot\ArcGIS\kml	Default Web Site	Classic .NET AppPo...
/ArcGIS/Manager	C:\inetpub\wwwroot\ArcGIS\Manager	Default Web Site	DefaultAppPool (v4.0)
/ArcGIS/Mobile	C:\inetpub\wwwroot\ArcGIS\Mobile	Default Web Site	DefaultAppPool (v4.0)
/ArcGIS/rest	C:\inetpub\wwwroot\ArcGIS\rest	Default Web Site	DefaultAppPool (v4.0)
/ArcGIS/security	C:\inetpub\wwwroot\ArcGIS\security	Default Web Site	DefaultAppPool (v4.0)
/ArcGIS/services	C:\inetpub\wwwroot\ArcGIS\services	Default Web Site	DefaultAppPool (v4.0)
/ArcGIS/tokens	C:\inetpub\wwwroot\ArcGIS\tokens	Default Web Site	DefaultAppPool (v4.0)
/ArcGIS/wms	C:\inetpub\wwwroot\ArcGIS\wms	Default Web Site	DefaultAppPool (v4.0)
/FDOT.GIS.Fram...	C:\inetpub\wwwroot\FDOT.GIS.Framework	Default Web Site	DefaultAppPool (v4.0)
Root Application	%SystemDrive%\inetpub\wwwroot	Default Web Site	DefaultAppPool (v4.0)

9. Once complete the pool window should appear as follows.

Name	Status	.NET Frame...	Managed Pipeli...	Identity	Applications
ASP.NET v4.0	Started	v4.0	Integrated	ApplicationPoolIden...	0
ASP.NET v4.0 Cl...	Started	v4.0	Classic	ApplicationPoolIden...	0
Classic .NET App...	Started	v2.0	Classic	ApplicationPoolIden...	8
DefaultAppPool	Started	v4.0	Integrated	ApplicationPoolIden...	2

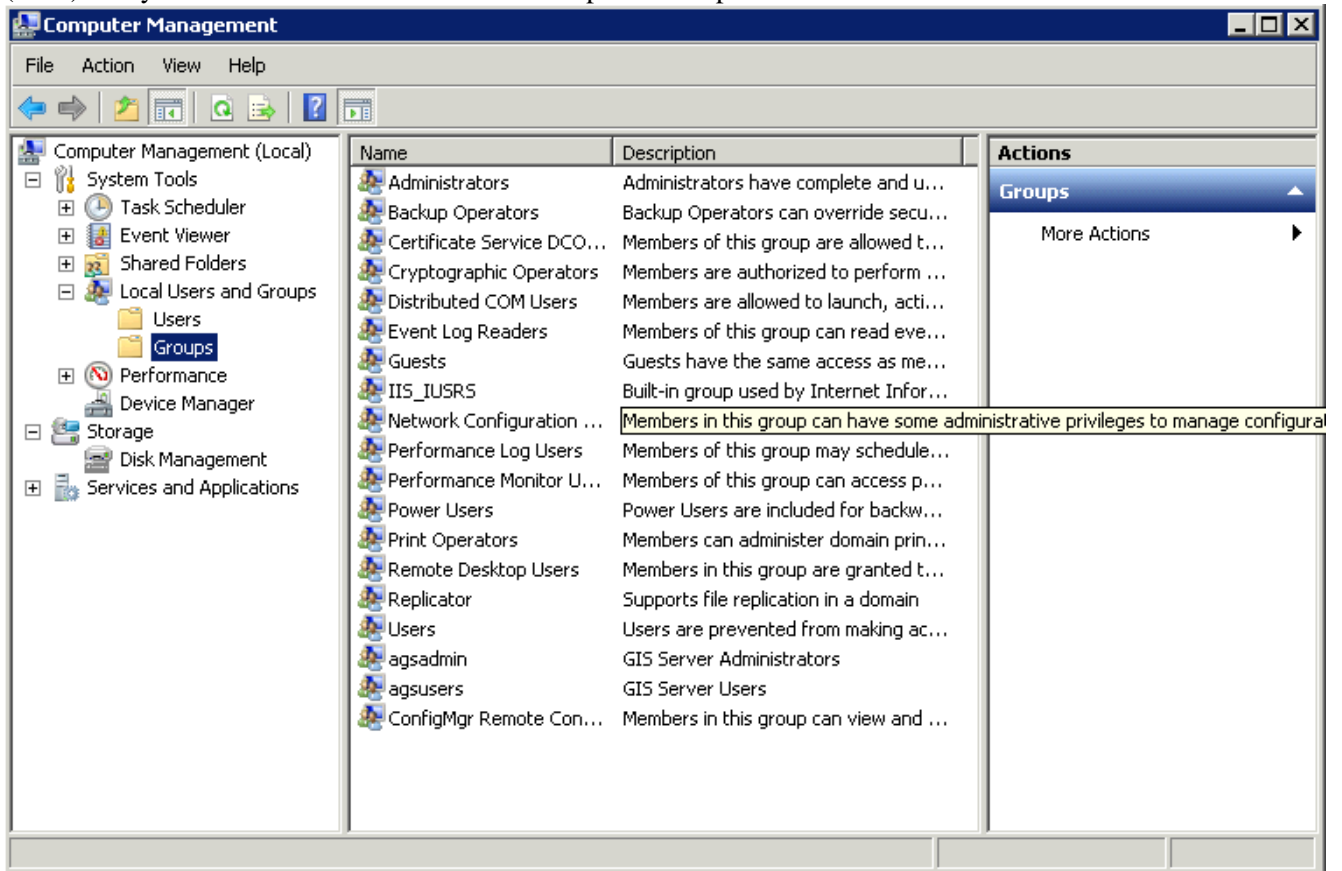
## 2.8 ArcGIS Server Manager Configuration - Groups

1. Go to Start → Administrative Tools → Computer Management.

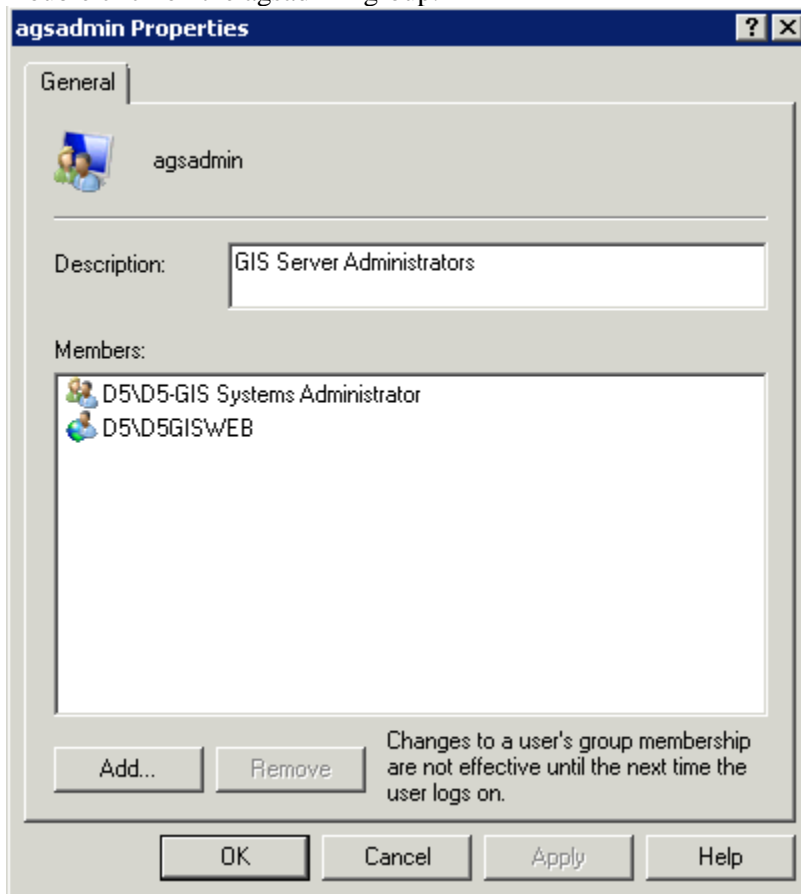




- When Computer Management window opens navigate down the left panel Computer Management (local) → System Tools → Local Users and Groups → Groups.



3. Double click on the agsadmin group.



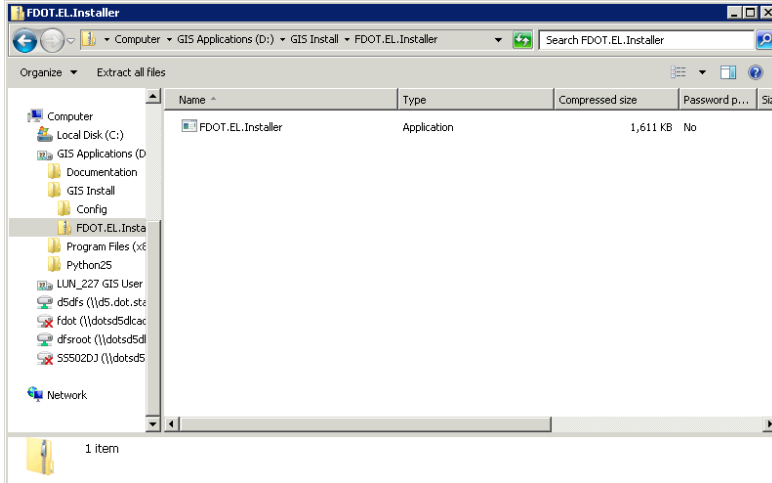
4. Now add the users and groups that will have administrative access to the ArcGIS Server.
5. If the users will be creating new websites and services they will also require full control of the C:\intepub\wwwroot\ArcGIS folder and they will need logon locally GPO.

### 3.0 FDOT Enterprise Library (FEL) Install

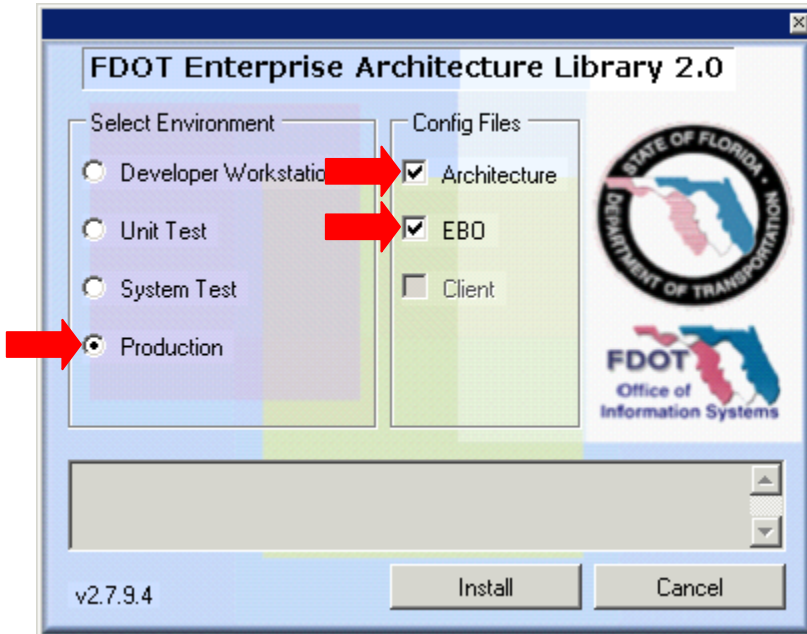
#### 3.1 FEL 2.0 Install

**NOTE: This install will restart your IIS services. Do not install during business hours if you have production application.**

1. Download the FEL 2.0 install from the following file location.  
<\\dotscosan02\CO\OIS\BSSO\Public\Enterprise GIS Framework\Dependencies\Enterprise Library 2.0>
2. Unpack the FDOT.EL.Installer zip file onto the server.
3. Double click the **FDOT.EL.Installer.exe** file to begin the installation process.

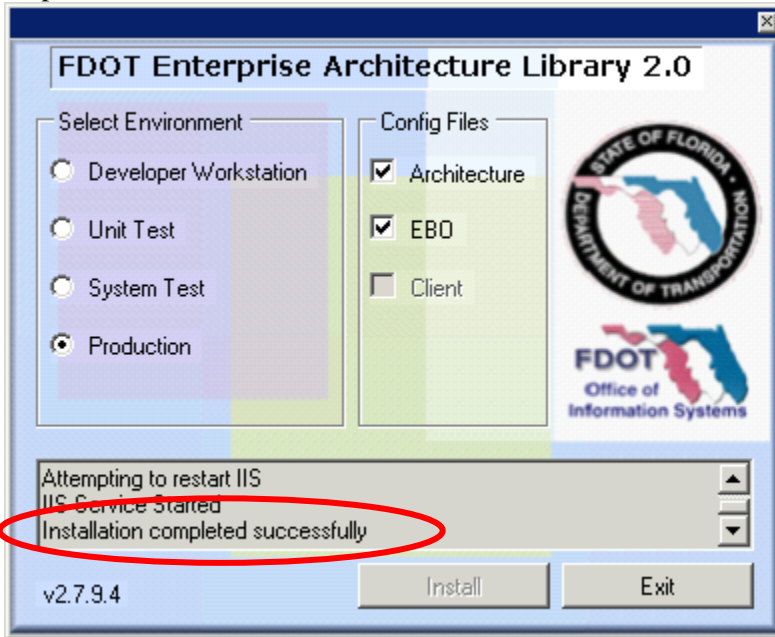


4. When the install window opens select the radio button next to Production and then check the boxes next to Architecture and EBO.



5. Click the **INSTALL** button to begin the install.

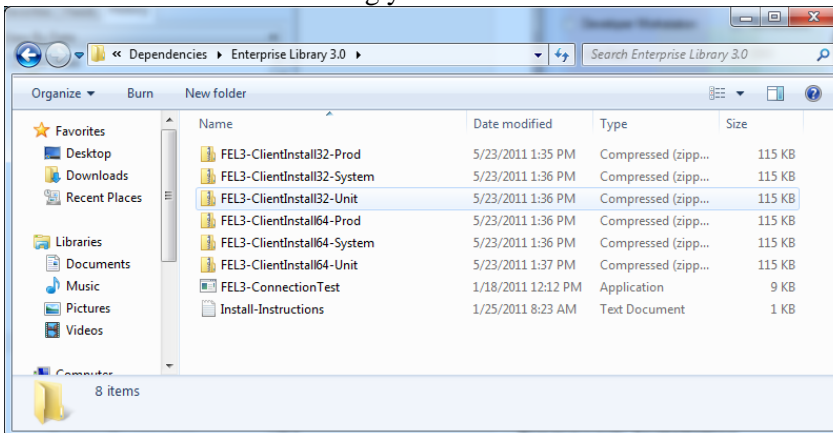
- When the install is complete you will see *“Installation Completed Successfully”* in the bottom of the output area.



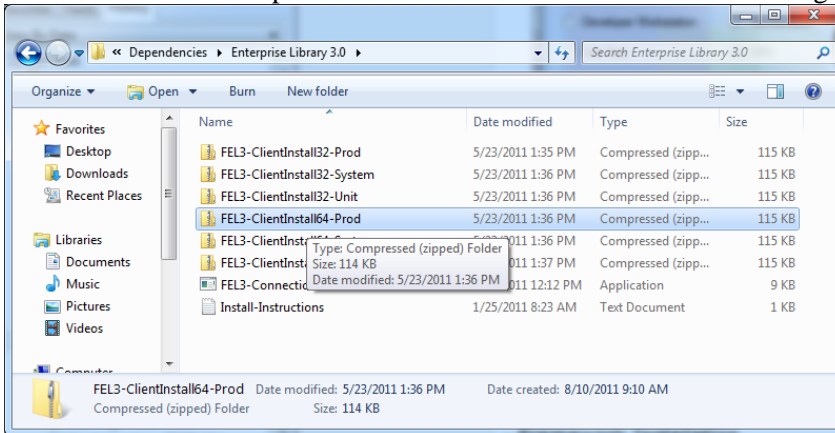
- Press EXIT.

### 3.2 FEL 3.0 Install

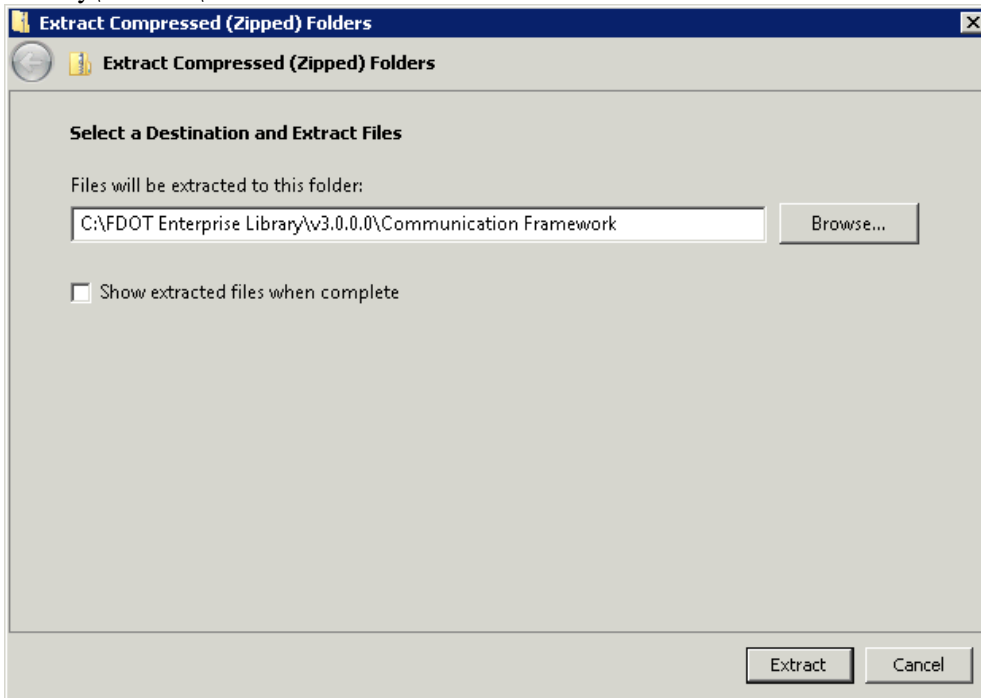
- Navigate to the FEL 3.0 install <\\dotscosan02\CO\OIS\BSSO\Public\Enterprise GIS Framework\Dependencies\Enterprise Library 3.0>
- Download the version matching your server version and level.



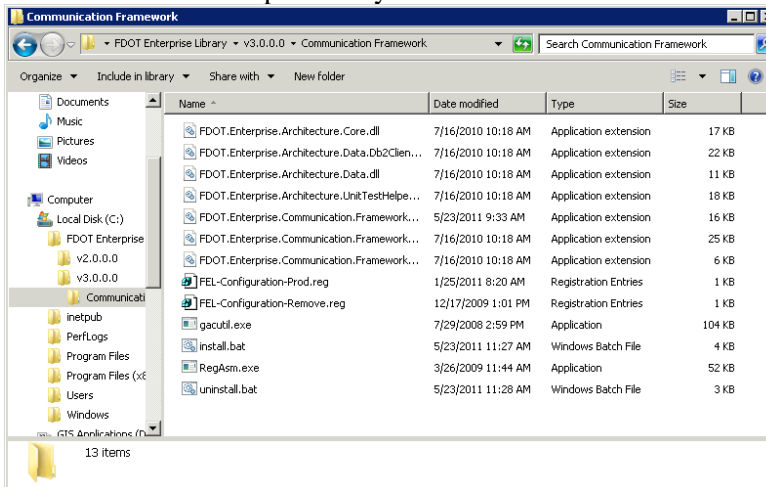
3. In the case of our 64-bit Windows 2008R2 production server we will download the FEL3-ClientInstall64-Prod zip file. The same install will be used for the staging server.



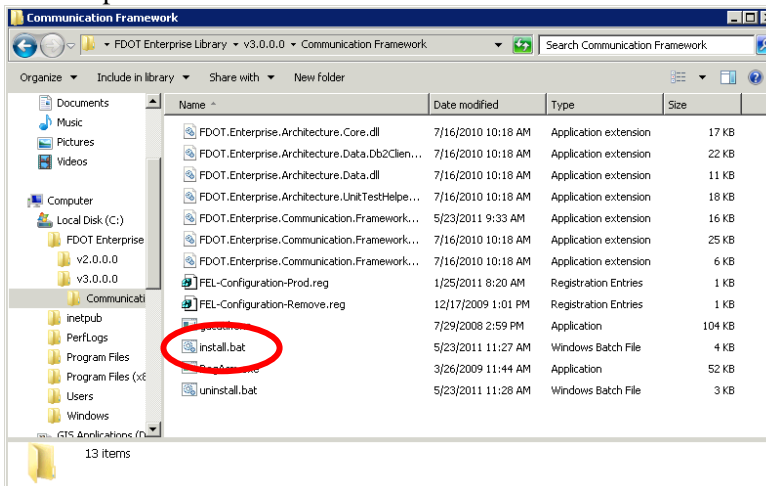
4. Create or unzip the zip file to the following directory structure. C:\FDOT Enterprise Library\v3.0.0.0\Communication Framework.



5. Extract the FEL 3.0 zip file for your environment into the new directory.



6. Once unpacked double click the install.bat file to install the FEL 3.0.



7. You will see a command window flash make sure all the items are successful and then press any key to end the install. The install of FEL 3.0 is complete.

```

C:\Windows\system32\cmd.exe
Microsoft (R) .NET Global Assembly Cache Utility. Version 3.5.30729.1
Copyright (c) Microsoft Corporation. All rights reserved.

SCHEME: <FILEPATH> ID: <C:\FDOT Enterprise Library\v3.0.0.0\Commu
nication Framework\FDOT.Enterprise.Architecture.Data.Db2Client.dll> DESCRIPTION
: <FDOT.Enterprise.Architecture.Data.Db2Client>
Assembly successfully added to the cache
Microsoft (R) .NET Global Assembly Cache Utility. Version 3.5.30729.1
Copyright (c) Microsoft Corporation. All rights reserved.

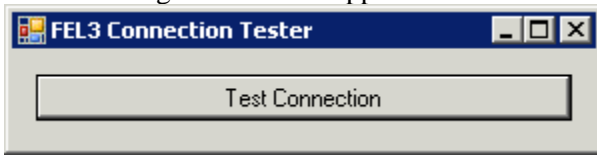
SCHEME: <FILEPATH> ID: <C:\FDOT Enterprise Library\v3.0.0.0\Commu
nication Framework\FDOT.Enterprise.Architecture.UnitTestHelpers.dll> DESCRIPTIO
N: <FDOT.Enterprise.Architecture.UnitTestHelpers>
Assembly successfully added to the cache
Registering COM visible assemblies
Microsoft (R) .NET Framework Assembly Registration Utility 2.0.50727.3053
Copyright (C) Microsoft Corporation 1998-2004. All rights reserved.

Types un-registered successfully
Microsoft (R) .NET Framework Assembly Registration Utility 2.0.50727.3053
Copyright (C) Microsoft Corporation 1998-2004. All rights reserved.

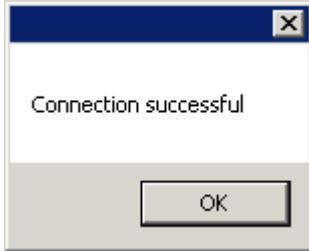
Types registered successfully
Configuring Registry
Press any key to continue . . .
    
```

8. Now that the install is complete navigate to the [\\dotscosan02\CO\OIS\BSSO\Public\Enterprise GIS Framework\Dependencies\Enterprise Library 3.0](#) directory and double click FEL3-ConnectionText.exe.

The following window will appear.



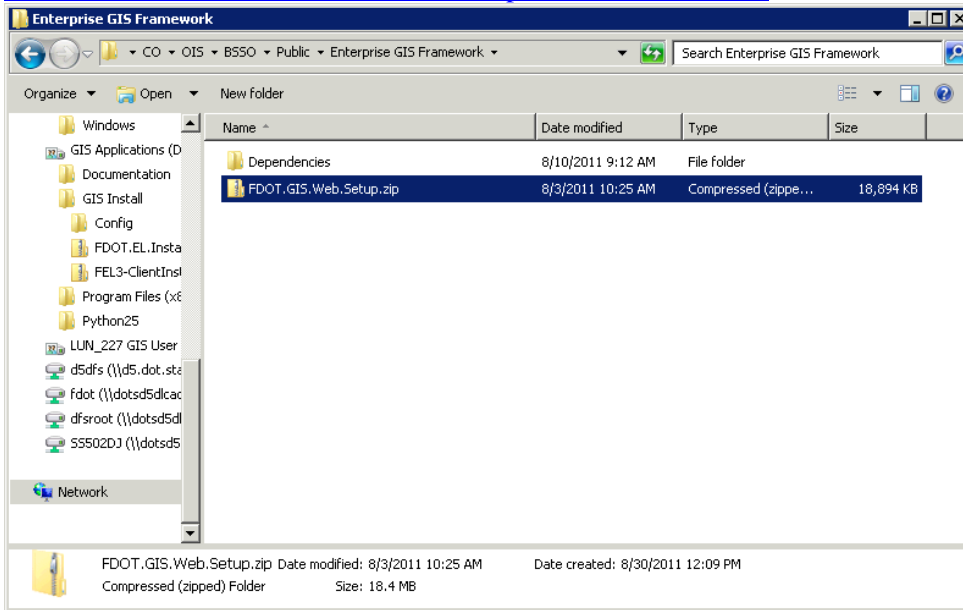
9. Press the Test Connection Button.
10. You should receive the following successful message. If you do not receive this message the install did not work. Try the install again and make sure the command window looks similar to step 7.



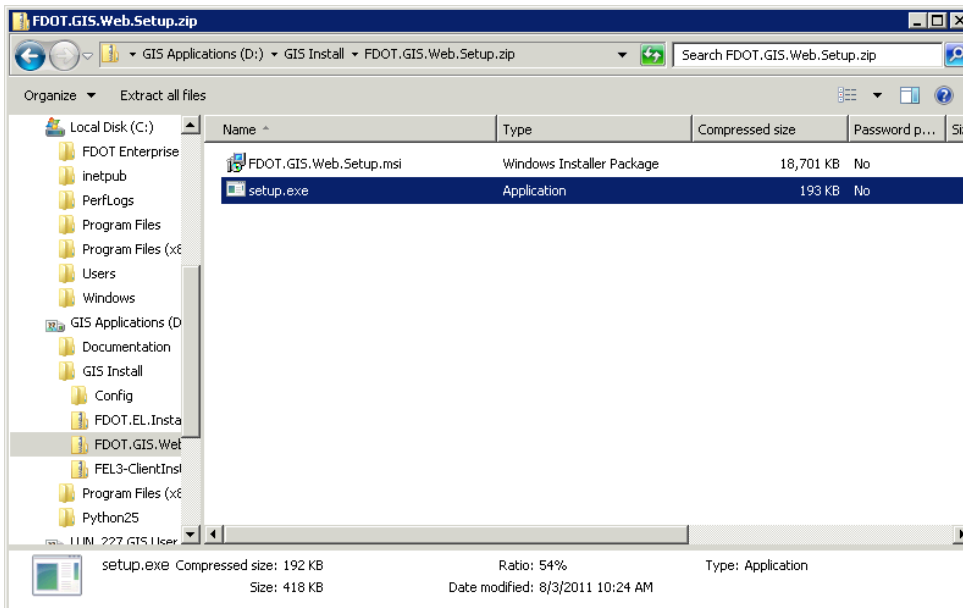
## 4.0 FDOT GIS Framework Install

1. Download the FDOT GIS Framework zip from the following location.

<\\dotscosan02\CO\OIS\BSSO\Public\Enterprise GIS Framework>



2. Once the download is complete open the zip file and double click the setup.exe file to install the GIS Framework.

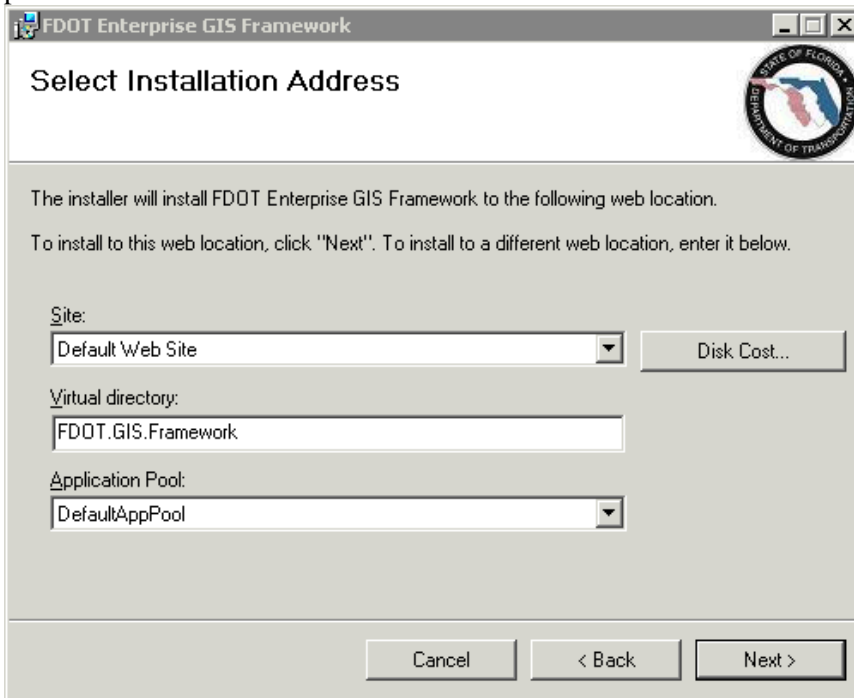




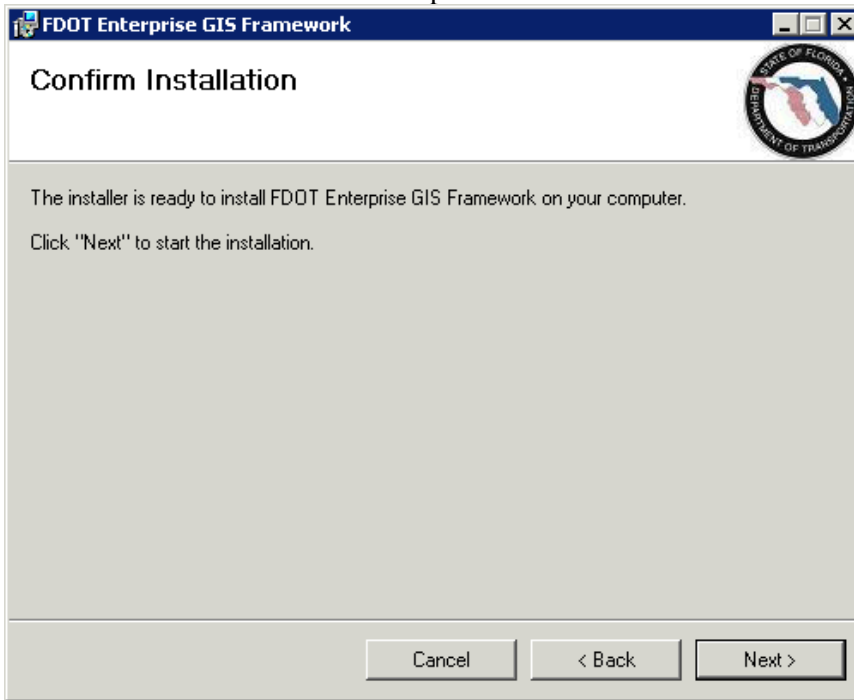
- When the welcome screen appears press NEXT.



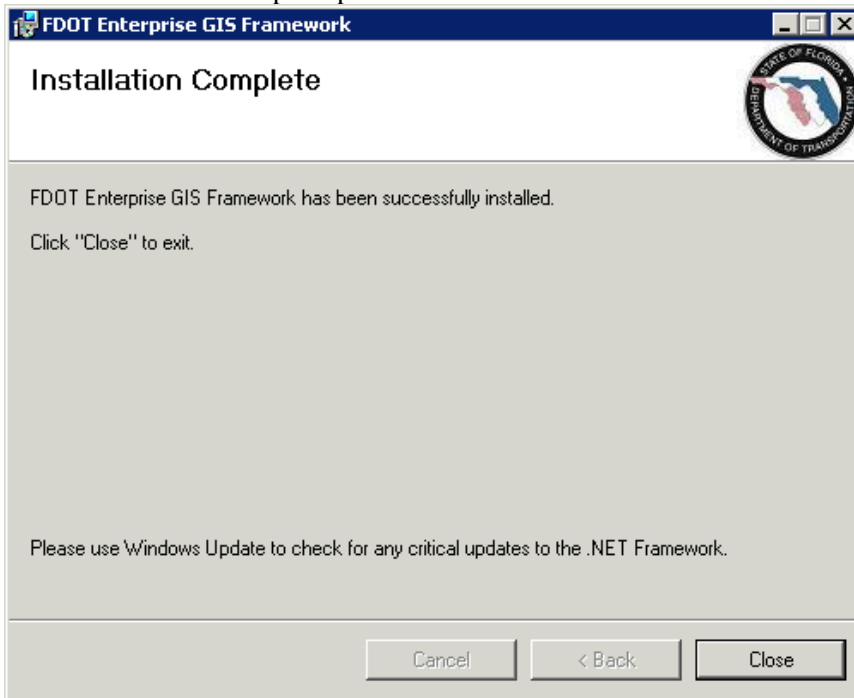
- Accept the default values. If you change anything just make sure the Application Pool is a .NET 4.0 pool. Press NEXT.



5. On the confirm installation window press NEXT.



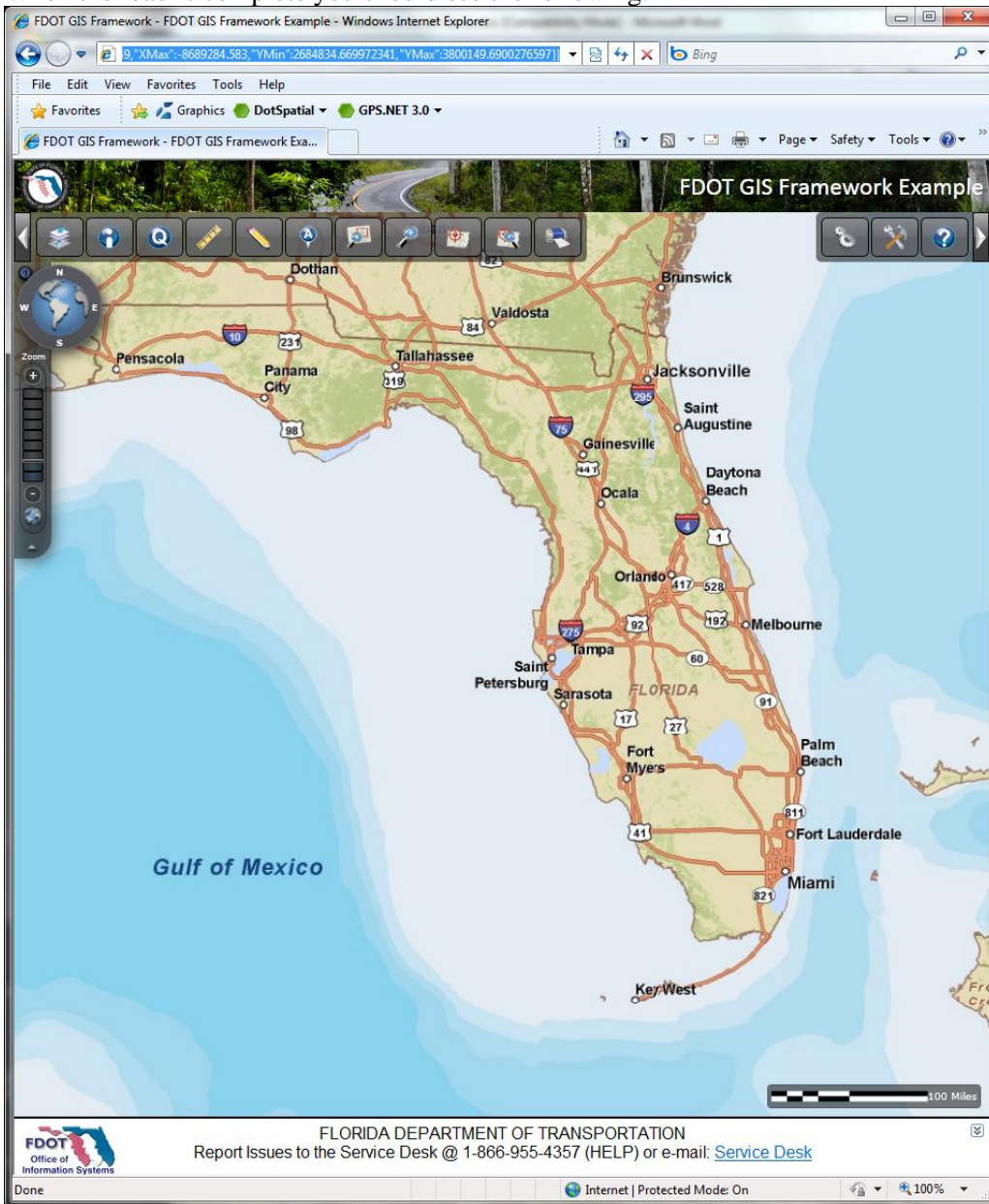
6. Once the install is complete press CLOSE.



7. Now test the application by going to the following URL on your server.  
<http://<your server name>/FDOT.GIS.Framework>

**NOTE: The first time you run the application you may get a timeout because the server is caching. Just close the application and reopen it.**

8. When the load is complete you should see the following.



## 5.0 (Optional) ArcSDE Install

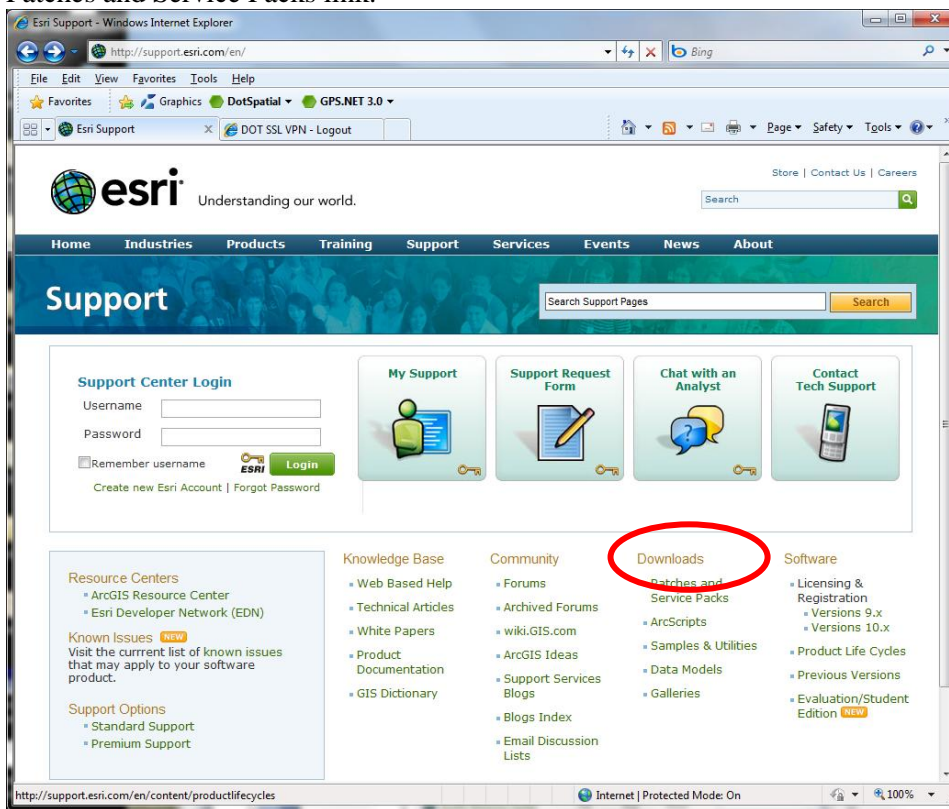
### 5.1 Database Preparation

1. Send an E-mail to the CO-DBAT group and requesting the setup of your SDE repository. They will schedule a completion data with you and let you know when you can begin. The email should contain the following information:
  - a. District requesting the database.
  - b. User IDs to be created. In the case of D5 SDE, GISREAD, GISEDIT and GISADMIN
  - c. The permissions for each ID should be setup as follows.
    - i. **SDE**
      - Create Session
      - Create Table
      - Create Trigger
      - Create Sequence
      - Select Any Table
      - Create Procedure
      - Create Indextype
      - Create Library
      - Create Operator
      - Create Public Synonym
      - Create Type
      - Create View
      - Drop Public Synonym
      - Alter Any Index
      - Alter Any Table
      - Analyze Any
      - Create Any Index
      - Create Any Procedure
      - Create Any Sequence
      - Create Any Trigger
      - Create Any View
      - Drop Any Index
      - Drop Any Procedure
      - Drop Any Sequence
      - Drop Any Table
      - Drop Any View
      - Execute Any Procedure
      - Select Any Sequence
      - Administer Database Trigger
      - Connect
      - Resource
      - GRANT execute on dbms\_pipe to public;
      - GRANT execute on dbms\_lock to public;
    - ii. **GISADMIN**
      - Create Session
      - Create Table
      - Create View
      - Create Trigger
      - Create Sequence
      - Select Any Table – To allow compression using this ID.

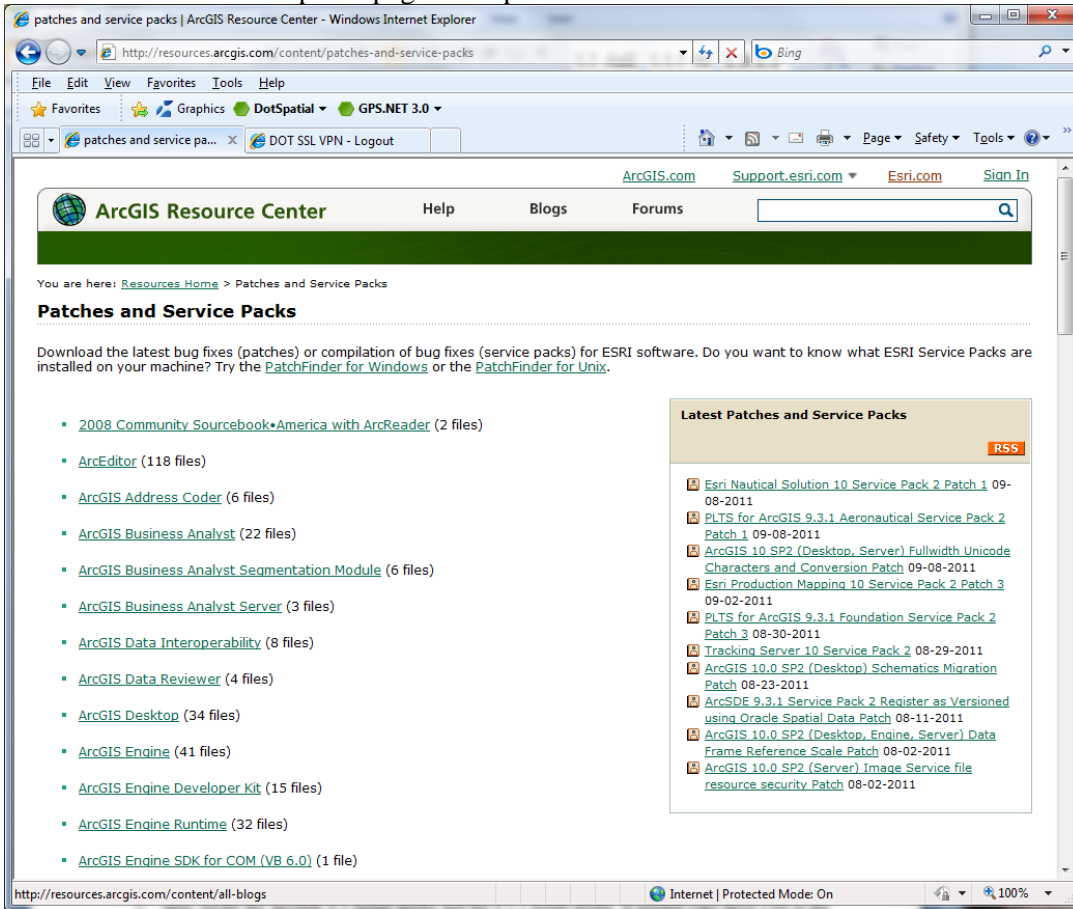
- iii. **GISREAD**  
Create Session
- iv. **GIEDIT**  
Create Session
- d. Standard initial size is 5GB of space to start.

## 5.2 Preparation

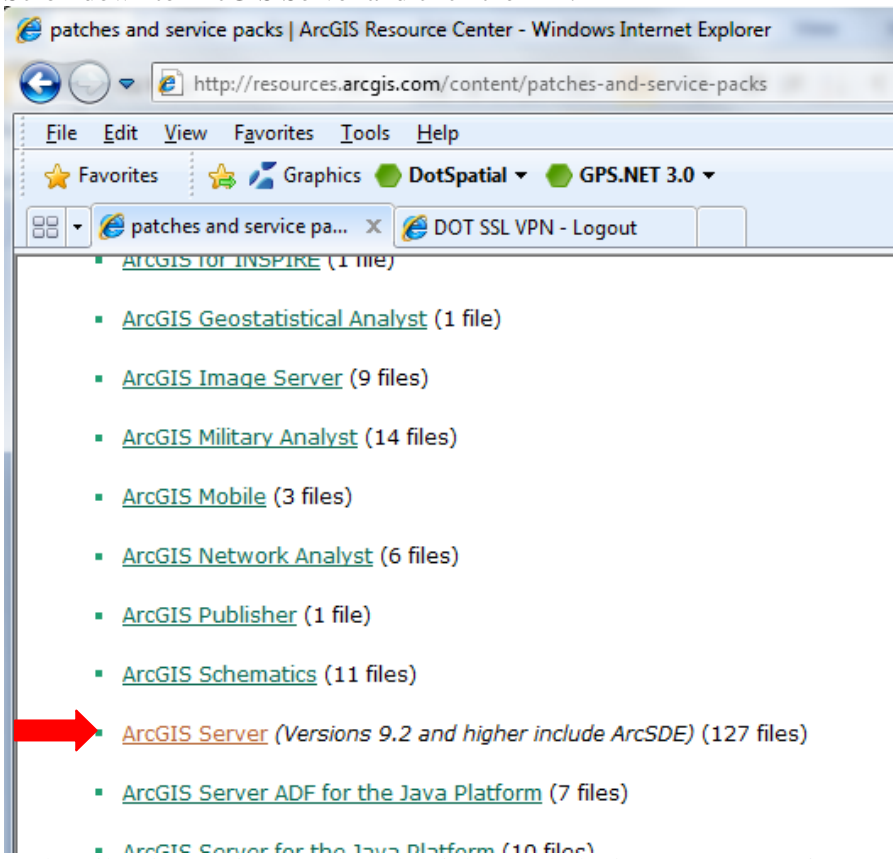
1. Locate the client install for Oracle 10gR2 and Oracle 10gR2 patch set 4. They will be needed shortly.
2. Also, locate the ArcSDE 9.3 install media and the 9.3.1 install media. If needed copy these CDs to the server for use later in the install process.
3. Download the latest ArcSDE 9.3.1 service packs by going to <http://support.esri.com> once there click the Patches and Service Packs link.



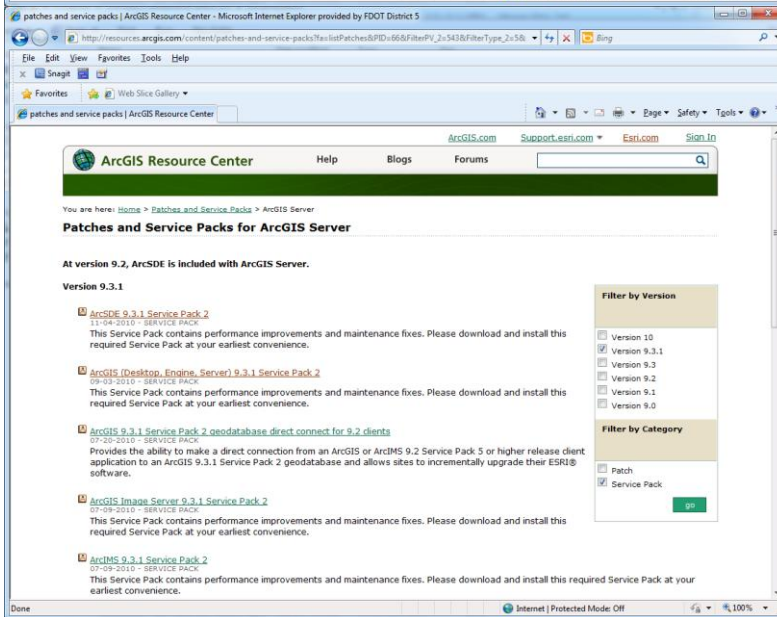
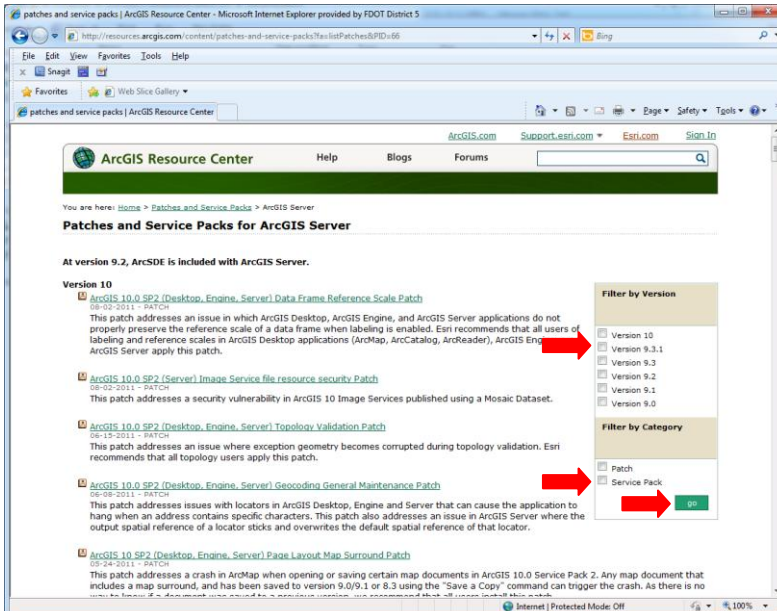
4. The Patches and Service packs page will open.



5. Scroll down to ArcGIS Server and click the link.



6. In the Filter by version panel on the right check the box next to Version 9.3.1 and Service Pack then click GO.





7. Find the ArcSDE 9.3.1 Service Pack 2 link and click it.

The screenshot shows the ArcGIS Resource Center website. The navigation bar includes 'Help', 'Blogs', and 'Forums'. The breadcrumb trail is 'Home > Patches and Service Packs > ArcGIS Server'. The main heading is 'Patches and Service Packs for ArcGIS Server'. Below this, it states 'At version 9.2, ArcSDE is included with ArcGIS Server.' and 'Version 9.3.1'. A red arrow points to the link 'ArcSDE 9.3.1 Service Pack 2' (dated 11-04-2010). Other links include 'ArcGIS (Desktop, Engine, Server) 9.3.1 Service Pack 2' (dated 09-03-2010) and 'ArcGIS 9.3.1 Service Pack 2 geodatabase direct connect for 9.2 clients' (dated 07-20-2010). A sidebar on the right has 'Filter by Version' with 'Version 9.3.1' selected, and 'Filter by Category' with 'Service Pack' selected.

8. On the Service Pack page scroll down to the “*ArcSDE Server Installation for Windows*” section.

**Installation Steps**

1. Install this Service Pack using an administrator account , then upgrade your geodatabase using your ArcSDE administrator account.  
Make sure you have write access to the ArcSDE installation folder, that no one is using ArcSDE, and that the ArcSDE service is down.
2. Stop your current ArcSDE service, if one is running.  
**NOTE:** If you do not shut down the ArcSDE service before installing this Service Pack, you will be prompted and required to reboot your server machine in order to successfully complete the Service Pack installation.
3. Copy the appropriate file to a location other than the ArcSDE installation folder:

<b>DB2</b>	<a href="#">SDE931sp2-DB2.msp</a>	3 MB
<b>DB2 z OS</b>	<a href="#">SDE931sp2-DB2zOS.msp</a>	3 MB
<b>Informix</b>	<a href="#">SDE931sp2-Informix.msp</a>	3 MB
<b>Oracle 9iR2</b>	<a href="#">SDE931sp2-Oracle9i.msp</a>	3 MB
<b>Oracle 10gR2</b>	<a href="#">SDE931sp2-Oracle10g.msp</a>	3 MB
<b>Oracle 10gR2 64</b>	<a href="#">SDE931sp2-Oracle10g-64.msp</a>	4 MB
<b>Oracle 11g</b>	<a href="#">SDE931sp2-Oracle11g.msp</a>	3 MB
<b>Oracle 11g 64</b>	<a href="#">SDE931sp2-Oracle11g-64.msp</a>	4 MB
<b>PostgreSQL</b>	<a href="#">SDE931sp2-PG.msp</a>	3 MB
<b>SQL Server</b>	<a href="#">SDE931sp2-SqlServer.msp</a>	3 MB
<b>SQL Server 64</b>	<a href="#">SDE931sp2-SqlServer-64.msp</a>	3 MB
4. Double-click the SDE931sp2<Database>.msp to start the install process.


- Once there click the SDE931sp2-Oracle10g.msp link to download the file. This install uses the 32-bit version so make sure the 32-bit version is downloaded.

**ArcSDE Server Installation for Windows**

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**Installation Steps**


- Install this Service Pack using an administrator account , then upgrade your geodatabase using your ArcSDE administrator account.  
Make sure you have write access to the ArcSDE installation folder, that no one is using ArcSDE, and that the ArcSDE service is down.
- Stop your current ArcSDE service, if one is running.  
**NOTE:** If you do not shut down the ArcSDE service before installing this Service Pack, you will be prompted and required to reboot your serve machine in order to successfully complete the Service Pack installation.
- Copy the appropriate file to a location other than the ArcSDE installation folder:



<b>DB2</b>	<a href="#">SDE931sp2-DB2.msp</a>	3 MB
<b>DB2 z OS</b>	<a href="#">SDE931sp2-DB2zOS.msp</a>	3 MB
<b>Informix</b>	<a href="#">SDE931sp2-Informix.msp</a>	3 MB
<b>Oracle 9iR2</b>	<a href="#">SDE931sp2-Oracle9i.msp</a>	3 MB
 <b>Oracle 10gR2</b>	<a href="#">SDE931sp2-Oracle10g.msp</a>	3 MB
<b>Oracle 10gR2 64</b>	<a href="#">SDE931sp2-Oracle10g-64.msp</a>	4 MB
<b>Oracle 11g</b>	<a href="#">SDE931sp2-Oracle11g.msp</a>	3 MB
<b>Oracle 11g 64</b>	<a href="#">SDE931sp2-Oracle11g-64.msp</a>	4 MB
<b>PostGreSQL</b>	<a href="#">SDE931sp2-PG.msp</a>	3 MB
<b>SQL Server</b>	<a href="#">SDE931sp2-SqlServer.msp</a>	3 MB
<b>SQL Server 64</b>	<a href="#">SDE931sp2-SqlServer-64.msp</a>	3 MB


- Double-click the SDE931sp2<Database>.msp to start the install process.

- Once the download is complete press the back button and scroll down until you find the ArcSDE 9.3.1 Service Pack 1 link and click it.

 [ArcGIS 9.3.1 Service Pack 1 geodatabase direct connect for 9.2 clients](#)  
02-18-2010 - SERVICE PACK  
Provides the ability to make a direct connection from an ArcGIS or ArcIMS 9.2 Service Pack 5 or higher release client application to an ArcGIS 9.3.1 Service Pack 1 geodatabase and allows sites to incrementally upgrade their ESRI® software.

 [ArcGIS \(Desktop, Engine, Server\) 9.3.1 Service Pack 1](#)  
12-19-2009 - SERVICE PACK  
This Service Pack contains performance improvements and maintenance fixes. Please download and install this required Service Pack at your earliest convenience.

  [ArcSDE 9.3.1 Service Pack 1](#)  
12-19-2009 - SERVICE PACK  
This Service Pack contains performance improvements and maintenance fixes. Please download and install this required Service Pack at your earliest convenience.

 [ArcGIS Military Analyst 9.3.1 Service Pack 1](#)  
12-14-2009 - SERVICE PACK  
ESRI announces ArcGIS Military Analyst 9.3.1 Service Pack 1. This Service Pack contains several improvements and maintenance fixes for Military Analyst 9.3.1.

 [ArcGIS Image Server 9.3.1 Service Pack 1](#)  
12-14-2009 - SERVICE PACK

11. On the Service Pack page scroll down to the “ArcSDE Server Installation for Windows” section.

**ArcSDE Server Installation for Windows**

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**Installation Steps**

1. Install this Service Pack using an administrator account , then upgrade your geodatabase using your ArcSDE administrator account.  
Make sure you have write access to the ArcSDE installation folder, that no one is using ArcSDE, and that the ArcSDE service is down.
2. Stop your current ArcSDE service, if one is running.  
**NOTE:** If you do not shut down the ArcSDE service before installing this Service Pack, you will be prompted and required to reboot your machine in order to successfully complete the Service Pack installation.
3. Copy the appropriate file to a location other than the ArcSDE installation folder:

<b>DB2</b>	<a href="#">SDE931sp1-DB2.msp</a>	3 MB
<b>DB2 z OS</b>	<a href="#">SDE931sp1-DB2zOS.msp</a>	2 MB
<b>Informix</b>	<a href="#">SDE931sp1-Informix.msp</a>	3 MB
<b>Oracle 9iR2</b>	<a href="#">SDE931sp1-Oracle9i.msp</a>	3 MB
<b>Oracle 10gR2</b>	<a href="#">SDE931sp1-Oracle10g.msp</a>	3 MB
<b>Oracle 10gR2 64</b>	<a href="#">SDE931sp1-Oracle10g-64.msp</a>	4 MB
<b>Oracle 11g</b>	<a href="#">SDE931sp1-Oracle11g.msp</a>	3 MB
<b>Oracle 11g 64</b>	<a href="#">SDE931sp1-Oracle11g-64.msp</a>	4 MB
<b>PostgreSQL</b>	<a href="#">SDE931sp1-PG.msp</a>	3 MB
<b>SQL Server</b>	<a href="#">SDE931sp1-SqlServer.msp</a>	3 MB
<b>SQL Server 64</b>	<a href="#">SDE931sp1-SqlServer-64.msp</a>	3 MB

4. Double-click the SDE931sp1<Database>.msp to start the install process.


12. Click on the SDE931sp1-Oracle10g.msp file to download it.

**ArcSDE Server Installation for Windows**

---

**Installation Steps**

1. Install this Service Pack using an administrator account , then upgrade your geodatabase using your ArcSDE administrator account.  
Make sure you have write access to the ArcSDE installation folder, that no one is using ArcSDE, and that the ArcSDE service is down.
2. Stop your current ArcSDE service, if one is running.  
**NOTE:** If you do not shut down the ArcSDE service before installing this Service Pack, you will be prompted and required to reboot your machine in order to successfully complete the Service Pack installation.
3. Copy the appropriate file to a location other than the ArcSDE installation folder:

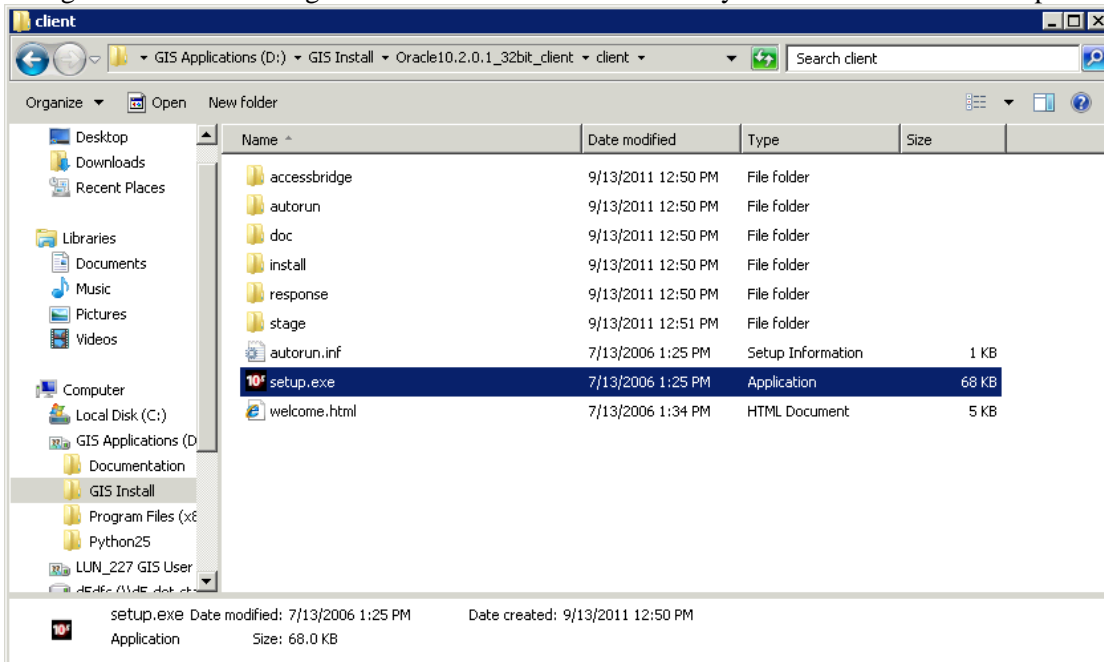
<b>DB2</b>	<a href="#">SDE931sp1-DB2.msp</a>	3 MB
<b>DB2 z OS</b>	<a href="#">SDE931sp1-DB2zOS.msp</a>	2 MB
<b>Informix</b>	<a href="#">SDE931sp1-Informix.msp</a>	3 MB
<b>Oracle 9iR2</b>	<a href="#">SDE931sp1-Oracle9i.msp</a>	3 MB
 <b>Oracle 10gR2</b>	<a href="#">SDE931sp1-Oracle10g.msp</a>	3 MB
<b>Oracle 10gR2 64</b>	<a href="#">SDE931sp1-Oracle10g-64.msp</a>	4 MB
<b>Oracle 11g</b>	<a href="#">SDE931sp1-Oracle11g.msp</a>	3 MB
<b>Oracle 11g 64</b>	<a href="#">SDE931sp1-Oracle11g-64.msp</a>	4 MB
<b>PostgreSQL</b>	<a href="#">SDE931sp1-PG.msp</a>	3 MB
<b>SQL Server</b>	<a href="#">SDE931sp1-SqlServer.msp</a>	3 MB
<b>SQL Server 64</b>	<a href="#">SDE931sp1-SqlServer-64.msp</a>	3 MB

4. Double-click the SDE931sp1<Database>.msp to start the install process.

13. Once the download is complete close the browser window.

### 5.3 Oracle 10g R2 Client Base Install

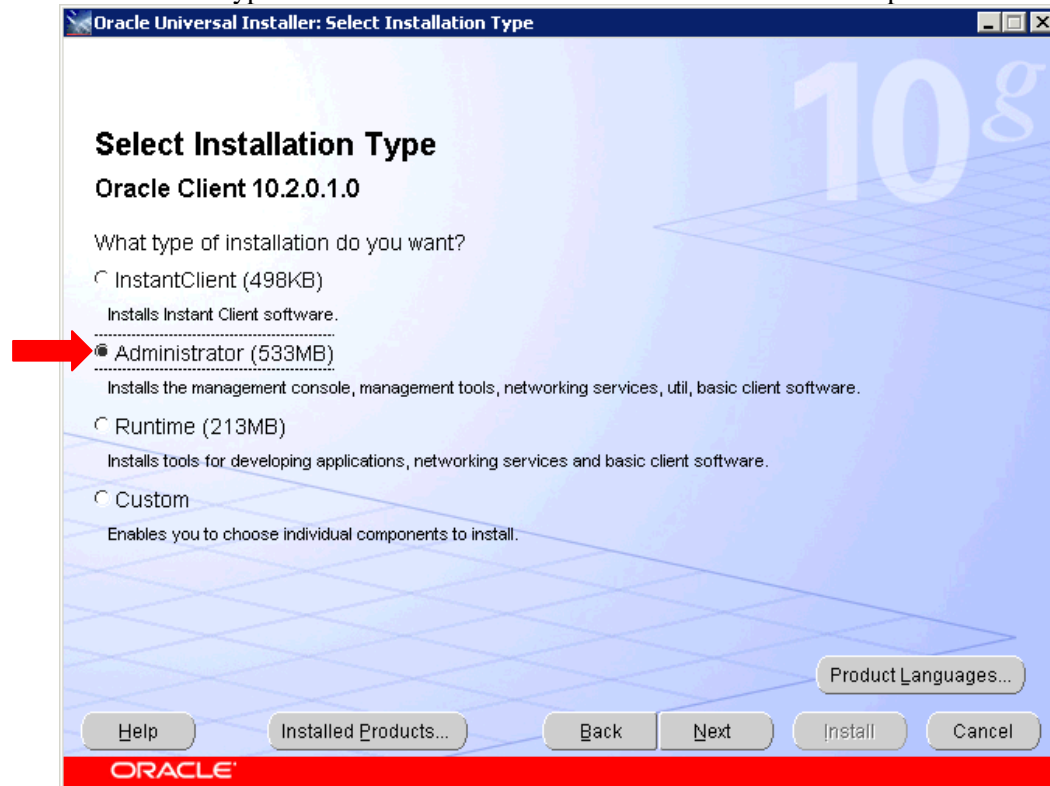
1. Navigate to the Oracle 10g R2 Client 10.2.0.1 install directory and double click the setup.exe file.



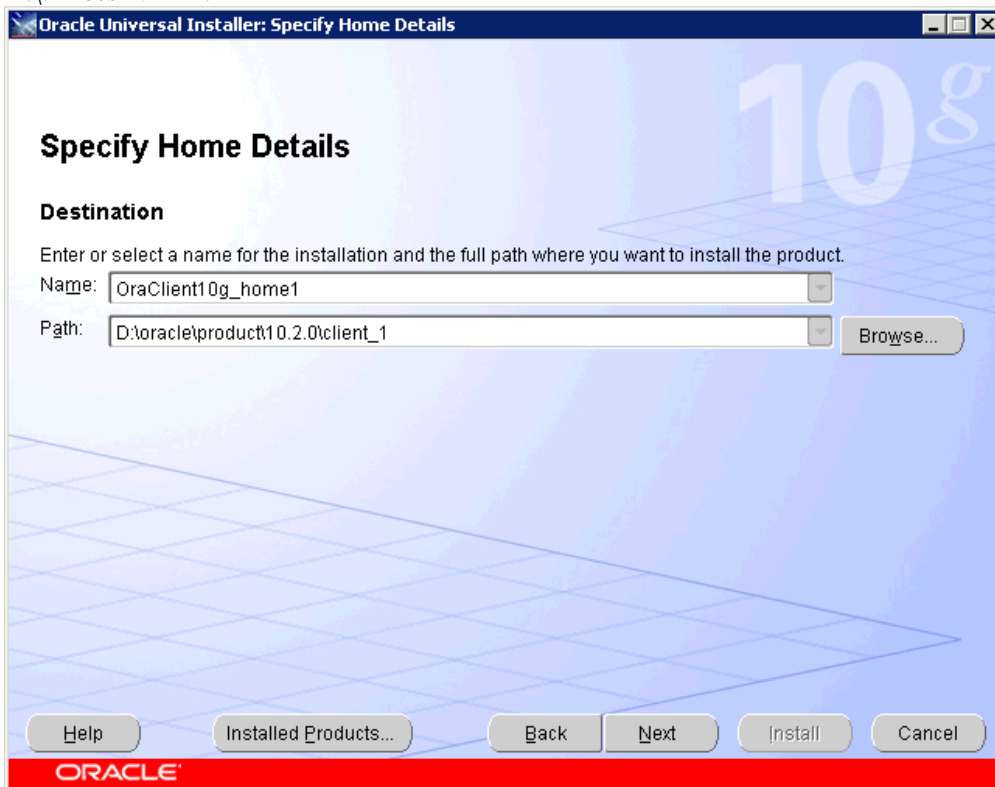
2. When the welcome screen appears press NEXT.



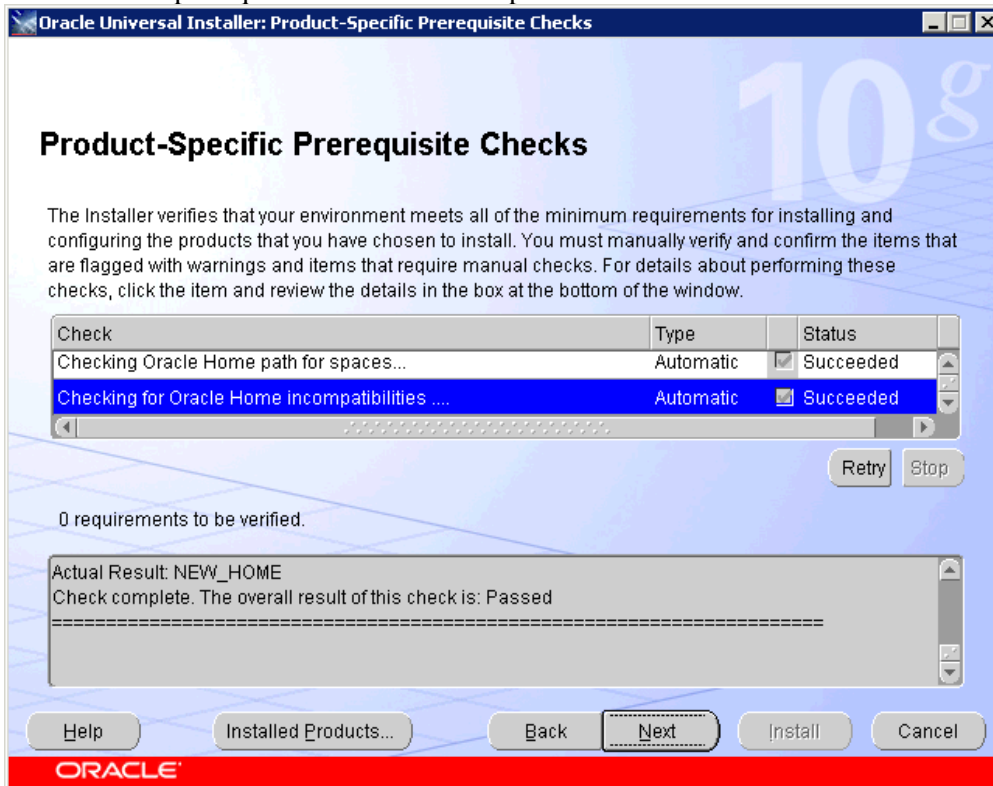
3. On the install type window choose the Administrator radio button and press NEXT.



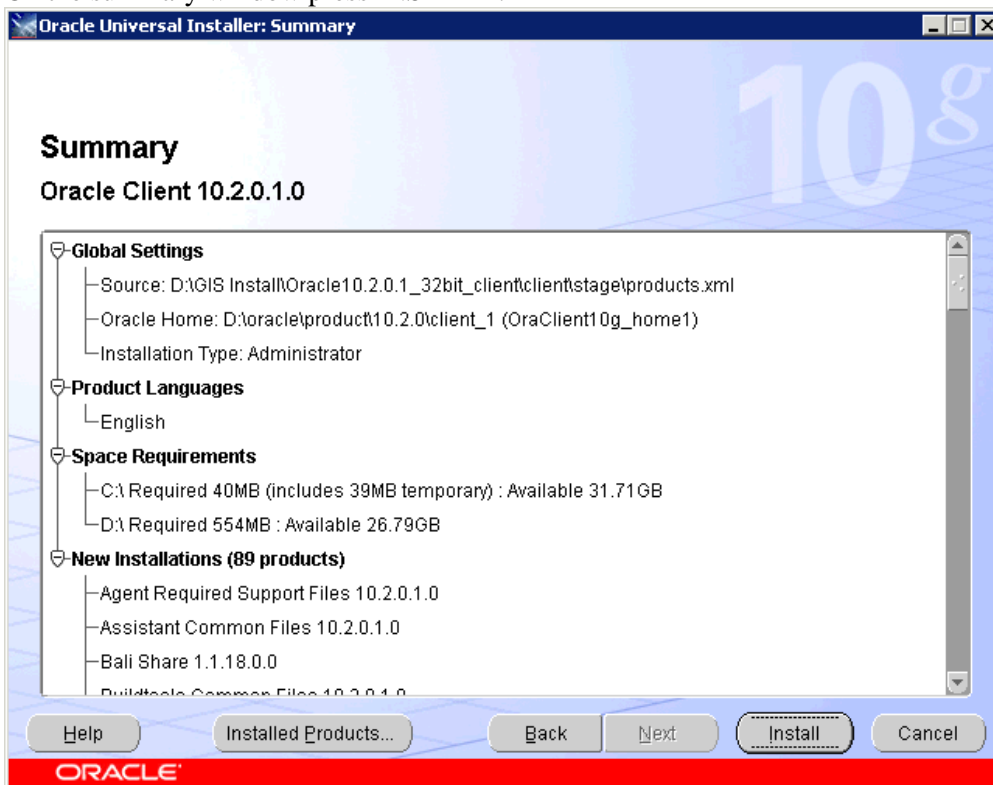
4. Change the path setting so that the path points at the applications drive. In this case C:\ is changed to D:\. Press NEXT.



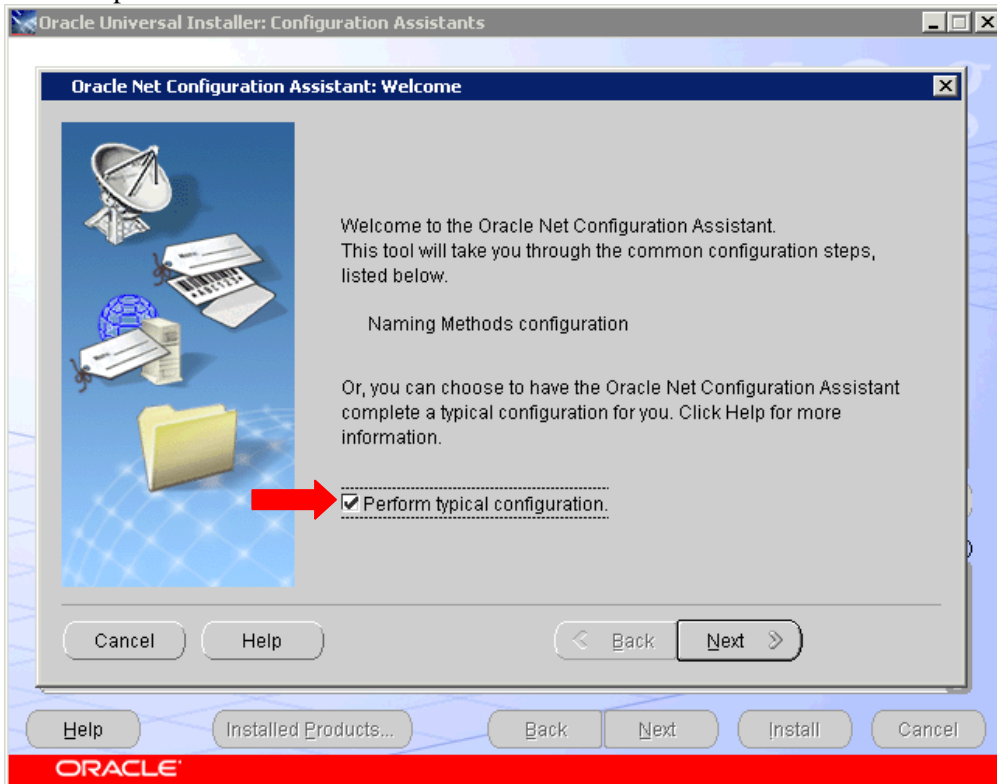
5. Check that all prerequisites succeeded and press NEXT



6. On the summary window press INSTALL.



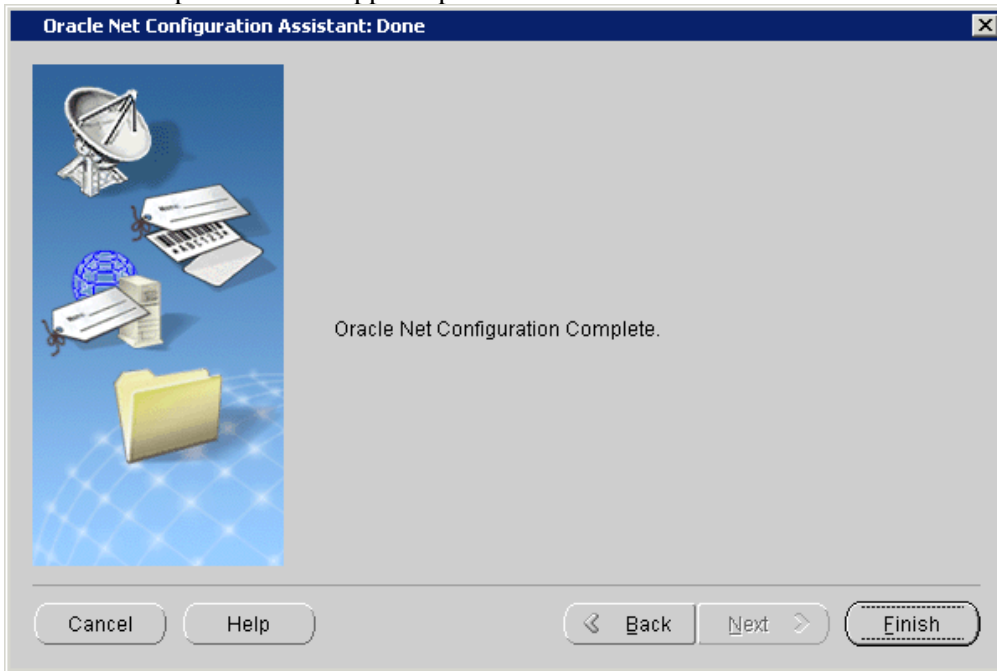
7. When the Oracle NET Configuration welcome window appears check the *“Perform Typical”* check box then press NEXT.



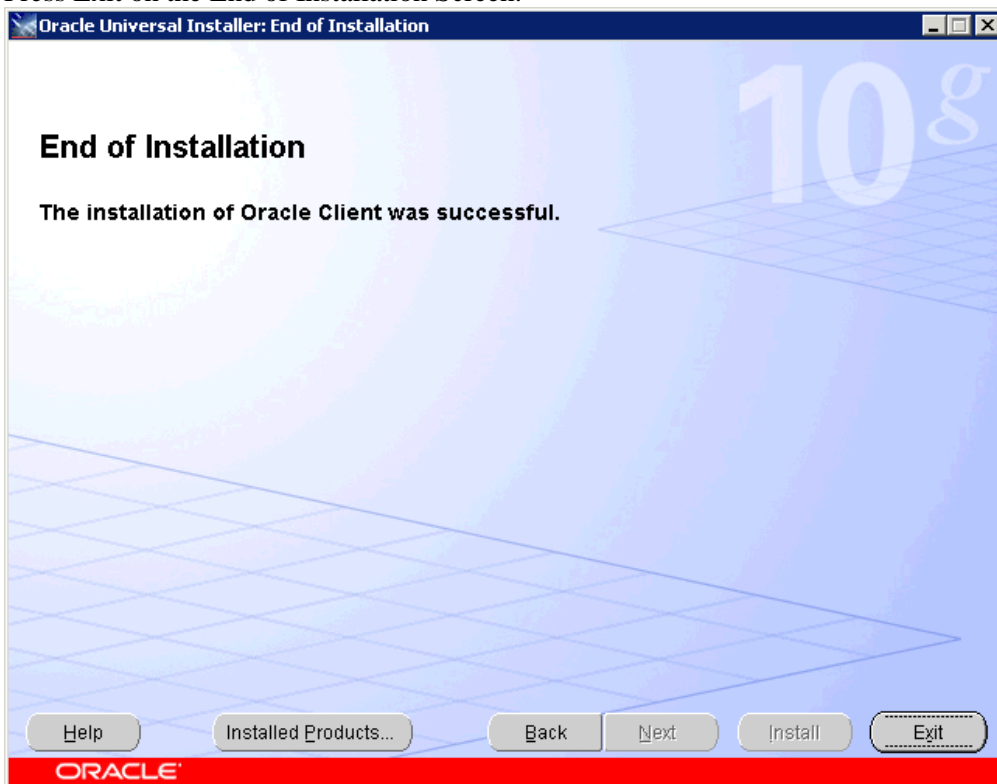
8. On the welcome screen press NEXT.



9. When the complete window appears press FINISH.

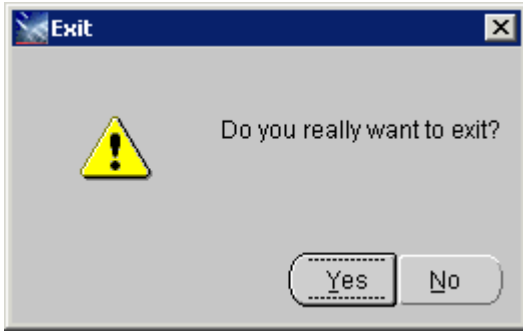


10. Press Exit on the End of Installation Screen.



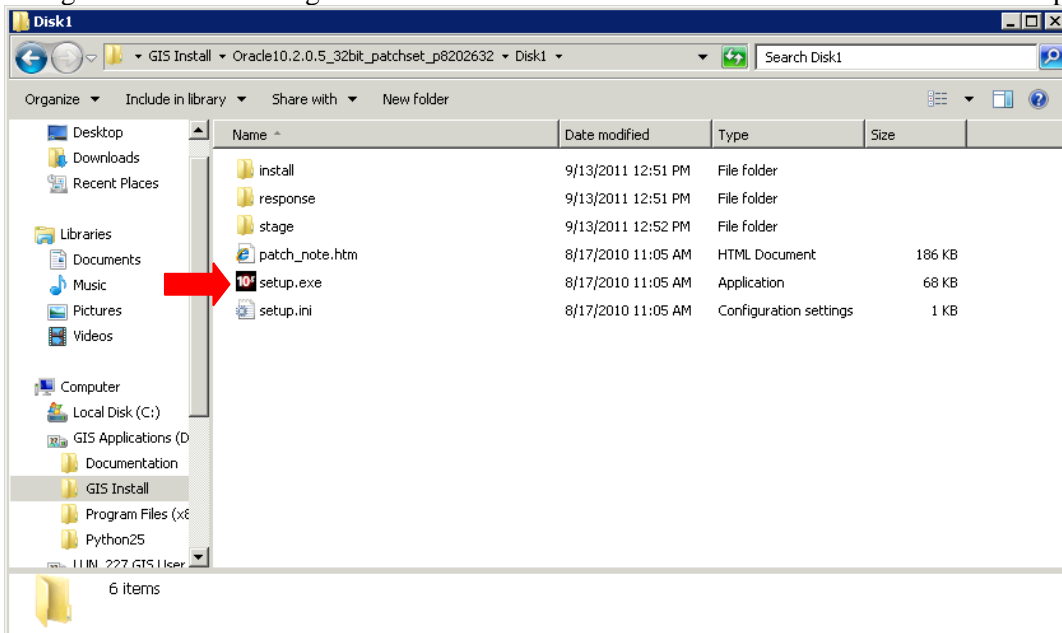


11. Press YES on the Exit confirmation window.



### 5.4 Oracle 10gR2 Patch Set 4 Client Install

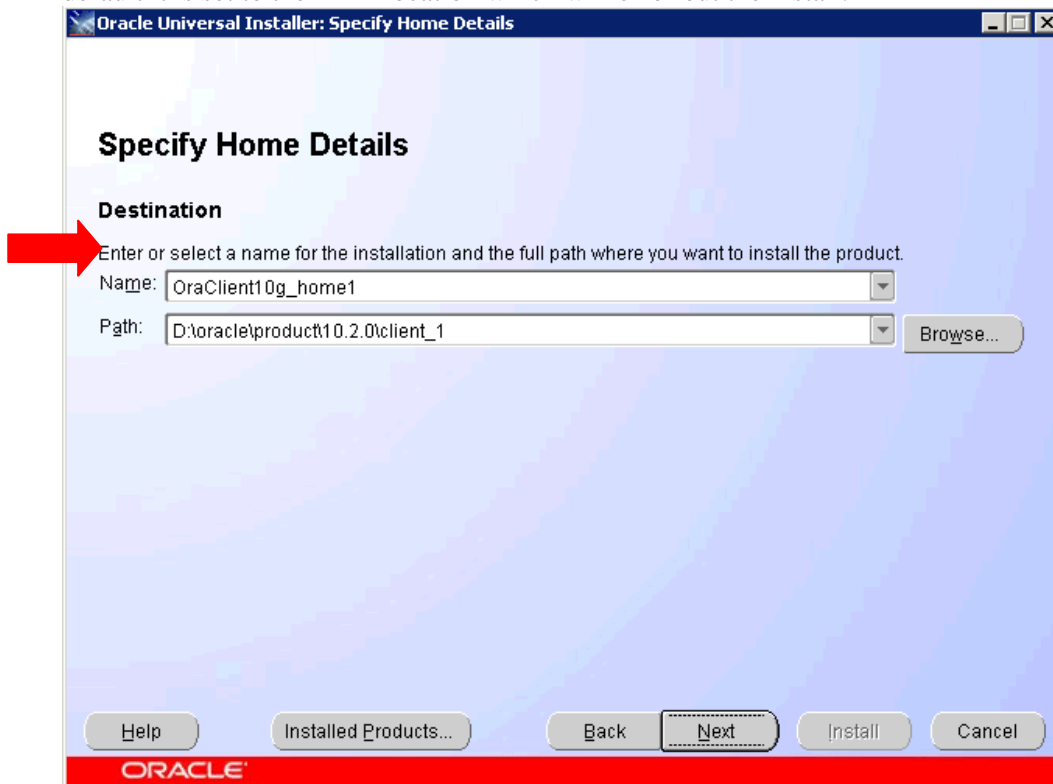
1. Navigate to the Oracle 10gR2 Patch Set 4 Client install location and double click the setup.exe file.



- When the welcome screen opens press NEXT.

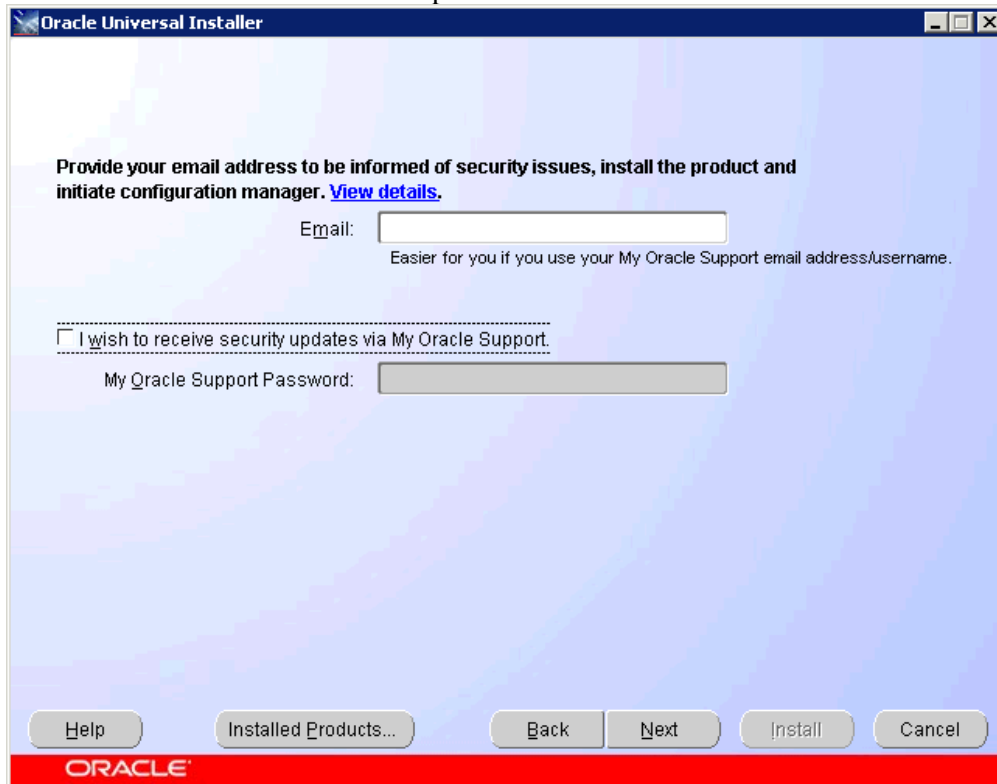


- On the Specify home window make sure to select OraClient10g\_home1 from the Name dropdown. By default it is set to the DBA location which will error out the install.

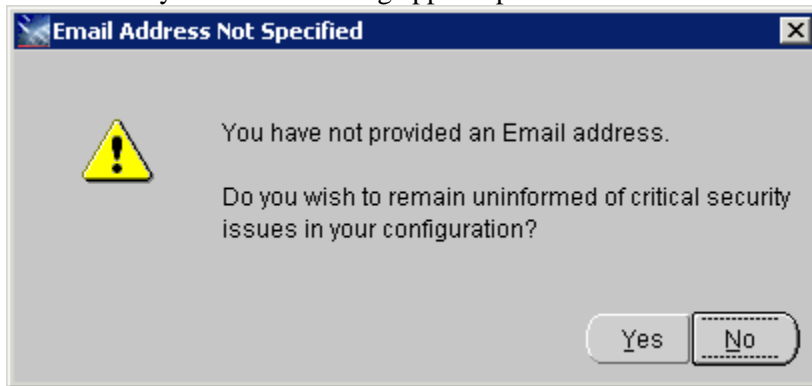


- Once you set the name click NEXT.

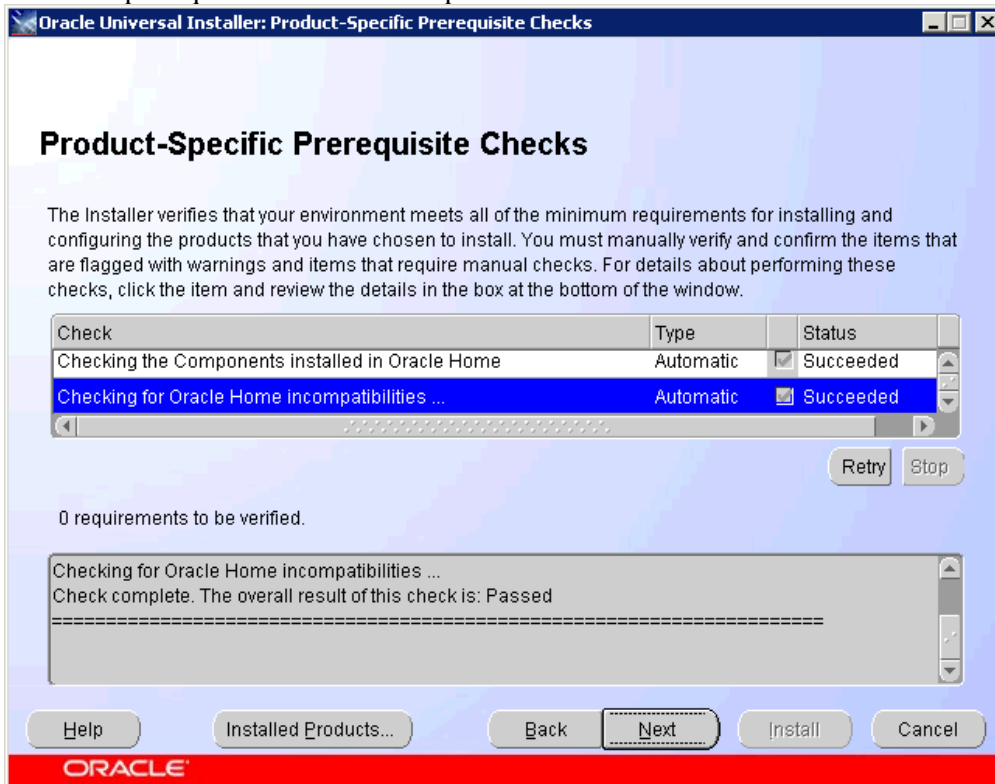
5. On the contact information window press NEXT.



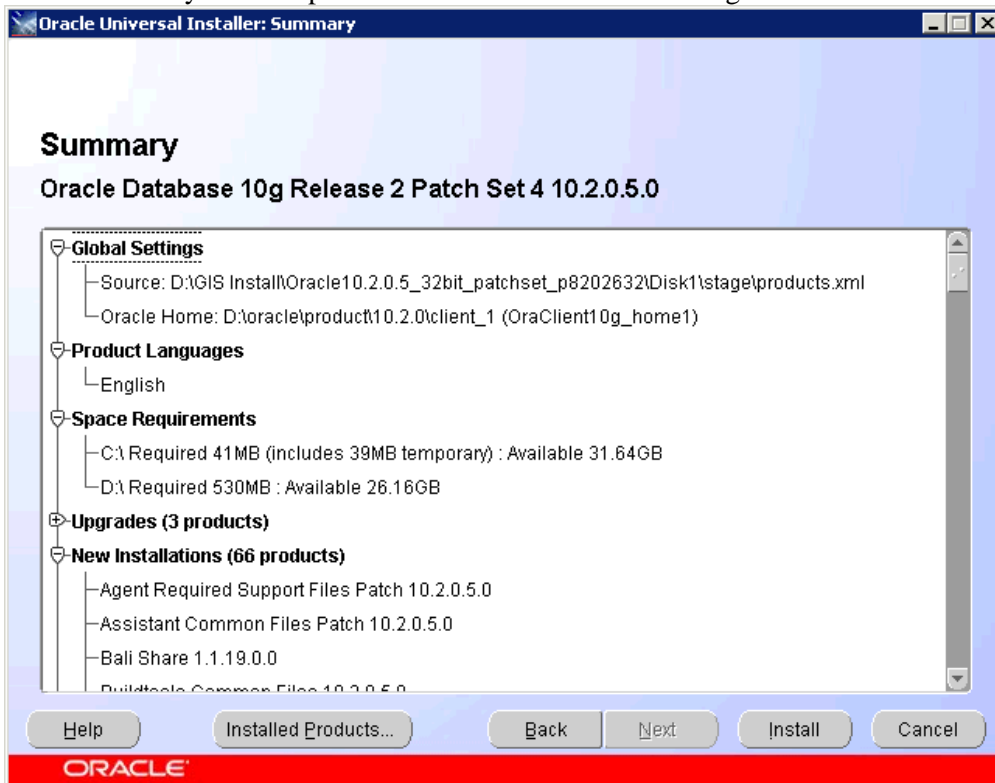
6. When the stay informed warning appears press YES.



- When the prerequisite check finishes press NEXT.



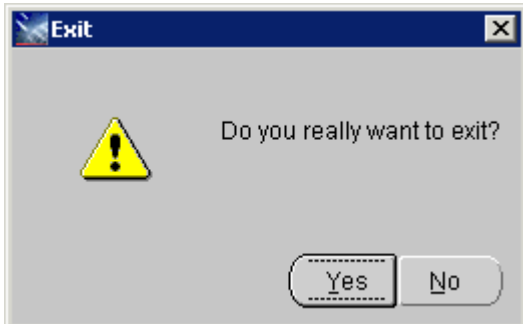
- On the summary window press INSTALL. The install will begin.



9. On the End of Installation window press EXIT.

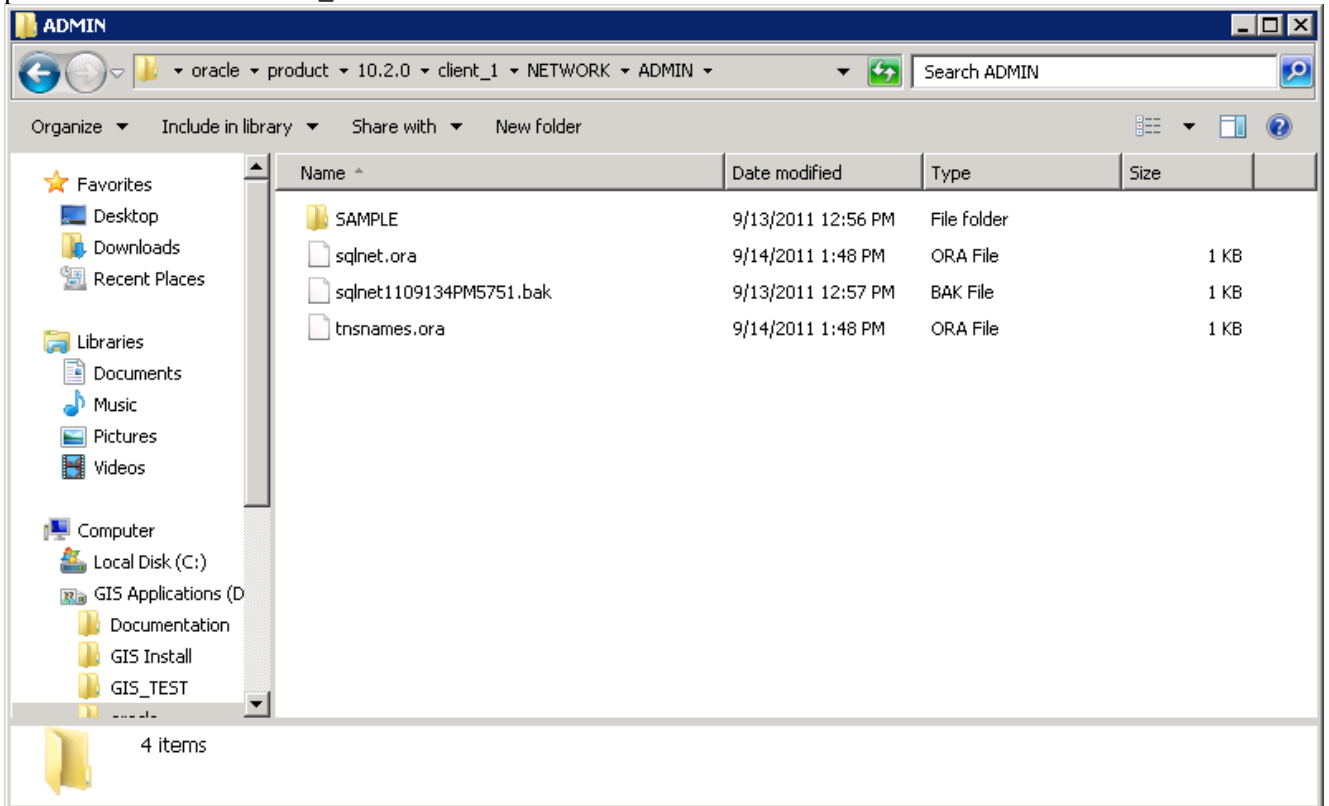


10. Press YES on the Exit confirmation window.

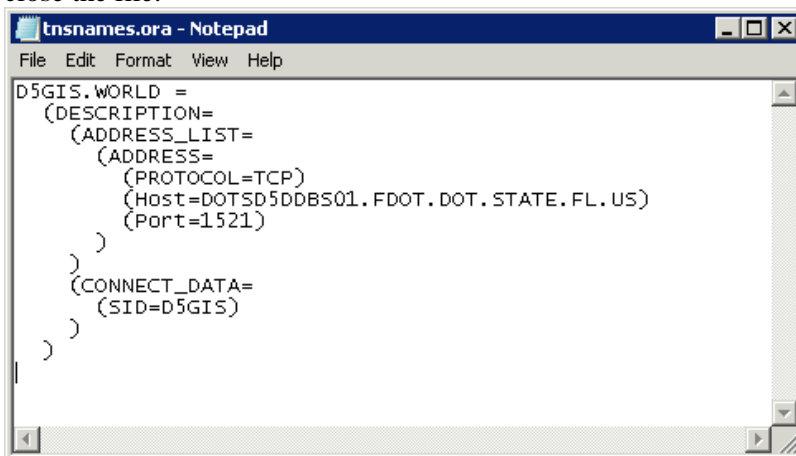


### 5.5 Oracle TNSNAMES.ora Configuration

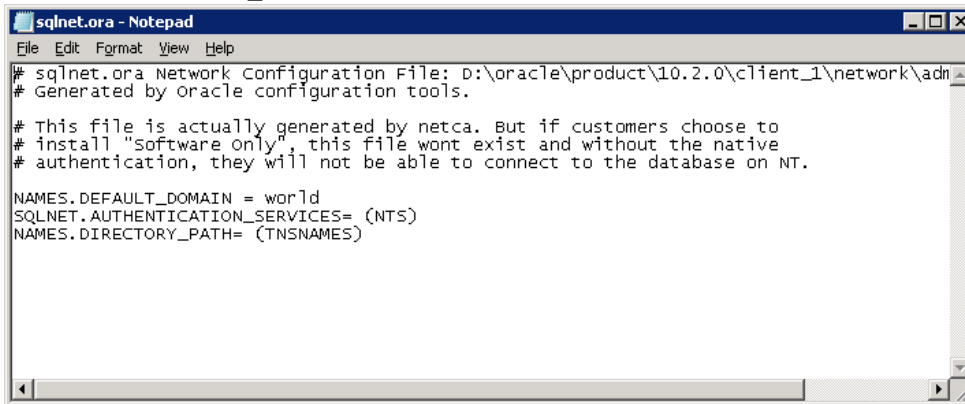
1. Before beginning the ArcSDE install you should receive a connection string from the CO-DBAT group. When you receive this connection string navigate to your Oracle install folder and go to oracle → product → 10.2.0 → client\_1 → Network → ADMIN



2. Once there open the tnsnames.ora file in notepad and past the connection string into the file, save it, and close the file.



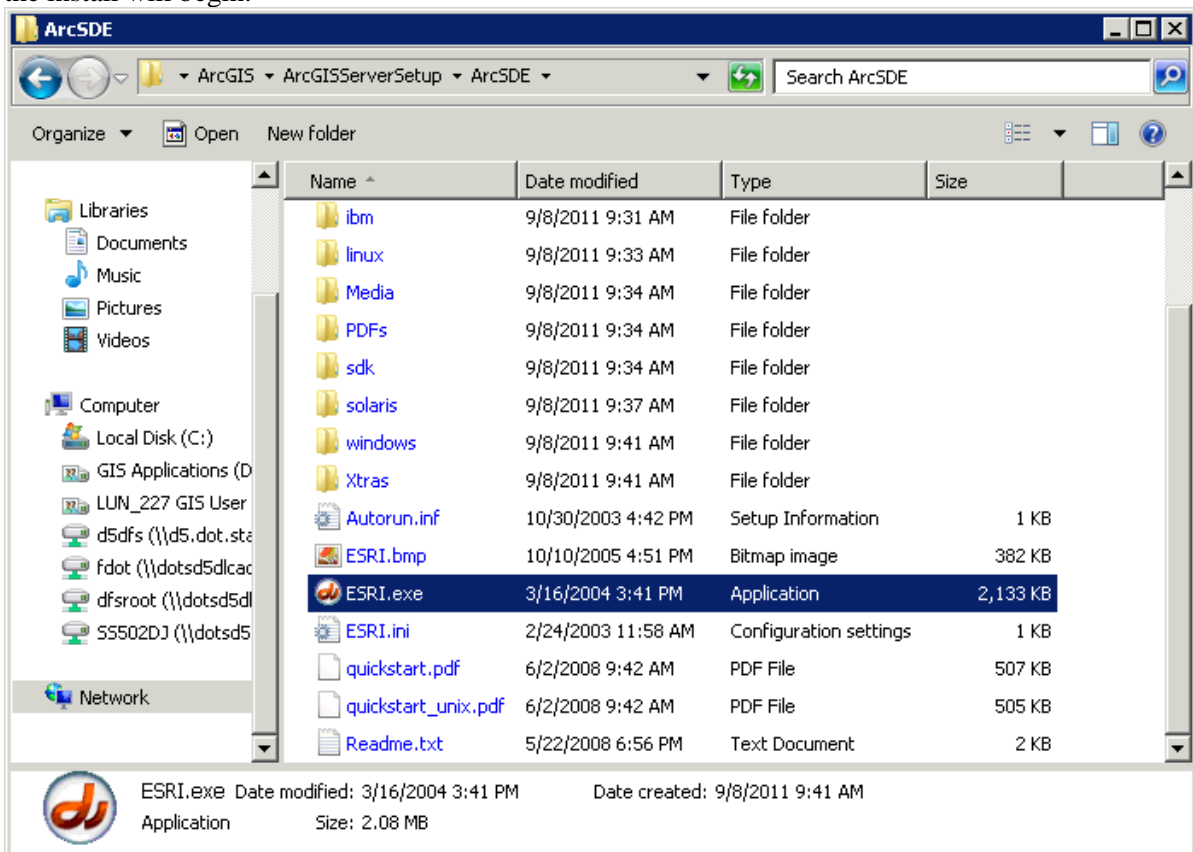
- Now open the sqlnet.ora file and add the following line after the lines with # at their beginning.  
NAMES.DEFAULT\_DOMAIN = world



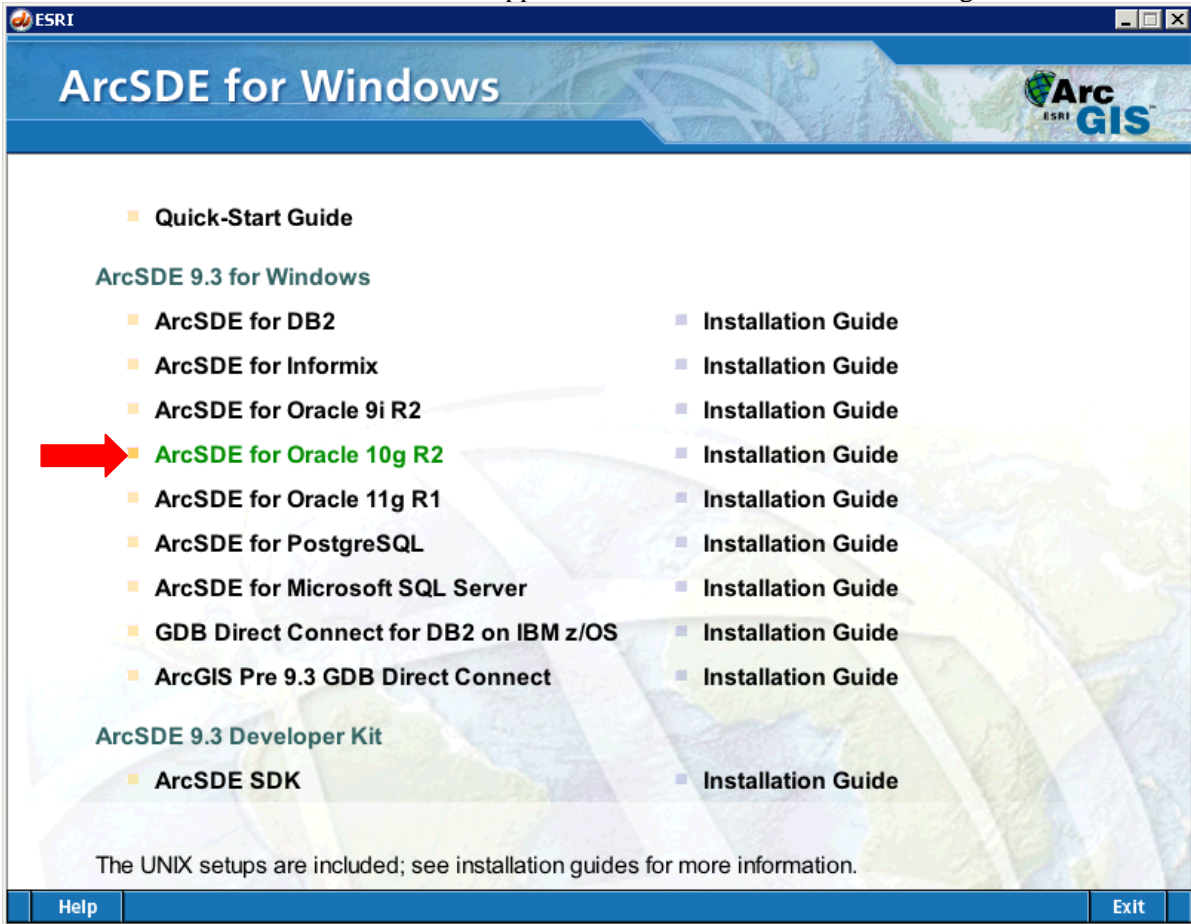
- Once this is done save and close the file.
- Close the file explorer.

### 5.6 ArcSDE 9.3 Install

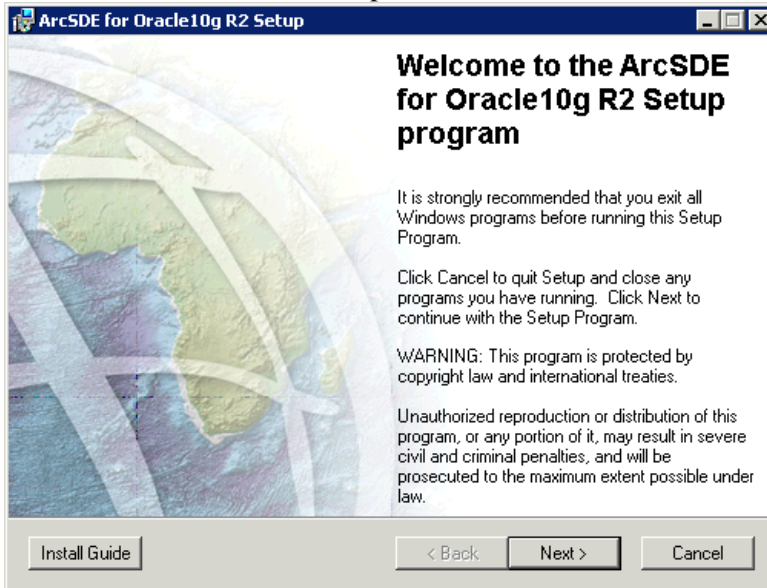
- Navigate to the ArcSDE 9.3 install directory and double click the ESRI.exe file or insert the media and the install will begin.



2. When the ArcSDE for Windows window appears click the ArcSDE for Oracle 10g R2 link.

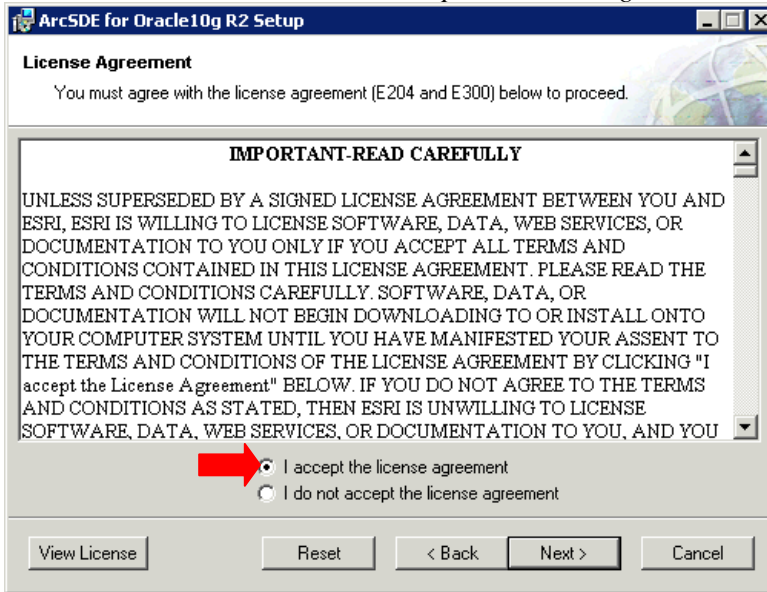


3. When install welcome screen opens click NEXT.

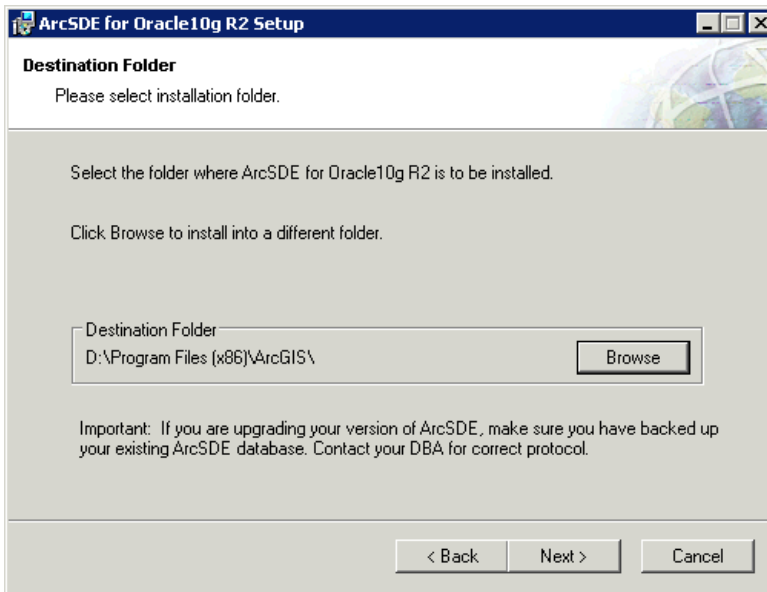




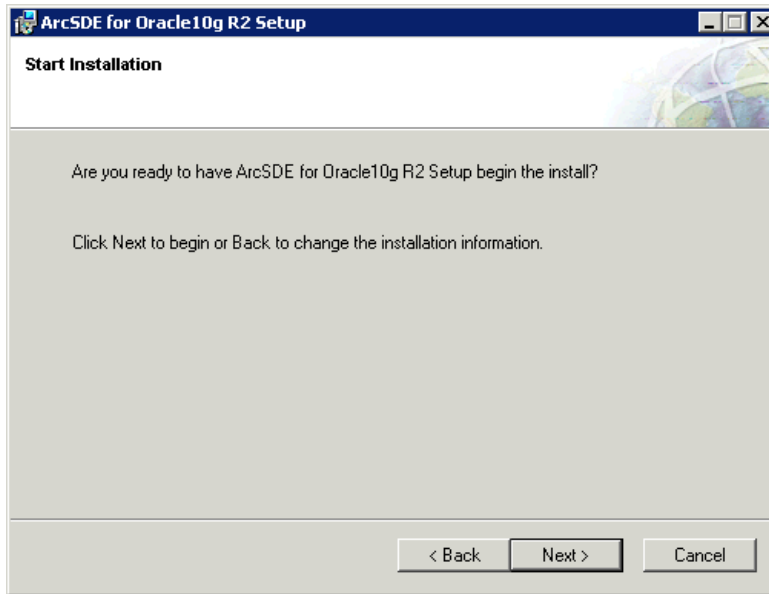
4. Click the radio button next to “I accept the license agreement” and press NEXT.



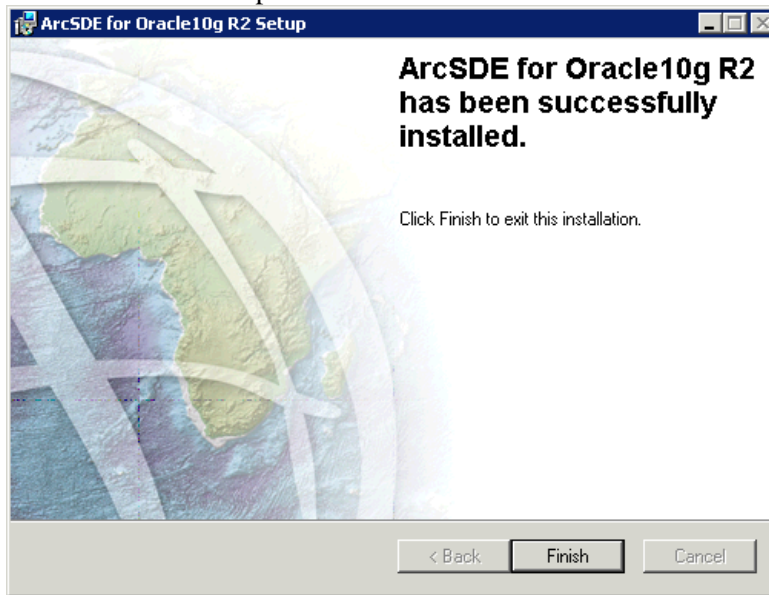
5. Change the install location so that it points at the install drive. In this case C:\ was changed to D:\  
Click NEXT



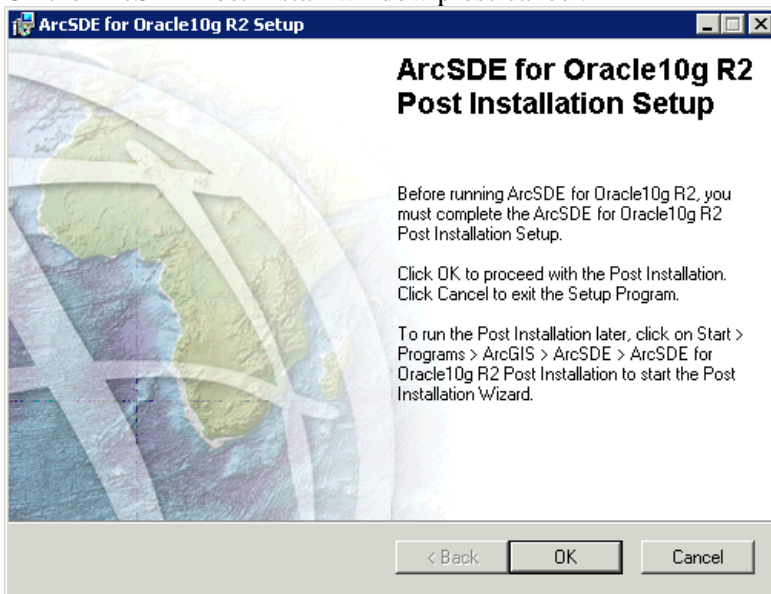
6. Click NEXT to start the install.



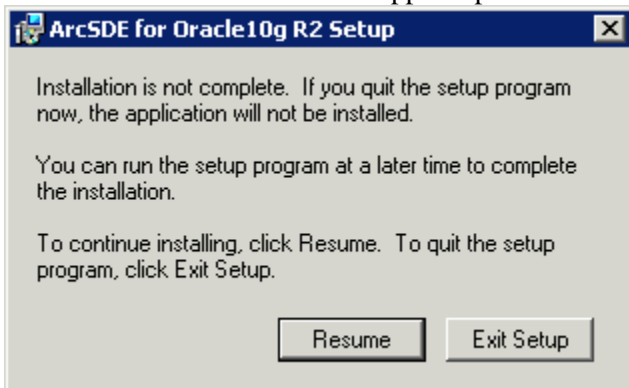
7. When the install completes click FINISH.



- On the ArcSDE Post Install window press cancel.

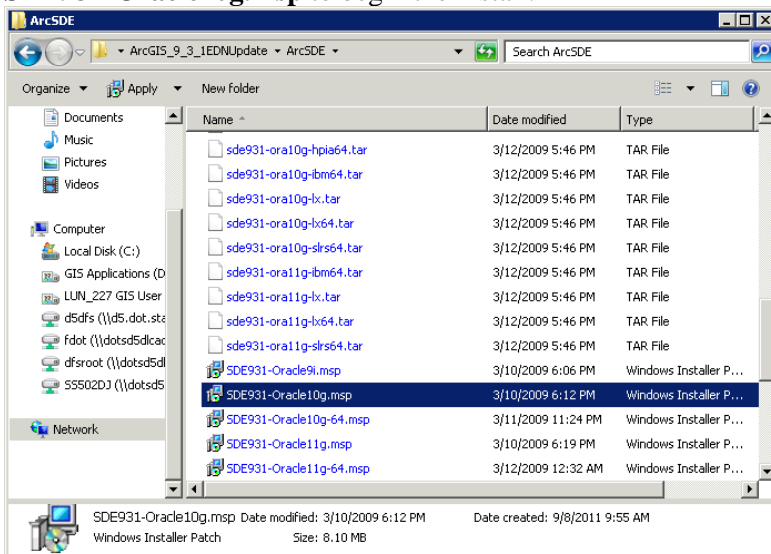


- When the confirm exit window appears press Exit Setup.

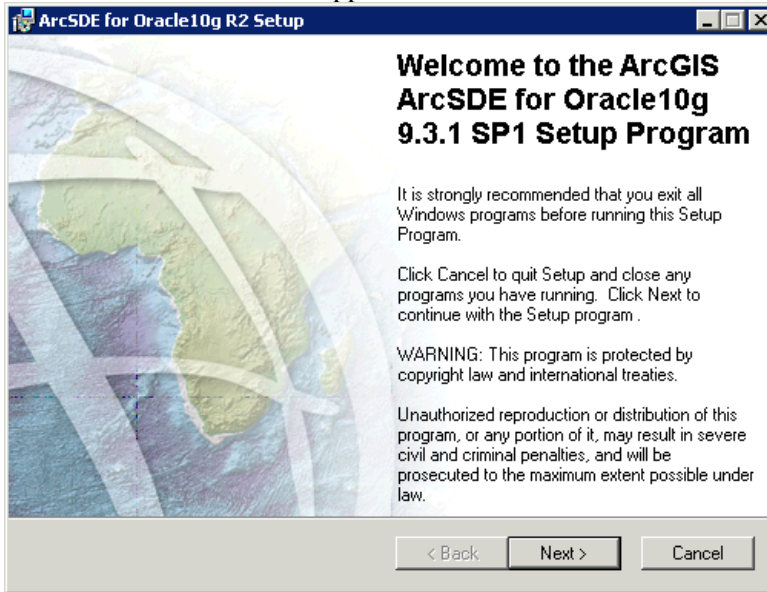


## 5.7 ArcSDE 9.3.1 Install

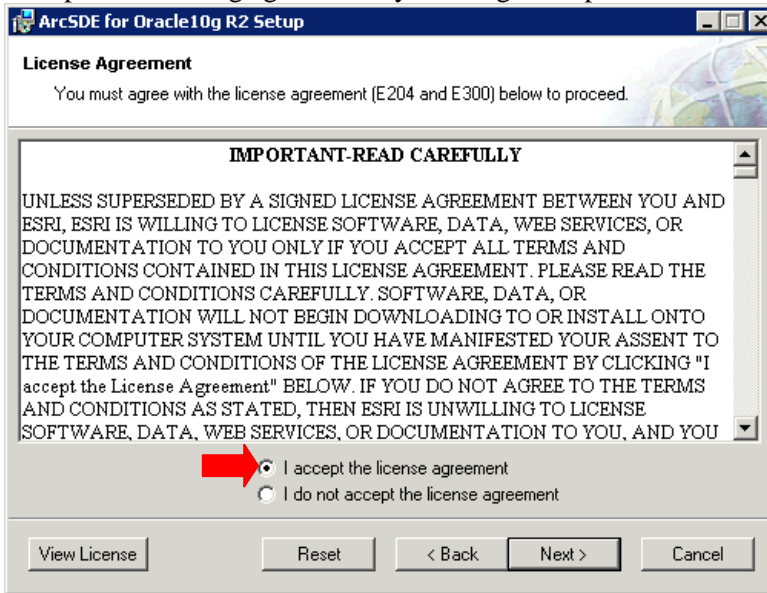
- Navigate to the 9.3.1 install directory and go into the SDE folder. Once in there double click on **SDE931-Oracle10g.msp** to begin the install.



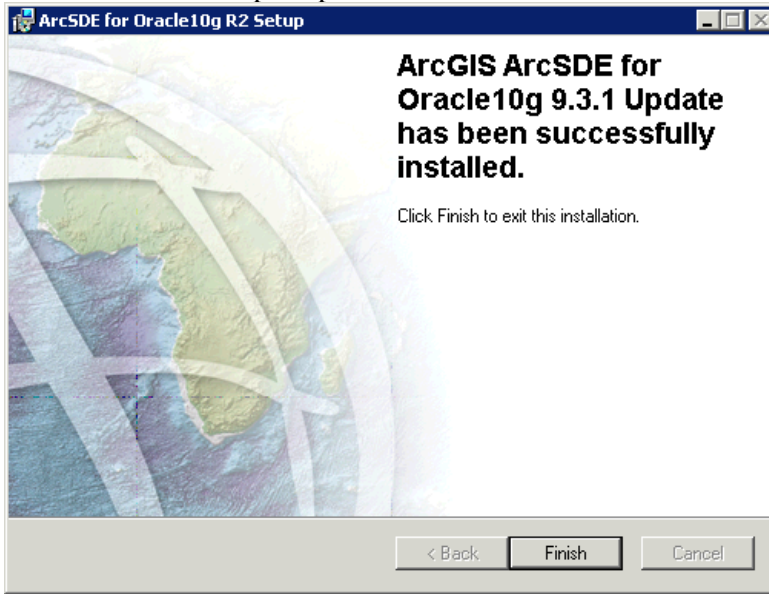
2. When the welcome screen appears click NEXT.



3. Accept the licensing agreement by clicking the top radio button. The press NEXT.

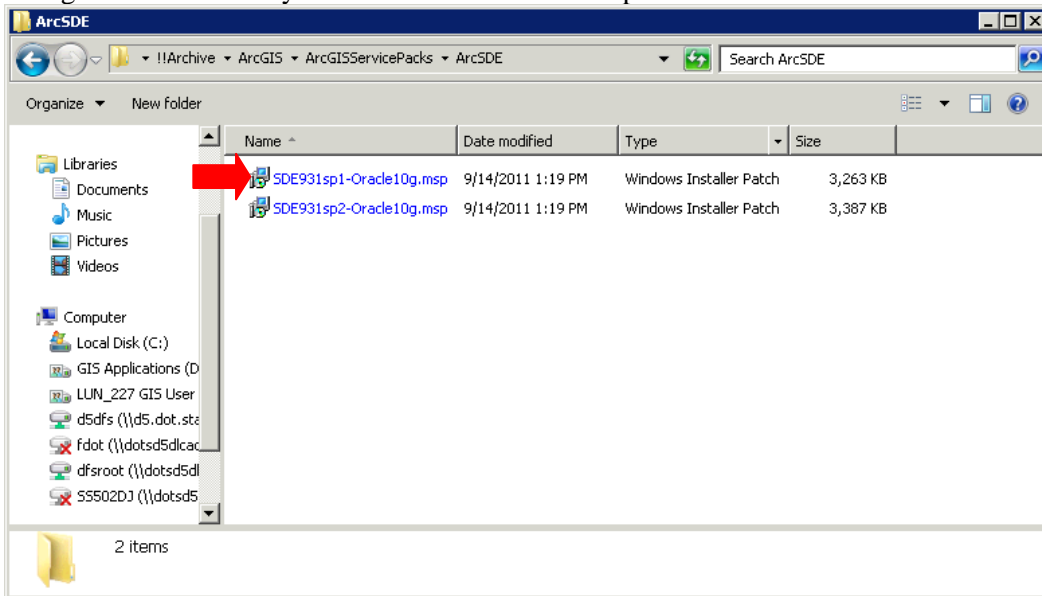


4. When the install complete press FINISH.

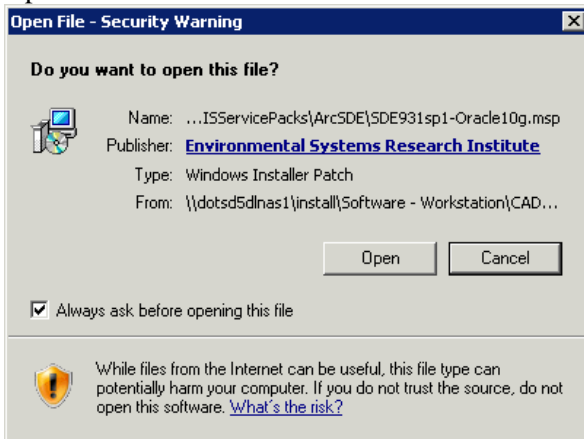


## 5.8 ArcSDE 9.3.1 SP 1 Install

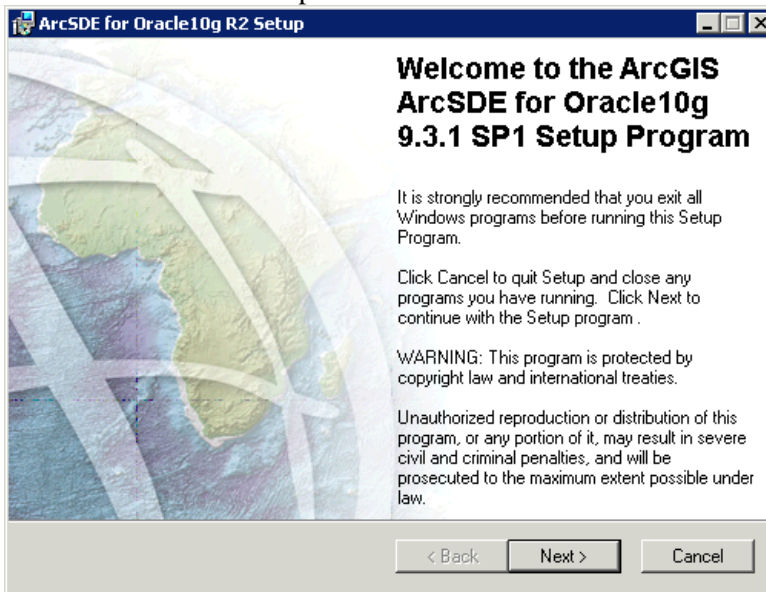
1. Navigate to the directory where the ArcSDE service packs were downloaded.



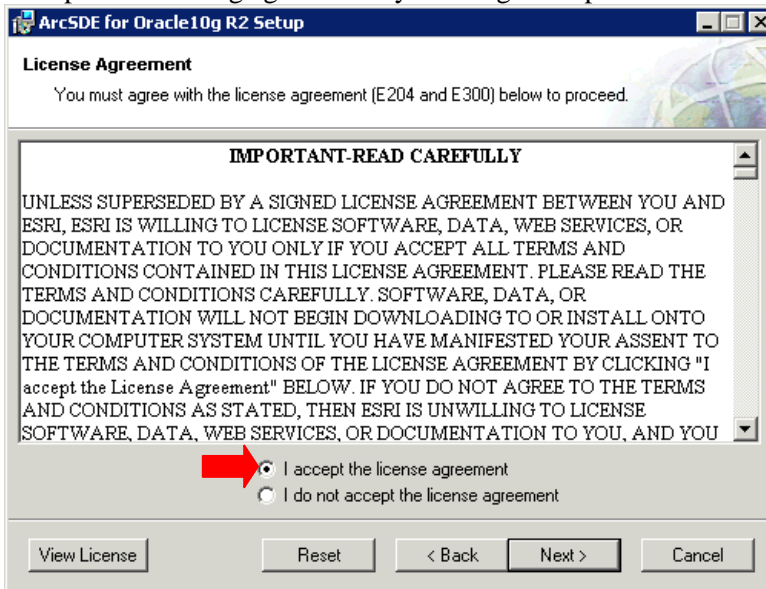
2. Double click the file named **SDE931sp1-Oracle10g.msp**. When the security warning appears press Open.



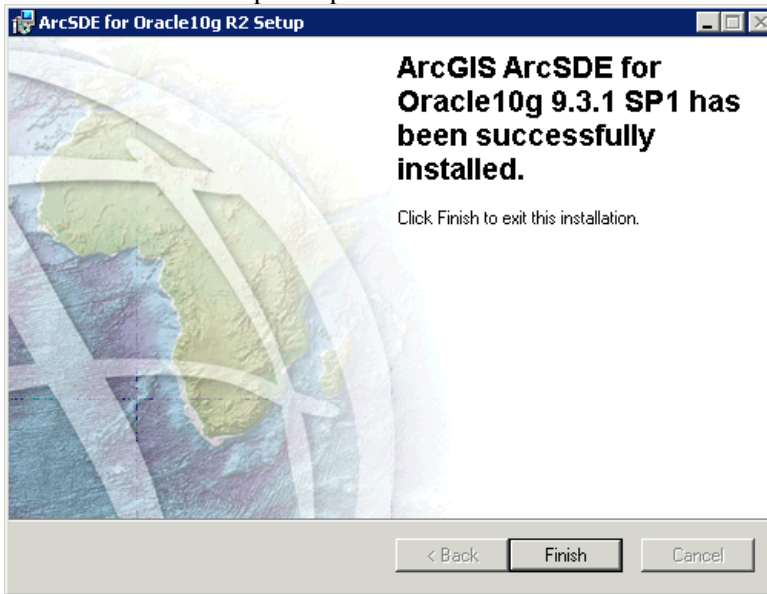
3. One the welcome screen press NEXT.



4. Accept the licensing agreement by clicking the top radio button. The press NEXT.

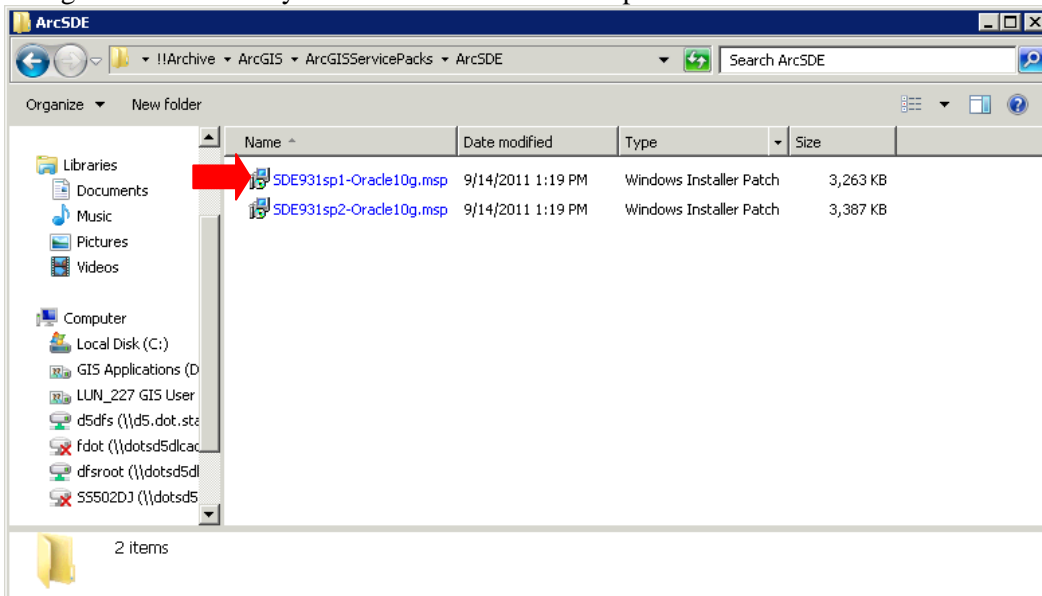


- When the install completes press FINISH.

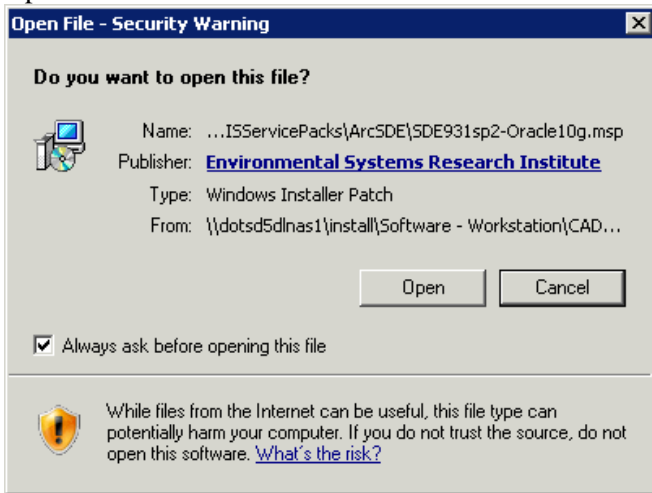


## 5.9 ArcSDE 9.3.1 SP 2 Install

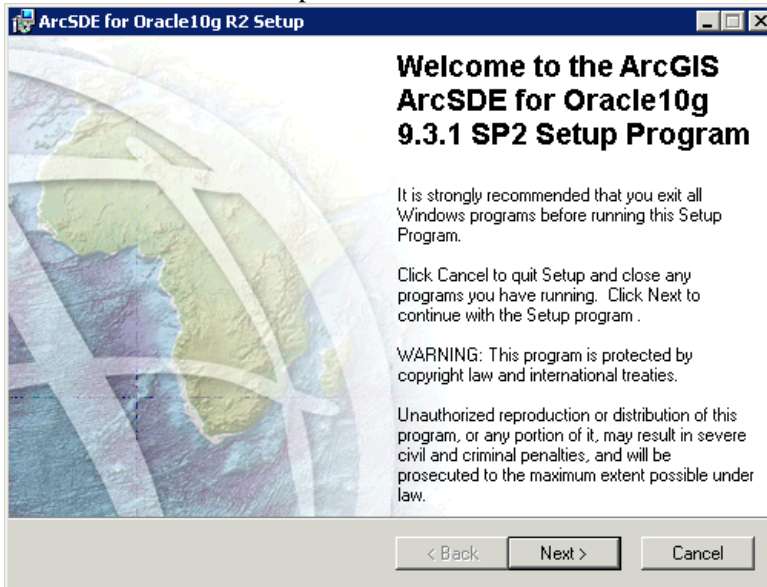
- Navigate to the directory where the ArcSDE service packs were downloaded.



2. Double click the file named **SDE931sp1-Oracle10g.msp**. When the security warning appears press Open.

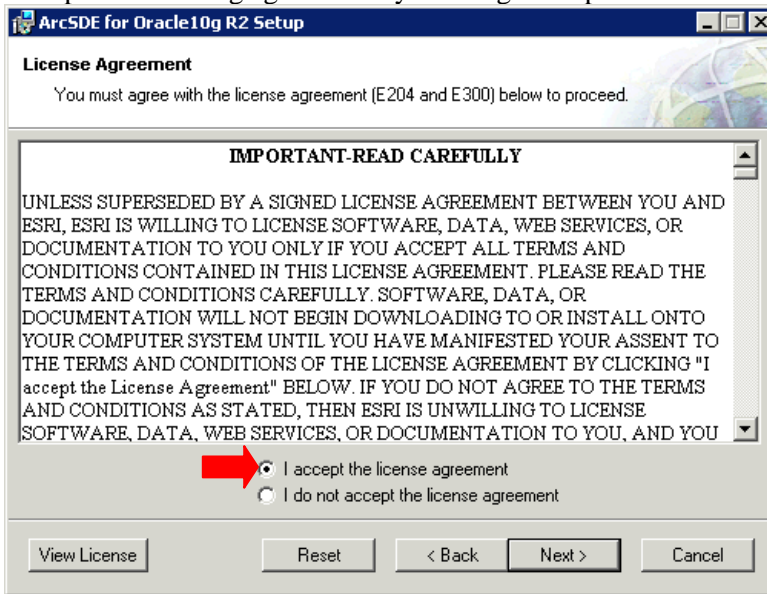


3. One the welcome screen press NEXT.

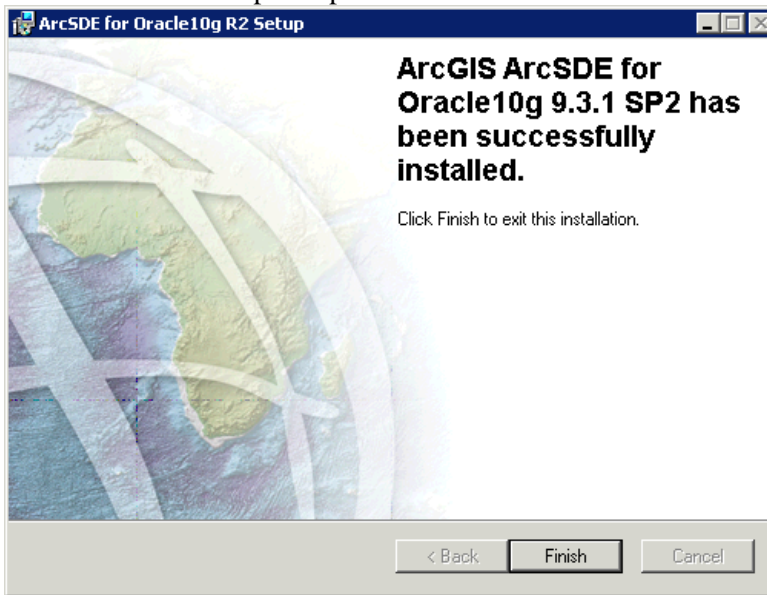




4. Accept the licensing agreement by clicking the top radio button. Then press NEXT.

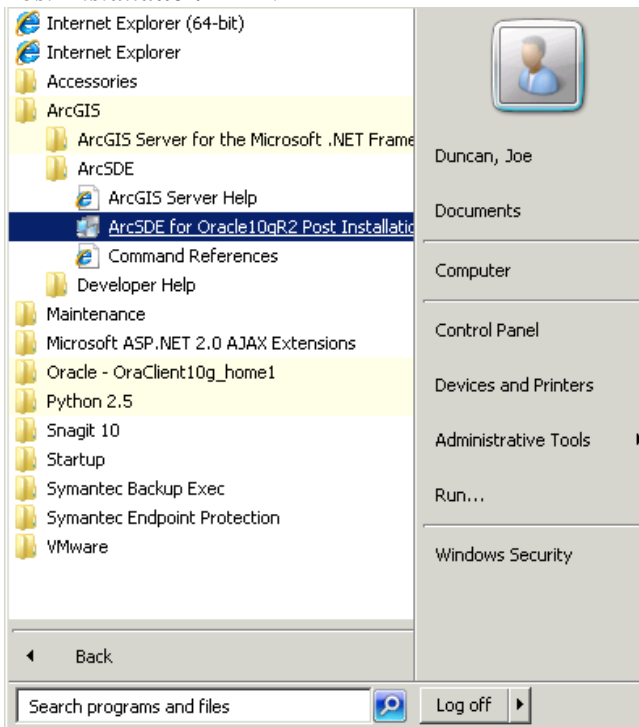


5. When the install completes press FINISH.

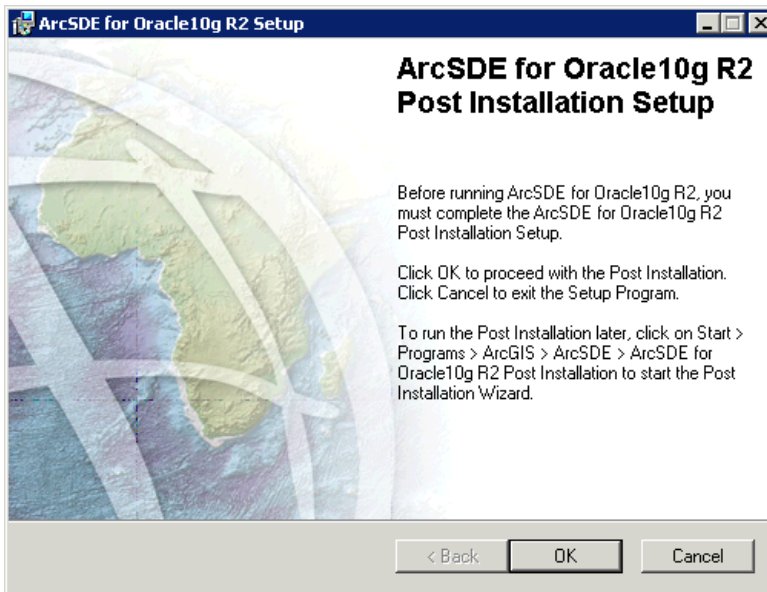


### 5.10 ArcSDE Post Install

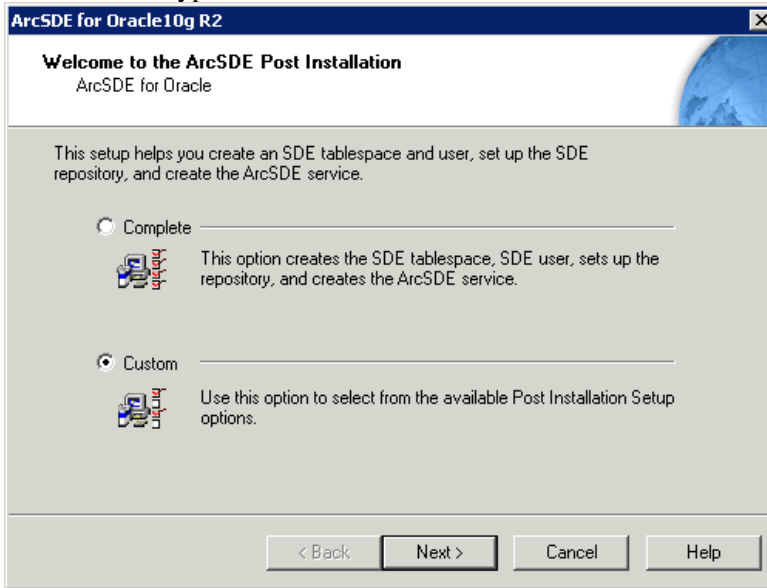
1. Go to Start → All Program → ArcGIS → ArcSDE and then click on the “*ArcSDE for Oracle10gR2 Post Installation*” link.



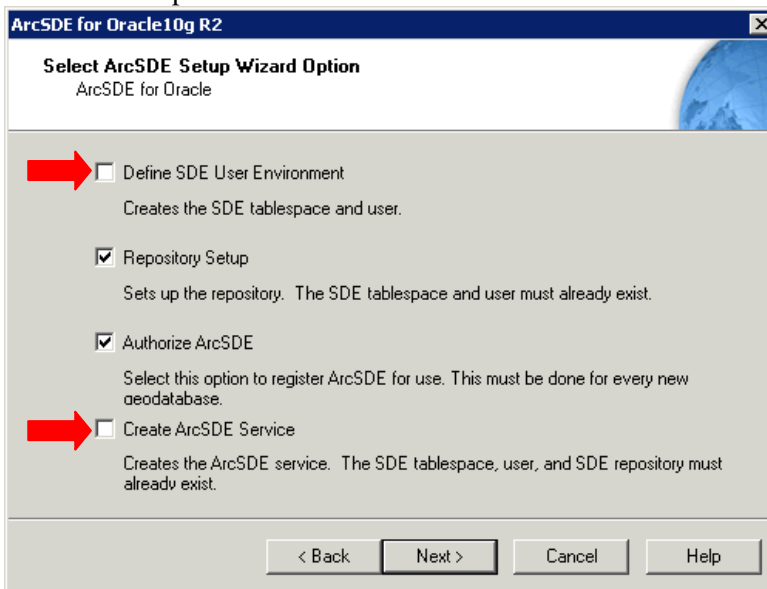
2. Click OK on the welcome screen.



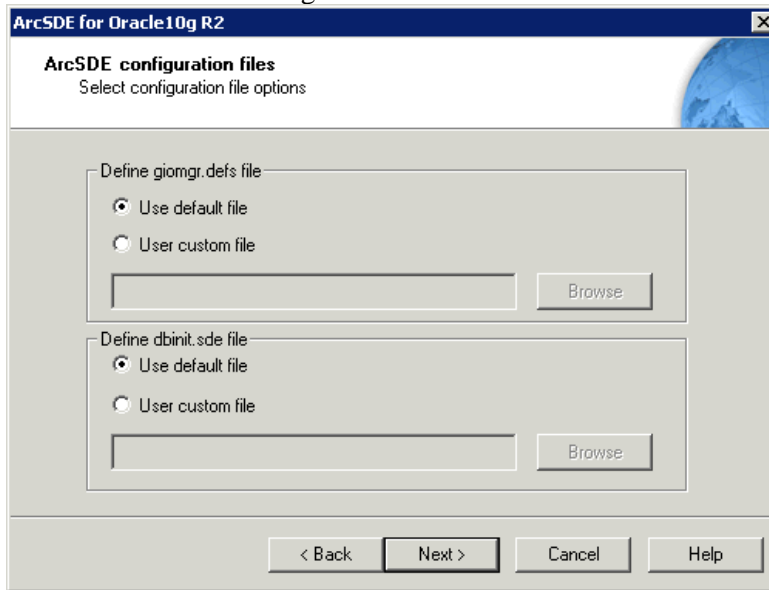
3. On the install type screen select the radio button next to Custom and then click NEXT.



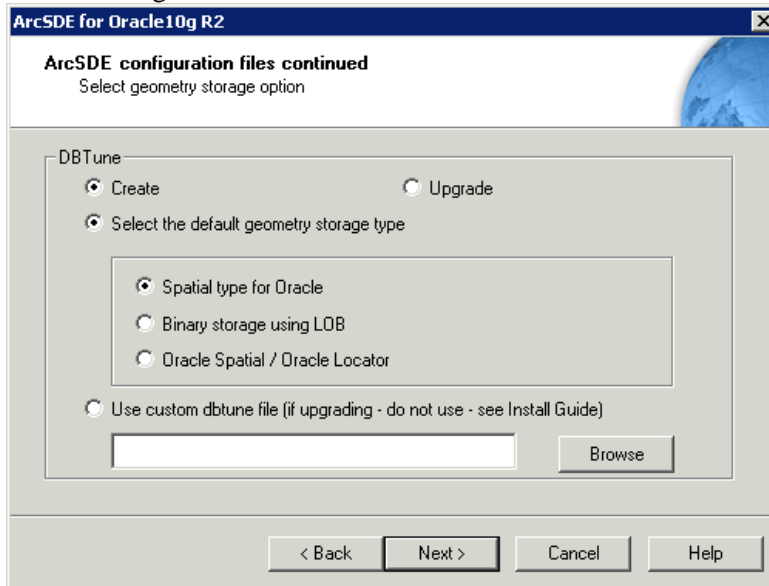
4. On the setup wizard options screen uncheck "Define SDE User Environment" and "Create ArcSDE Service" then press NEXT.



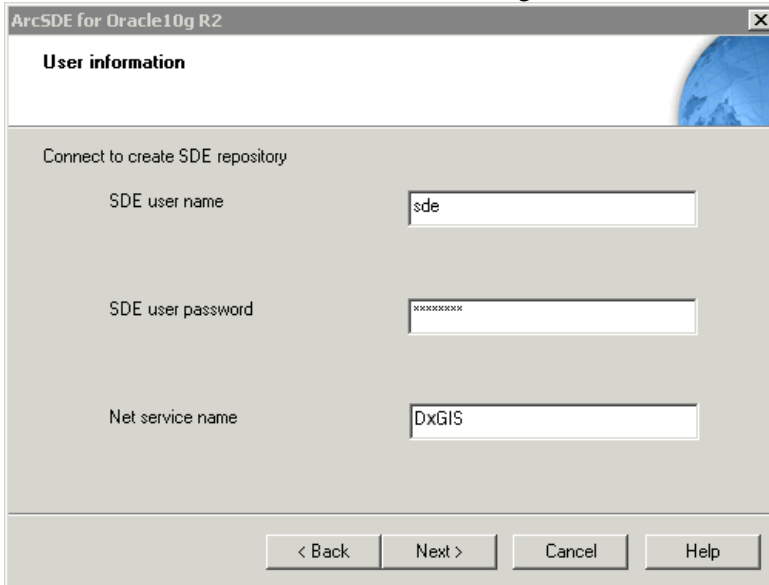
5. Press NEXT on the configuration files window.



6. On the configuration files continued window click NEXT.

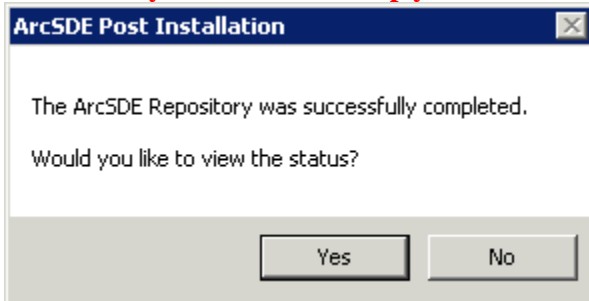


7. On the User Information screen enter the SDE User ID and password and the Net service name for the database. The net service name is the name given to the database by CO-DBAT.

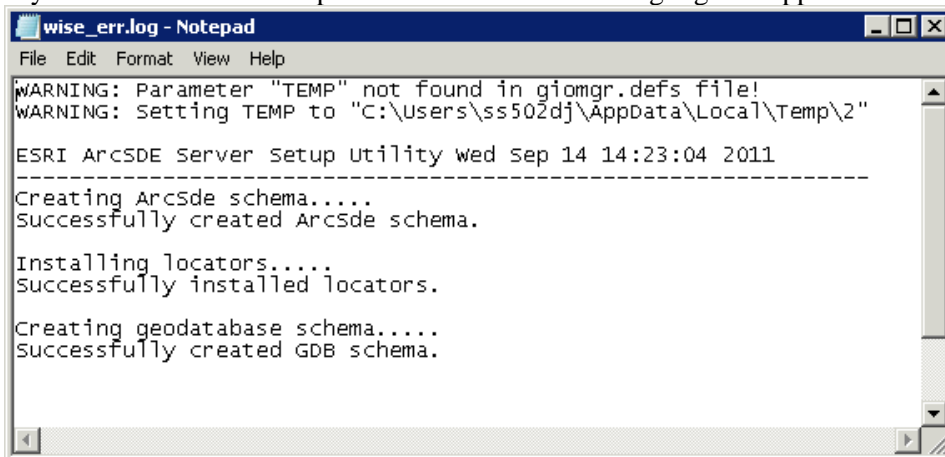


8. Once this information is entered press NEXT. The following prompt should appear. Click YES if you want to view the log.

**NOTE: If there was a failure contact the person responsible for setting up the database at CO-DBAT. They will be able to help you resolve any issues.**

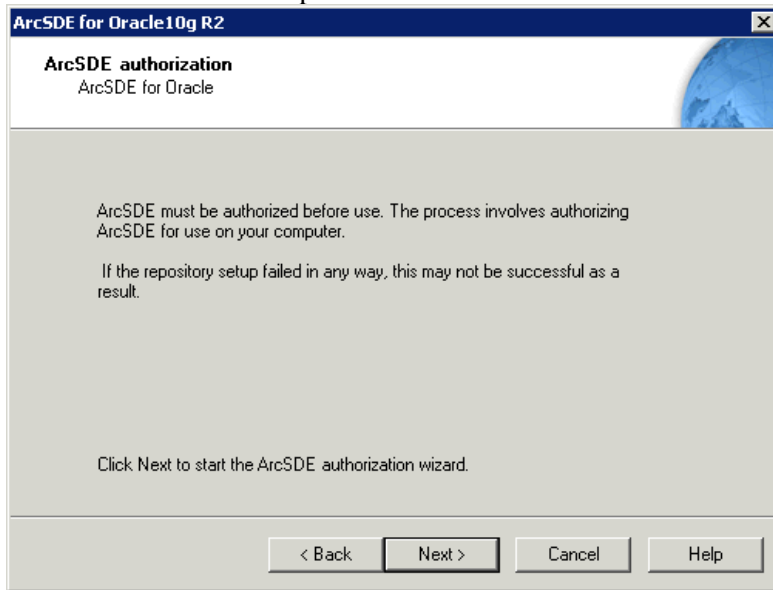


9. If you clicked YES on the previous screen the following log will appear.

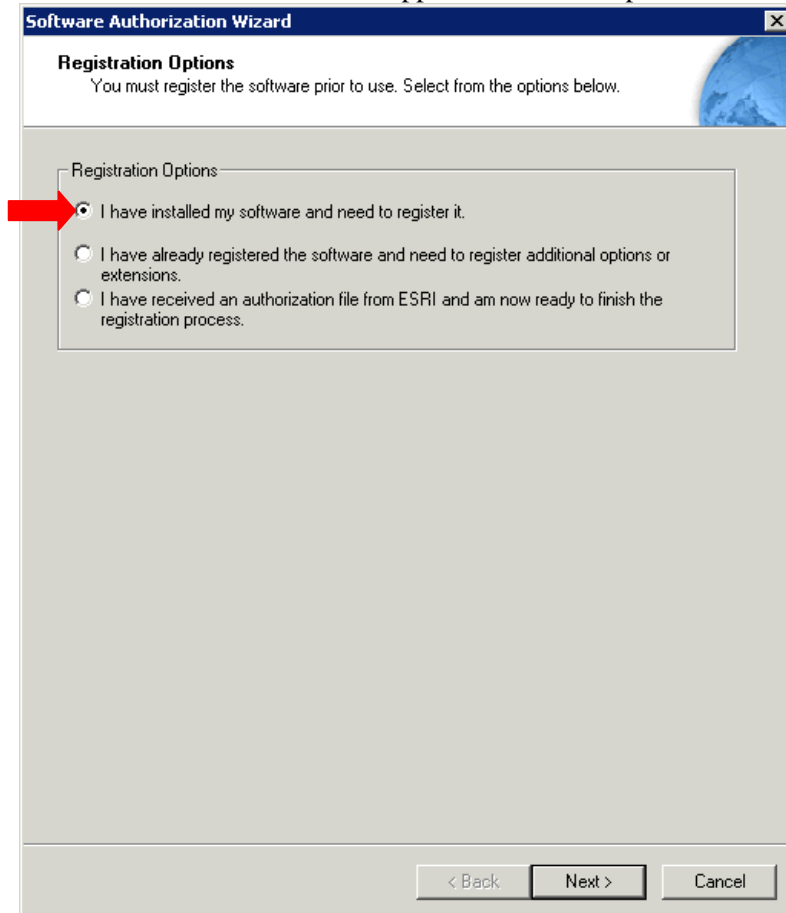


10. Close the log

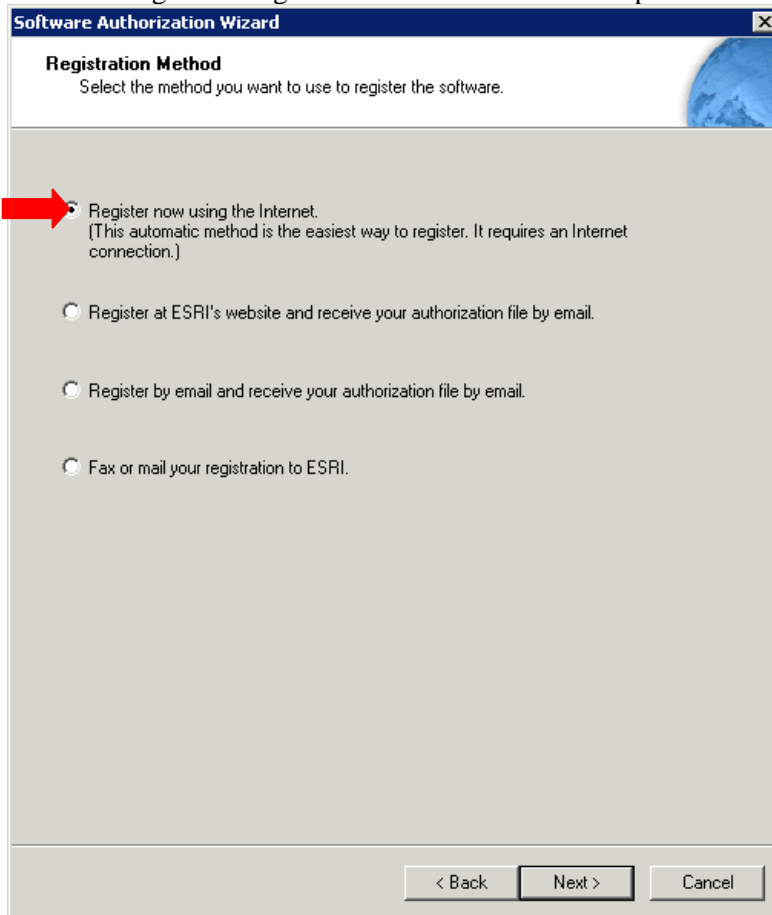
11. On the Authorize screen press NEXT.



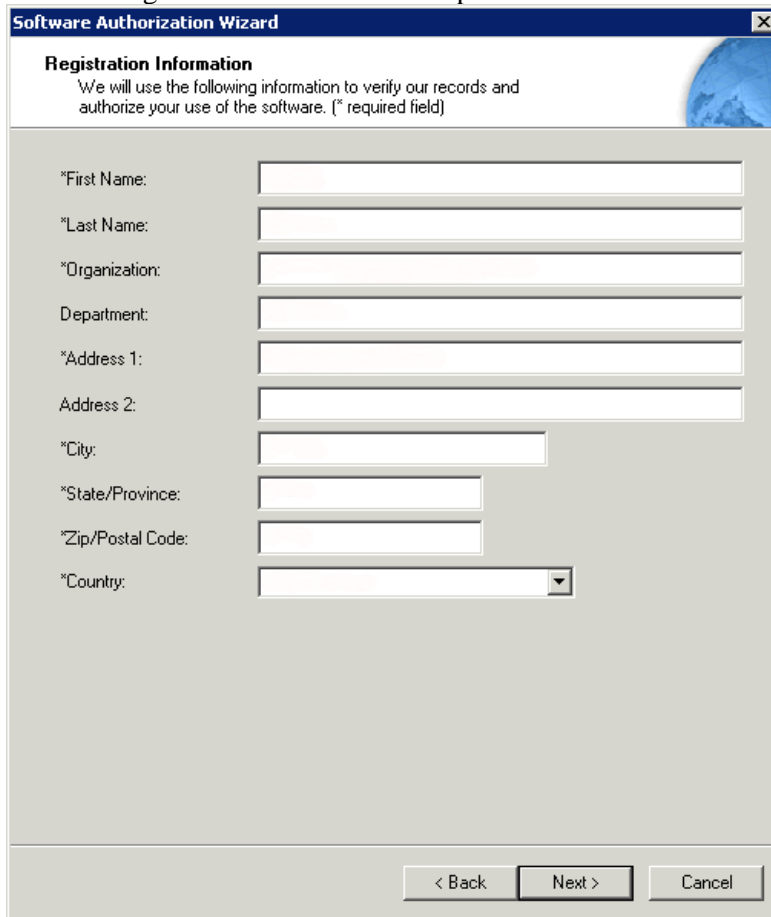
12. When the authorization wizard appears select the top radio button and press NEXT.



13. Select the register using the internet radio button and press NEXT.



14. Enter the registration information and press NEXT.



The screenshot shows a dialog box titled "Software Authorization Wizard" with a close button (X) in the top right corner. The main heading is "Registration Information". Below the heading is a note: "We will use the following information to verify our records and authorize your use of the software. (\* required field)". The dialog contains several input fields:

- \*First Name: [Text Input]
- \*Last Name: [Text Input]
- \*Organization: [Text Input]
- Department: [Text Input]
- \*Address 1: [Text Input]
- Address 2: [Text Input]
- \*City: [Text Input]
- \*State/Province: [Text Input]
- \*Zip/Postal Code: [Text Input]
- \*Country: [Dropdown Menu]

At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".



15. Continue entering information then press NEXT.

**Software Authorization Wizard**

**Registration information (continued)**  
We will use the following information to verify our records and authorize your use of the software. (\* required field)

\*Phone Number:

FAX Number:

\*Email:

\*Your Organization:

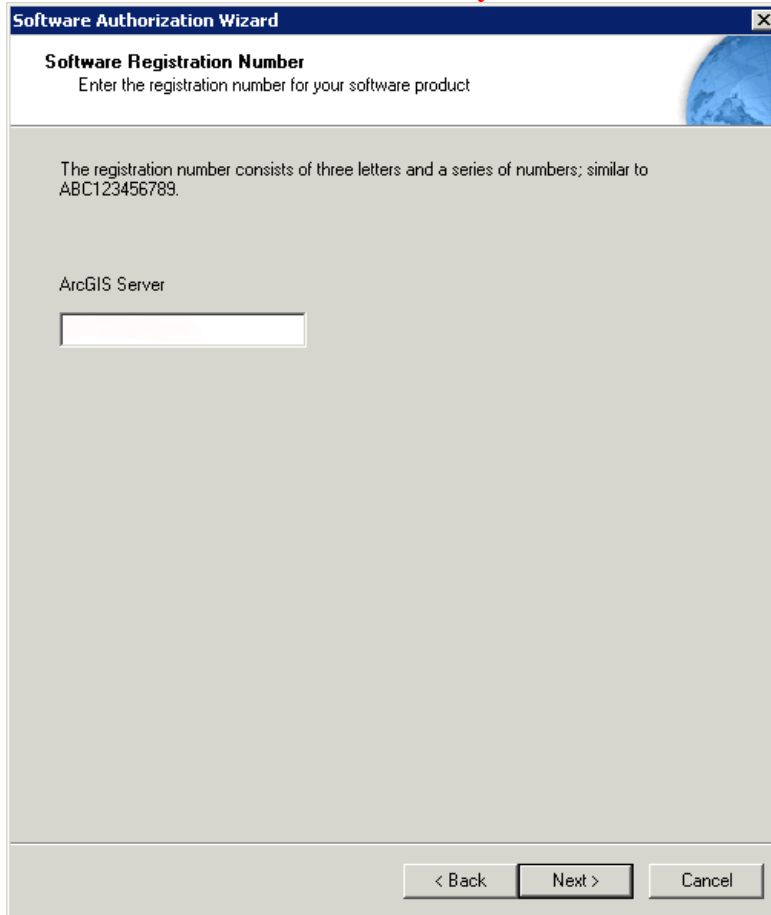
\*Your Industry:

\*Yourself:

The personal information you supplied is protected under ESRI's privacy policy. If you want to view ESRI's privacy policy, click the View button below.

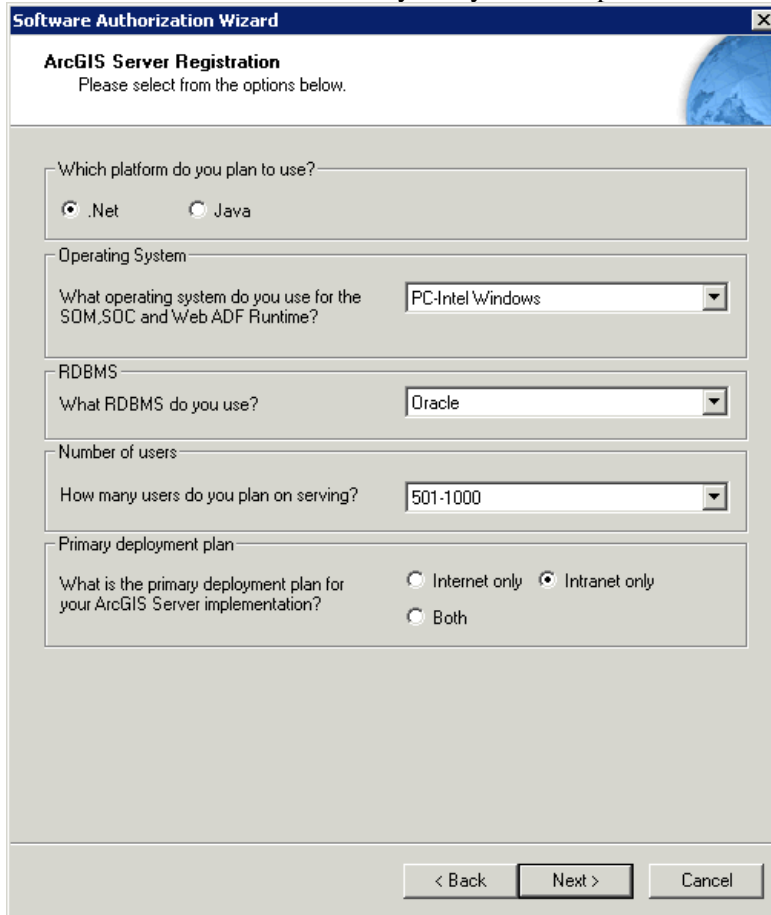
< Back   Next >   Cancel

16. Enter the registration code received from ESRI. Press NEXT  
**NOTE: This should be the same code you used for ArcGIS Server.**



The screenshot shows a Windows-style dialog box titled "Software Authorization Wizard". The main heading is "Software Registration Number" with the instruction "Enter the registration number for your software product". Below this, a note states: "The registration number consists of three letters and a series of numbers; similar to ABC123456789." The software name "ArcGIS Server" is listed above a text input field. At the bottom, there are three buttons: "< Back", "Next >" (which is highlighted), and "Cancel".

17. Enter the information relevant to your system and press NEXT.



The screenshot shows the 'Software Authorization Wizard' dialog box for ArcGIS Server Registration. The title bar reads 'Software Authorization Wizard' with a close button. The main heading is 'ArcGIS Server Registration' with the instruction 'Please select from the options below.' and a small globe icon. The form is divided into several sections:

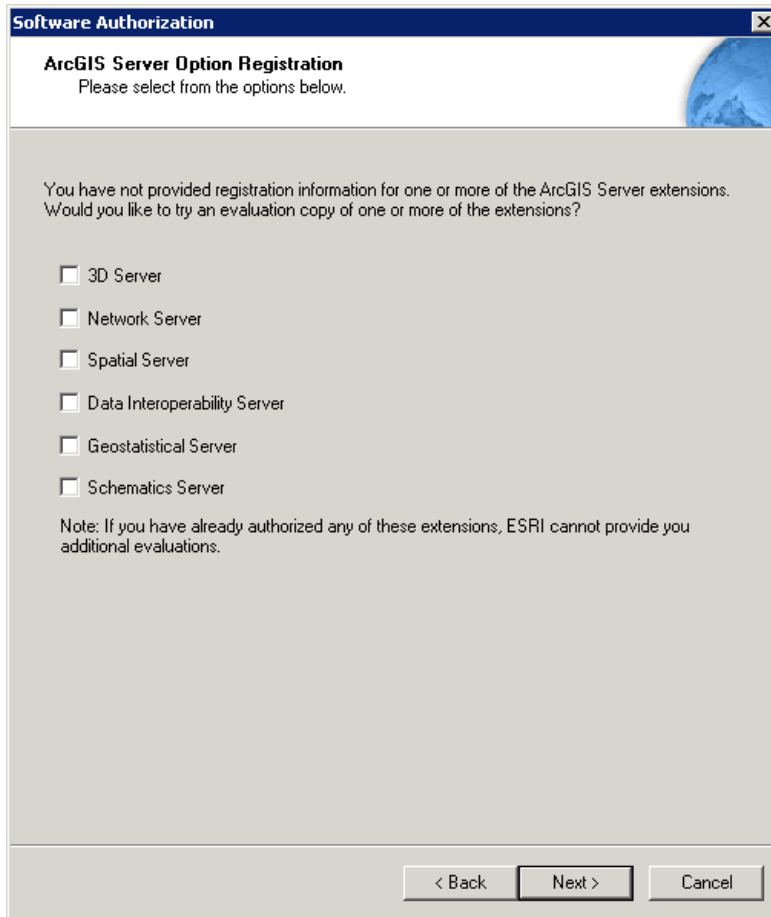
- Which platform do you plan to use?**: Radio buttons for '.Net' (selected) and 'Java'.
- Operating System**: A dropdown menu for 'What operating system do you use for the SOM, SOC and Web ADF Runtime?' with 'PC-Intel Windows' selected.
- RDBMS**: A dropdown menu for 'What RDBMS do you use?' with 'Oracle' selected.
- Number of users**: A dropdown menu for 'How many users do you plan on serving?' with '501-1000' selected.
- Primary deployment plan**: Radio buttons for 'Internet only', 'Intranet only' (selected), and 'Both'.

At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

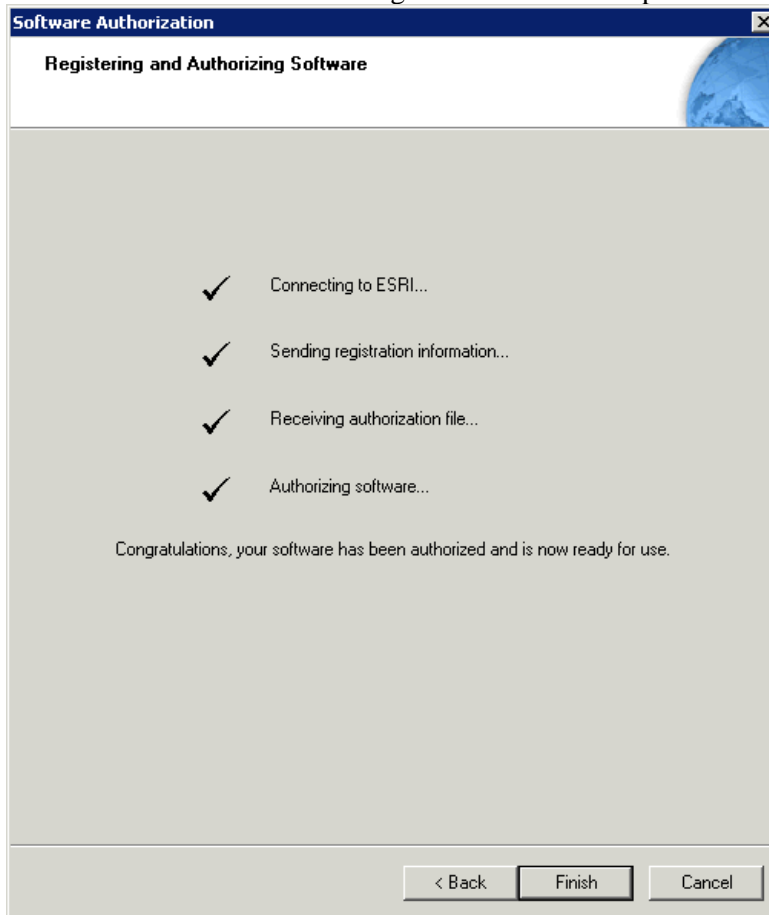
18. Select the Radio button next to *“I do not want to register any extensions at this time”* and press NEXT

The screenshot shows a window titled "Software Authorization Wizard" with a close button (X) in the top right corner. The main title is "ArcGIS Server Option Registration" with the instruction "Please select from the options below." and a small globe icon. The "Options" section contains two radio buttons: the first is selected and labeled "I do not want to register any extensions at this time," and the second is labeled "I have a registration number for one or more extensions." Below this is the "Registration numbers" section, which lists seven server types with corresponding text input fields: 3D Server, Network Server, Spatial Server, Data Interoperability Server, Geostatistical Server, Schematics Server, and Virtual Earth. A "Virtual Earth Information" button is located below the Virtual Earth field. At the bottom of the window are three buttons: "< Back", "Next >", and "Cancel".

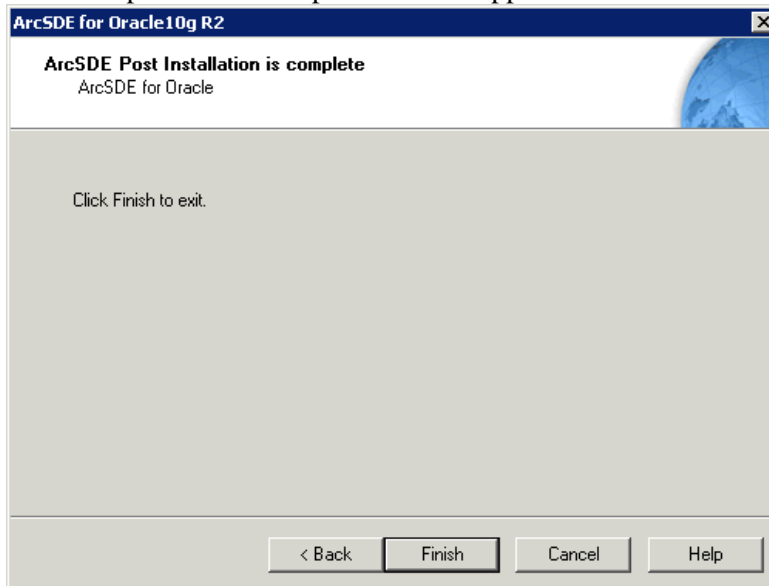
19. Click NEXT on the trial window.



20. The license authorization will begin. When it finishes press FINISH.



21. When the post install complete window appears click FINISH.

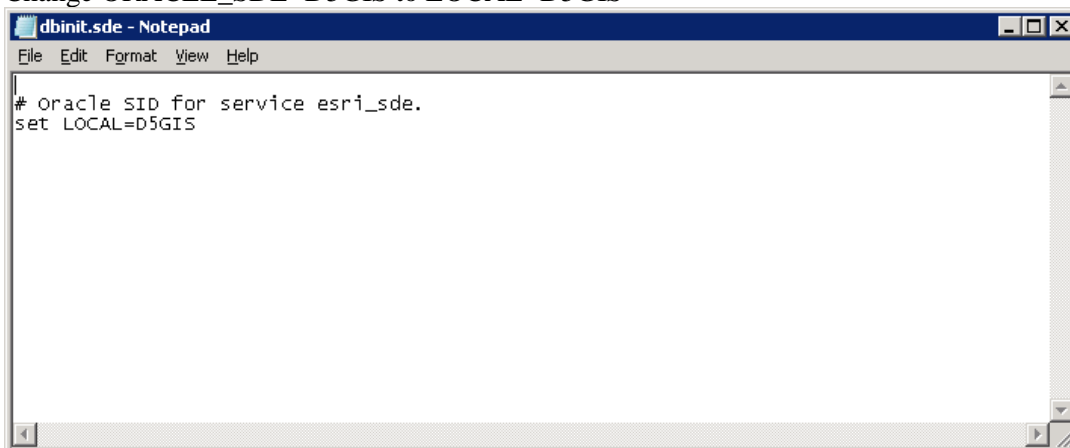


## 5.11 ArcSDE Service Configuration

1. This process was developed from the linked ESRI help document starting with step 6. <http://support.esri.com/index.cfm?fa=knowledgebase.techarticles.articleShow&d=23753>
2. Open a command prompt by going to Start → Run and type cmd
3. Change the working directory to “D:\Program Files (x86)\ArcGIS\ArcSDE\ora10gexe”
4. In the command window enter the following command replacing <sdepassword> with the sde userid’s password. Press enter after entering the line below.
  - a. sdeservice -o create -p <sdepassword> -d ORACLE,D5GIS -n -i esri\_sde
  - b. If the service is created successfully you should see the following message.

```
Copying contents of C:\Program Files\ArcGIS\ArcSDE\ora10gexe\etc\dbinit.sde to  
C:\Program Files\ArcGIS\ArcSDE\ora10gexe\etc\dbinit.sde.backup.  
  
Successfully created and registered esri_sde service  
  
C:\Program Files\ArcGIS\ArcSDE\ora10gexe>_
```

5. Open explorer and navigate to “D:\Program Files (x86)\ArcGIS\ArcSDE\ora10gexe/etc” and open dbinit.sde in notepad.
6. Change ORACLE\_SDE=D5GIS to LOCAL=D5GIS



7. Save the file can close it.
8. Navigate to C:\Windows\System32\Drivers\Etc and open the services file in notepad.
9. Once the file is open scroll to the bottom and verify that the following service is listed:
  - a. Esri\_sde 5151/tcp #ArcSDE for Oracle
  - b. If it is not there add it on a new line at the end of the file.
10. Save and close the services file.
11. Switch back to the command window and type in the following and hit enter.
  - a. Net start esri\_sde
  - b. The service should start and you should see the following.

```
C:\Program Files\ArcGIS\ArcSDE\ora10gexe>net start esri_sde  
The ArcSde Service(esri_sde) service is starting.  
The ArcSde Service(esri_sde) service was started successfully.  
  
C:\Program Files\ArcGIS\ArcSDE\ora10gexe>_
```

12. Once the service starts the ArcSDE install is complete.