

# **Voluntary Service System (VSS) Installation Guide for the EMC**

**Version 3.1  
May 2, 2003**

Department of Veterans Affairs  
VHA System Design & Development (SD&D)  
VistA Migration Service



## Revision History

### Documentation History

Date	Revision	Description	Author
March 18, 2003	1.0	<p>The <i>VSS Installation Guide for the EMC</i> issued as Part 1 of the <i>VSS Installation Guide</i>. The document contained instructions for:</p> <ul style="list-style-type: none"> <li>• Installing and upgrading the VSS application and database</li> <li>• Migrating site data to the EMC</li> <li>• Performing initial site administration and ongoing EMC administration using the VSS application.</li> </ul>	Sachy Kulkarni, Deborah Goff, Conrad Sweeting, and Jim Alexander.
May 2, 2003	2.0	<p>The <i>VSS Installation Guide for the EMC</i> issued as a standalone document, without site implementation materials.</p> <p>The following sections were added:</p> <ul style="list-style-type: none"> <li>• “Maintaining the VSS Databases” (maintaining the production, customer service, test, and training versions of the database)</li> <li>• “Acknowledgements/Notifications” (a subsection to “Migrating Site Data to EMC”).</li> </ul>	

### Patch History

The history of VSS is included in the application Release Notes.

## Revision History

## **Acknowledgements**

The Voluntary Service System (VSS) team consists of the following personnel:

- VistA Migration Program Manager – Maureen Hoye
- Project Manager – Rebecca Byrd
- Developers – Mike Langley, Ron DiMiceli, and Rick Jones
- Requirements Analysts – Conrad Sweeting and Ken Bowers
- Database Administrators – Deborah Goff and Don Creaven
- System Administrator – Mike Garvey
- Build Master – Sachy Kulkarni
- Testers – Gary Davisson and Rob Duarte
- Technical Writers – Jim Alexander and Phylis Carlin
- Training Coordinator – Monique Allen

## Acknowledgements

# Contents

<b>Revision History</b> .....	<b>iii</b>
Documentation History .....	iii
Patch History .....	iii
<b>Acknowledgements</b> .....	<b>v</b>
<b>Contents</b> .....	<b>vii</b>
<b>Introduction</b> .....	<b>x</b>
<b>Installing the VSS Application</b> .....	<b>1</b>
Introduction .....	1
Installation Procedures .....	1
Removing the Previous Installation .....	2
Creating the Application Path .....	2
Preparing the Web Server .....	3
Running the VSS Install Wizard .....	4
Creating the DSN .....	9
<b>Applying VSS Updates</b> .....	<b>15</b>
Introduction .....	15
Locating Existing Web Server Path .....	15
Running the VSS Executable .....	17
Editing Web.Config Files for Vtk and VtkUser .....	18
<b>Installing Multiple Instances of VSS</b> .....	<b>23</b>
Introduction .....	23
Setting up the Database .....	23
Multiple Application Versions .....	24
Applying a VSS Update .....	24
Creating a New Instance or Version .....	24
Using the Installed Version .....	24
Using a Different Application Version .....	25
Creating a New Web Site .....	26
Creating Application Virtual Directories .....	29
Vtk and VtkUser .....	29
CrystalReportWebFormViewer and aspnet_client .....	34
Editing the Web.Config File .....	34
<b>Setting Up the Original VSS Database</b> .....	<b>37</b>
Introduction .....	37
Creating a New SQL Server Database .....	37
Restoring the Backup File to the New Database .....	40
Setting the SQL Server Login User .....	43

<b>Upgrading the VSS Database.....</b>	<b>53</b>
Introduction.....	53
Upgrade Overview.....	53
Creating a New Test Database Directory.....	54
Restoring the Test Database.....	54
Manually Executing the Monthly Rollup (Optional).....	57
Executing the DTS Packages for Upgrades.....	57
<b>Maintaining the VSS Databases .....</b>	<b>61</b>
The Five VSS Databases.....	61
Vista Intermediate Database.....	61
VSS Production Database.....	61
VSS Test Database.....	62
VSS Training Database.....	62
VSS CS Database.....	62
Copying Data with DTS “Refresh” Packages.....	62
Refresh CS Database Package.....	62
Advantages and Disadvantages of the DTS Package.....	63
Executing the “RefreshCSDatabase” Package.....	63
Upgrading the “RefreshCSDatabase” Package.....	64
Refresh Training Database Package.....	74
Executing the “RefreshTrainingDatabase” Package.....	75
Upgrading the “RefreshTrainingDatabase” Package.....	76
<b>Migrating Site Data to the EMC.....</b>	<b>77</b>
Introduction.....	77
Migration Overview.....	77
Site Process.....	77
EMC’s Role.....	78
Data Migration Procedures.....	78
Confirming the DTS Package.....	78
Restoring the VistaIntermediate Backup Database.....	79
Running “Data Migration StoredProcs.sql”.....	82
Copying the .OTM File into Outlook.....	83
Creating the Data Migration.PST File.....	83
Setting Up a Location for Flat Files.....	87
Scheduling a Site.....	88
Scheduling a Job.....	88
Setting Up a Job Time.....	90
Setting a Station Number and Path.....	93
Acknowledgements/Notifications.....	94
Notification Types.....	95
Messaging Events.....	96
Templates Variables.....	96
Recipient’s List.....	97
<b>EMC Application Administration.....</b>	<b>99</b>



## Contents

Introduction.....	99
Application Administrator's Responsibilities.....	99
The Maintenance Menu .....	100
Adding A New Site.....	100
Editing Site Information .....	102
Editing Specifications for Web.config file .....	102
User Administration.....	103
Adding a Central Office Site User Administrator.....	103
Adding a New Primary Site User Administrator .....	106
Generating User Reports.....	108
<b>Appendix A: Loading SQL Server Flat File Packages.....</b>	<b>109</b>

## Introduction

The *VSS Installation Guide for the EMC* contains information for the Enterprise Management Center (EMC) to use when installing and maintaining the Voluntary Service System (VSS) application before and after its national release in May, 2003. This material includes summary descriptions and instructions on the following topics:

- Installing the original Alpha version of the application (“Installing the VSS Application”). In certain unusual circumstances the application could require reinstallation, in which case these instructions would be used.
- Updating the original application through patch releases (“Applying VSS Updates”)
- Creating multiple versions of the application on the EMC servers: Production, Customer Service (CS), Test, and Training (“Installing Multiple Instances of VSS”)
- Creating the original (Alpha) version of the VSS database (“Setting Up the Original VSS Database”)
- Upgrading the database when application enhancements require structural changes to database tables (“Upgrading the VSS Database”)
- Maintaining consistent data between the five versions of the VSS database at the EMC (“Maintaining the VSS Databases”)
- Migrating Voluntary Services data from VHA facilities to the EMC during the VSS implementation phases (“Migrating Site Data to the EMC”)
- Performing configuration and site administration tasks during the VSS implementation phases (“EMC Site Administration”). This section also includes ongoing administration tasks at the EMC site using the VSS application.

This document does not include information for the IRM and Voluntary Service groups to use prior to their “go-live” dates. That information is found in a separate document, titled *VSS Site Installation Guide*.

# Installing the VSS Application

## Introduction

This section contains the procedures for installing the VSS application. These procedures will be required only when:

- A new version of VSS is released as an installation, rather than as an update package (this may happen with the first national release version of VSS)
- A new operating system is installed
- The hard drive is reformatted
- New disk hardware is installed.

Normally new versions of the application are installed by the EMC through update patches. The procedures for updating VSS are presented in the section “Updating the VSS Application.”

**Before installing any instance of the application, you must first create a database for it.** The instructions for setting up a database are presented in the section of this document titled “Upgrading the VSS Database.”

The VSS installation process is composed of the following tasks and subtasks:

- Uninstalling the existing version of the application
- Installing the new version of the application
  - Removing the Previous Installation
  - Creating the application path
  - Preparing the Web server
  - Running the VSS wizard
- Creating the DSN

The following procedures apply to both single and multiple instances of VSS. In some of the steps below, additional information is noted for multiple-instance installs. If you are not installing multiple instances, you can ignore these notes.

**As a general rule, the folder structure for a VSS installation should be planned carefully at the outset. Otherwise, Vtk and VtkUser applications may end up in different locations, so that they will not work.**

## Installation Procedures

Installing the VSS application is a five-step process:

1. Removing the previous installation
2. Creating the application path
3. Prepare the Web server

## Installing the VSS Application

4. Running the VSS install wizard
5. Creating the DSN

There are two executables in the VSS installation folder: Vtk and VtkUser. Vtk is the main VSS application; VtkUser is the auto-login application. The complete installation requires running both executables. Vtk and VtkUser must use the same Web site for each installation of the application. **Vtk must be installed first, so that the same site can be selected when installing VtkUser.**

The application (Vtk) and auto-login (VtkUser) install wizards ask for the following locations:

- The newly created database
- The installation folder
- The application's Web site.

### ***Removing the Previous Installation***

1. Go to Internet Explorer Administrative Tools/Internet Information Services/Stop to stop the application site.
2. Find the installation location.
3. Go to Windows Control Panels/Add-Remove Programs and uninstall the existing installation of VtkUser .
4. Repeat step 2 for the existing installation of Vtk.
5. Go to the uninstalled application location and remove Vtk and VtkUser folders with their contents.

**Note:** You must uninstall the auto-login program (VtkUser) first, before uninstalling the main program (Vtk).

### ***Creating th Application Path***

The installation folder location can be anywhere on a local drive, but not on a network or mapped drive. The only restriction is that the last folder in the installation folders must be named VTK or VtkUser (depending on which of the two applications you are installing). Example: D:\VSS Applications\VSS Test\Vtk\.

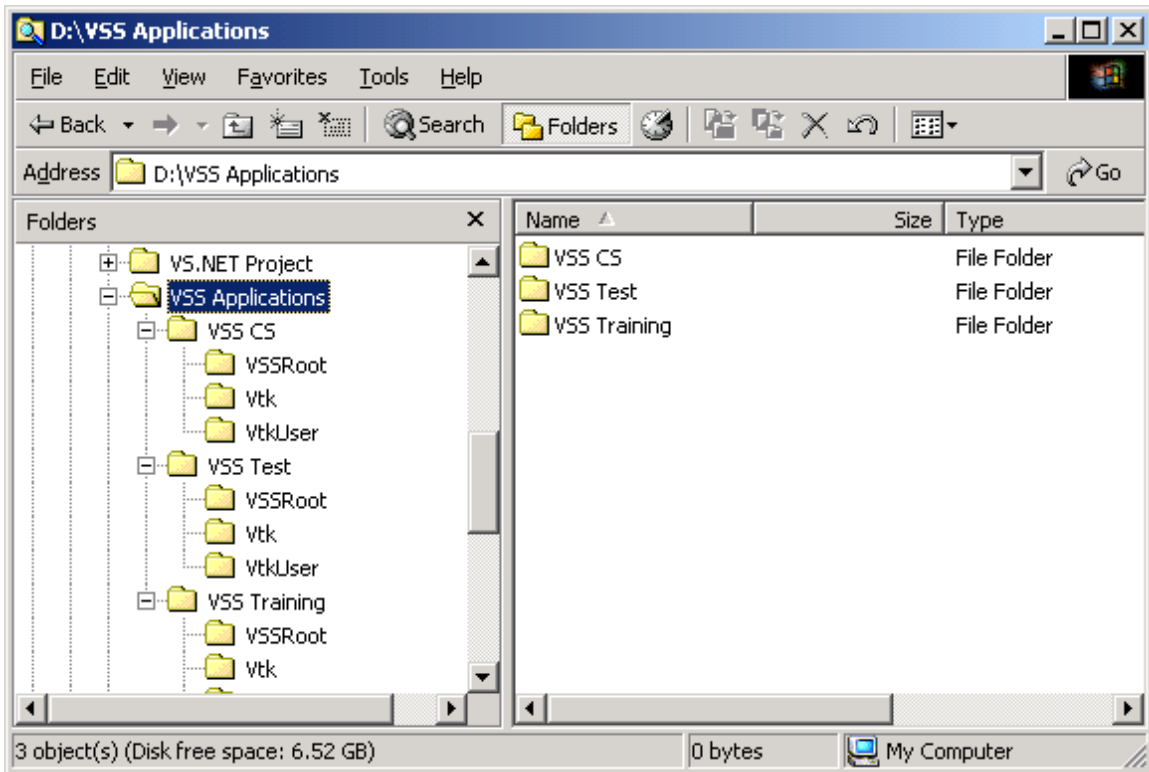
**Multiple Instances:** For the Folder field on the Select Installation Folder screen enter "C:\VSS Applications\VSS Test\Vtk\" (for the VSS program) or "C:\VSS Applications\VSS Test\VtkUser\" (for auto-login program).

The VSS Application folder will finally look something like this:

## Installing the VSS Application

```
C:\VSS Applications\VSS Production\Vtk
... \VSS CS\
... \VSS Test\
... \VSS Training\
```

```
C:\VSS Applications\VSS Production\VtkUser
... \VSS CS\
... \VSS Test\
... \VSS Training\
```



## Preparing the Web Server

To ensure proper installation of the VSS application onto a Web server, follow this checklist:

1. Confirm that the Web server has no applications, processes, or data that might conflict with the VSS application.
2. Uninstall any prior versions of VSS and VSS Auto-login using the Add/Remove Programs option in the Windows Control Panel
3. Confirm that the Web server has Windows 2000 Server or a later edition.
4. Confirm that Internet Information Server and SQL Server have the most current service packs and patches installed.

## Installing the VSS Application

5. If the server has Visual Studio.NET installed, uninstall it.
6. Confirm that the latest version of the .Net Framework is installed.
7. Confirm that the server has the 50MB free disk space initially required by the VSS application.
8. Confirm that ASP.NET ISAPI Filter is added to IIS.
9. Confirm that IIS Service is running.
10. Make sure that the installer is an Administrator on the Local Web Server.
11. Confirm that all support services are functioning correctly.
12. Inspect the server event logs and resolve any issues before installation.
13. Verify that the database server is on the same subnet and can communicate with the Web server.
14. Confirm that you have received the VSS installation files from National Vista Support (NVS), and copy them to the server. Note this location for the installation.

### ***Running the VSS Install Wizard***

Vtk is the main VSS application and VtkUser is the auto-login application. Both applications are installed with executables that run the same wizard. The instructions below describe the wizard prompts. **You must install Vtk first, then VtkUser.**

1. Locate the VSS Release v.x.xx folder, where the VSS application installation files are stored.
2. Double-click on the file Setup.exe in the VTK folder. The Welcome screen of the Voluntary Service System wizard appears.
3. Click Next on the Welcome screen.
4. Enter the database server machine name and the database name on the Database Details screen and click Next.

## Installing the VSS Application

**Voluntary Services System**

### Enter Database Details

Provide a name of database and a machine name where database is residing. Carefully check the names before moving ahead. Application wont run if these names are misspelled or incorrect.

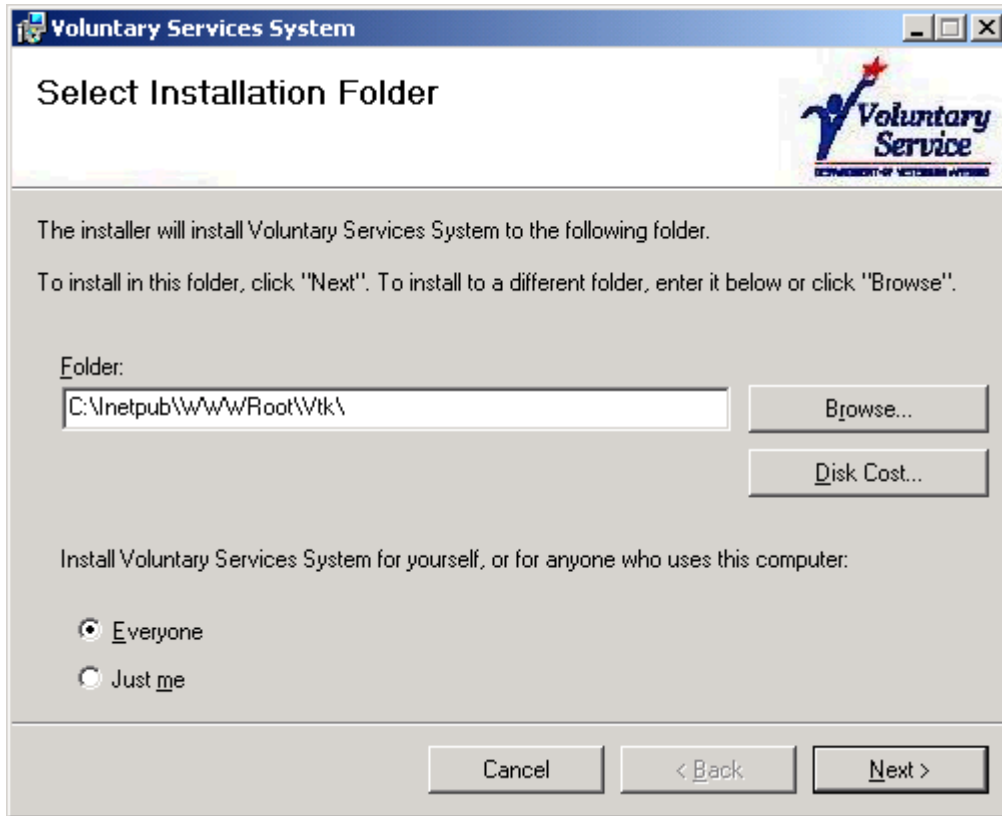
Database Server Name:  
VHAISPMUL4

Database Name:  
VSS

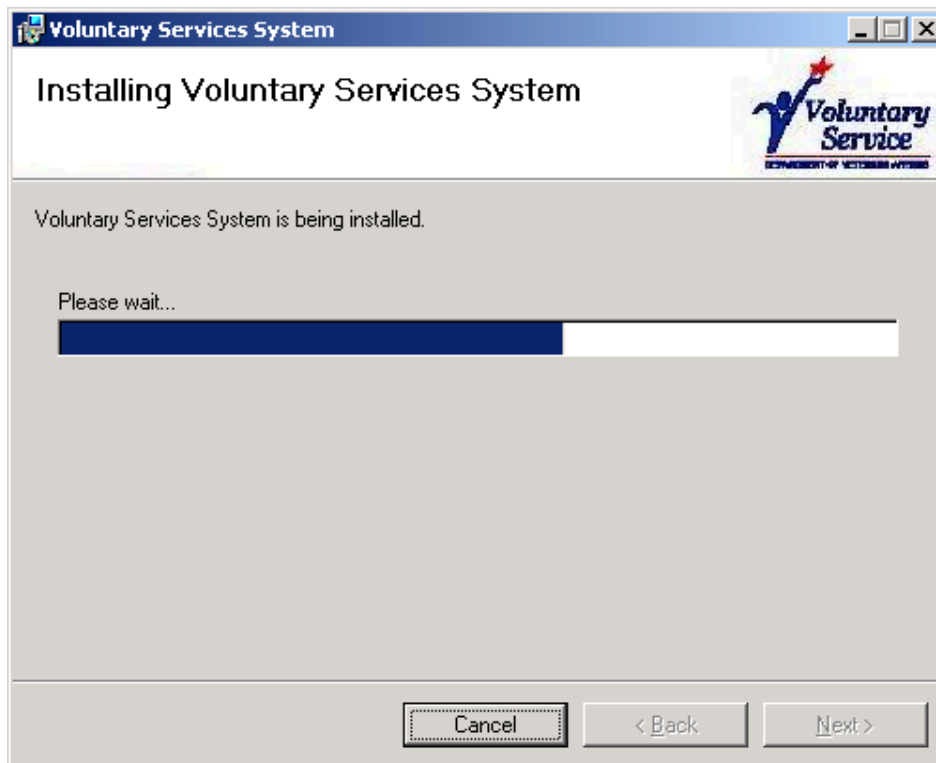
Cancel    < Back    Next >

5. When the Select Installation Folder screen appears, enter a folder location, or navigate to the folder using the Browse button.

## Installing the VSS Application

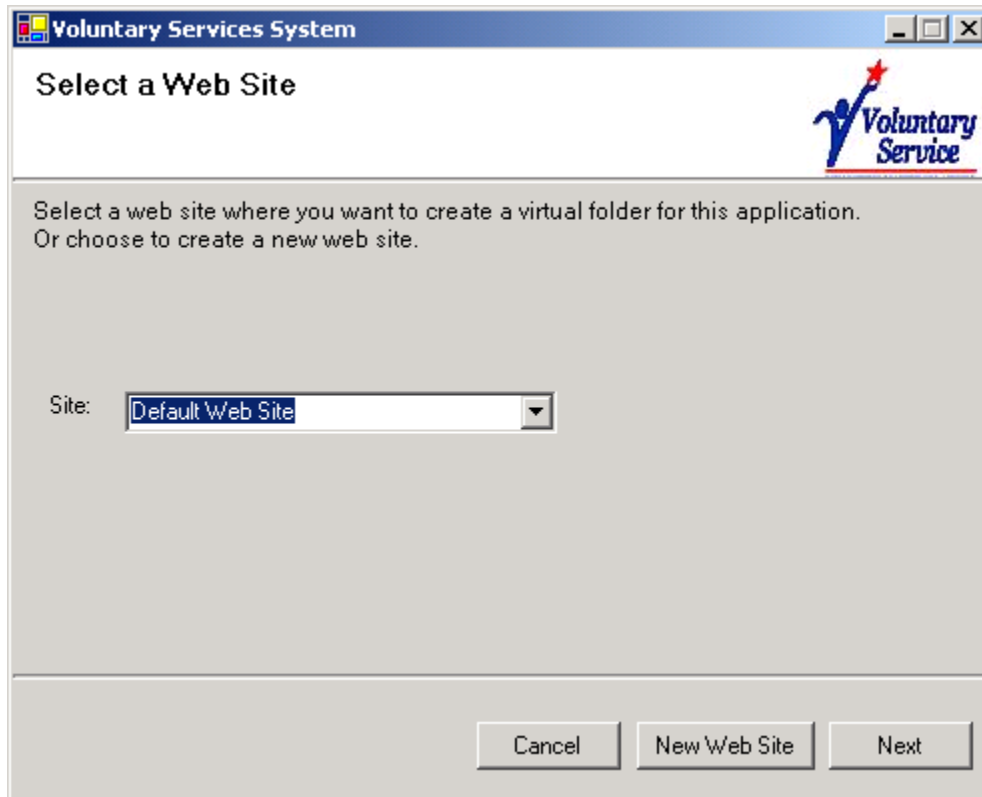


6. Choose the Everyone option, and click Next. A screen with the progress bar appears for a few minutes. Then the Select a Website screen appears.





## Installing the VSS Application



### 7. Select a Website:

- When installing the Vtk application, create a new site.
- When installing the VtkUser application, use the same Web site created for the VTK application.

#### **Creating a New Web Site (Vtk)**

Follows these steps if you are installing Vtk.

- a. Click on the New Web Site button. The Create a Web Site screen appears.

## Installing the VSS Application

**Voluntary Services System**

### Create a Web Site

Provide details of new web site that you want to create on this computer.  
(Describe the Web site, home directory for web content and specify IP address and port settings.)

Description:

Root Path:

Port:  IP Address:

- b. Enter in the Description field the text that appears in the Web Site Identification section of Web site tab in Properties for the IIS Web site.
- c. In the Root Path field enter the path for VSSroot. Make sure no characters in the path string violate standard Windows32.

If the path you type does not exist, the system displays a prompt to confirm that you want to create the folder.

**Multiple Instances:** Enter the root path of the web site as “C:\VSS Applications\VSS Test\VSSRoot” or “D:\VSS Applications\VSS Test\VSSRoot”. This way all the folders pertaining to VSS Test installation will be under \VSS Applications\VSS Test folder.

- d. For the Port and IP Address fields, enter the port number and IP address for the new web site.

**Note:** The Port number and default IP address displayed on the screen are those for the default web site. If you leave these values, you will cause a conflict between the default web site and the new web site because the two sites will have the same IP address and port combination. Therefore, one of them will stop. If the status of new web site is “Stopped” use the Internet Service Manager to stop the default web site and then start the new web site.

## Installing the VSS Application

**Multiple Instances:** Enter a Port and IP Address that is reserved for VSS Test site. For SQA testing, you can use the IP address of Default Site but make sure you use different Port numbers for Test (e.g., 1020), Training and NVS.

- e. Click Create. A new site will be created, with the Vtk application configured under it.

**Note.** The Web site configuration process may take from 1 to 15 minutes, depending on whether it is local or from the network share. Do not interrupt the install process at this point. Let the install finish.

### **Selecting an Existing Web Site (VtkUser)**

Follows these steps if you are installing VtkUser.

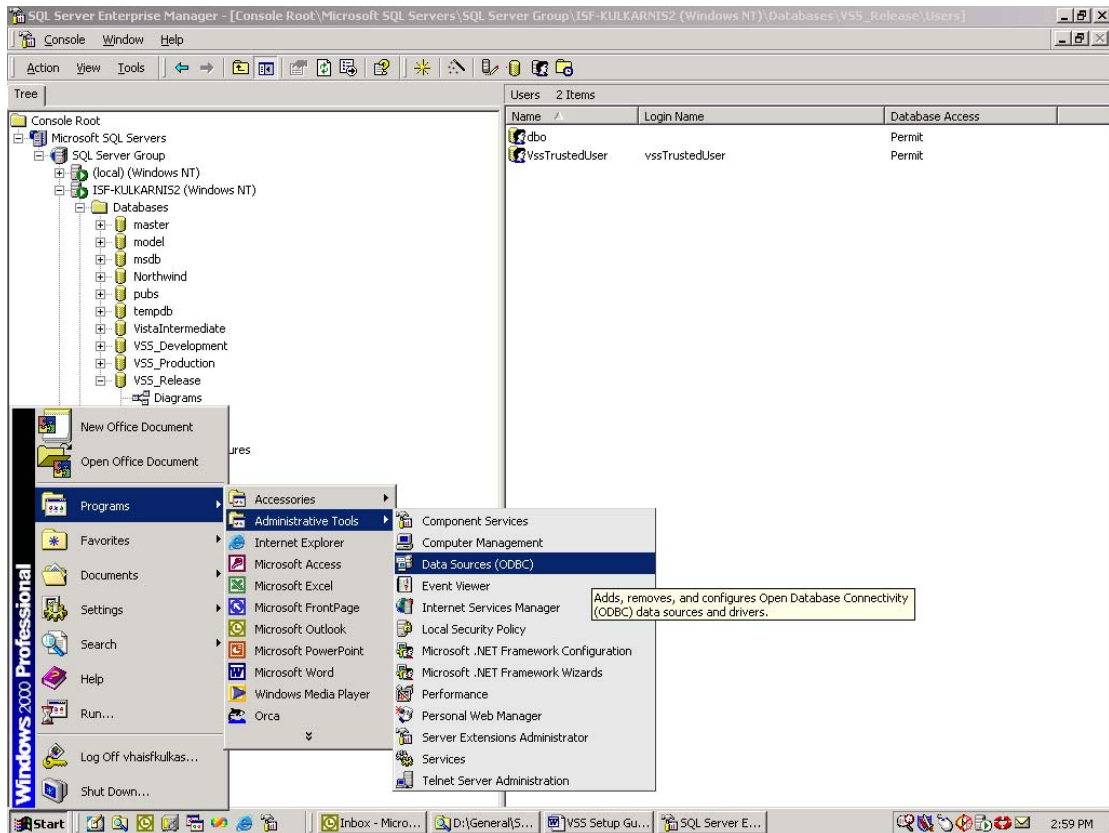
- a. Select a site from the Site pull down list, which shows all the Web sites configured on that server.
  - b. Click Next. The Install Complete screen appears. Proceed to step 8.
8. Click Close on the Install Complete screen.

## **Creating the DSN**

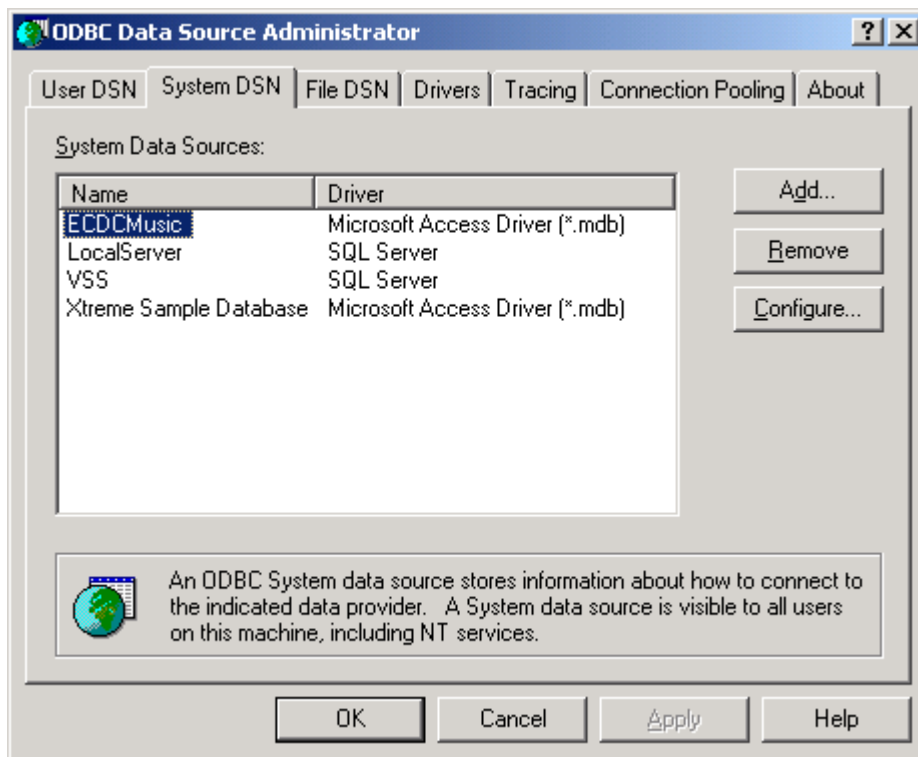
1. From the Start menu of SQL Server Enterprise Manager, select **to** Administrative Tools, and open Data Sources (ODBC).

**Multiple Instances:** It is helpful to create DSNs for all the installations/versions at one time. This way all the database versions on the database server can also be tested while creating the DSNs. Use clearly identifiable DSN names, such as VSSTest and VSSTraining.

## Installing the VSS Application

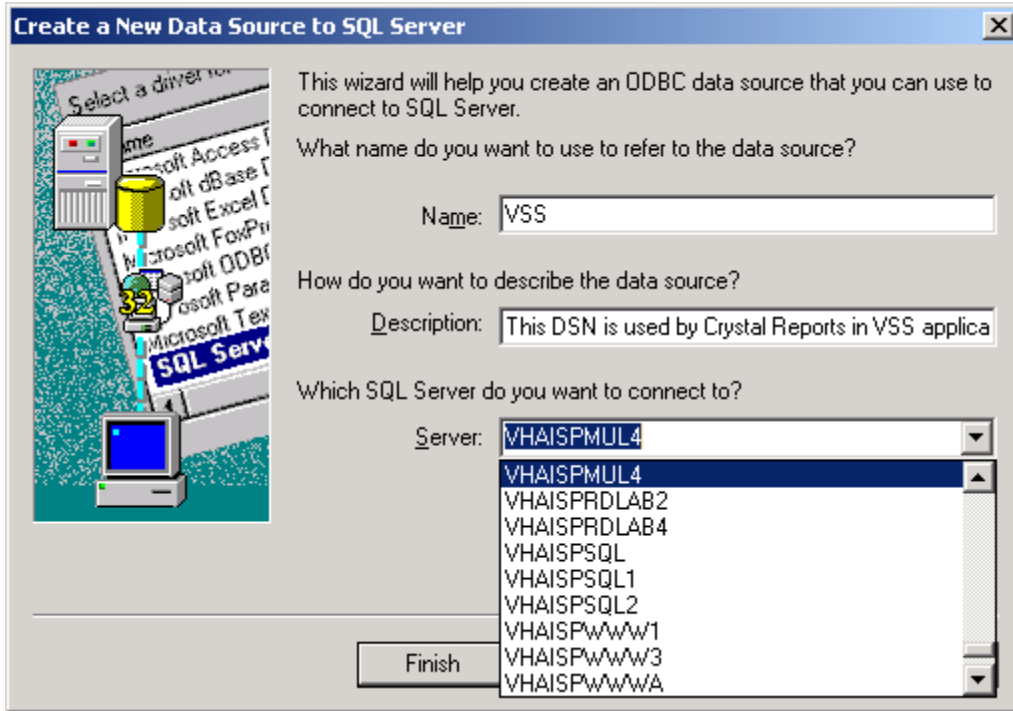


2. Choose the System DSN tab.



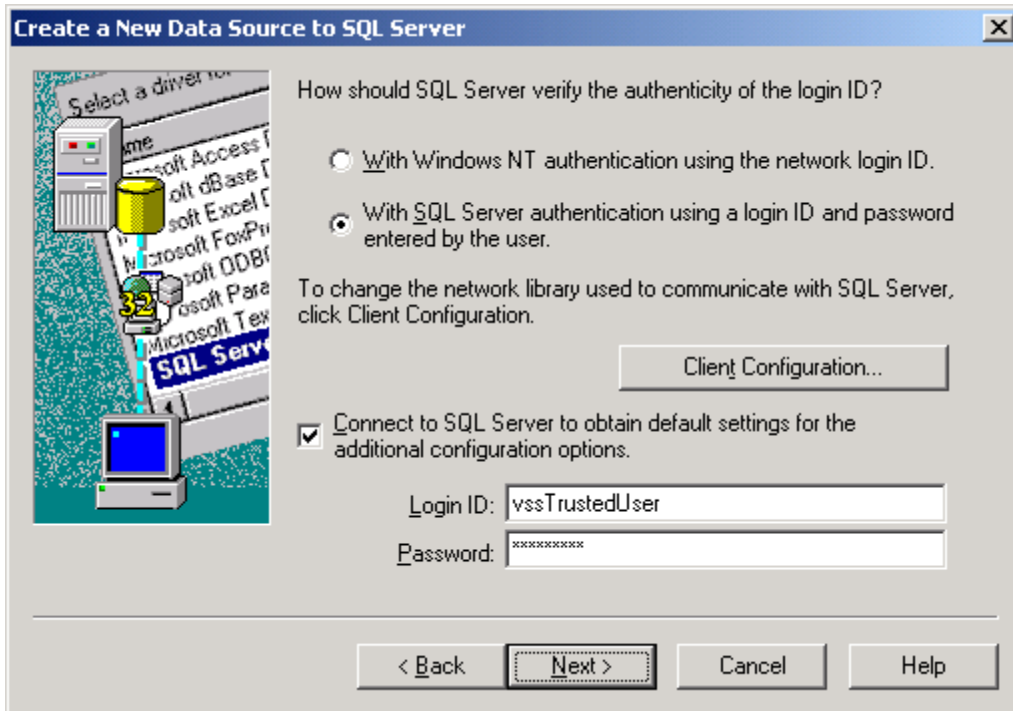
## Installing the VSS Application

3. Click Add.
4. On the Create New Data Source screen, select SQL Server from the drivers list.
5. Click Finish.

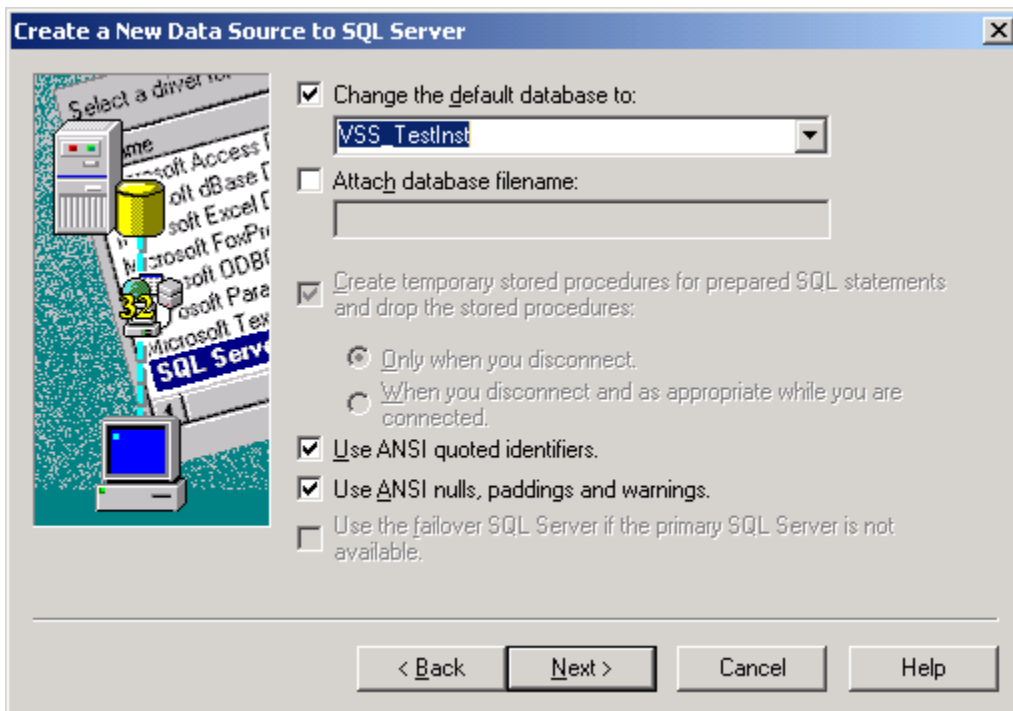


6. On the Create a New Data Source to SQL Server screen, enter "VSS" in the Name field.
7. In the Description field, enter any descriptive text.
8. Type in the name of the server where the VSS application's database resides. Or select it from the drop-down list.
9. Click Next.
10. On the next screen, select the, "With SQL Server Authentication..." option.

## Installing the VSS Application

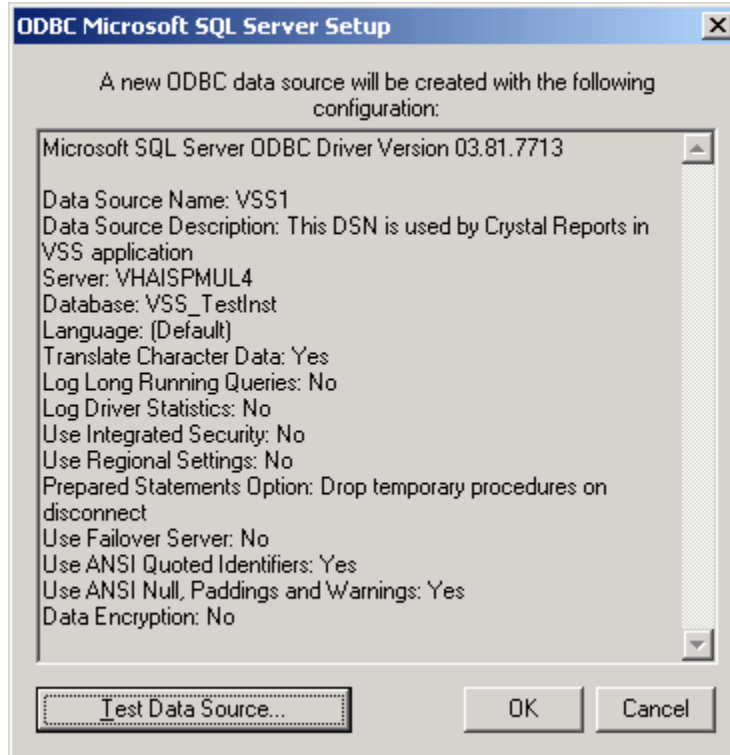


11. Type “VssTrustedUser” in the Login ID field.
12. Enter the password that you already created for VssTrustedUser.
13. Click Next.
14. Choose the new VSS database that you created as your default database.
15. Click Next.



## Installing the VSS Application

16. Click Finish.



17. On the “ODBC Microsoft SQL Server Setup” screen, click Test Data Source to confirm that it can connect to SQL Server database.

18. Click OK.

19. Click OK again.

## Installing the VSS Application



# Applying VSS Updates

## Introduction

This section contains instructions for installing a patch for a new version of the VSS application on the Web server. It assumes that a previous version of the application has already been installed and is running successfully. The instructions for the first-time installation of the application are presented in the section of this document titled, *Installing the VSS Application*.

Installing a new version of the application requires updating the database to the same version. **The database update must precede the application update. Never attempt to connect an old application database to a new version of application – or vice versa.** Instructions for updating the database are presented in the section of this document titled, *Updating the VSS Database*.

These instructions are for installing a single instance of the application. To install multiple instances of a VSS update, see the section of this document titled *Creating Multiple Instances of VSS*. Multiple instances are used to create training, test and customer support versions of the production application.

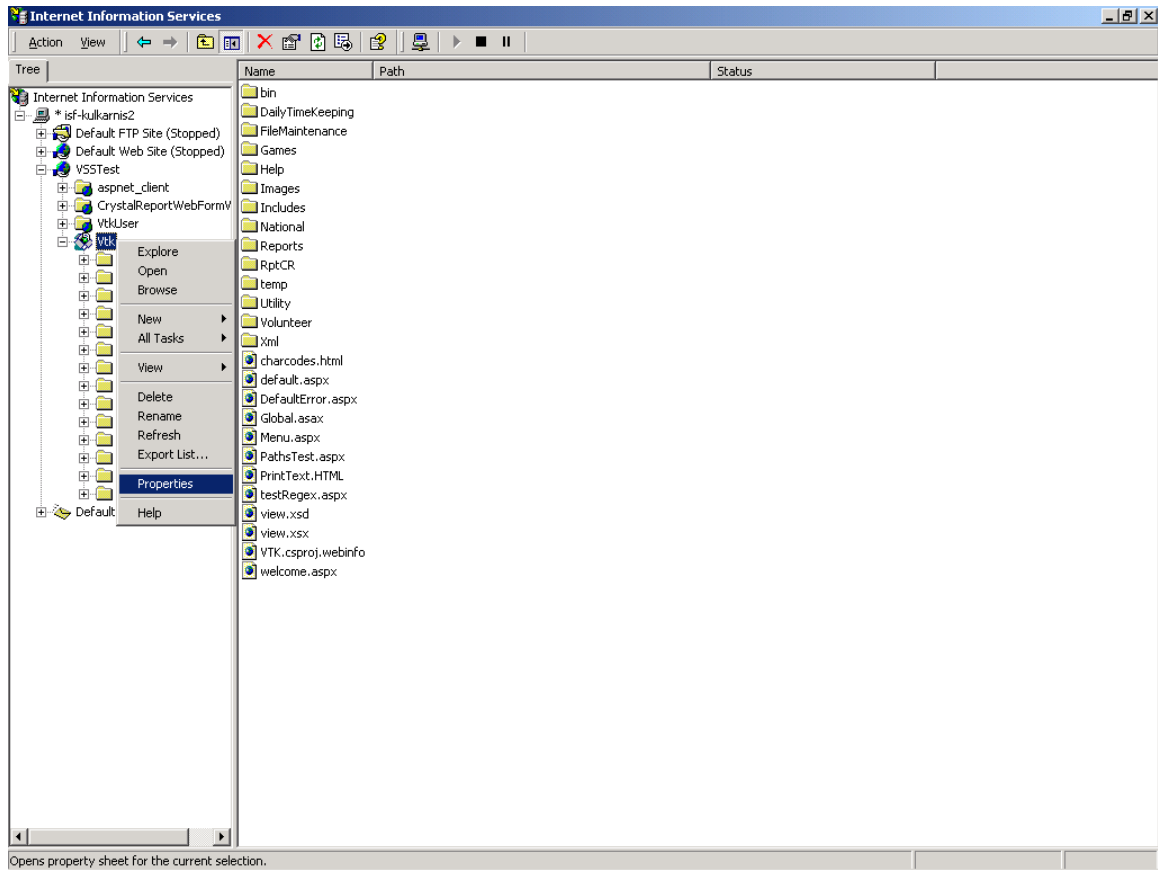
Applying a VSS update on the Web server requires four general tasks:

1. Locating the existing VSS path on the Web server
2. Executing the VSS update file
3. Editing the Web.Config files for Vtk and VtkUser
4. Editing the VSS Web Configuration screen.

## Locating Existing Web Server Path

1. Go to Administrative Tools/Internet Service Manager on the Web server machine.
2. From the list of services, expand the VSS App Web site.
3. Right-click on VSS application Web site and select Stop. This will break all the connections to this site and prevent sharing application files while update happens.
4. Right-click on the Vtk virtual directory, as shown in the image below, and select Properties from the Pop-menu.

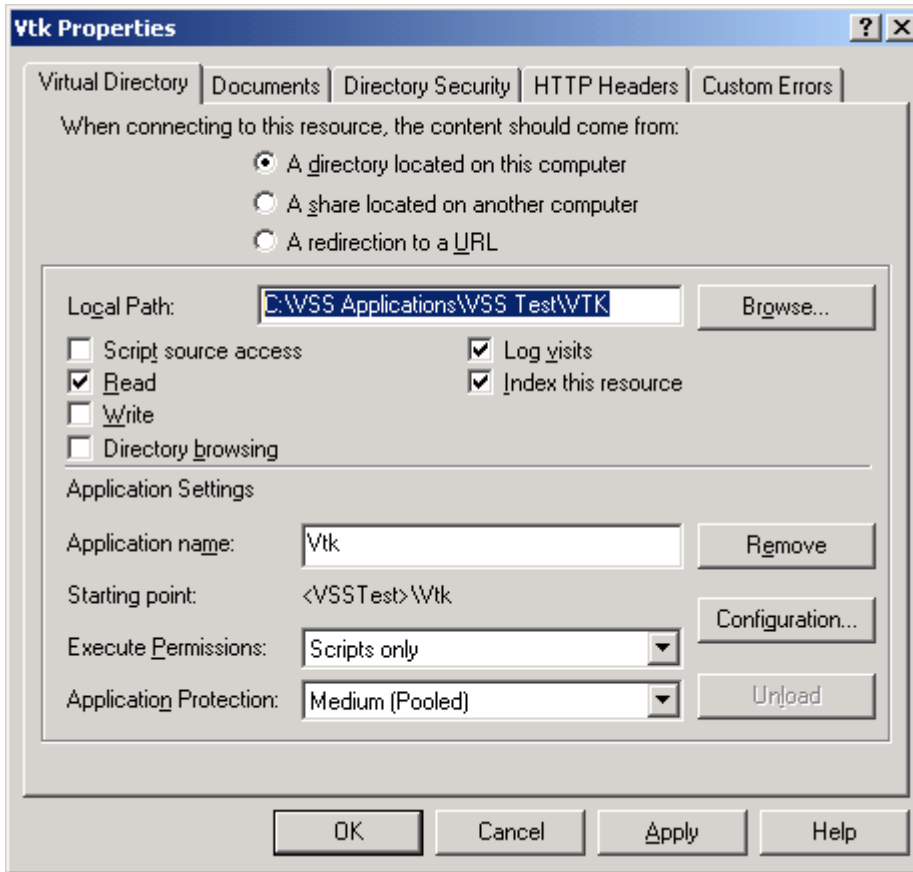
## Applying VSS Updates



5. On the Vtk Property screen, select the Virtual Directory tab (if it is not already the default).
6. Note the Local Path input field value – you will need this when you execute the application.

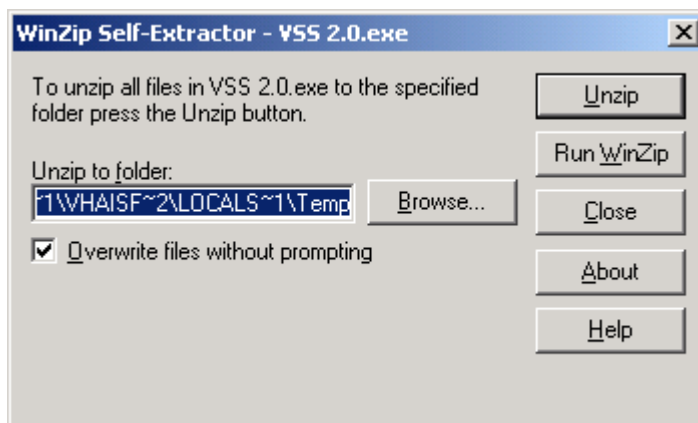
**Note:** Remember that Vtk and VtkUser must be under the same folder. In the image below, for example, the path for the virtual directories for both Vtk and VtkUser is C:\VSS Applications\Vss Test.

## Applying VSS Updates



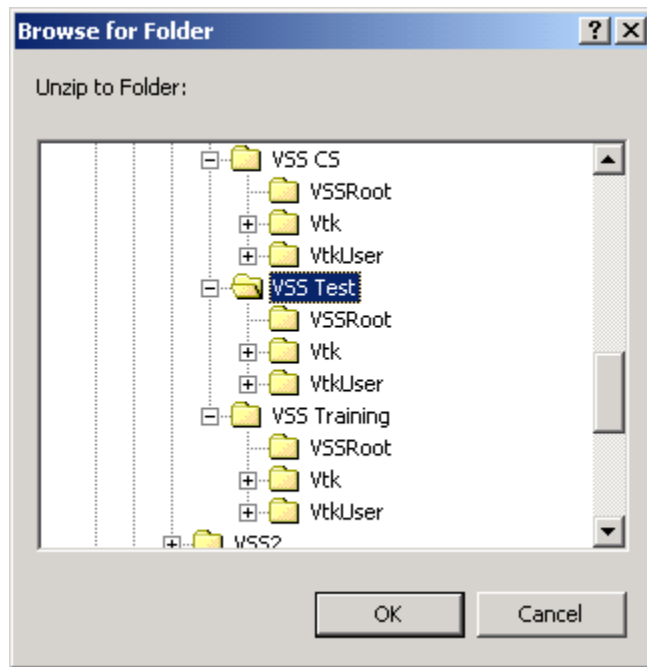
## Running the VSS Executable

1. Locate the file VSS x.xx.exe in the Release V.x.xx folder.
2. Execute this file by double clicking it.
3. On the WinZip Self-Extractor screen, use the Browse button to point to the Vtk and VtkUser virtual directories (C:\VSS Applications\Vss Test in the example above).

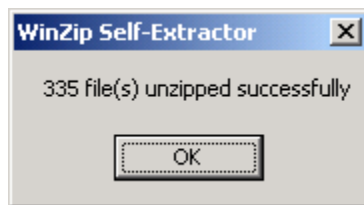


4. On the Browse for Folder screen, point to appropriate folder.

## Applying VSS Updates



5. Click OK. When you point to proper path, you will be back to the Winzip Self-Extractor screen.
6. Click the Unzip button to start extracting files.
7. When extraction is complete, you will a message will display the number of file(s) successfully unzipped. Click OK.

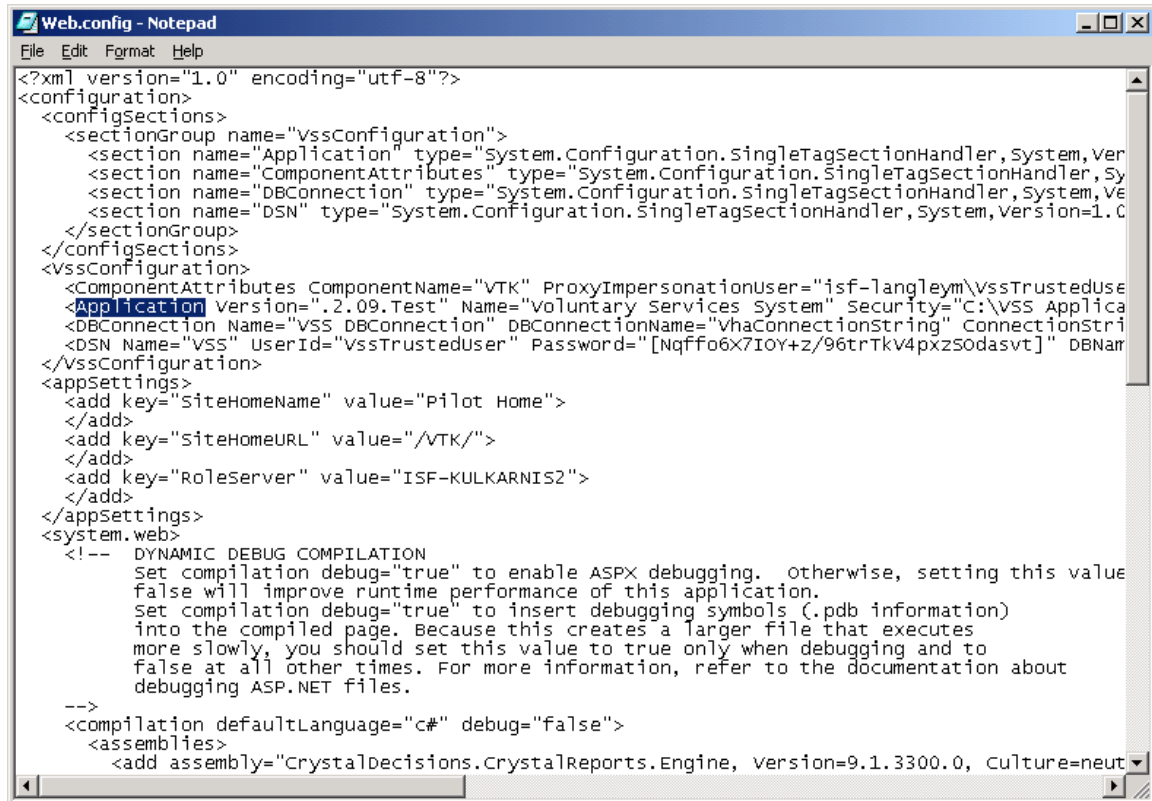


**Note:** The number of files extracted will probably change with each the version of the application.

## Editing Web.Config Files for Vtk and VtkUser

1. Go to Vtk Virtual directory, and locate the file called Web.Config in the Vtk folder.
2. Open this file in Notepad by right clicking on the file and using Open With option.

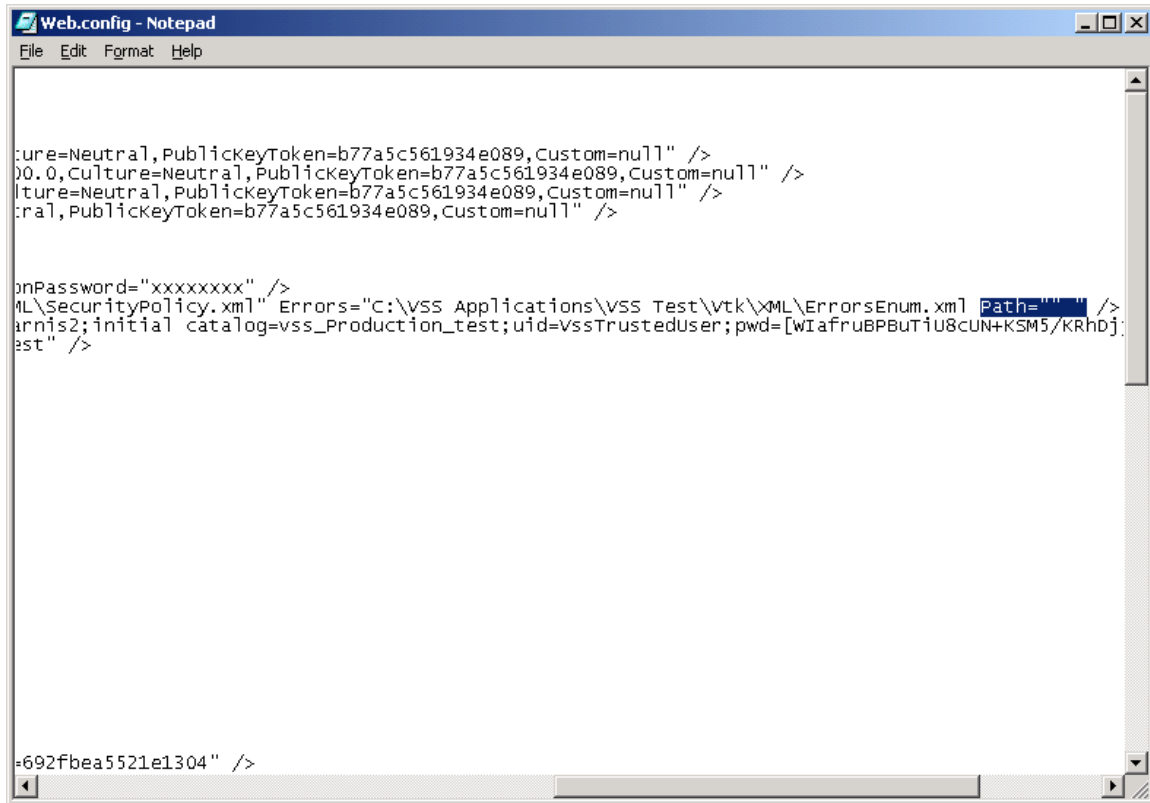
## Applying VSS Updates



```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <configSections>
    <sectionGroup name="vssConfiguration">
      <section name="Application" type="System.Configuration.SingleTagSectionHandler, System, Ver
      <section name="ComponentAttributes" type="System.Configuration.SingleTagSectionHandler, Sy
      <section name="DBConnection" type="System.Configuration.SingleTagSectionHandler, System, VE
      <section name="DSN" type="System.Configuration.SingleTagSectionHandler, System, Version=1.0
    </sectionGroup>
  </configSections>
  <vssConfiguration>
    <ComponentAttributes ComponentName="VTK" ProxyImpersonationUser="isf-langley\VssTrustedUser
    <Application Version=".2.09.Test" Name="voluntary Services system" security="C:\VSS Applica
    <DBConnection Name="VSS_DBConnection" DBConnectionName="vhaConnectionString" ConnectionStri
    <DSN Name="VSS" UserId="vssTrusteduser" Password="[Nqffo6x7IOY+z/96trTkV4pxzSodasvt]" DBName
  </vssConfiguration>
  <appSettings>
    <add key="SiteHomeName" value="Pilot Home">
    </add>
    <add key="SiteHomeURL" value="/VTK/">
    </add>
    <add key="RoleServer" value="ISF-KULKARNIS2">
    </add>
  </appSettings>
  <system.web>
    <!-- DYNAMIC DEBUG COMPILATION
    Set compilation debug="true" to enable ASPX debugging. otherwise, setting this value
    false will improve runtime performance of this application.
    Set compilation debug="true" to insert debugging symbols (.pdb information)
    into the compiled page. Because this creates a larger file that executes
    more slowly, you should set this value to true only when debugging and to
    false at all other times. For more information, refer to the documentation about
    debugging ASP.NET files.
    -->
    <compilation defaultLanguage="c#" debug="false">
      <assemblies>
        <add assembly="CrystalDecisions.CrystalReports.Engine, Version=9.1.3300.0, Culture=neut
```

3. Locate the Application tag under the VSS Configuration tag, and scroll to the right to the end of line, as shown in the image below.

## Applying VSS Updates



```
Web.config - Notepad
File Edit Format Help

:ure=Neutral,PublicKeyToken=b77a5c561934e089,Custom=null" />
)0.0,Culture=Neutral,PublicKeyToken=b77a5c561934e089,Custom=null" />
lture=Neutral,PublicKeyToken=b77a5c561934e089,Custom=null" />
:ral,PublicKeyToken=b77a5c561934e089,Custom=null" />

onPassword="xxxxxxx" />
ML\SecurityPolicy.xml" Errors="C:\VSS Applications\VSS Test\Vtk\XML\ErrorsEnum.xml Path="" />
arnis2;initial catalog=vss_Production_test;uid=vssTrustedUser;pwd=[wIafRuBPBUtIU8cUN+KSM5/KRhdj;
est" />

=692fba5521e1304" />
```

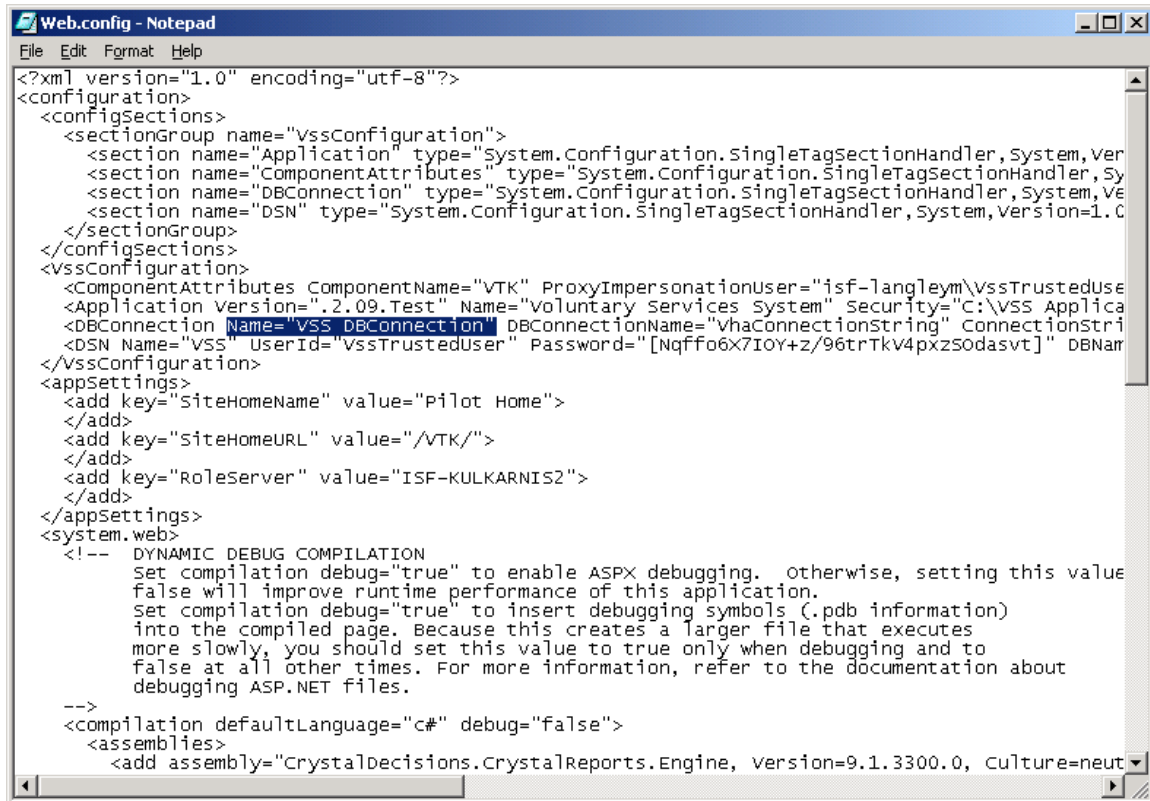
4. The following characters must appear before the end of the closing wicket: **Path=""**

If you do not see them, type them in. Remember to add a space (character) before and after the text you are adding. (See the highlighted text in the image above.)

**Note:** The value will be updated later (step # 15). For Web.Config file in Vtk, this element represents the Application Path; in VtkUser, it is the Timeout value.

5. Now locate the DBConnection tag, right below the Application tag, as shown in an image below.

## Applying VSS Updates



```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <configSections>
    <sectionGroup name="vssConfiguration">
      <section name="Application" type="System.Configuration.SingleTagSectionHandler, System, Ver
      <section name="ComponentAttributes" type="System.Configuration.SingleTagSectionHandler, Sy
      <section name="DBConnection" type="System.Configuration.SingleTagSectionHandler, System, VE
      <section name="DSN" type="System.Configuration.SingleTagSectionHandler, System, Version=1.0
    </sectionGroup>
  </configSections>
  <vssConfiguration>
    <ComponentAttributes ComponentName="VTK" ProxyImpersonationUser="isf-langley\VssTrustedUse
    <Application Version=".2.09.Test" Name="voluntary Services system" security="C:\VSS Applica
    <DBConnection Name="VSS DBConnection" DBConnectionName="vhaConnectionString" ConnectionStri
    <DSN Name="VSS" UserId="VssTrustedUser" Password="[Nqffo6x7IOY+z/96trTkV4pxz50dasvt]" DBNar
  </vssConfiguration>
  <appSettings>
    <add key="siteHomeName" value="Pilot Home">
    </add>
    <add key="siteHomeURL" value="/VTK/">
    </add>
    <add key="roleServer" value="ISF-KULKARNIS2">
    </add>
  </appSettings>
  <system.web>
    <!-- DYNAMIC DEBUG COMPILATION
    Set compilation debug="true" to enable ASPX debugging. otherwise, setting this value
    false will improve runtime performance of this application.
    Set compilation debug="true" to insert debugging symbols (.pdb information)
    into the compiled page. Because this creates a larger file that executes
    more slowly, you should set this value to true only when debugging and to
    false at all other times. For more information, refer to the documentation about
    debugging ASP.NET files.
    -->
    <compilation defaultLanguage="c#" debug="false">
      <assemblies>
        <add assembly="CrystalDecisions.CrystalReports.Engine, Version=9.1.3300.0, Culture=neut
```

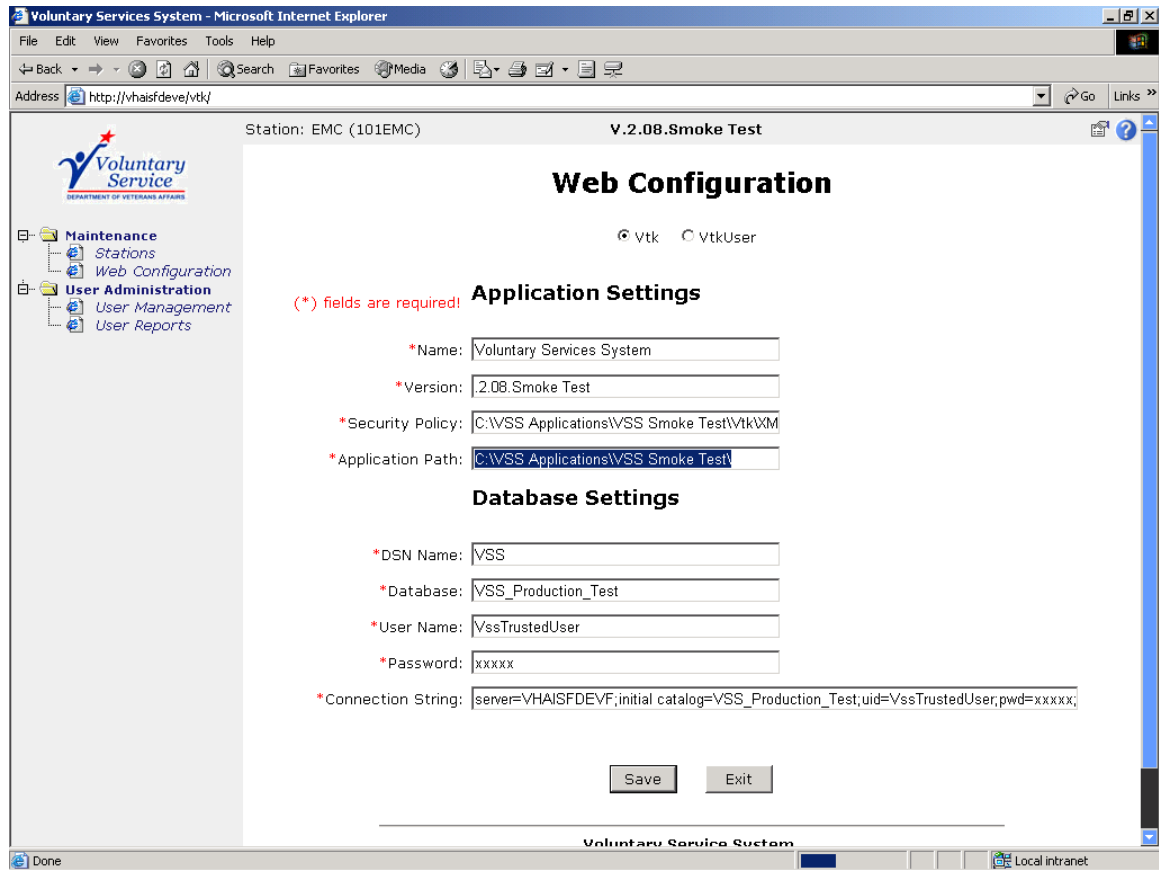
6. If you do not see the following text after the DBConnection tag

Name="VSS DBConnection"

you must add it. (If you do not enter the characters exactly right, the application might not work.)

7. Save the file.
8. Repeat steps 1-7 for the Web.Config file in the VtkUser virtual directory.
9. Restart the VSS App web site (the first 3 steps in the "Find Existing Setup" section above).
10. Set yourself as the EMC admin (if you haven't already).
11. Start a new browser window, and enter the URL for VSS application.
12. Select EMC from the station list.
13. Go to the Maintenance/Web Configuration screen.
14. Update the Version field to the appropriate version # (Example: 2.04).
15. Enter the proper root path for VTK directory, in the Path field. (It will update a portion of Web.Config file that you inserted in step 4 of this section).
16. In the Connection String field, make sure you have a correct database name as a value for "Initial Catalogue" element and that the DSN is pointing to the right database.

## Applying VSS Updates



17. Click Save

18. Click on VtkUser radio button to access Web configuration for autologing.

Remember that you won't be able to access the Web configuration for VtkUser, if the Application Path field is left empty for Vtk

19. Change the Version field to the appropriate version number.

20. If Timeout field is blank, enter 300 (seconds).

21. In the Connection String field, make sure you have a correct database name as a value for "Initial Catalogue" element and that the DSN is pointing to the right database.

22. Click Save.



## Installing Multiple Instances of VSS

### Introduction

This document contains instructions for creating multiple instances of the VSS application. Four application instances are maintained simultaneously at the EMC, so that development (Test), training, and NVS customer support (CS) can use instances of the application to suit their own needs without affecting the production version. The CS instance will always mirror the current Production instance, but Test and Training can use any version of the application, as well as older, smaller versions of the database.

**All non-production instances must be created on a test Web server and never reside in the production environment.** The current arrangement is to dedicate one server to Production and one to Test, Training, and CS. There is no restriction on the number of instances or versions of the application that can run simultaneously on a single web server. However, at some point additional instances will start to affect the performance of all of them.

The complete process for creating multiple VSS instances consists of the following sub-processes:

1. Installing or re-installing VSS v.1.17
2. Creating the new instance
3. Setting up a new Web site
4. Setting up the virtual directory
5. Editing the Web.Config file
6. Repeating steps 2-5 for each additional instance.

However, creation of a new instance will normally begin with step 2, because the primary install will already be in place as a production site. Step 1 will only be required for new hardware or rebuilding the Web server. Normally, new versions of the application will not require a new installation, only running an update patch.

### ***Setting up the Database***

A separate database must be set up for each instance of the application. The database must be set up first, before creating the new instance. The Production database is updated through scripts. Normally, the databases for other instances are then restored from backups of the Production database.

Instructions for creating a new application installation database are presented under *Creating a New SQL Database*, in the section, *Installing the VSS Application* of this document. Instructions for updating a previously created database are presented in the section, *Upgrading the VSS database*.

## ***Multiple Application Versions***

You can create either an identical instance of the production application or an instance of a newer or older version of the application. At any one time, you can have a mix of versions on the Test, Training, and CS sites. For the most part, developers and testers will want to test future versions of the application on Test, while trainers will want to use older, stable, familiar versions on Training. Customer support, however, will always want to use the version running on Production, because that is the version that their customers will be using.

The sections below include instructions for both of the following:

- creating an instance from the installed production version
- installing a non-production version from an update.

If you want to install a version that is different from the one on Production, you should execute an application update, instead of copying the originally installed version. Because the update will not contain the Web.Config files for Vtk and VtkUser, you must copy these files into the application folders for the new instance.

For more complete instructions on *installing* the application and creating the database from scratch, refer to the section *Installing the VSS Application*. For detailed instructions on applying an application update, see the section *Updating the VSS Application*. For instructions to upgrade the database, see the section *Upgrading the VSS Database*.

## **Applying a VSS Update**

Update the VSS application with the latest application update executable (e.g., VSS 2.xx.exe). Refer to the section of this document titled “Applying VSS Updates” for detailed instructions.

**Note:** Do not un-zip the update into VSSRoot, Vtk, or VtkUser folders directly. Point to the parent of these folders, i.e., VSS Test.

## **Creating a New Instance or Version**

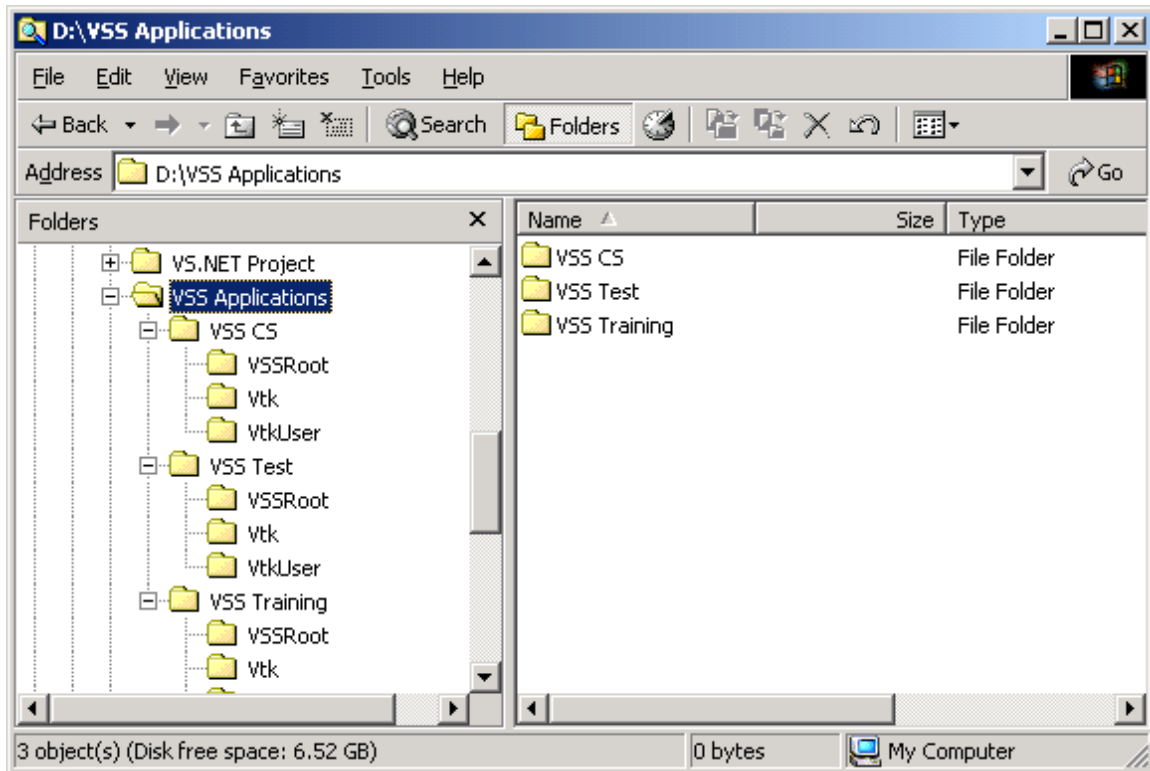
### ***Using the Installed Version***

Once you have installed VSS Test, you can use this section to install/setup VSS Training and VSS CS from the existing setup of VSS Test. This way you will have three different installations of the same VSS application version.

1. Open a windows explorer and locate the folder, as in the above example it was c:\VSS Applications\VSS Test.

## Installing Multiple Instances of VSS

- Using Edit/Copy, paste a copy of the whole parent folder, (e.g., c:\VSS Applications\VSS Test.) into VSS Application folder.
- Your directory structure will look something like the following image.



- Note that VSS Training folder under VSS Applications is the folder that you just copied.
- Rename this folder, Copy of VSS Test, to an appropriate name i.e. VSS Training
- Repeat this process one more time for creating VSS CS.

## Using a Different Application Version

Follow the steps in this section if you want to create an instance of a different version of the VSS application for the update. This update package will not contain Web.Config files for Vtk and VtkUser.

- Open a windows explorer and locate the new folder that you reinstalled the application (e.g.. C:\VSS Applications).
- Create a subfolder under the VSS Applications folder.

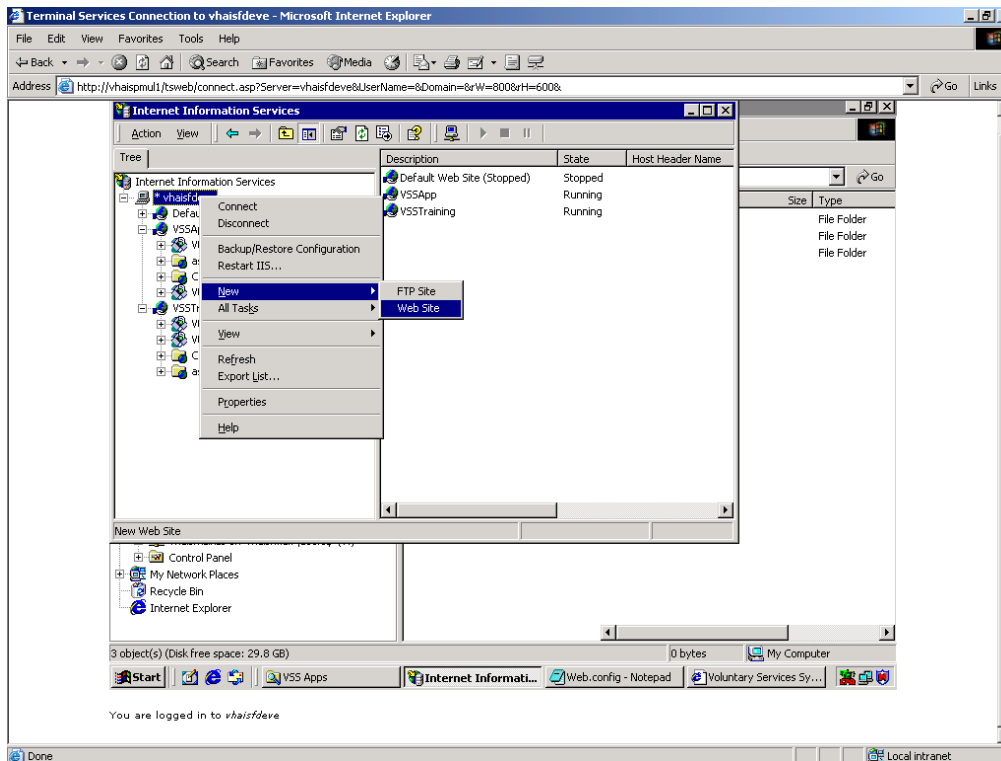
**Note:** Use appropriate name for this folder. If this installation is for training then create VSS Training folder and for NVS, create VSS CS folder. Whatever folder you create here, use this folder when it is referenced in any steps below.

## Installing Multiple Instances of VSS

3. Under the folder you just created (e.g., VSS Training) create Vtk, VtkUser folders for the application, and VSSRoot as the home directory for the new site.
4. Copy VSS V.2.xx.EXE under the root folder, e.g., VSS Training. This is a self-extractor EXE file.
5. Run the EXE file and point it to the subfolder under VSS Applications (e.g., C:\VSS Applications\VSS Training)
6. After all the files have been extracted, locate an existing instance of the VSS application.
7. Copy the Web.Config file from the existing instance Vtk and VtkUser subfolders into the corresponding subfolders of the new instance (e.g., VSS Test\VTK into VSS Training\VTK).

## Creating a New Web Site

1. Go to Administrative Tools/Internet Service Manager on the Web server machine.
2. On the left panel, right-click on web server's name, and select New/Web Site.

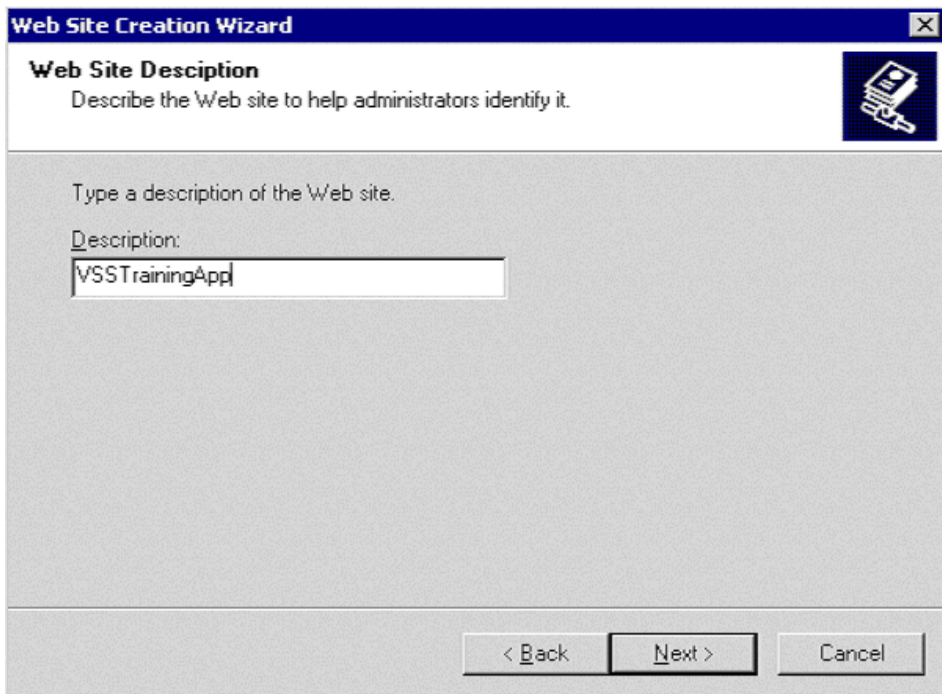


The Welcome screen of the VSS wizard appears.

## Installing Multiple Instances of VSS

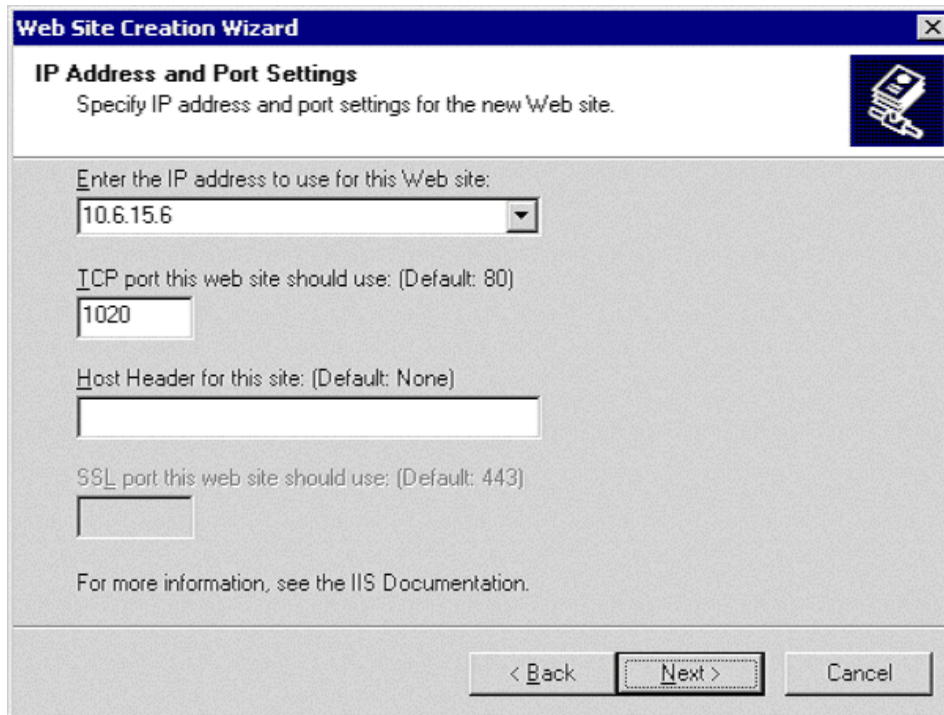


3. On the Welcome screen, click Next.
4. In the Web Site Description screen Description field, type an appropriate name for the site. Example: "VSS TrainingApp." Click Next.



5. The IP address and Port Settings screen appears:

## Installing Multiple Instances of VSS



The screenshot shows the 'Web Site Creation Wizard' dialog box, specifically the 'IP Address and Port Settings' step. The title bar reads 'Web Site Creation Wizard'. Below the title bar, the text 'IP Address and Port Settings' is displayed, followed by the instruction 'Specify IP address and port settings for the new Web site.' There is a small icon of a floppy disk with a plus sign in the top right corner. The main area contains four input fields: 1. 'Enter the IP address to use for this Web site:' with a dropdown menu showing '10.6.15.6'. 2. 'TCP port this web site should use: (Default: 80)' with a text box containing '1020'. 3. 'Host Header for this site: (Default: None)' with an empty text box. 4. 'SSL port this web site should use: (Default: 443)' with an empty text box. At the bottom, there is a note: 'For more information, see the IIS Documentation.' and three buttons: '< Back', 'Next >', and 'Cancel'.

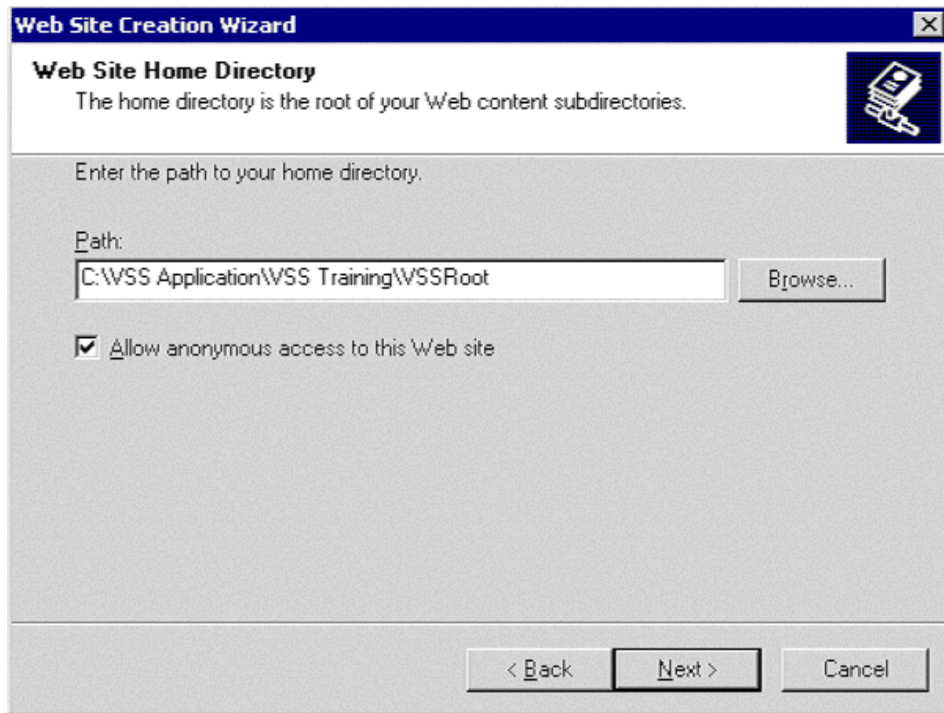
Do the following:

- Enter an IP address for this instance of VSS application
- Change the TCP port to something like 1020 from default 80. Do not use default port 80.
- Click Next.

**Note:** For SQA purposes, you can use an IP address available in the drop down list and change the port number.

6. On the Web Site Home Directory screen, use the Browse button to locate the home directory you created (e.g., C:\VSS Applications\VSSTraining\VSSRoot).

## Installing Multiple Instances of VSS



7. Uncheck “Allow anonymous access” and click Next.
8. On the Web Site Access Permission screen click Next.
9. Click Finish.

## Creating Application Virtual Directories

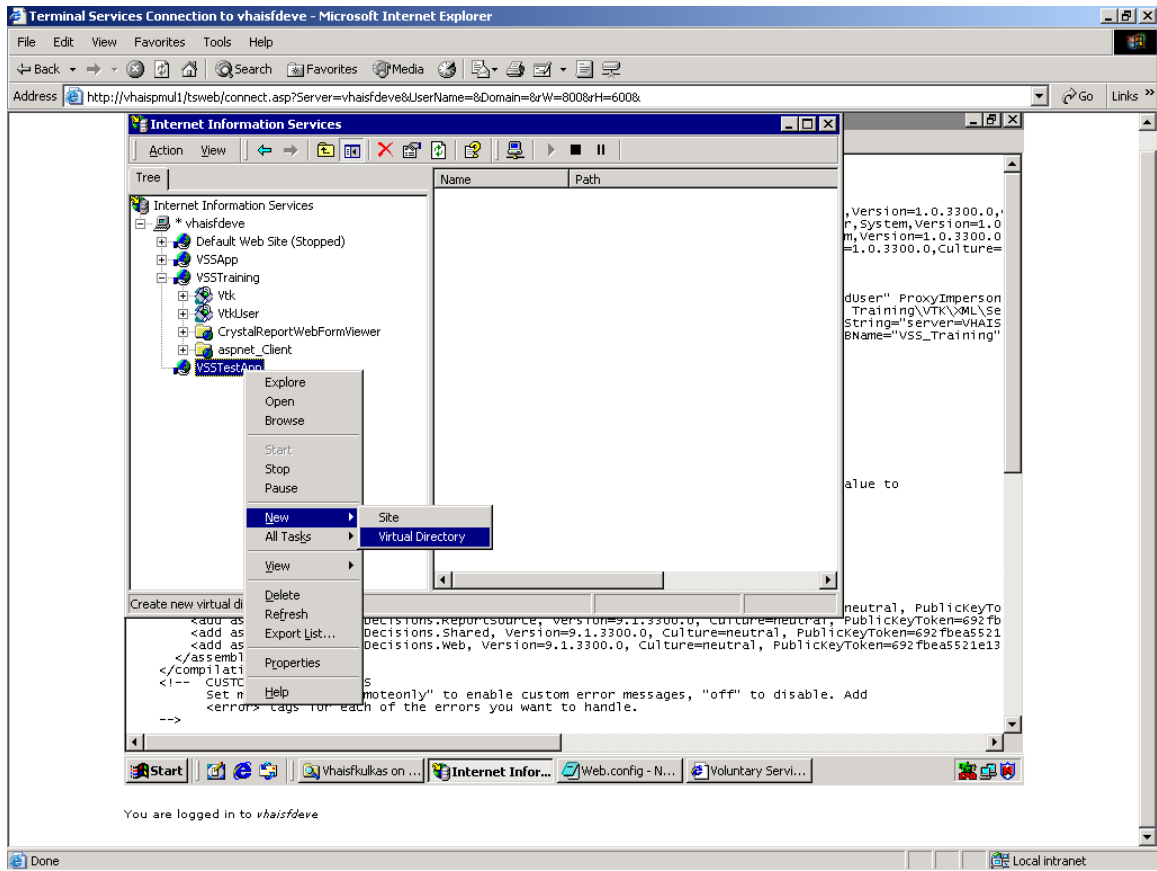
The following process will explain the steps to create application virtual directories for a particular instance of the application and to set up their properties. The virtual directories that you need to create are: Vtk, VtkUser, aspnet\_client, and CrystalReportWebFormViewer.

.Net Web applications needs the aspnet\_client virtual directory pointing at proper validation Java scripts. Crystal Reports needs the CrystalReportWebFormViewer directory.

### ***Vtk and VtkUser***

1. In Internet Information Services, right-click on the new web site you created and select New/Virtual Directory.

## Installing Multiple Instances of VSS



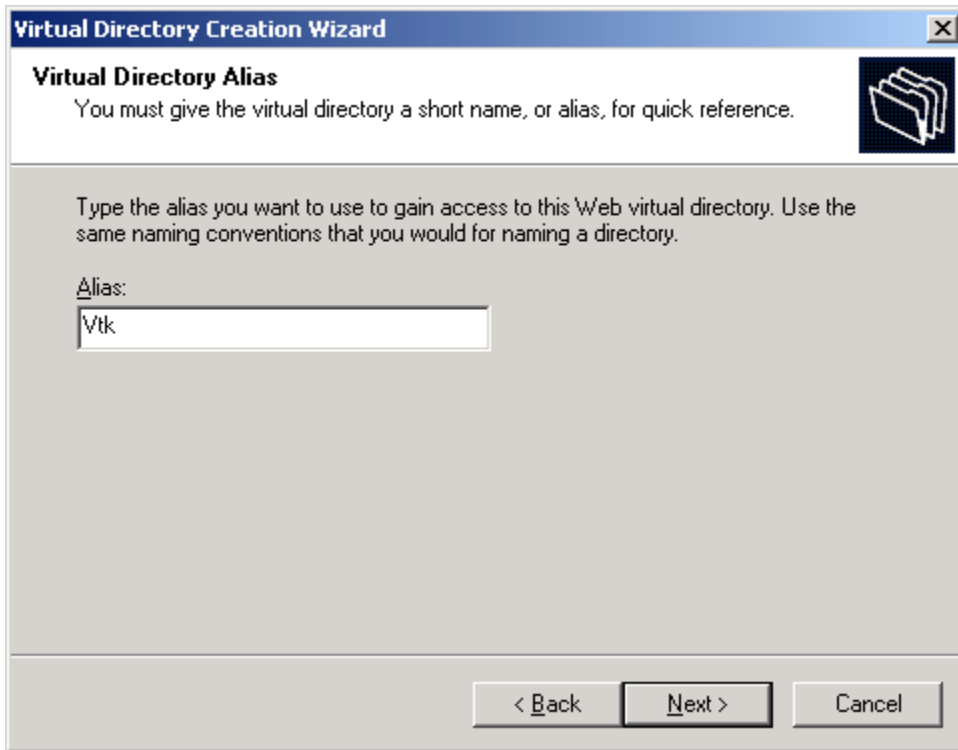
The Virtual Directory Creation Wizard appears.





## Installing Multiple Instances of VSS

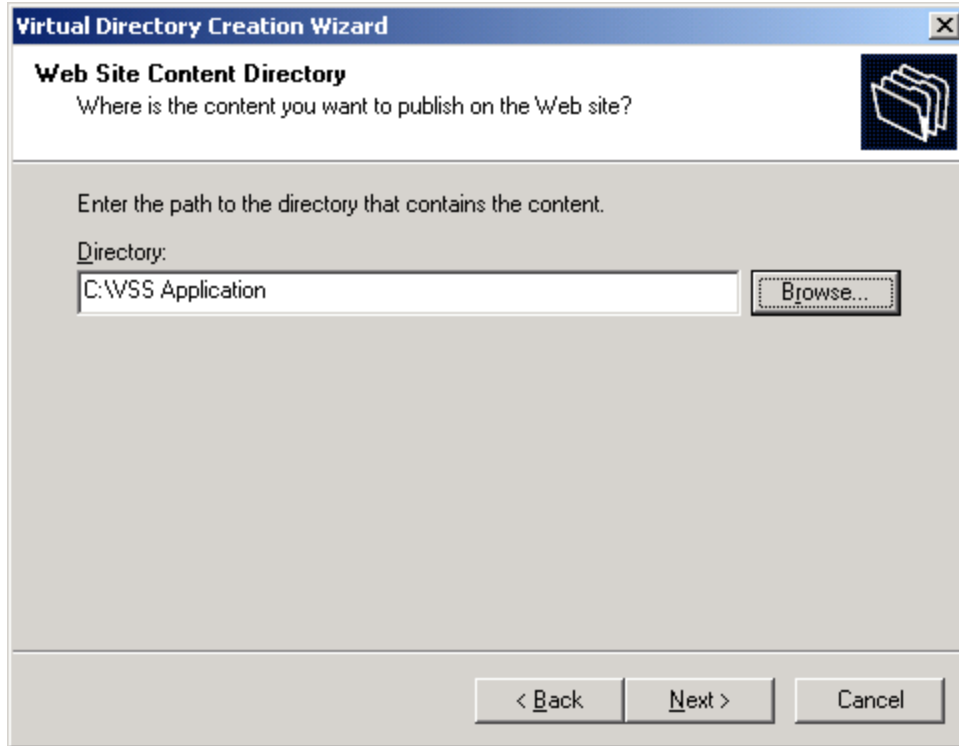
2. On the Welcome screen click Next.
3. On the Virtual Directory Alias screen, type Vtk orVtkUser for the alias, as appropriate.



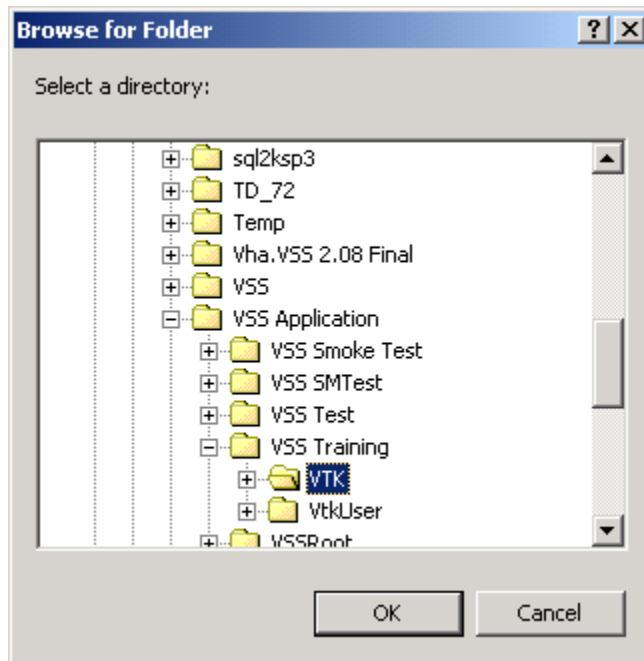
Click Next.

4. On the Web Site Content Directory screen, use the Browse button to point to the appropriate folder.

## Installing Multiple Instances of VSS



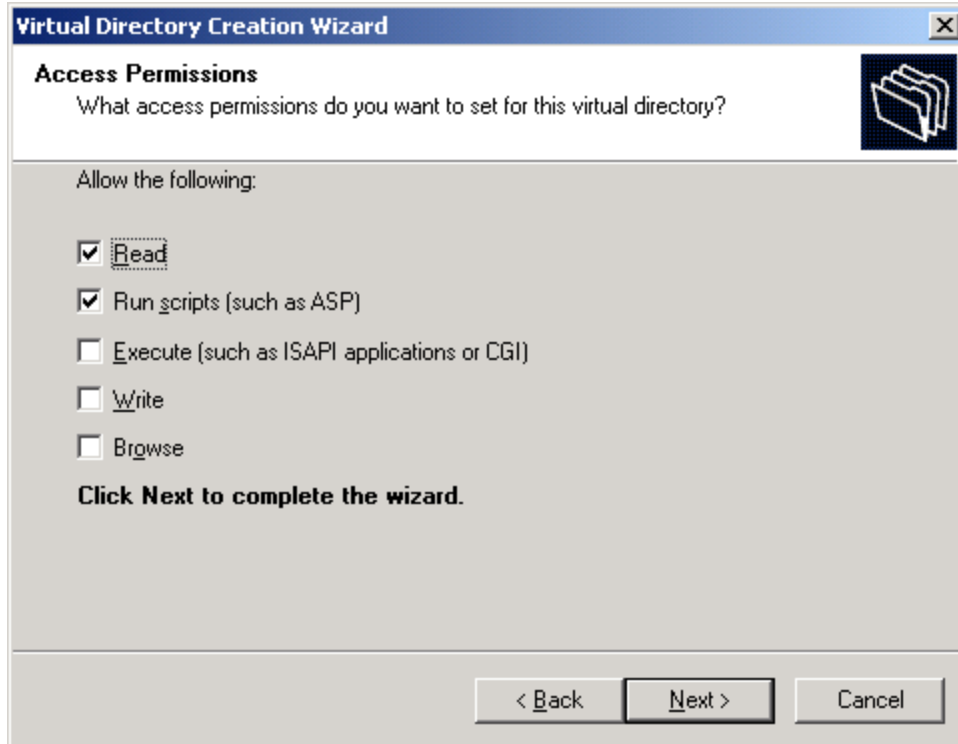
Example: for the training instance, point to C:\VSS Applications\VSS Training\Vtk or C:\VSS Applications\VSS Training\VtkUser.



Click Next.

5. On the Access Permissions screen click Next.

## Installing Multiple Instances of VSS



6. When you see a screen saying “Virtual directory is been successfully created”, click Finish.
7. Right-click on the Vtk (or VtkUser) virtual directory and select Properties.
8. Select the Directory Security tab, and click on Edit in the authentication section.
9. For Vtk:

- Uncheck “Anonymous Access”
- Check Integrated windows authentication

For VtkUser, do the reverse:

- Check Anonymous Access
- Uncheck Integrated windows authentication

10. Select the Documents tab, and remove all the Default documents from the list using the Remove button.
11. Click on Add, to add a new default document.
12. For Vtk, add Default.aspx.

For VtkUser, add Login.aspx.

13. Repeat steps 1 through 9 for VtkUser. Substitute VtkUser for Vtk in all of the above steps.

## ***CrystalReportWebFormViewer and aspnet\_client***

In order to create these two virtual directories, you must go to a previously created instance of VSS in IIS to locate the folders for these two virtual directories. These paths will be used to set up the same virtual directories in the new instance.

Follow the steps below to create the aspnet\_client and CrystalReportWebFormViewer virtual directories.

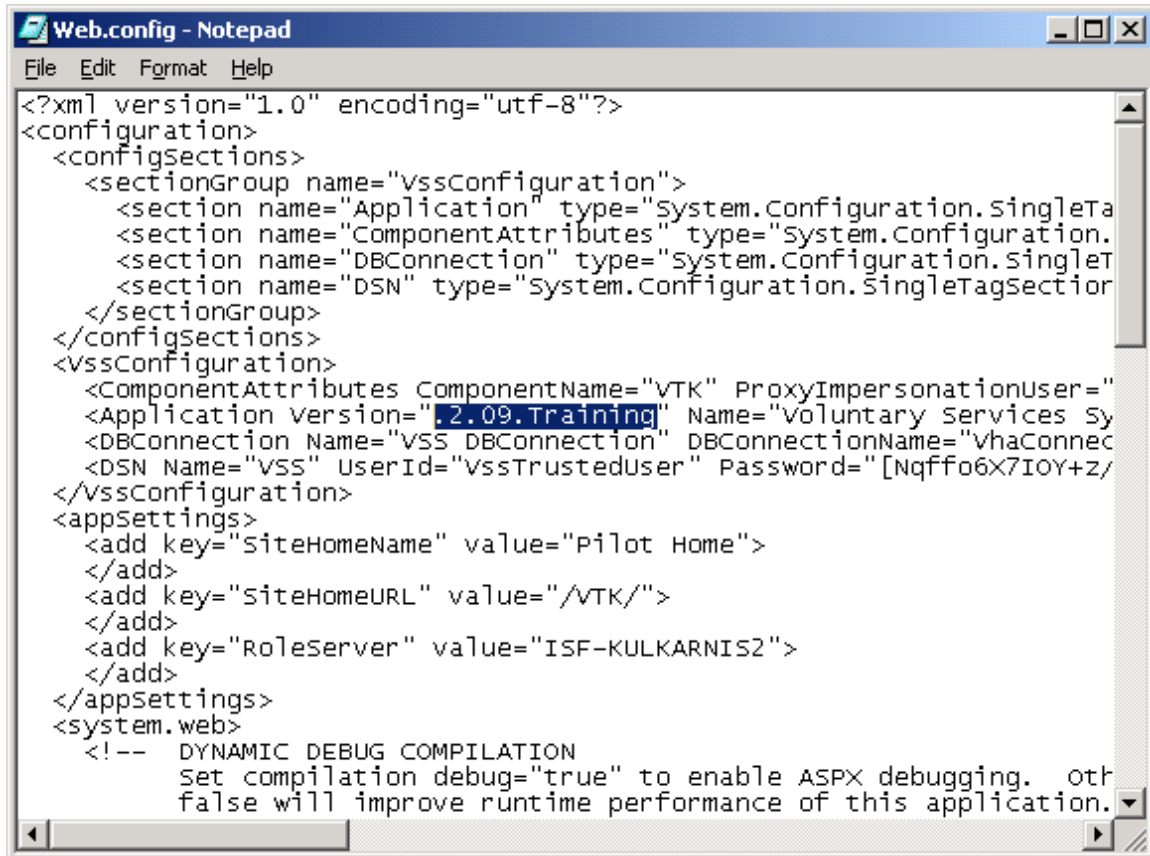
1. Select any of the other VSS application sites in IIS (e.g., VSS Test) and expand it.
2. You will see virtual directories named aspnet\_client and CrystalReportWebFormViewer.
3. Right-click on “aspnet\_client” and select Properties.
4. Select the Home Directory tab, and copy the local path into the clipboard using Edit/Copy. (This path will be used in the next steps.)
5. Click on the Web site that you were setting up, e.g., VSS Training. Go through the Virtual Directory creation wizard for each of these two virtual directories.
6. For each virtual directory, put the virtual directory name in the alias field. Paste the path in the clipboard into the Directory field.
7. After finishing the wizard, go to Properties for the newly created Virtual directory.
8. Select Virtual Directory tab and click Remove in front of Application Name field.
9. Repeat steps 1-8 above to create the CrystalReportWebFormViewer virtual directory.

## **Editing the Web.Config File**

If you are creating a new instance of the VSS application using a VSS update, the Web.Config file will not be available in Vtk and VtkUser. You will need to copy these two files from any other versions that are set up on the server.

1. If you have not done so already, copy the Web.Config file from the existing instance Vtk and VtkUser subfolders into the corresponding subfolders of the new instance (e.g., VSS Test\VTK into VSS Training\VTK).
2. In Windows Explorer, go to the Vtk directory for the instance you are creating and locate Web.Config file.
3. Open this file in Notepad.
4. Locate the Application Tag and change the value for Version element to the appropriate version name (e.g., .2.xx.Training)

## Installing Multiple Instances of VSS



```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <configSections>
    <sectionGroup name="vssConfiguration">
      <section name="Application" type="System.Configuration.SingleTagSection" />
      <section name="ComponentAttributes" type="System.Configuration.SingleTagSection" />
      <section name="DBConnection" type="System.Configuration.SingleTagSection" />
      <section name="DSN" type="System.Configuration.SingleTagSection" />
    </sectionGroup>
  </configSections>
  <vssConfiguration>
    <ComponentAttributes ComponentName="VTK" ProxyImpersonationUser="VTK" />
    <Application Version="2.09.Training" Name="Voluntary Services Sy" />
    <DBConnection Name="VSS DBConnection" DBConnectionName="vhaConnec" />
    <DSN Name="VSS" UserId="VssTrustedUser" Password="[Nqffo6X7IOY+z/" />
  </vssConfiguration>
  <appSettings>
    <add key="SiteHomeName" value="Pilot Home">
    </add>
    <add key="SiteHomeURL" value="/VTK/">
    </add>
    <add key="RoleServer" value="ISF-KULKARNIS2">
    </add>
  </appSettings>
  <system.web>
    <!-- DYNAMIC DEBUG COMPILATION
    Set compilation debug="true" to enable ASPX debugging. Other
    false will improve runtime performance of this application. -->
  </system.web>
</configuration>
```

5. For the Security element, change the path for the instance that you just created.

Example: If you copied the Web.Config file from VSS Test instance then you would change the path C:\VSS Applications\VSS Test\Vtk\XML to C:\VSS Applications\VSS Training\Vtk\XML.

6. For the Error element, make the same path name change as in step 5.
7. For the Path element, make the same path name change as in step 5.

**Note:** If the path that you set in steps 5-7 is incorrect, the application will not work.

8. Within the DBConnection Tag , locate the ConnectionString element shown below:

```
ConnectionString = "server=CHANGE VALUE1; initial catalog = CHANGE VALUE2; uid=VssTrustedUser; pwd=[WlafuBPBuTiU8cUN+KSM5/KRhDjj5/F]; Min Pool Size=1;"
```

9. Replace CHANGE VALUE1 with the SQL server machine name and CHANGE VALUE2 with the database name that you want application to point to.
10. Locate the DSN tag, and change the Name element to the DSN name that you created when you installed the application.

## Installing Multiple Instances of VSS

11. Change the DBName element value to the application's database name (The same value that as for Initial Catalog in step 6 above).
12. Save Changes.
13. Repeat the steps 1-12 above for VtkUser.

# Setting Up the Original VSS Database

## Introduction

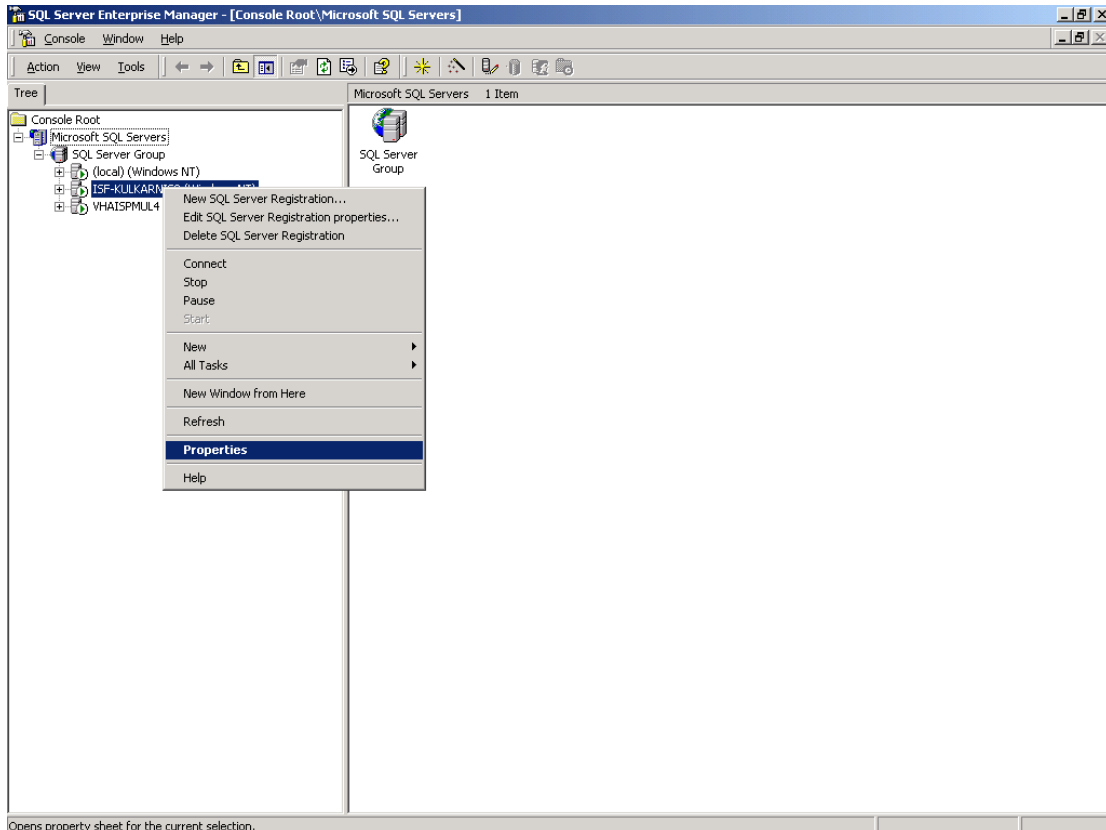
This section documents the process used to create the original VSS database. Since that time, the database has been upgraded using scripts whenever an application update has been released. Therefore, though the instructions below may be useful for understanding how the VSS team built the database, it is unlikely that they will need to be used again in this form.

The process for creating VSS database is composed of the following subprocesses:

1. Creating a new SQL server database
2. Restoring the backup file to the new database
3. Setting up the SQL Server Login User (VssTrustedUser)

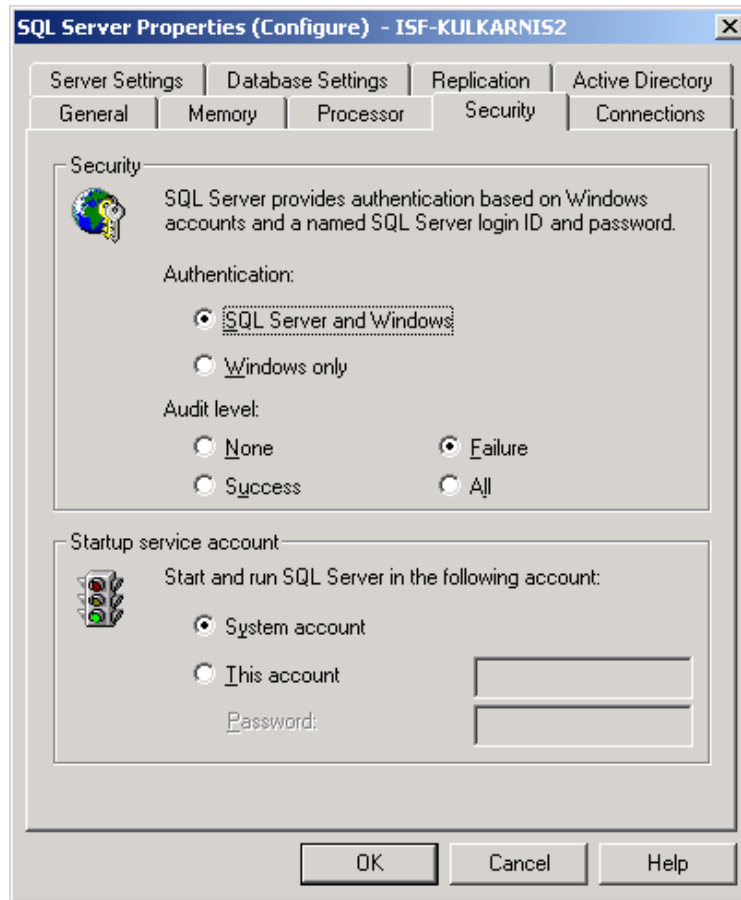
## Creating a New SQL Server Database

1. From the Start/Programs menu, select the Microsoft SQL Server and then Enterprise Manager.
2. Select a server under SQL Server Group, and go to Properties by right clicking on the Server name.



## Setting Up the Original VSS Database

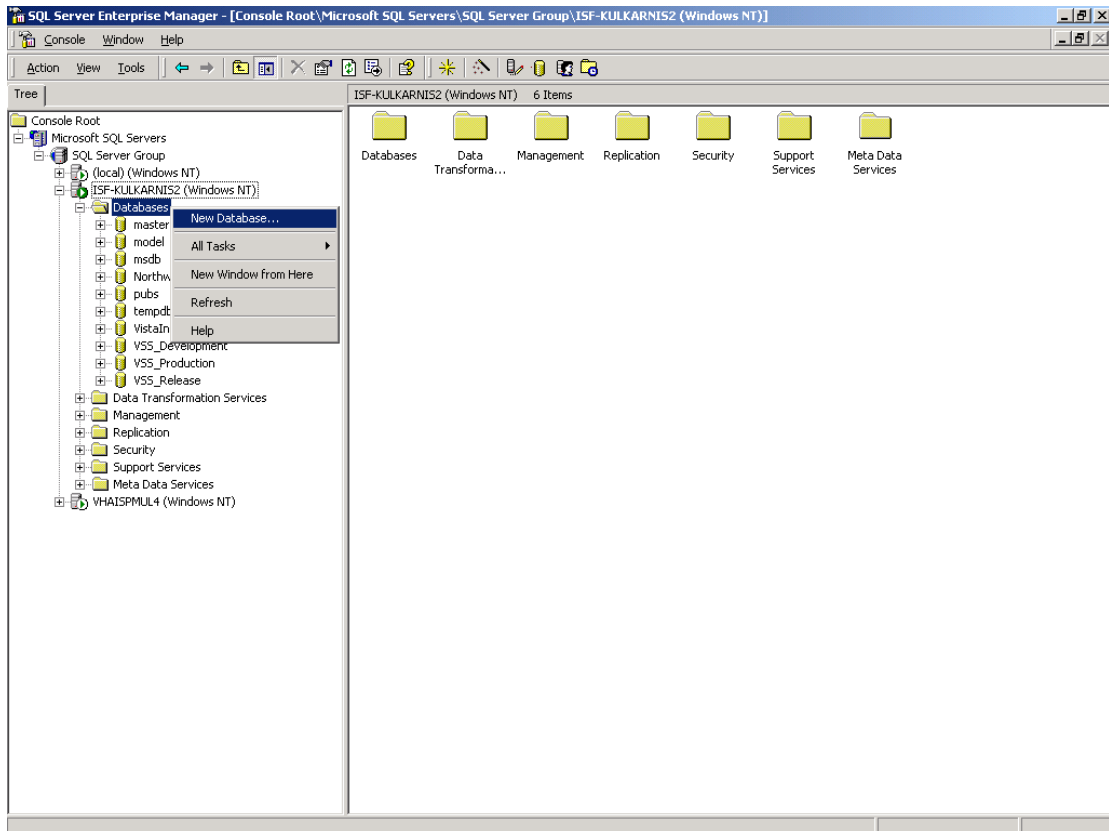
3. Under the Security tab, select the SQL Server and Windows button in the Authentication section. (“Windows only” is the default option.)



4. Click OK.
5. Select a server name under SQL Server Group and expand it.
6. Right click Databases, and choose the New Database option.

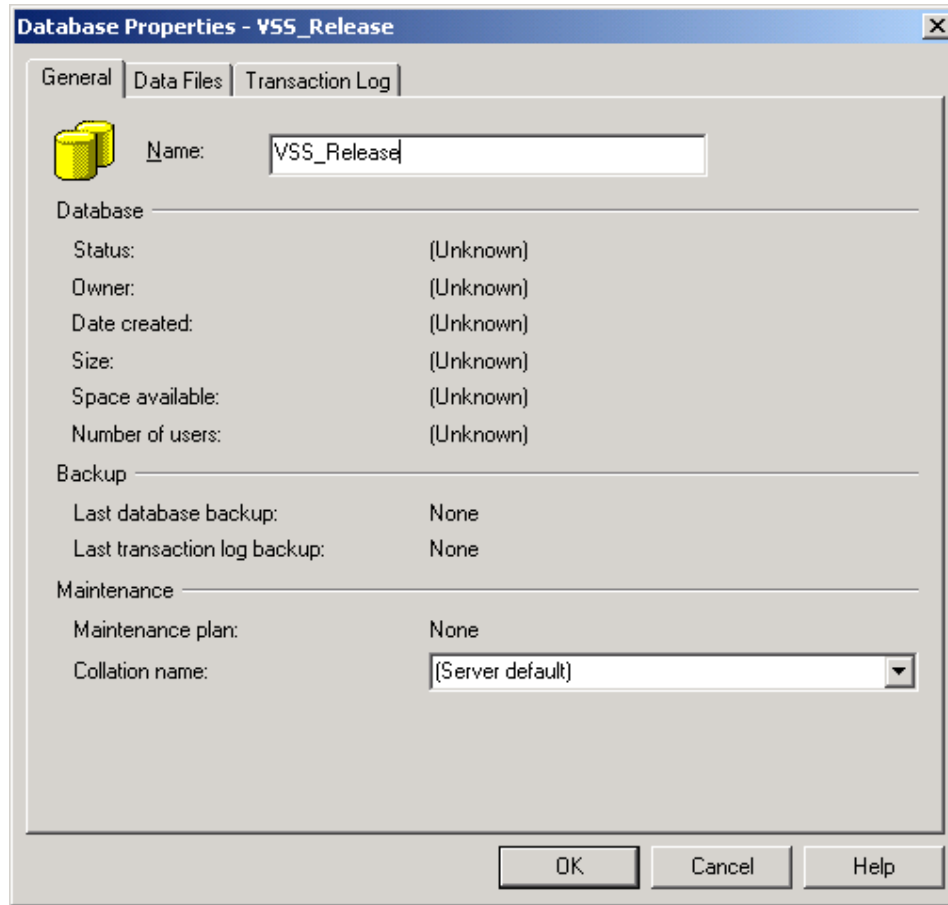


## Setting Up the Original VSS Database



7. Type the name for new database under the General tab. Example: "VSS\_Release".

## Setting Up the Original VSS Database

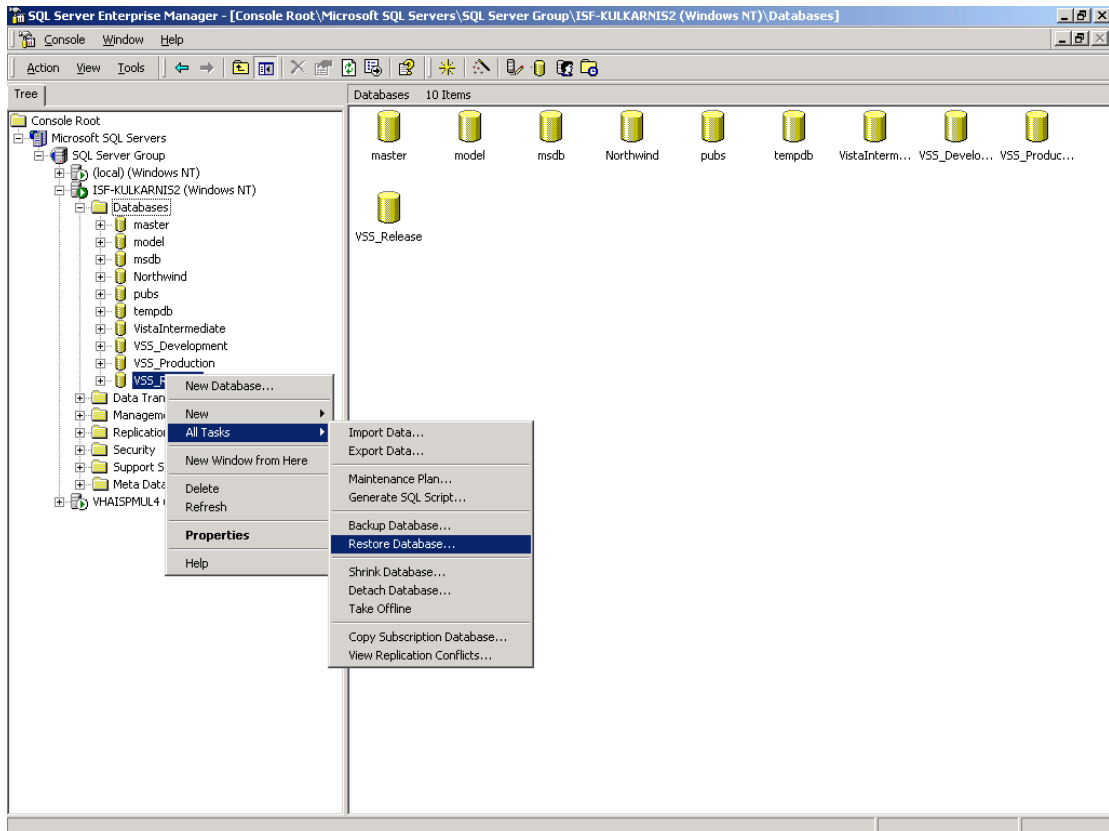


8. Select the Data Files tab.
9. Select a value under the File Name column, and rename it “VSS\_Release\_Data.”
10. Select the Transaction Log tab.
11. Select a value under File Name column, and rename it “VSS\_Release\_Log.”
12. Click OK. That creates a new database under Databases.

### ***Restoring the Backup File to the New Database***

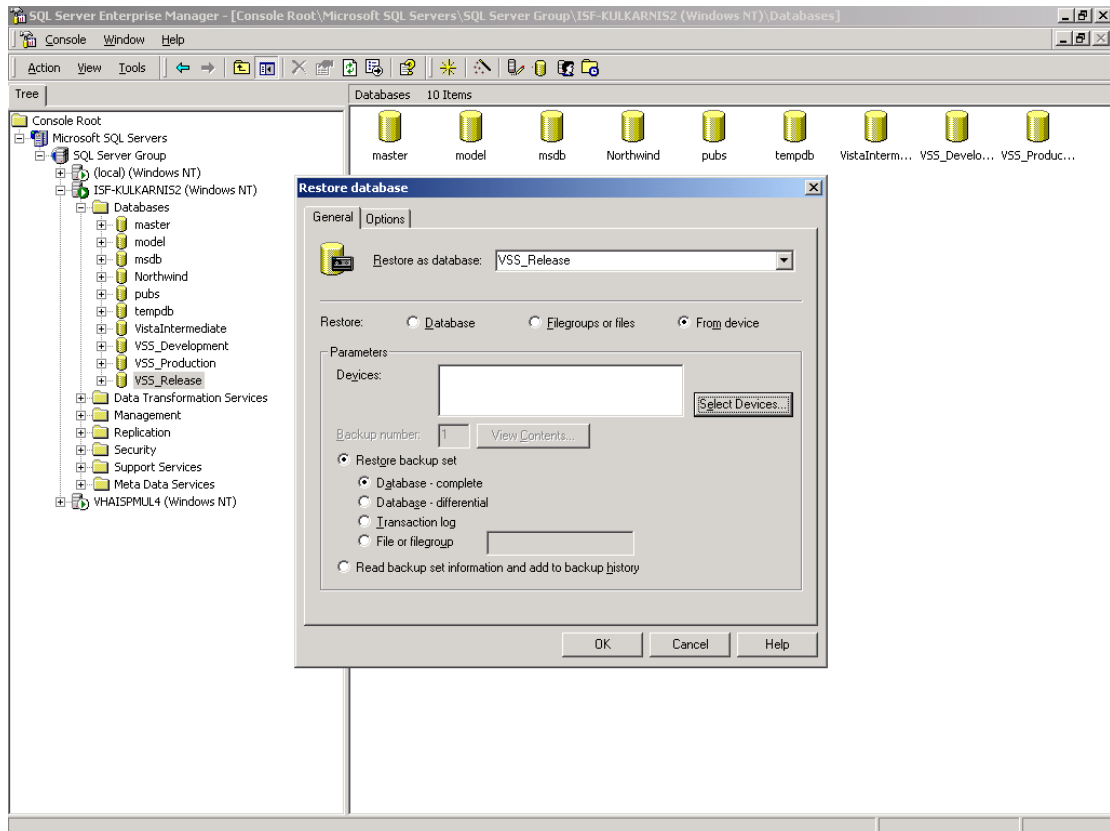
1. Right-click on the database that you just created, and select the All Task and Restore Database option from the popup menu.

## Setting Up the Original VSS Database

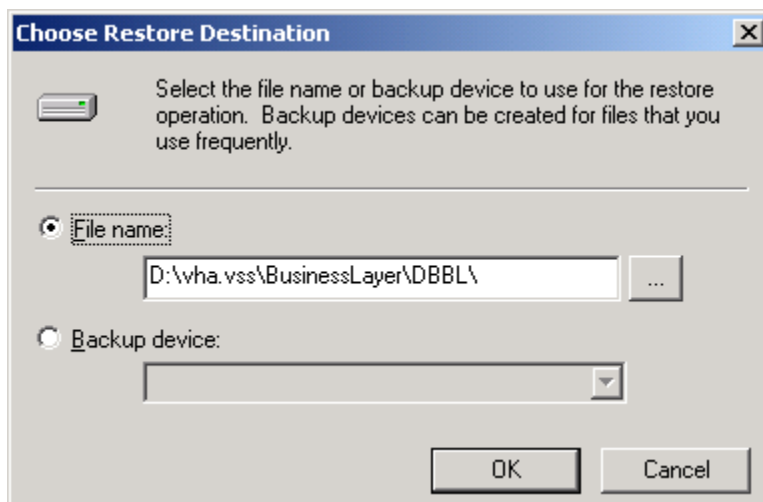


2. In the Restore section, click Device.
3. Click Select Devices....

## Setting Up the Original VSS Database



4. On the Choose Restore Devices screen, click Add.
5. On the Choose Restore Destination screen, click the File Name option and then the "...”button (ellipses).

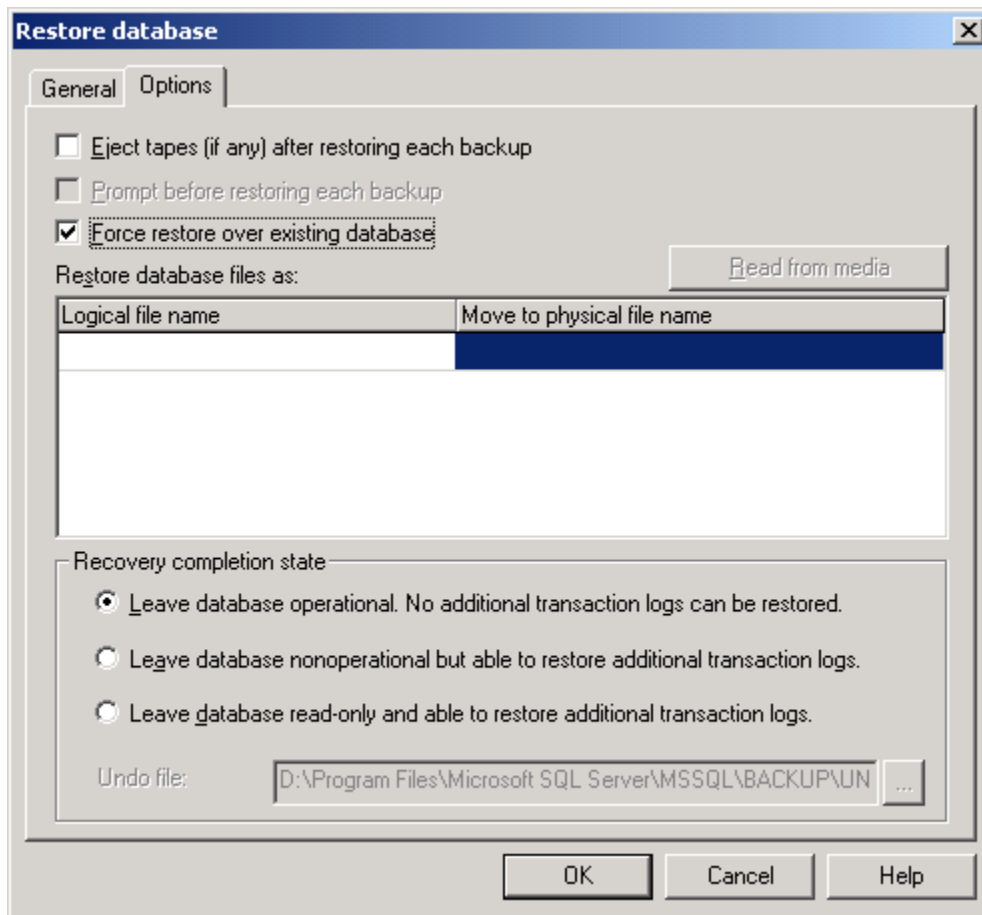


The Backup Devices Location screen appears.

6. From the Backup Devices Location screen, point to the appropriate database backup file, and click OK.

## Setting Up the Original VSS Database

7. On the Choose Restore Destination screen, Click OK.
8. On the Choose Restore Devices screen, Click OK.
9. On the Restore Database screen, select the Options tab.



10. Select the “Force restore over existing database” option.
11. Click OK. This will start the restoration process.
12. Once the restoration is complete, from the Enterprise Manager, select Users under New Database.
13. Delete the user named “VssTrustedUser.”

**Note:** At this point the VssTrustedUser will not have a login on the database server where the new database is restored. In order to create a new login, the old user login must be deleted. See the following section to recreate the user login.

### **Setting the SQL Server Login User**

You can set up the user “VssTrustedUser” by running the script VssTrustedUser.Sql, included in the VSS installation files folder. Or, you can perform the script’s actions manually. Both methods are described in this section. Choose the option below that is easier for you.

## Setting Up the Original VSS Database

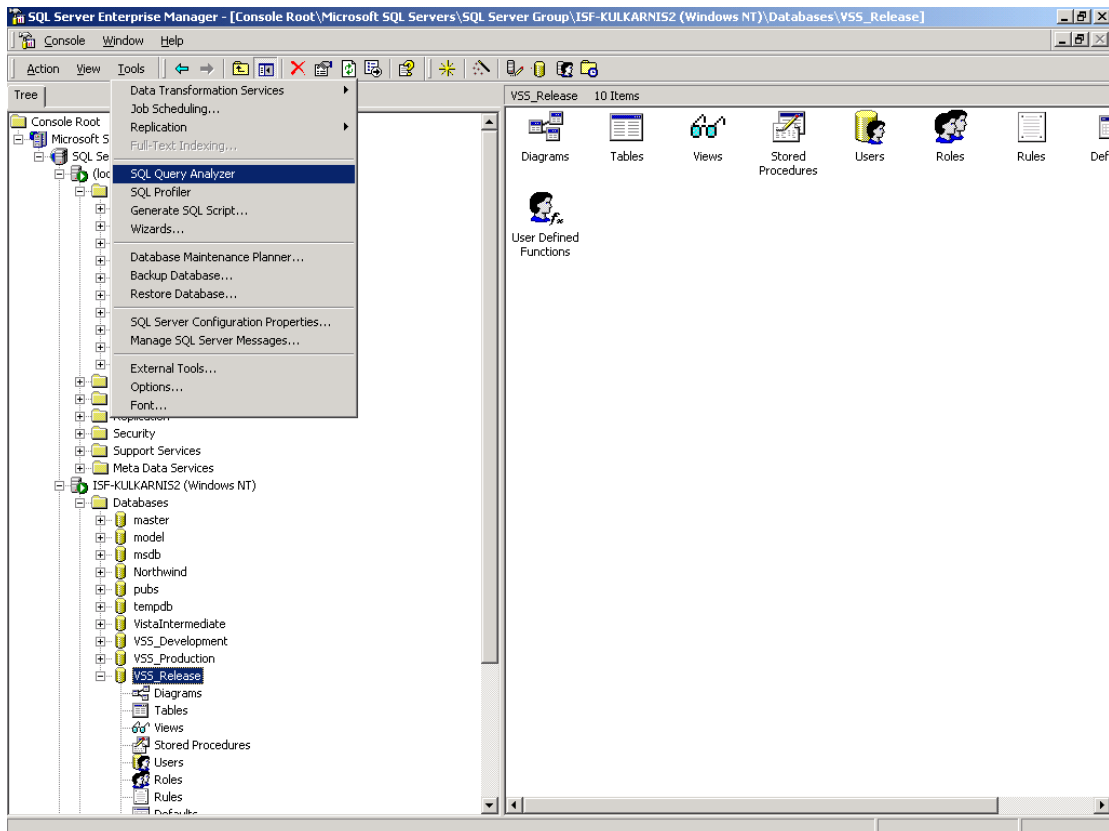
When SQL Server user permissions are changed, they may not take effect until SQL Server Service restarts. So the final step to setting the user is to stop and restart the SQL Server service.

### **Script Method**

The following steps use the VssTrustedUser script to set the user for the new database. Steps 8 through 15 confirm that the script has set permissions for all the objects. If you see that these permissions have not been set using the script, you should follow the instructions below to set them manually.

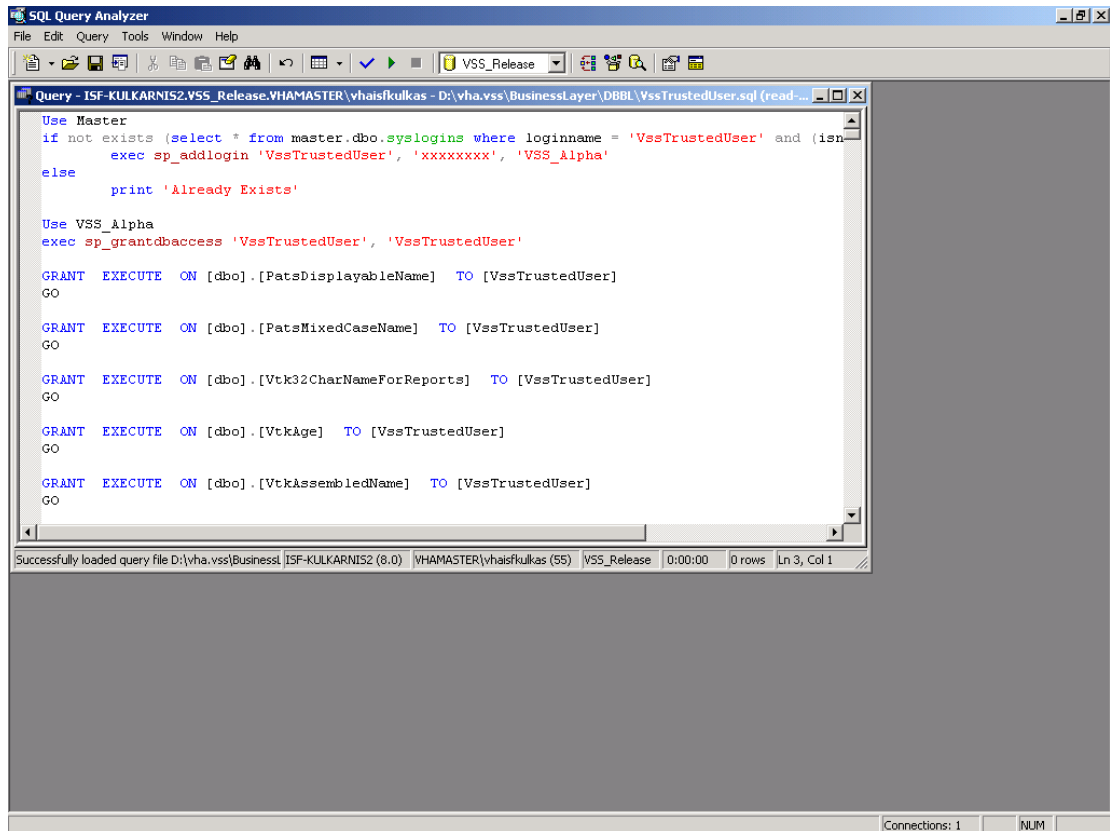
To set the user for the new database using the VssTrustedUser script:

1. Start Enterprise Manager from the Microsoft SQL Server menu.
2. Select the VSS application Database you just created.
3. From the Tools menu, select SQL Query Analyzer.



4. Using the File/Open option, select a VssTrustedUser.SQL file from Database folder from VSS installation files. You will see the following screen.

## Setting Up the Original VSS Database



5. In the script line

```
exec sp_addlogin 'VssTrustedUser', <password>, 'VSS_Alpha'
```

change the database name 'VSS\_Alpha' to the name of the database you just created.

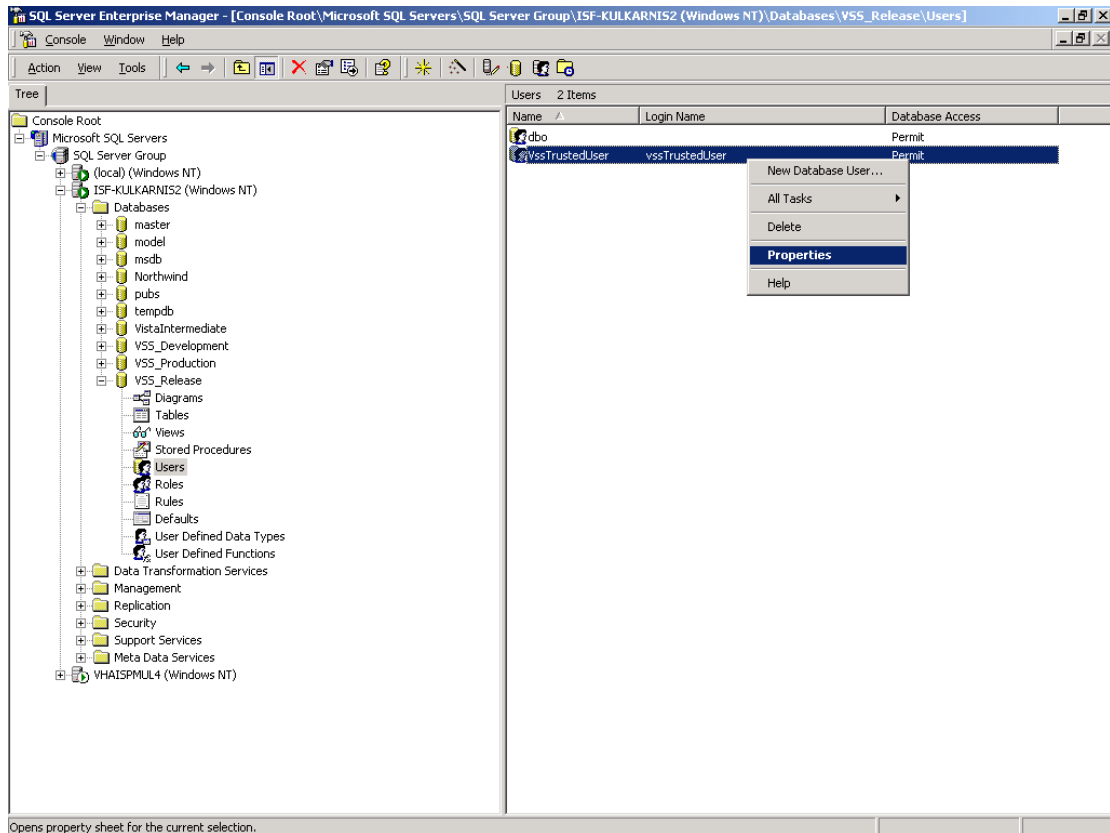
6. Similarly, in the next line

```
Use VSS_Alpha
```

change the database name "VSS\_Alpha" to the name of the database you just created.

7. From the Query menu, select the Execute option to run the query.
8. In the left panel of the Enterprise Manager screen, select the newly created database.
9. Select Users.

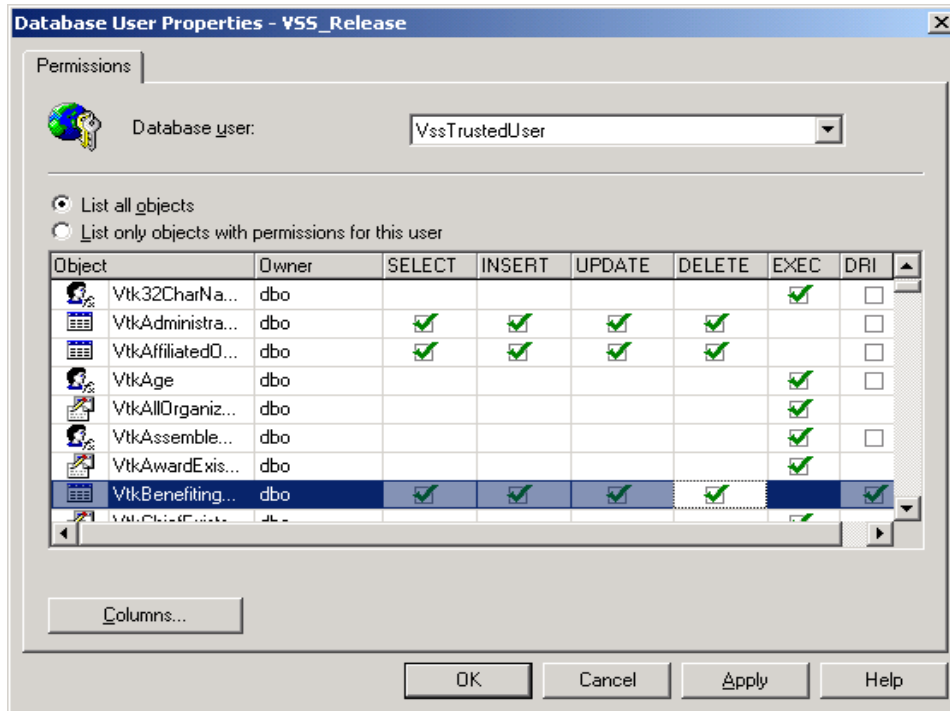
## Setting Up the Original VSS Database



10. Right-click VssTrustedUser from the users list in the right panel and select Properties from the pop-up menu.
11. On the Database User Properties screen, click Permissions, and select the List All Objects option, if not selected by default.



## Setting Up the Original VSS Database



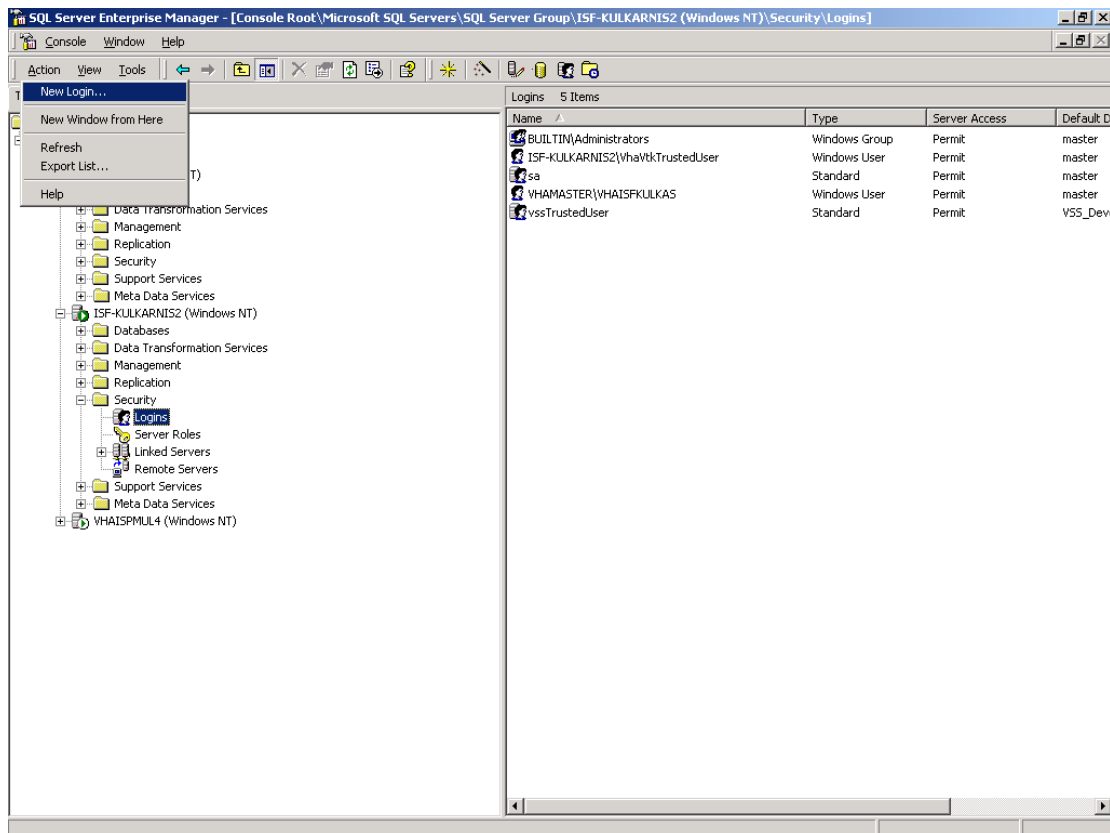
12. Check all the boxes under the Select, Insert, Update, Delete, and Exec columns for all the objects under the Object column. Exclude all system objects and those that start with "dt\_".
13. Click Apply and then OK.
14. Click Apply and then click OK.
15. After setting the user, you should stop and then restart the SQL Server service.

### **Manual Method**

The SQL server login user can be set manually as well as with a script. If you have run the VssTrustedUser script and see that permissions have not been set for some of the objects, you should follow the instructions below to set them manually.

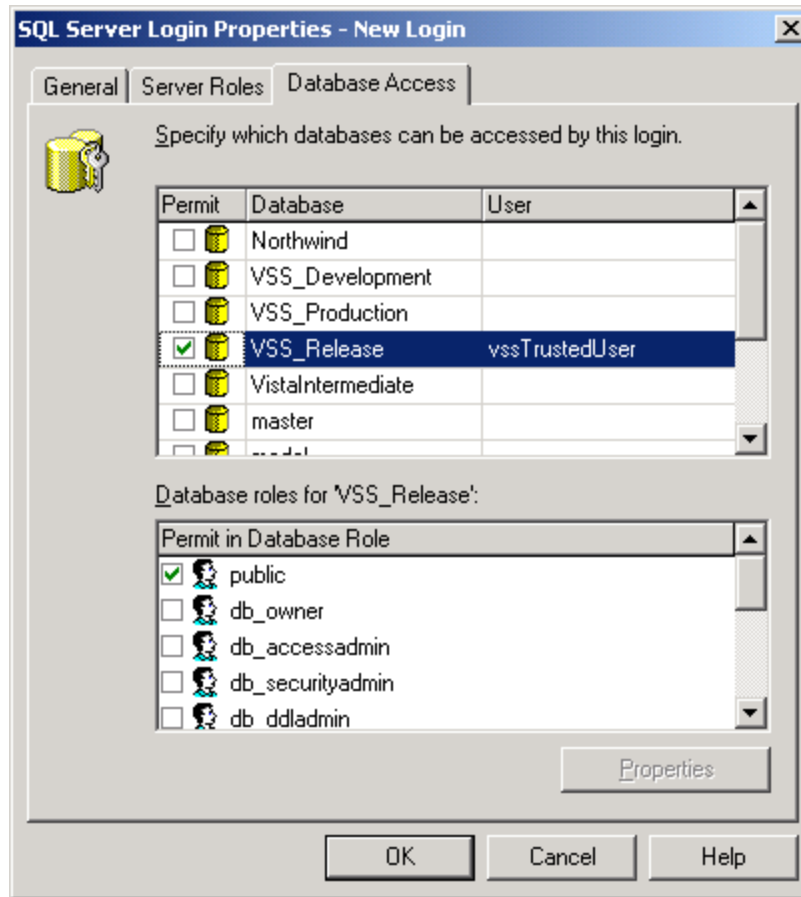
1. Start Enterprise Manager from the Microsoft SQL Server menu.
2. Go to the server where the VSS Database is installed.
3. For that Server, under Security, select Logins.

## Setting Up the Original VSS Database

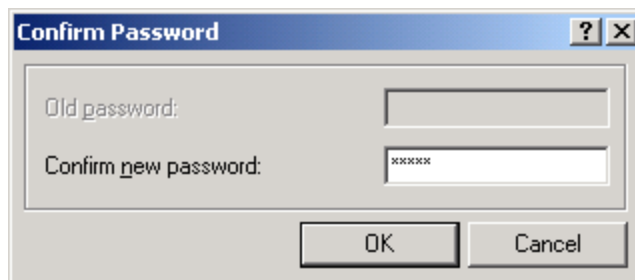


4. From the Action menu, select New Login. The SQL Server Login Properties screen appears.
5. On the SQL Server Login Properties screen, select the General tab, and type “VssTrustedUser” in the Name field.
6. Under Authentication, select the SQL Server Authentication option.
7. Enter the initial password. If you do not know the initial password for this version of the application, contact NVS/Customer Service.
8. Select the Database Access tab, and check the appropriate check box in the Permit column for the database you just created.

## Setting Up the Original VSS Database

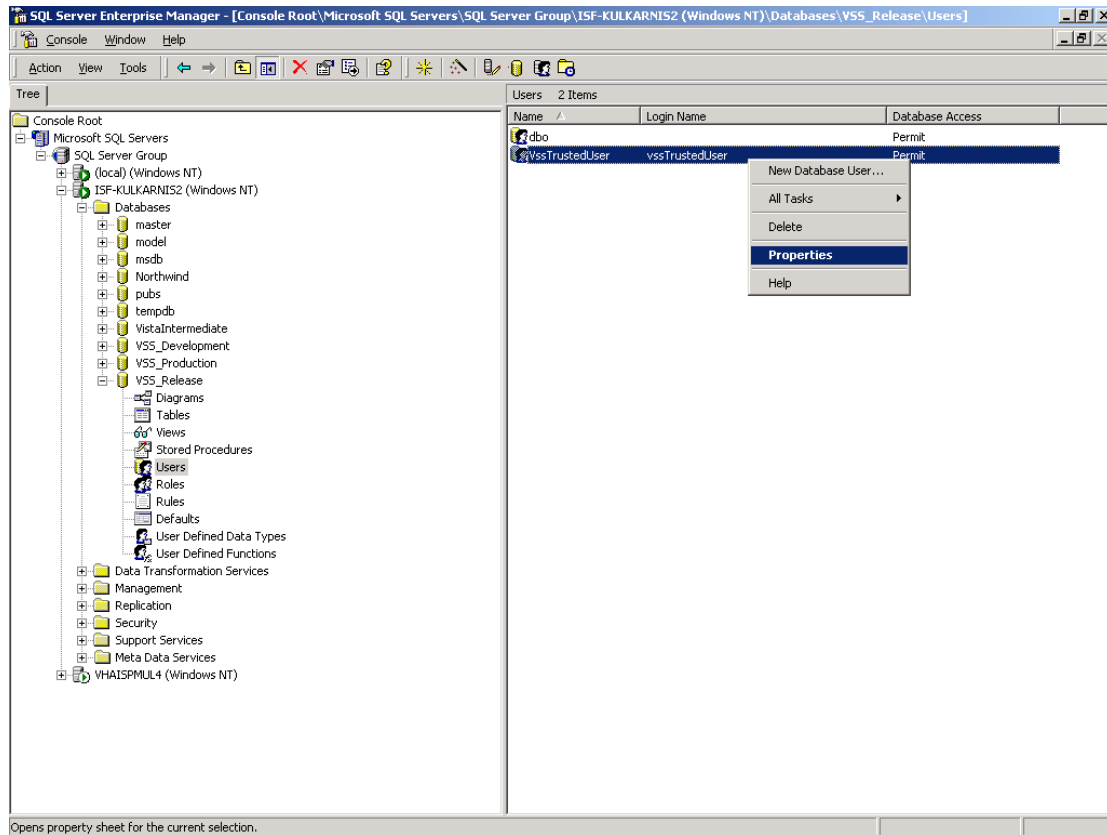


9. Click OK.
10. If the system asks you to confirm the password that you just entered, enter the same password again.



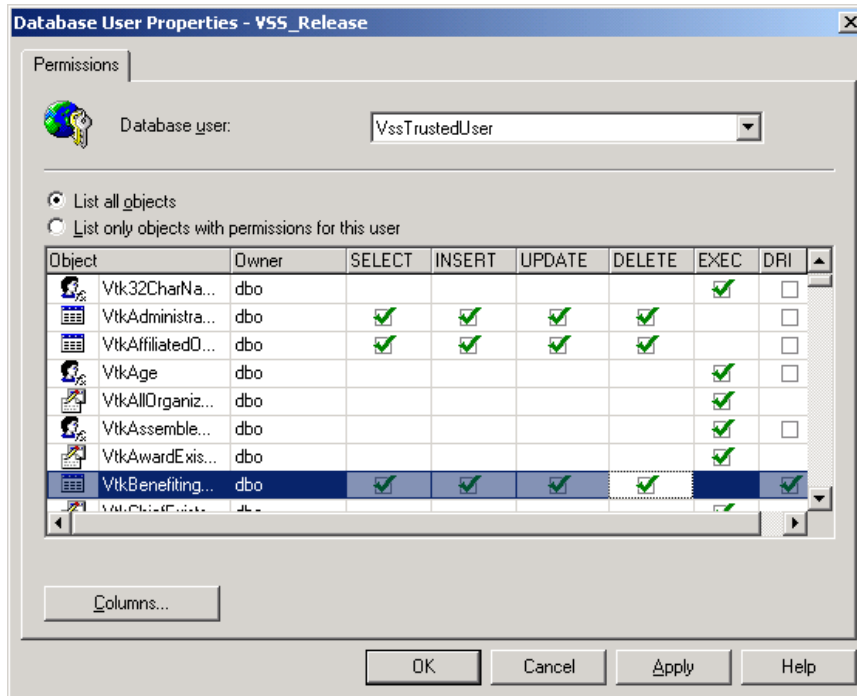
11. Click OK.
12. In the left panel of the Enterprise Manager screen, select the new database and then select Users.

## Setting Up the Original VSS Database



11. Select VssTrustedUser from the Users list in the right panel.
12. Right click Properties from the pop-up menu.
13. In Database User Properties screen, click Permissions, and select the List All objects option.

## Setting Up the Original VSS Database



14. Check all the boxes under the Select, Insert, Update, Delete, and Exec columns for all the objects under the Object column. Exclude all system objects and those that start with "dt\_".
15. Click Apply and the OK.
16. On Database User Properties screen, choose "db\_owner" from the Database role membership option, and click OK.
17. Click Apply and then click OK.
18. Stop and then restart SQL Server service.

## Setting Up the Original VSS Database

## Upgrading the VSS Database

### Introduction

This section describes the process of upgrading the VSS database when new database scripts are released to the EMC. To create the new database, the upgrade scripts are run on a database restored to the Test site from the current Production database backup. After testing successfully on the Test site, the upgrade scripts are run on the Production database. **In both cases, the database must be upgraded before an application update is applied.**

There are four instances of the application running on the two VSS application servers: Production, CSS, Test, and Training. Each instance of the application uses a separate database. The CSS database must be identical to the Production database, and is therefore restored from the latest Production backup. The training database can be restored from the Test database. Because the four instances of the application may not use same version of the application, it is important that the restored database is the correct one for the version.

### *Upgrade Overview*

The entire sequence for upgrading the four databases is as follows:

1. Upgrade the database on the Test site.
2. If there is an application update patch, run it on the Test site.
3. Test the database upgrade/application update on the Test site.
4. If the Test site test is successful, run the database upgrade scripts on the Production database.
5. Restore the CS database from the latest backup of the new Production database and restore permissions — **required the first time there is a new database upgrade.** (Because there is a long list of permissions the EMC needs to preserve for the CS database on a daily basis, this process is now automated — see “Refresh CS Database Package” under “Maintaining the VSS Database,” in this document.
6. Restore the Training database from the new Test database and restore permissions (optional).

The process of upgrading the Test site database consists of the following general steps:

1. Creating a new Test database and adding new/modified files to database folder.
2. Restoring the database from the Production backup
3. Manually executing the monthly rollup (optional)
4. Executing the new SQL DTS packages

Detailed instructions for each of these steps are presented in the sections below. To upgrade the Production database, follow sections 4 through 6. To restore database backups to the Test, CS, and Training sites, follow sections 1 and 2.

For information about updating the intermediate database prior to executing any data migration, see the section of this document titled “VSS Data Migration Setup.” In the unusual event that the EMC receives a database upgrade package that requires importing data via flat files, see Appendix D of this document, “Loading SQL Server Flat File Packages.” This section contains detailed steps for completing the process.

### Creating a New Test Database Directory

Using a tool such as Windows Explorer, you must copy all new/modified scripts, new flat files (if they exist), and the database backup to the database folder for the release version being implemented. **When doing this, it is extremely important to substitute the appropriate database, backup file, and physical path/file names.**

To create a new Test database directory:

1. Create a new release directory with the version number in the name.
2. Create a new Database subdirectory under the appropriate release directory.
3. Copy the new/modified scripts or files into the database folder for the release version being implemented.

### Restoring the Test Database

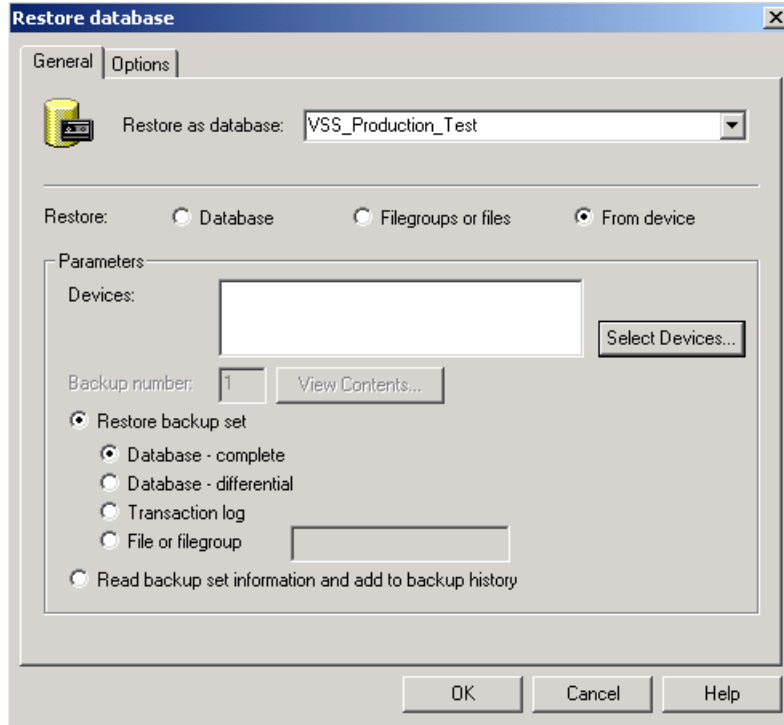
You should restore the Test database from the most recent Production database backup. **When doing this, it is extremely important to substitute the appropriate database, backup file, and physical path/file names.**

To restore the Test database, follow the steps below:

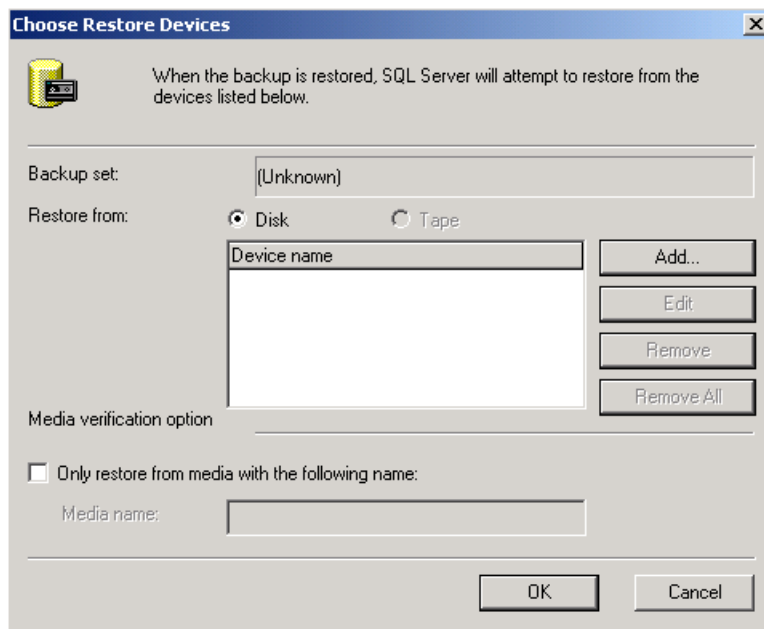
1. Use SQL Server Enterprise Manager to delete the old Test database.
2. Create a new database (“VSS\_Production\_Test,” for example), and accept all defaults.
3. In SQL Server Enterprise Manager, highlight the database name in the tree to the left and right-click. Select All Tasks | Restore Database... from the popup menu to initiate the restore of the development/test database.
4. When the Restore Database screen appears, select the From Device option for the Restore property. Then, click the Select Devices button.




## Upgrading the VSS Database



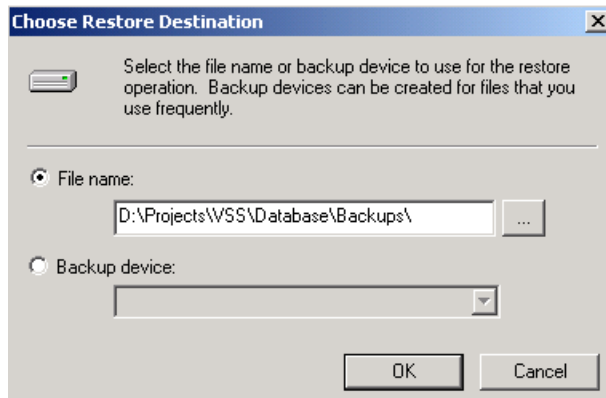
5. When the Choose Restore Devices screen appears, click the Add button to add a new device name for the backup.



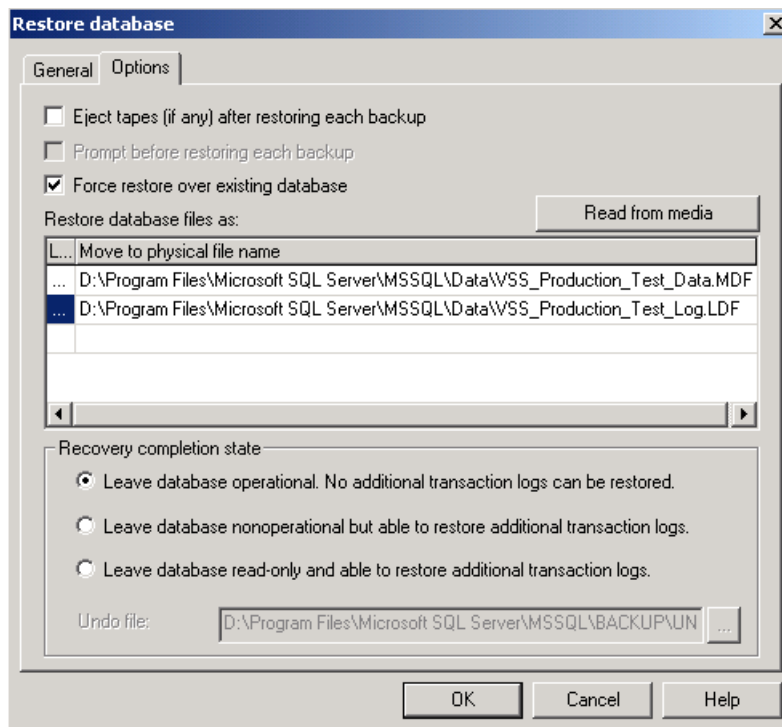
6. Click the  button and select the backup file that has been placed in the database folder for the release version being implemented. The earliest acceptable post alpha backup is

VSS\_Production\_db\_200212100015.BAK

## Upgrading the VSS Database



7. Click OK three times and then select the Options tab.



8. Make sure that the “Force restore over existing database” box is checked.
9. Set the Path and file name under the “Restore database files as:” section, shown above, and in the column labeled, “Move to physical file name.”

**Note.** When restoring a backup created on a different server, make sure to check the path of the SQL Server Data folder (location of the .MDF files) and database name for the destination of the restore.

You may need to change the path to match the destination path and file name of the restored database. The backup will retain the physical path and file names as they were from the machine where the backup was created.

## Upgrading the VSS Database

The physical database name often has an additional “\_Data” and the log name an additional “\_Log”. This is a SQL Server naming convention that you must either accept or change at the time the database is created. A typical SQL Server database path is D:\Program Files\Microsoft SQL Server\MSSQL\Data.

10. Click OK to begin the restore.

11. When the message appears that the restore has been successful, click OK.

Now you are ready to upgrade the restored database with the update scripts.

## Manually Executing the Monthly Rollup (Optional)

Monthly rollup is automated event, scheduled by the system administrator. However, you may want to use the SQL Query Analyzer to perform the rollup manually if you are restoring a backup that still needs to have the latest monthly rollup performed. Or you simply want to test the monthly rollup

To execute the rollup manually:

1. Connect to the VSS\_Production\_Test database
2. Execute the following command:

```
EXEC VtkMonthlyRollup
```

## Executing the DTS Packages for Upgrades

The SQL Server DTS packages must be executed in the Local Packages section of SQL Server Enterprise Manager’s Data Transformation Services (DTS).

The basic steps for executing each DTS package for upgrades are:

1. Set connection properties for Microsoft OLE DB Provider
2. Set package properties
3. Execute the package.

If the script execution fails, you will need to resolve the problem before proceeding any further with the upgrade.

The detailed steps for loading the DTS packages are as follows:

1. In SQL Server Enterprise Manager locate the appropriate server hosting the database to be upgraded.
2. Go to Data Transformation Services/Local Packages and locate and double-click on the script package you wish to execute.

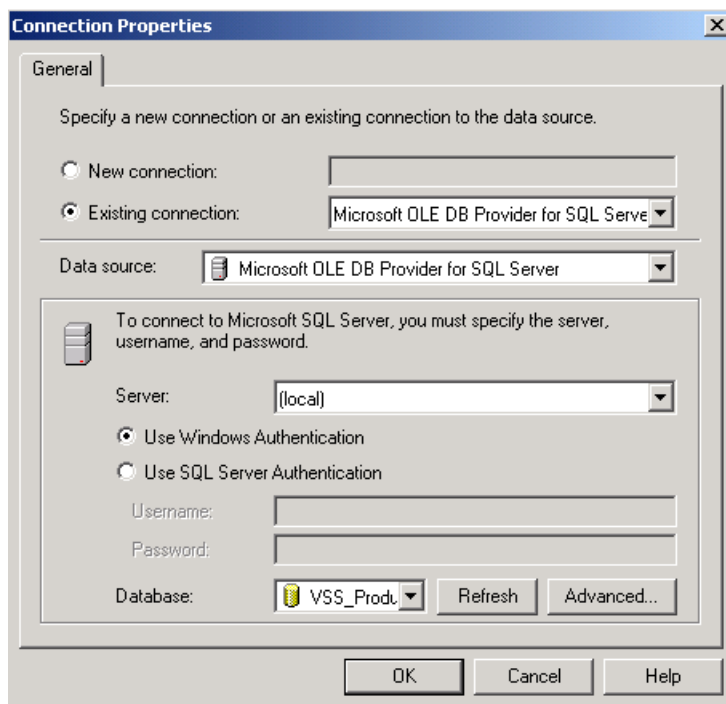
## Upgrading the VSS Database

3. Check the properties for the Microsoft OLE DB Provider for SQL Server by doing the following:

- a. Right-click on the Microsoft OLE DB Provider icon:



- b. Select Properties from the popup menu.
- c. Make sure that Data Source shows the correct database server and that Database shows the correct database. This should be preset, but it's a good idea to double-check the values set.
- d. If you are connecting remotely, Server cannot be "local" unless you are connected via Terminal Server to the server.



- e. If you have made changes, click Refresh.
- f. Click OK to close the Connection Properties screen. The Task References dialog appears.

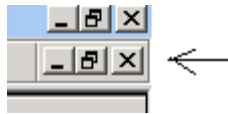


## Upgrading the VSS Database

- d. Click OK.
5. Click Package/Save from the Package menu to save the changes.
6. Click Package/Execute to execute the package.
7. If the package does not successfully complete execution, capture a screen shot of the “Executing Package” popup. This should list the steps completed and identify the step that failed.

**Note:** If script execution fails, you must resolve the problem before preceding any further with the upgrade.

8. To exit the package, click the bottom “X” in the upper right corner of the Package window.



## Maintaining the VSS Databases

### The Five VSS Databases

There are five separate databases used in support of the VSS application: Vista Intermediate, VSS Test, VSS Training, VSS Production, and VSS CS. These databases reside in an Enterprise Management Center (EMC) clustered-server environment. The first cluster has the VSS Production and Vista Intermediate databases that serve as the repository of “live” data for the VSS application. The second cluster has the VSS Test, VSS Training, VSS CS, and Vista Intermediate databases that serve as the repository of “test” data for the VSS application. These databases can be managed through the SQL Server Enterprise Manager (SEM).

#### ***Vista Intermediate Database***

The Vista Intermediate database is an interim database used to facilitate the migration of the data from its legacy flat file format to a relational database management system. The flat files are generated through Microsoft Outlook as data is received from the legacy system for a station. Currently six stations have already been migrated. Multiple stations have been scheduled to migrate in three phases that are managed by a spreadsheet (*VSS station list for EMC.xls*) in conjunction with a Data Transformation Services (DTS) package that has a job scheduled by the SQL Server Agent to automate the execution of the data migration.

The DTS package is used to transform the data from the flat files to the interim database tables, followed by launching necessary scripts to transform the data from its legacy format in the Vista Intermediate database to the relational format present in the application database. A copy of the Vista Intermediate database, the DTS package, and the VSS Station List spreadsheet resides on the test server and on the production server for executing the migration to the application database.

All database migrations are executed on the test server first so that the migration for a particular station can be tested prior to migrating the data to the production server. The database name in the SEM is “VistaIntermediate.” Please refer to the section “Migrating Site Data to the EMC” for more details.

#### ***VSS Production Database***

The VSS Production database is the live repository for the data that is managed by the VSS Application that is accessed via the user’s web browser with the site URL <http://vaww.vss.med.va.gov/vtk>. The database name in the SEM is “VSS\_Production.”

## **VSS Test Database**

The VSS Test database is the newest version of the application database. This database is used to test database and application upgrades, as well as data migrations prior to being applied to the VSS Production database. This database is accessed by the VSS application with the site URL <http://vaww.test.vss.med.va.gov/vtk>. The database name in the SEM is “VSS\_Test.” Please refer to the section entitled *Upgrading the VSS Database* for upgrade instructions.

## **VSS Training Database**

The VSS Training database is a mirror of the VSS Test database. This database is provided so that users can train on the newest version of the application that is accessed by the site URL <http://vaww.training.vss.med.va.gov/vtk>. The database name in the SEM is “VSS\_Training.” For instructions on using the DTS package, see the section below, “RefreshTrainingDatabase.”

## **VSS CS Database**

The VSS CS database is a mirror of the VSS Production database used by Customer Service (CS) to support the VSS application. This is the database supporting the VSS application that is accessed by the site URL <http://vaww.cs.vss.med.va.gov/vtk>. CS will use this application to replicate the users’ issues and try to determine how to fix them. This database requires a daily restore or refreshing of the data from the VSS Production database. The database name in the SEM is “VSS\_CS.” There is a DTS package named, “RefreshCSDatabase” to facilitate ease in refreshing the data in the database. For instructions on using the DTS package, see the section below, “RefreshCSDatabase.”

## **Copying Data with DTS “Refresh” Packages**

### **Refresh CS Database Package**

The DTS package, named “RefreshCSDatabase” is preset to copy data from the VSS\_Production database (residing at EMC within the SEM on the first cluster) to the VSS\_CS database (residing at EMC within the SEM on the second cluster). It also preserves all permissions. This DTS package performs more efficiently when it resides on the server that contains the VSS\_CS database; it is currently located at EMC within the SEM on the second cluster.

The basic steps that the DTS package performs are the following:

1. Set all constraints to NoCheck in the VSS\_CS database.
2. Disable all triggers in the VSS\_CS database.
3. Delete all rows of data from each table in the VSS\_CS database.
4. Copy all rows of data from each table in the VSS\_Production database to their respective table in the VSS\_CS database.
5. Set all constraints to Check in the VSS\_CS database.
6. Enable all triggers in the VSS\_CS database.



### **Advantages and Disadvantages of the DTS Package**

#### Advantages:

- Preserves permissions.
- Automates database copying.
- Avoids making a backup and then restoring from the backup when there's no design change.
- Saves hard drive space since it does not need a backup to restore the database.
- No network delays due to copying a large file such as the backup.

#### Disadvantages:

- Database design changes require a database restore from the upgraded database backup.
- Database restores require the permissions to be reset.
- Database design changes require a modification to the data transformations and/or the ActiveX scripts in the DTS package.

### **Executing the “RefreshCSDatabase” Package**

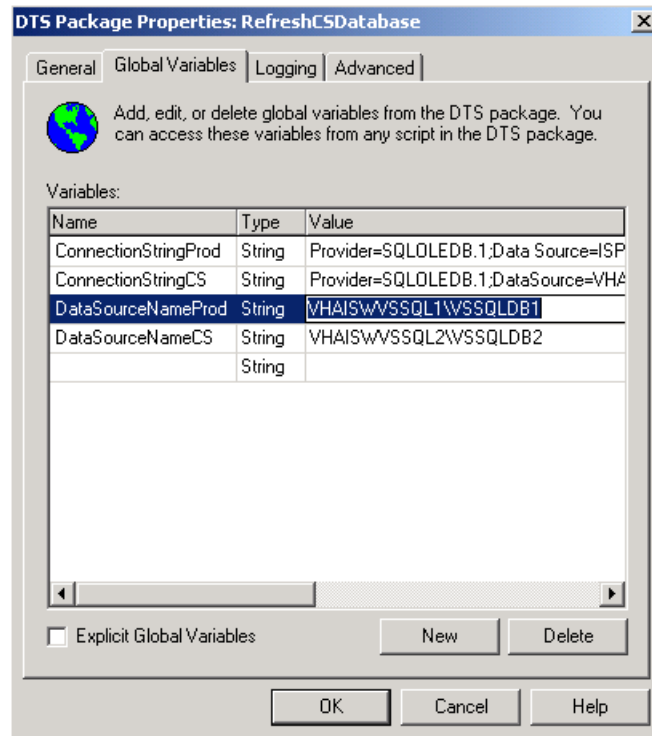
The SQL Server DTS packages must be executed in the Local Packages section of SQL SEM's DTS.

The basic steps for executing the daily data restorations with this DTS are:

1. Set the server names in the global variables of the DTS package properties.
2. Execute the package either manually or automatically with the SQL Server Agent.

The detailed steps for loading the DTS package are as follows:

1. In the SEM locate the appropriate server hosting the VSS\_CS database.
2. Go to Data Transformation Services/Local Packages and locate and double-click on the “RefreshCSDatabase” package.
3. Check the package properties by doing the following:
  - a. Right-click inside the package (any where in the white space) and select Package Properties from the popup menu.
  - b. Click on the Global Variables tab page. Look under Variables for the variable named “DataSourceNameProd” and “DataSourceNameCS”. Expand the value column (last column) to the right of the variable name and type.



- c. Verify or enter the value for the “DataSourceNameProd” and the “DataSourceNameCS” variable to be the application server for the VSS\_Production database and the test server for the VSS\_CS database, respectively.
  - d. Click OK.
4. Click Package/Save from the Package menu to save the changes.
  5. Click Package/Execute to execute the package as often as desired either manually or scheduled automatically through the SQL Server Agent. Be prepared for the package to run for five to ten minutes and increase in time as the database grows exponentially larger. For best results, schedule the package to run during non-duty hours.

### **Upgrading the “RefreshCSDatabase” Package**

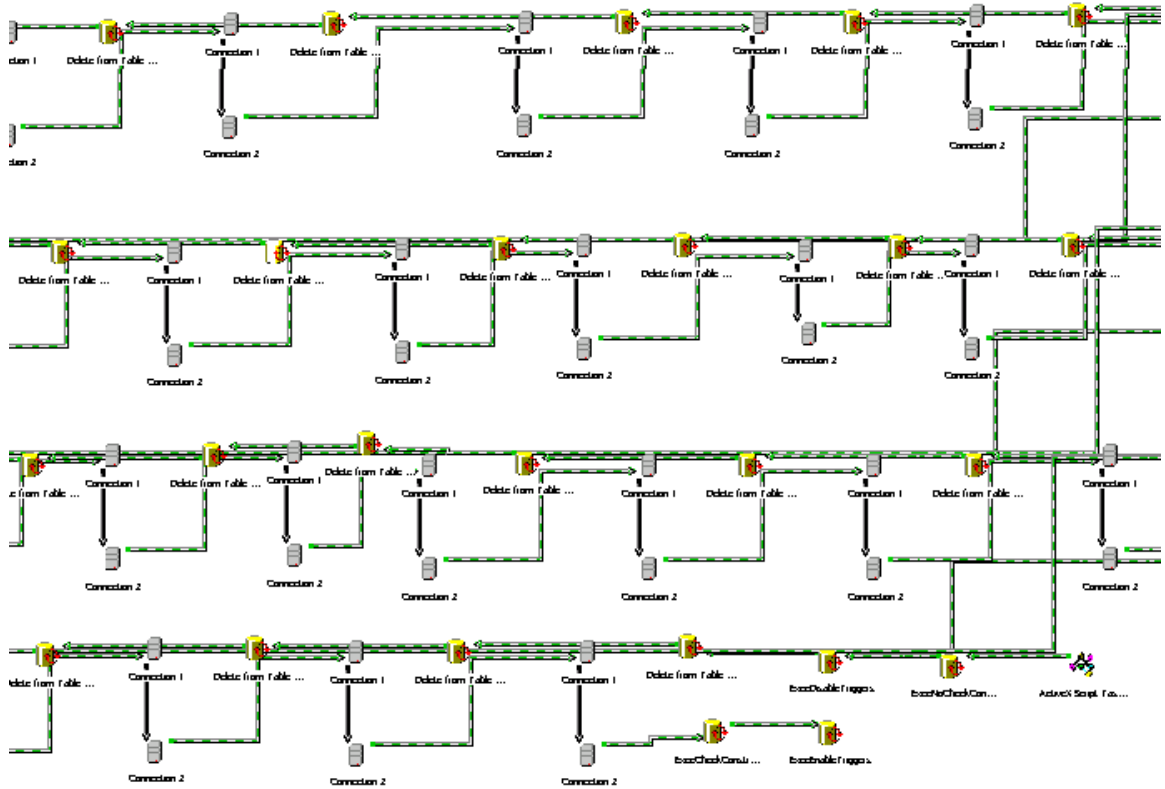
Note that if a future upgrade to the VSS\_Production database changes anything in the database design from a table’s column name, data type, size, constraint, or trigger then the VSS\_CS database will require a normal database restore from the initial restore of a newly upgraded production database followed by resetting the permissions, and most likely a modification to the transformations and/or the ActiveXScripts to add or delete procedures and triggers as upgraded. Also, reset the SQL Server Agent to run the modified package for the daily restores to the VSS\_CS database. Detailed steps are:

1. Use the instructions in the section in this document entitled “Upgrading the VSS Database” for details on how to restore the database taking care to restore the

## Maintaining the VSS Databases

VSS\_CS database with the backup from the VSS\_Production database and reset the permissions.

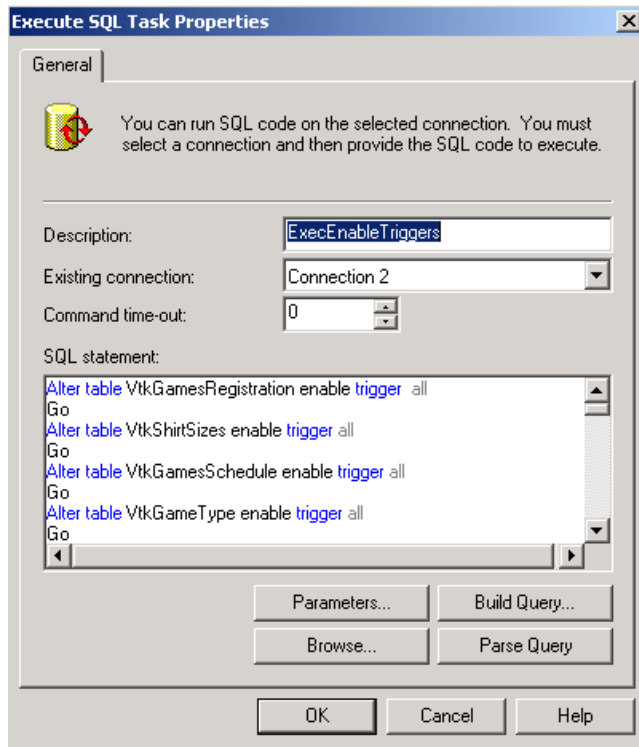
2. Familiarize yourself with the objects in the DTS package:



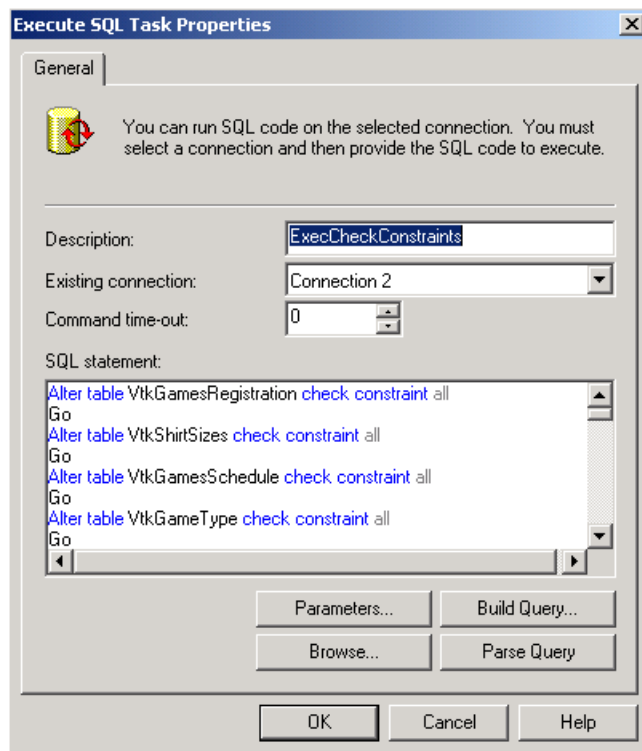
The best approach is to start at the bottom of the screen.

3. Right-Click the “ExecEnableTriggers” SQL task icon and select Properties from the popup menu. Modify the SQL Statement located in the bottom text box as necessary and click OK. Note that every VSS trigger should be listed in this script.

## Maintaining the VSS Databases

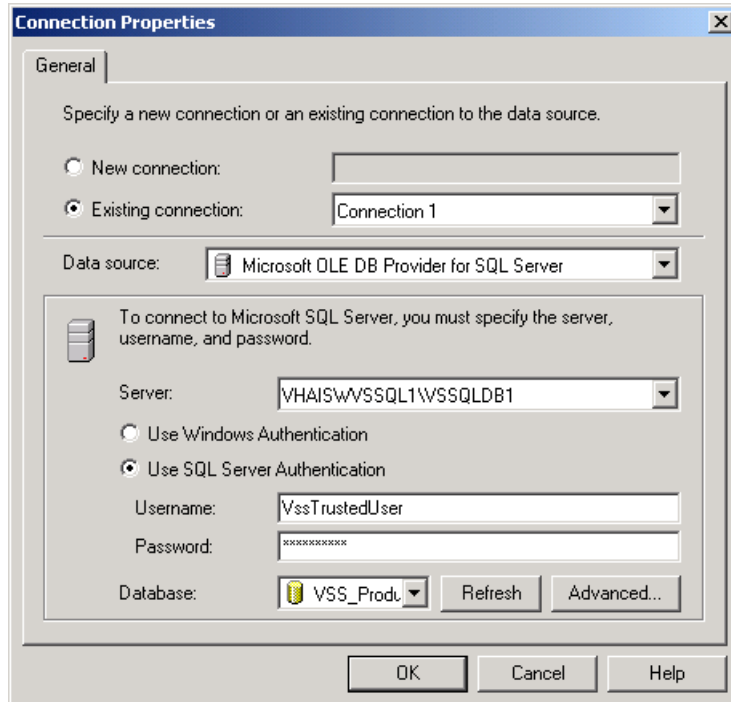


- Right-Click the ExecCheckConstraints SQL task icon and select Properties from the popup menu. Modify the SQL Statement located in the bottom text box as necessary and click OK. Note that every VSS constraint should be listed in this script.



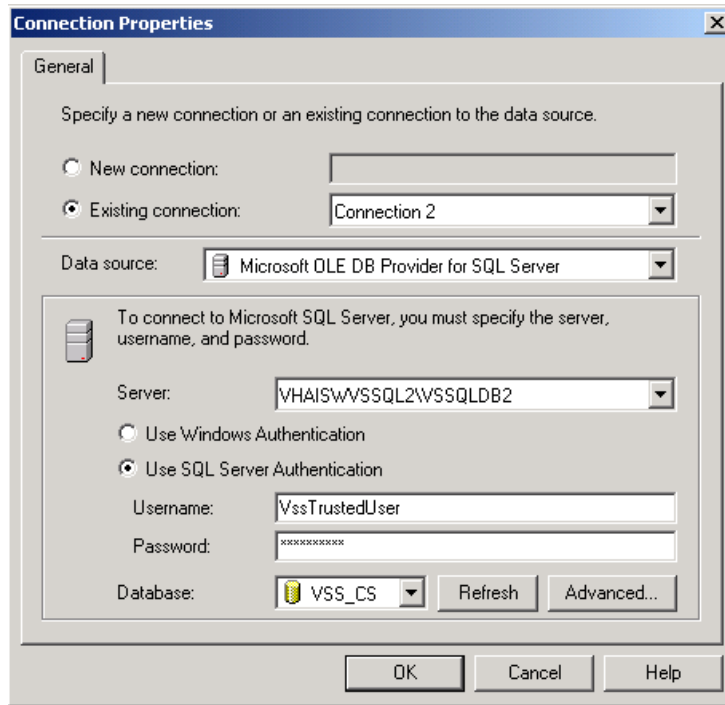
## Maintaining the VSS Databases

5. Right-Click any Connection 1 Microsoft OLE DB Provider for SQL Server icon and select Properties from the popup menu. Modify the server and database as necessary and click OK. Note that it is only necessary to modify the properties of one of the Connection 1 icons. This setting should be the appropriate application database to be used as the source. Click OK.

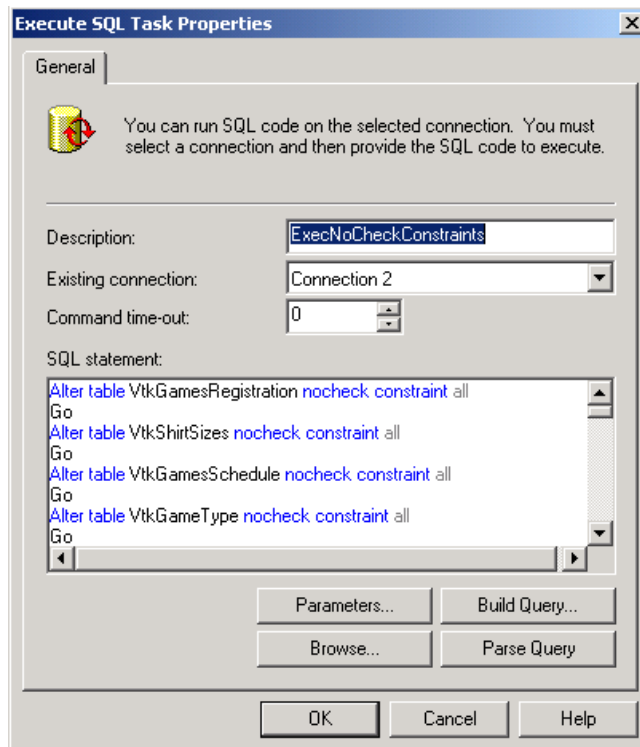


6. Right-Click any Connection 2 Microsoft OLE DB Provider for SQL Server icon and select Properties from the popup menu. Modify the server and database as necessary and click OK. Note that it is only necessary to modify the properties of one of the Connection 2 icons. This setting should be the appropriate application database to be used as the destination. Click OK.

## Maintaining the VSS Databases

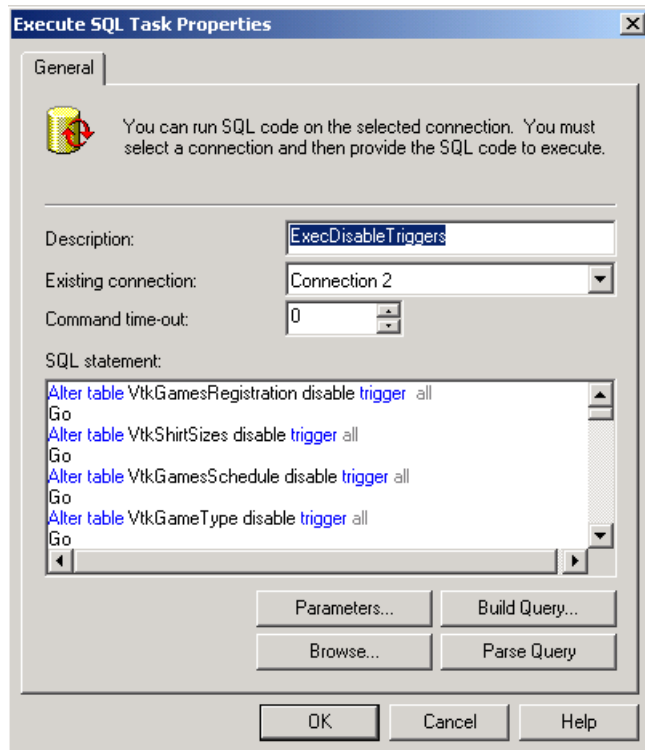


7. Right-Click ExecNoCheckConstraints SQL task icon and select Properties from the popup menu. Modify the SQL Statement located in the bottom text box as necessary and click OK. Note that every VSS constraints should be listed in this script.

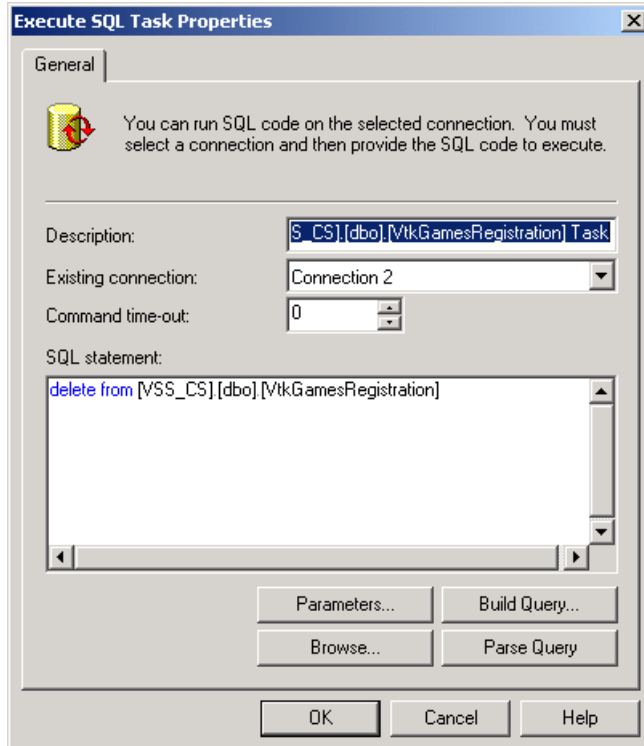


## Maintaining the VSS Databases

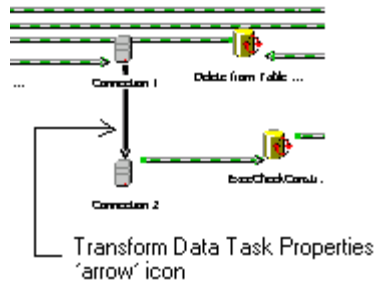
- Right-click ExecDisableTriggers SQL task icon and select Properties from the popup menu. Modify the SQL Statement located in the bottom text box as necessary and click OK. Note that every VSS trigger should be listed in this script.



- Right-click each of the SQL task icons for deleting data and select Properties from the popup menu. Modify the description and the SQL Statement located in the bottom text box as necessary and click OK.



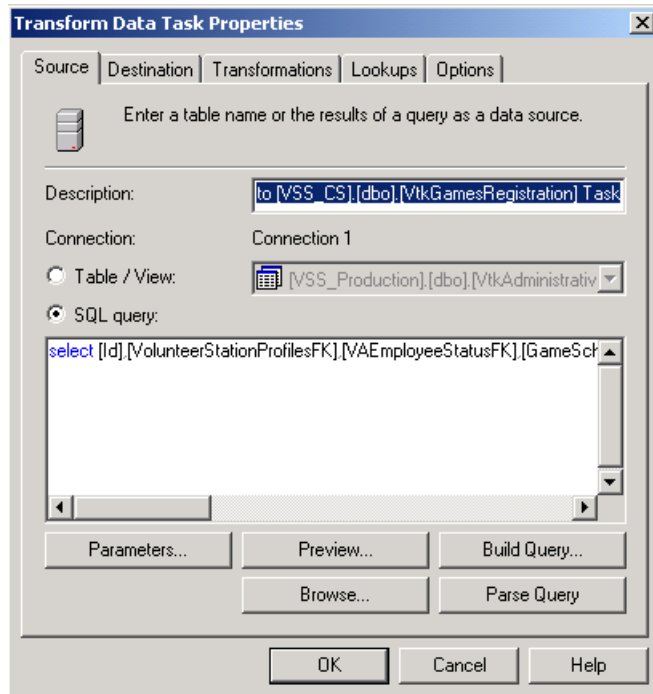
10. Right-click each of the Transform Data Task Properties 'arrow' icon (pictured below) and located in the downward position between the Connection 1 and Connection 2 icon for each table transformation. Click Properties from the popup menu.



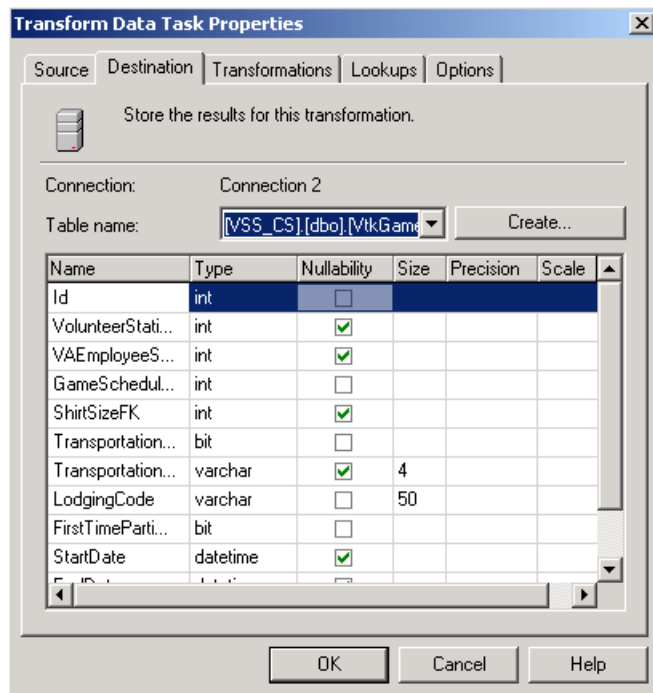
- a. Click on the Source tab page. Modify the description and SQL query as necessary. It is easier to click the Table/View and select the appropriate source table from the list than it is to modify the SQL query.



## Maintaining the VSS Databases



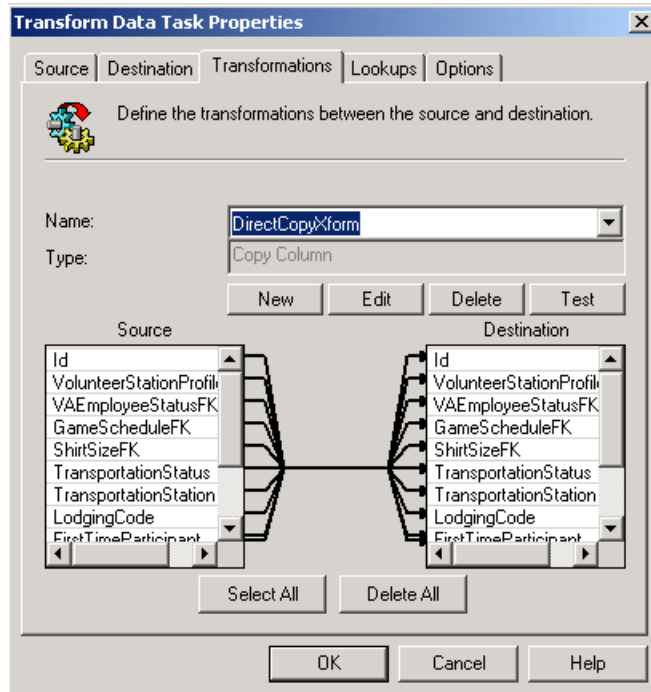
- b. Click on the Destination tab page. Modify the description and SQL query as necessary. It is easier to click the Table/View and select the appropriate destination table from the list than it is to modify the SQL query.



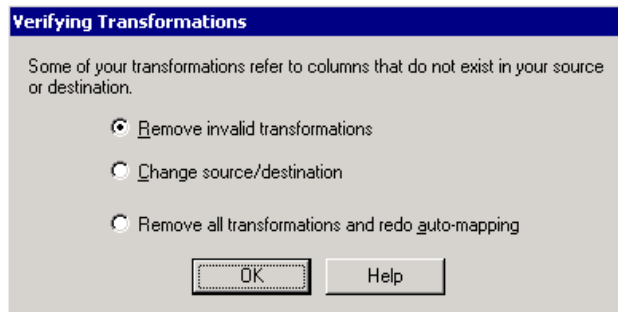
- c. Note that if any column names changed, were added, or were dropped that the transformations would need to be redone. If this is the case click on

## Maintaining the VSS Databases

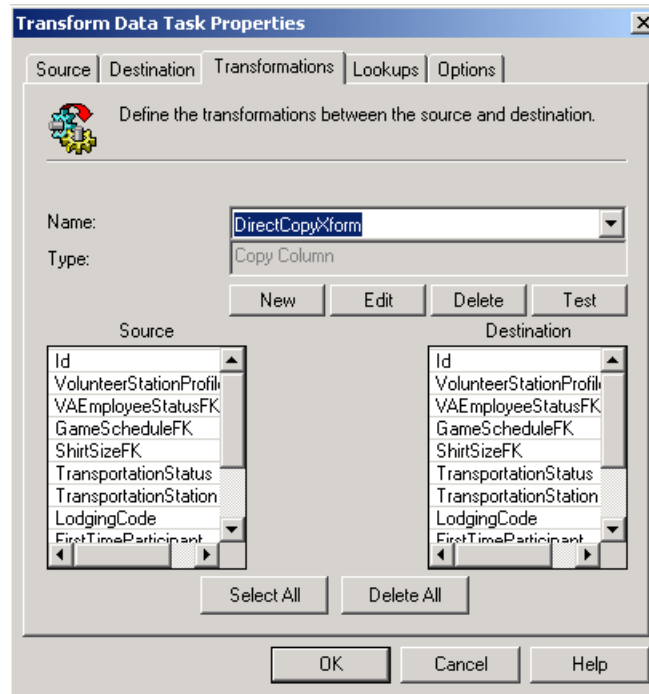
the Transformations tab page. A successful transformation will look similar to this. Note that the column names for the source and the destination column should be identical. Also the columns in the source table are pointing to its identical column in the destination table.



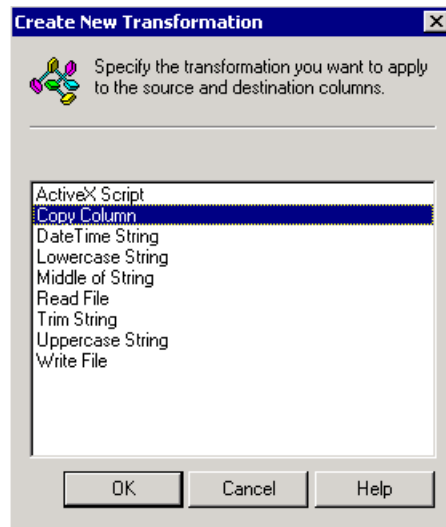
If you do not see the screen above, but you get a screen like this one:



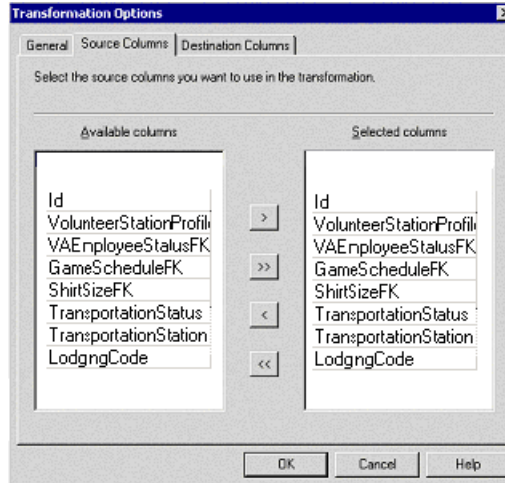
- i. Select the Remove invalid transformations and the click OK.
- ii. When the Transformation tab page re-appears, click New.



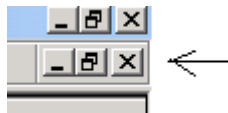
- iii. When the Create New Transformation dialog panel appears, select “Copy Column” and, click OK button.



- iv. On the Source Columns tab page, click all of the available columns in the available column and move them over to the selected columns. Then click OK button.



- v. On the Destinations Columns tab page, click all of the available columns and move them over to the selected columns. Click OK.
  - vi. The completed transformations screen should look like the one pictured in paragraph 10.c. above. Click OK button.
- d. Click OK.
11. Click {Package}, {Save} from the Package menu to save the changes. Then click {Package}, {Execute} to execute the package. Please reset any schedules for the daily execution of this DTS package.
  12. To exit the package, click the bottom X in the upper right corner of the Package window. (See below)



13. Please reset any schedules for the daily execution of this DTS package.

## **Refresh Training Database Package**

The DTS package, named “RefreshTrainingDatabase” is preset to copy data from the VSS\_Production database (residing at EMC within the SEM on the first cluster) to the VSS\_Training database (residing at EMC within the SEM on the second cluster). It also preserves all permissions. This DTS package performs more efficiently when it resides on the server that contains the VSS\_CS database; it is currently located at EMC within the SEM on the second cluster.

The basic steps that the DTS package performs are the following:

1. Set all constraints to NoCheck in the VSS\_Training database.
2. Disable all triggers in the VSS\_Training database.
3. Delete all rows of data from each table in the VSS\_Training database.
4. Copy all rows of data from each table in the VSS\_Production database to their respective table in the VSS\_Training database.

5. Set all constraints to Check in the VSS\_Training database.
6. Enable all triggers in the VSS\_Training database.

### **Executing the “RefreshTrainingDatabase” Package**

The SQL Server DTS packages must be executed in the Local Packages section of SQL SEM’s DTS.

The basic steps for executing the daily data restorations with this DTS are:

1. Set the server names in the global variables of the DTS package properties.
2. Execute the package either manually or automatically with the SQL Server Agent.

The detailed steps for loading the DTS package are as follows:

1. In the SEM locate the appropriate server hosting the VSS\_Training database.
2. Go to Data Transformation Services/Local Packages and locate and double-click on the “RefreshTrainingDatabase” package.
3. Check the package properties by doing the following:
  - a. Right-click inside the package (any where in the white space) and select Package Properties from the popup menu.
  - b. Click on the Global Variables tab page. Look under Variables for the variables named below and expand the value column (last column) to the right of the variable name and enter information as described below:

<u>Name</u>	<u>Value</u>
DataSourceNameSource	<i>Type source DSN.</i>
DataSourceNameDestination	<i>Type destination DSN.</i>
DbnameSource	<i>Type source database name.</i>
DbnameDestination	<i>Type destination database name</i>

It is not necessary to manually update the “ConnectionStringSource” and “ConnectionStringDestination” variables.

- c. Click OK.
4. Click Package/Save from the Package menu to save the changes.
  5. Click Package/Execute to execute the package as often as desired either manually or scheduled automatically through the SQL Server Agent. Be prepared for the package to run for five to ten minutes and increase in time as the database grows exponentially larger. For best results, schedule the package to run during non-duty hours.

### **Upgrading the “RefreshTrainingDatabase” Package**

Note that if a future upgrade to the VSS\_Production database changes anything in the database design from a table’s column name, data type, size, constraint, or trigger then it will require a normal database restore from the initial restore of a newly upgraded database followed by resetting their permissions, and most likely a modification to the transformations and/or the ActiveXScripts to add or delete procedures and triggers as upgraded. Also, reset the SQL Server Agent to run the modified package for the daily restores to the VSS\_Training database.

It is important to note that if database names ever change, then the Refresh Training Database DTS package is the best package to accomplish the change. This DTS package contains two additional global variables for the database source name and the database destination name that need to be reset. Also the transformations will need to be reset for appropriate database and table.

To upgrade the *RefreshTrainingDatabase* package, follow the detailed steps provided in the section above, “Upgrading the “RefreshCSDatabase” Package.” Wherever the database name “VSS\_CS,” is required, substitute the name “VSS\_Training.”

# Migrating Site Data to the EMC

## Introduction

### *Migration Overview*

The VSS Data Migration is the process of moving all data in each Voluntary Service station's local database to the new central VSS database administered by the EMC. The migration of all Voluntary Service sites will take place in three phases scheduled by System Implementation (SI). Several sites have already been migrated during the Alpha and Beta test versions of the VSS application.

The data is migrated from each site as a flat file in a Mailman message. This data is stored as in an intermediate database in Outlook Messaging at the EMC. When all of the sites have migrated successfully, the data is converted to SQL database tables in the VSS Production database.

Upon the receipt of all the emails, the data in the flat files is uploaded into the intermediate database in SQL Server using DTS package (Data Transformation Services). The data is finally converted into SQL database tables in the VSS Production database by applying specific business rules.

### *Site Process*

Two weeks before migration, the scheduled sites will receive a "data cleansing" patch that local Voluntary sites will run, with the assistance of their IRMs. This patch will identify redundant data, which the sites will then delete manually. When the data is clean, the sites will coordinate with the EMC to run a test migration. The test migration data will go into the Test database, where the sites can practice with the application and examine the data.

The data cleansing patch is also used to send an email to EMC with the site's institution information. The EMC administrator then creates the site in the VSS application using this information.

When the implementation phase begins, the EMC will receive an email from each scheduled site that it is ready to migrate the data. The email will contain VSS application information needed to create a new site. When a site's data appears in the Production database, the EMC will notify the site by email that its data has been received. It will also notify the site of any errors in the migrated data. The sites will then work with the NVS to clear up the errors and coordinate with the EMC to resend the data.

As the data for a site is received and placed in the Production database, the EMC Application Administrator enters the station data into the GUI as well as the site user

## Migrating Site Data to the EMC

administrator. At this point the site is officially migrated to the central database and begins using the VSS application.

### ***EMC's Role***

This section provides instructions for the EMC to perform the following tasks:

- Setting up Outlook to receive data from the VSS sites
- Sending notifications to the sites before and after migration

These general tasks consist of the following steps:

1. Confirming the DTS Packages
2. Restoring the VistaIntermediate Backup Database in SQL Server
3. Running "Data Migration StoredProcs.sql"
4. Copying the .OTM file into MS Outlook
5. Creating Data Migration.PST file
6. Setup a location for Outlook to store the flat files.
7. Scheduling a Site
8. Setting a Station Number and Path
9. Acknowledgements/Notifications

These steps are presented in detail in the sections below.

## **Data Migration Procedures**

### ***Confirming the DTS Package***

The DTS package is part of the data migration code setup that must be in place before data migration occurs. The DTS Package contains that uploads the data from flat files that Outlooks generates for each site. The purpose of this step is to confirm that DTS package is set up under "Local packages" option of "Data Transformation Services."

For the VSS Beta version, the name of the DTS package is "VSSStation v.2.08 Beta 2". This name may change with each version of the application.

Unlike other data migration pieces, the DTS package cannot be distributed as a conventional application. It must be uploaded from the SQL server machine of the NVS developer to the EMC SQL Server machine. If the package is not present on the EMC machine, you must ask NVS to upload it for you.

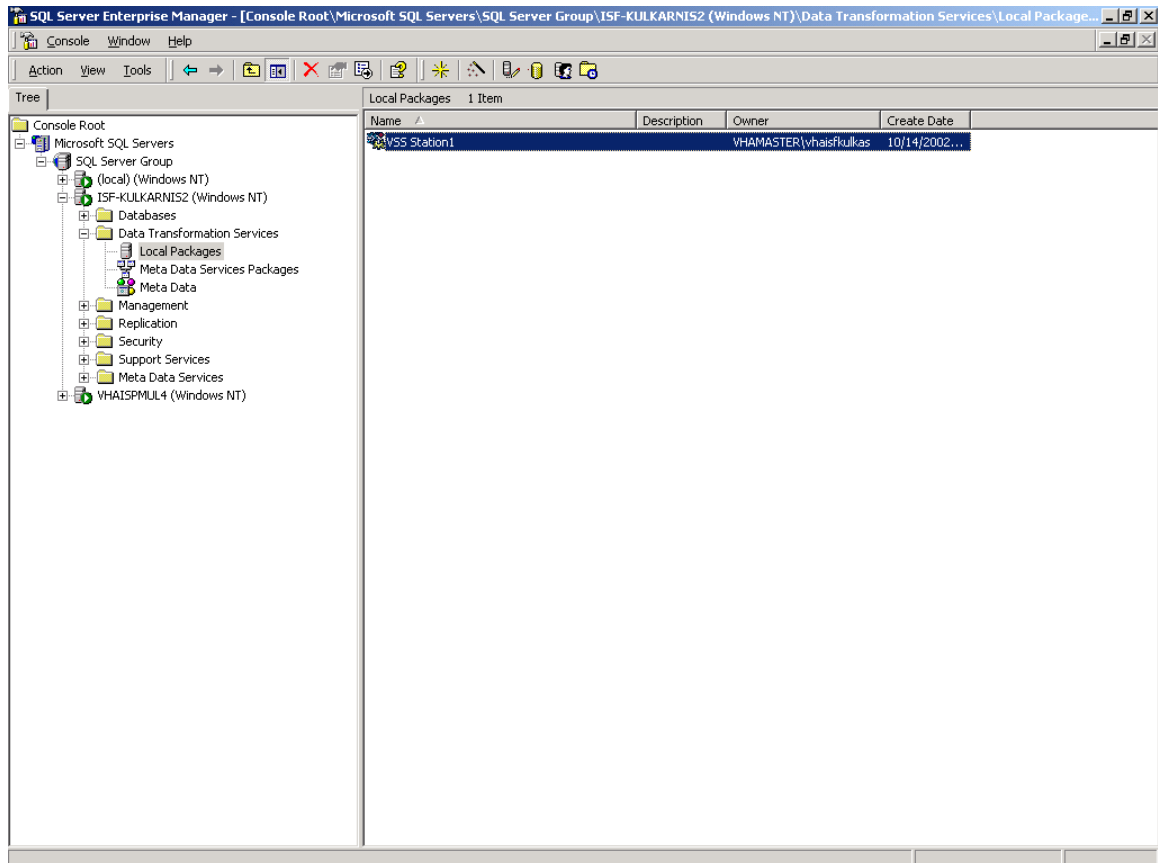
The DTS package can be scheduled to run multiple times. Each instance will migrate one site only. While one instance migrates, the others will wait for it to finish, at which point the next scheduled package starts.

To confirm the existence of the DTS package, follow these steps:



## Migrating Site Data to the EMC

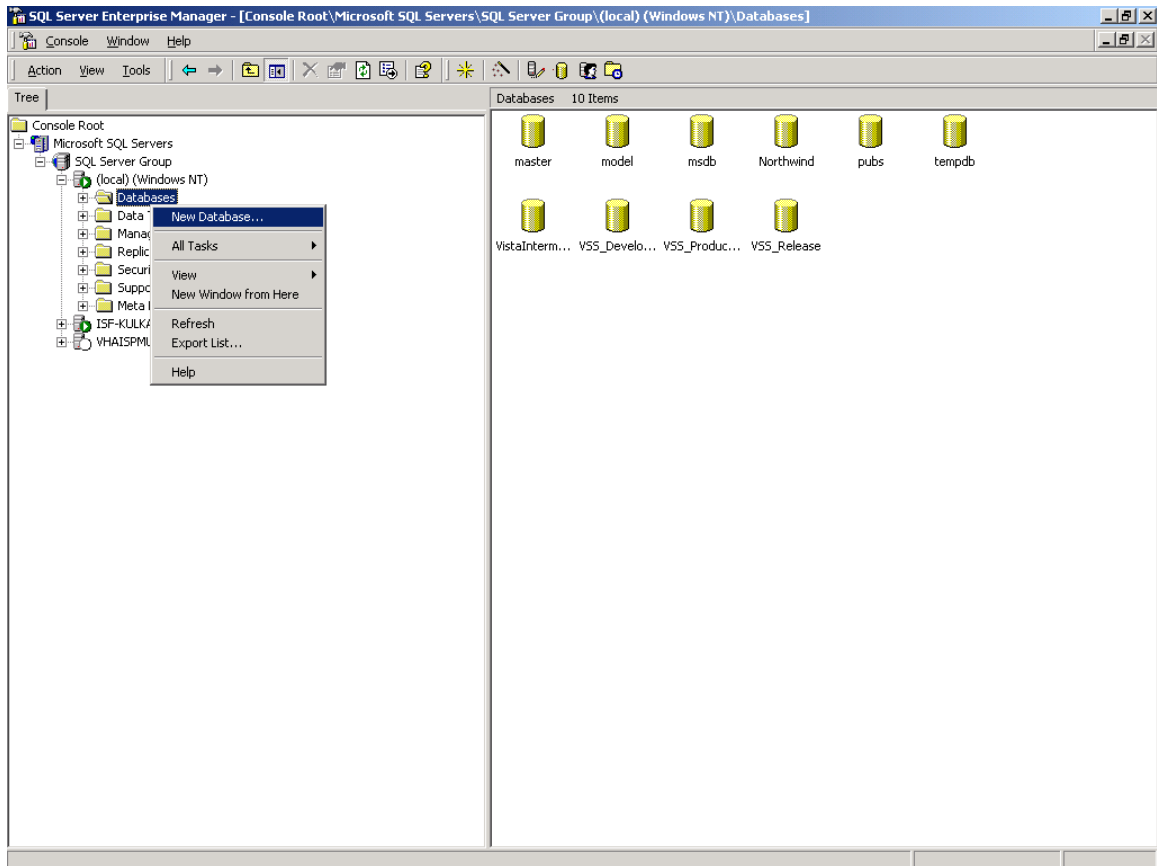
1. From the Start/Programs menu, select Enterprise Manager from the Microsoft SQL Server menu.
2. Select a Server under SQL Server Group and expand it.
3. Select a Server name or Local (Windows NT) and expand it.
4. Select the Local packages option under the Data Transformation Services node.
5. Confirm that the latest version of the DTS package is present in the right side panel.
6. If you do not see the DTS package, call or email the NVS to have it uploaded from the developers' SQL Server machine.



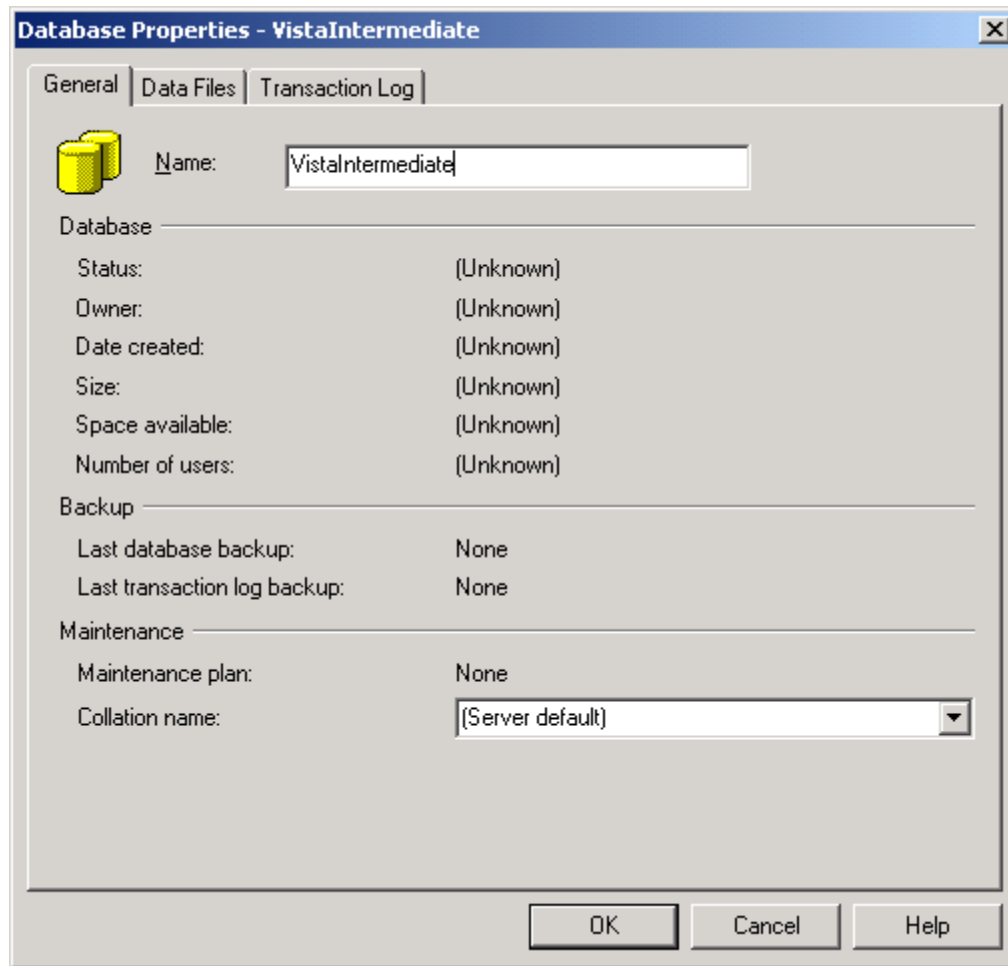
## ***Restoring the VistaIntermediate Backup Database***

1. From the Start/Programs menu, select Enterprise Manager from the Microsoft SQL Server menu.
2. Select a Server under SQL Server Group and expand it.
3. Select a Server name and expand it.
4. Right click Databases, and choose the New Database option.

## Migrating Site Data to the EMC



5. Under the General tab, enter “VistaIntermediate” for the name for the new database, as shown below.



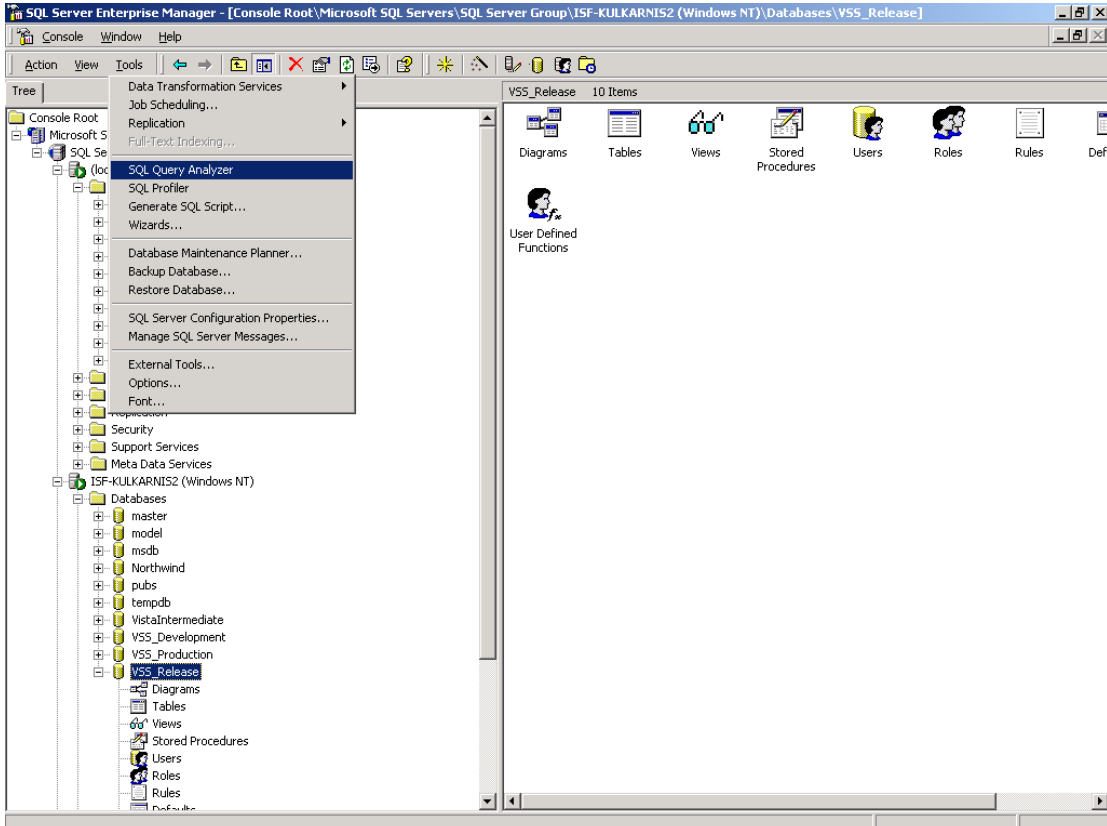
6. Select the Data Files tab.
7. Make sure that one of the values under the File Name column is "VistaIntermediate\_Data".
8. Select the Transaction Log tab.
9. Make sure that one of the values under the File Name column is "VistaIntermediate\_Log". Click OK. This creates a new database, listed under Databases.
10. Right-click on the new database, and select the All Task and Restore Database option.
11. In the Restore section, click Device.
12. Click Select Device.
13. On the Choose Restore Devices screen, click Add.
14. On the Choose Restore Destination screen, click the "... [ellipses] button under the File name option.
15. From the Backup Devices Location screen, point to the appropriate database backup file, and click OK. (The back up file name is VistaIntermediate\_Backup. It should reside in the SQL Stuff folder, in Data Migration folder.)
16. Click OK on the Choose Restore Destination screen.
17. Click OK on the Choose Restore Devices screen.

## Migrating Site Data to the EMC

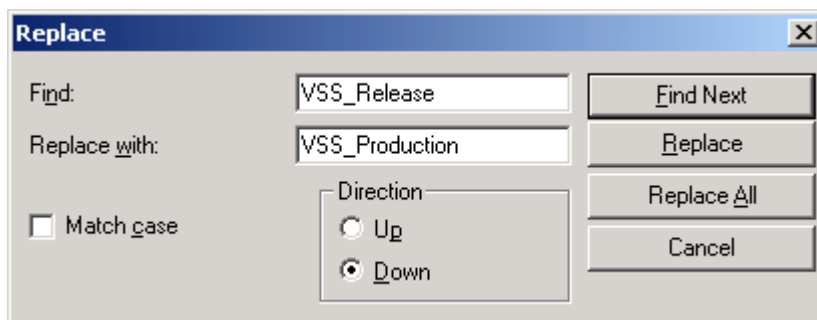
18. Go to Options tab on the Restore Database screen.
19. Select the “Force restore over existing database” option. Click OK.

### **Running “Data Migration StoredProcs.sql”**

1. Start Enterprise Manager from the Microsoft SQL Server menu.
2. Select the VistaIntermediate Database you just created.
3. From the Tools menu, select SQL Query Analyzer.



4. Using the File/Open option, select a Data Migration StoredProcs.SQL file from the Database folder of Data Migration.
5. From the Edit menu, select the Replace option.



## Migrating Site Data to the EMC

6. In the Find edit box, type “VSS\_Release” and in the Replace with box type an appropriate VSS application database name.
7. Click on Replace All button.
8. From the Query menu, select the Execute option to run the query.

### **Copying the .OTM File into Outlook**

You should have received the Data Migration Codes from the NVS. These will be on either a CD or in a shared location. Follow the steps in this section to copy the .OTM file into user’s profile folder. This file will then contain the VBA macros that will create flat files from the emails. You must close the Outlook session before copying this .OTM file.

The Outlook messaging code will work only with the NT user account specified for the user name (step 3, below). When the actual data migration happens, this user must log on to that computer, enable macros (“Creating the Data Migration.PST File,” below), and remain logged on until data migration process is completed.

Outlook macros only work in the profile of the user who is currently logged on. For the messaging code to work with other NT user accounts:

- Each user must have Administrative rights on the Outlook messaging machine
- The .OTM file must be copied into each user’s Outlook profile folder at \Application Data\Microsoft\Outlook.

To Copy the .OTM file into Outlook, follow these steps:

1. Go to the Data Migration Code location and use the following path to find the VbaProject.OTM folder.

\Documents and Settings\*User Name*\Application Data\Microsoft\Outlook\

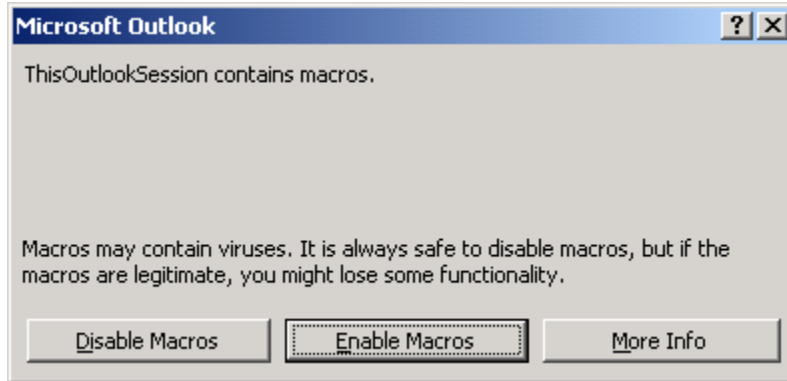
2. Replace *User Name* with your NT Logon name, e.g., VhaisfXXXXX
3. Copy the VbaProject.OTM file into the user’s profile folder.

Overwrite the existing VbaProject.OTM if one already exists.

### **Creating the Data Migration.PST File**

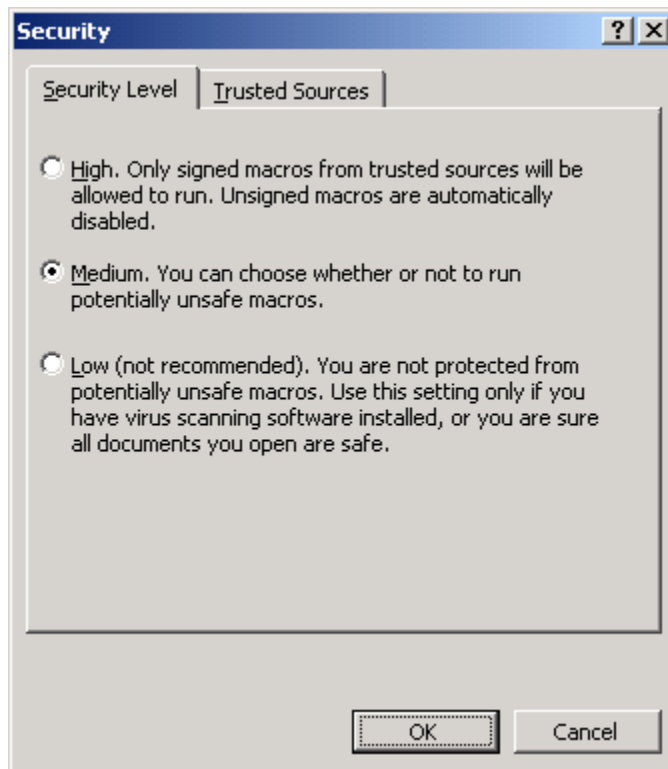
1. Open Microsoft Outlook.
2. If you are prompted with following dialogue, click Enable Macros.

## Migrating Site Data to the EMC



If you are *not* prompted with the Macros dialogue shown above, you must change the Outlook security level:

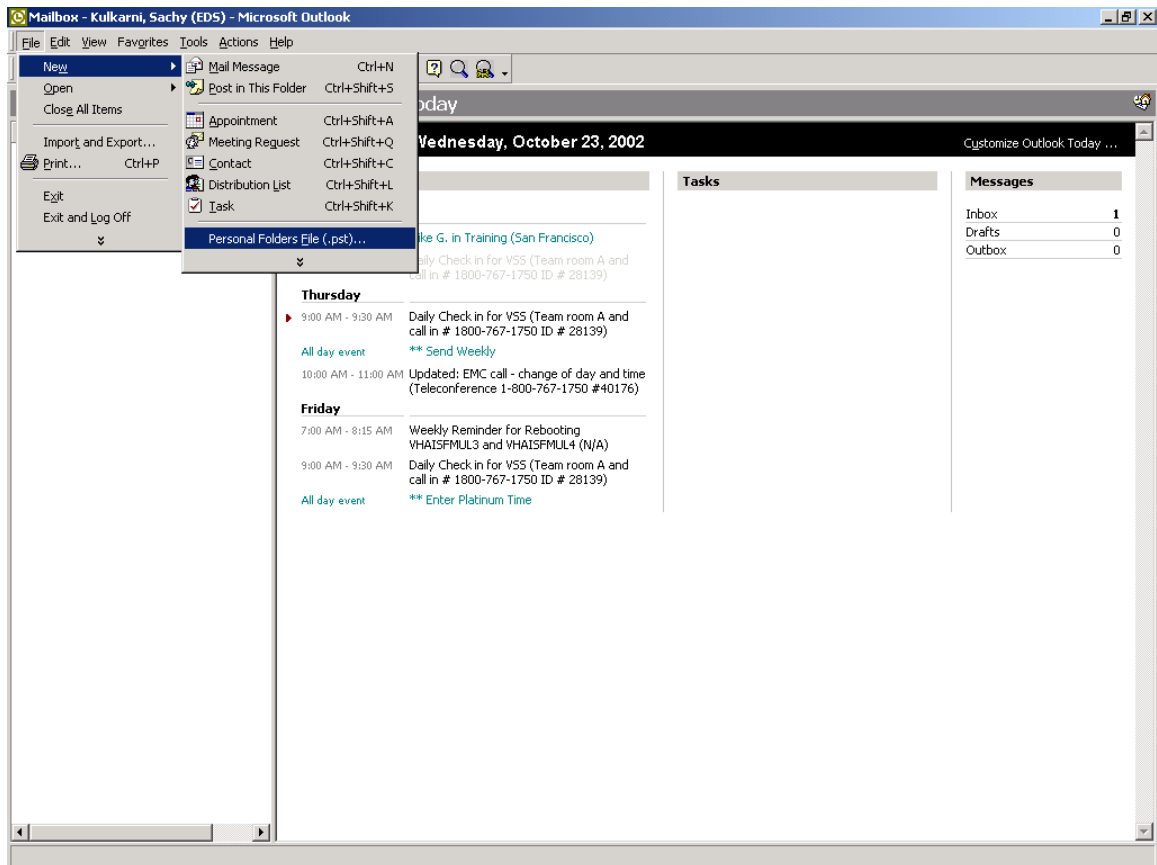
- a. Go to the Outlook Tools menu and select the Security option. You will see the Security Screen.



- b. Select the Security Level tab. Then select the second option, “Medium. You can choose whether or not to run the potentially unsafe macros.”
- c. Close the Outlook session and reopen the Microsoft Outlook.
- d. Now you should see the Macros dialogue. Click Enable Macros.

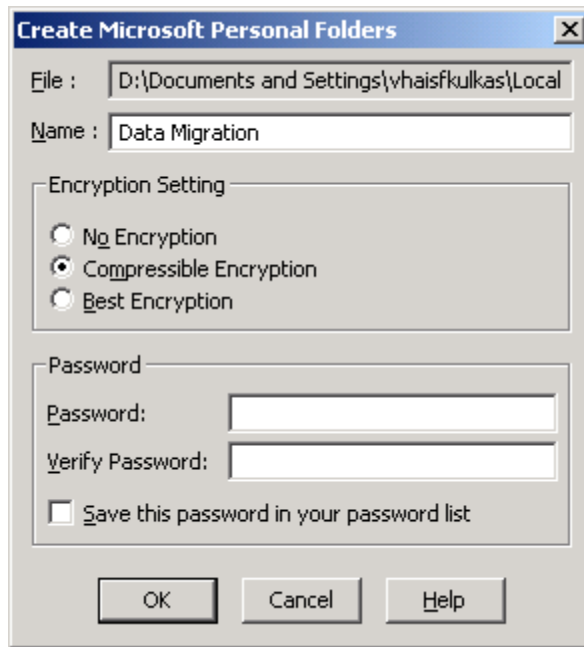
## Migrating Site Data to the EMC

- From the File menu, select New and then select “Personal Folders File (.pst)...”

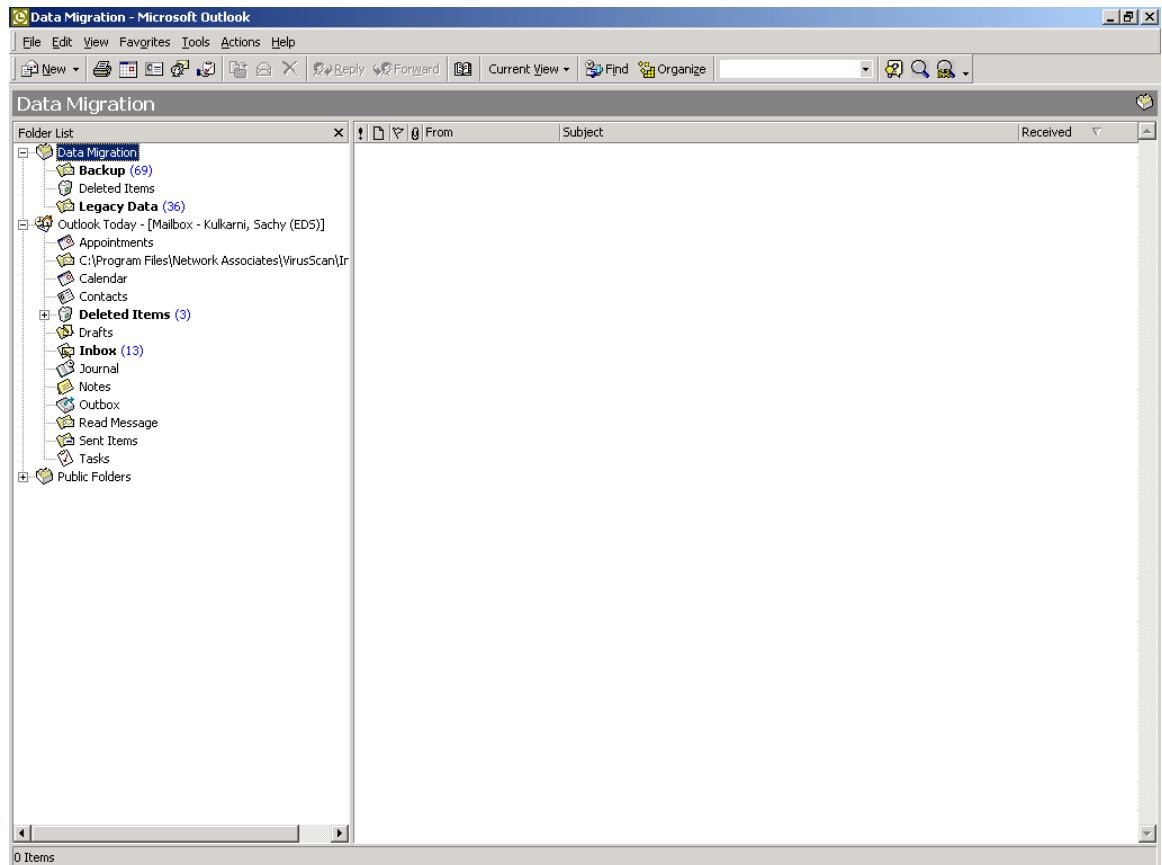


- On the Create Personal Folders screen, type “Migration.pst” for File Name
- Click OK and then Create to continue creating .pst file.
- On the Create Microsoft Personal Folders screen, type “Data Migration” for Name.

## Migrating Site Data to the EMC

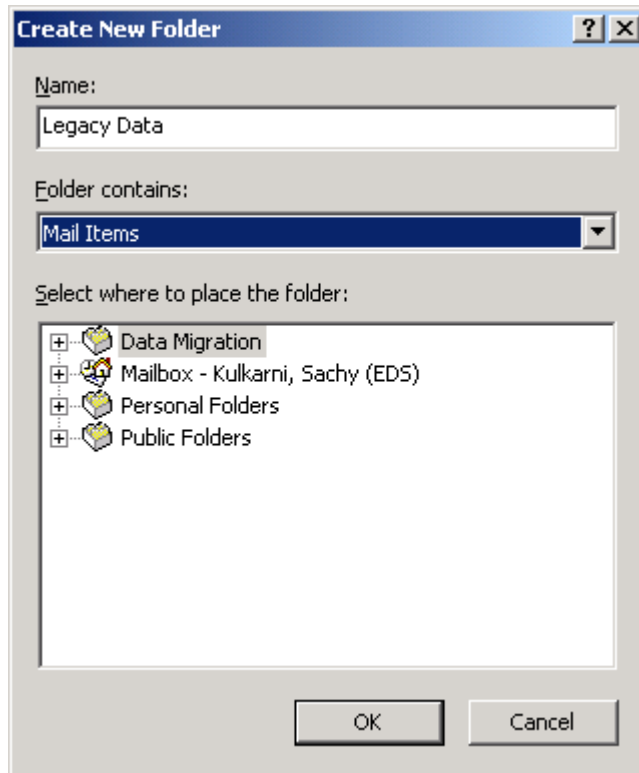


7. Leave the other settings as defaults and click on OK.
8. In the Folder list on the left side panel, you should see “Data Migration” is being created.





9. Right-click on “Data Migration” and select “New folder ...” from the pop-up menu.



10. In the Name textbox type “Legacy Data” as the folder name and click on OK.

### ***Setting Up a Location for Flat Files***

You need to set up a location for the Outlook to store the migration flat files before the migration can take place. In the following steps you will set up this location.

1. Go to SQL Server machine.
2. Create a folder named VSSDataMigration on any disk drive. (For example: D:\Migration\VSS\VSSDatamigration).
3. Create 15 folders named “\Station 1” through “\Station 15” under the C:\VSSDataMigration folder.
4. Also create a folder named \Miscellaneous on any local disk drive.
5. Copy the folders “FileFolder Mapping”, “Acknowledgements” under the “Data Migration” folder provided by NVS.
6. Copy the files MoveFiles.Bat and Sleep.VBS from the Data Migration folder into the VSSDataMigration folder.
7. Share the folder VSSDataMigration as the share name “VSSDataMigration,” and give full rights to this folder to the administrator of the Outlook Messaging Machine.
8. Go to Outlook Messaging Machine.
9. Map this shared location as M:Drive.

## Migrating Site Data to the EMC

*Note:* For Outlook to create flat files when data is received in the emails, this location has to be mapped to M:Drive only.

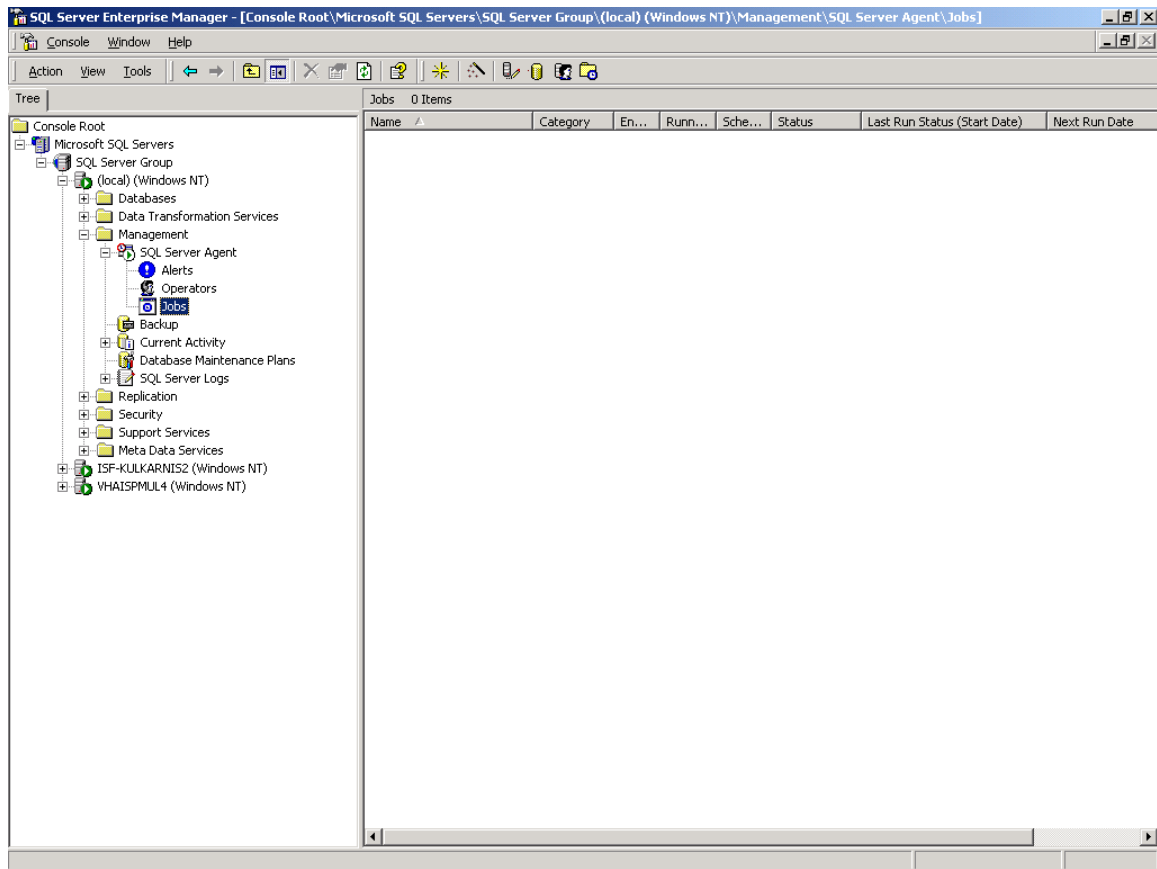
### **Scheduling a Site**

There are two things you need to do to schedule each site:

- Schedule a job
- Set up time.

### **Scheduling a Job**

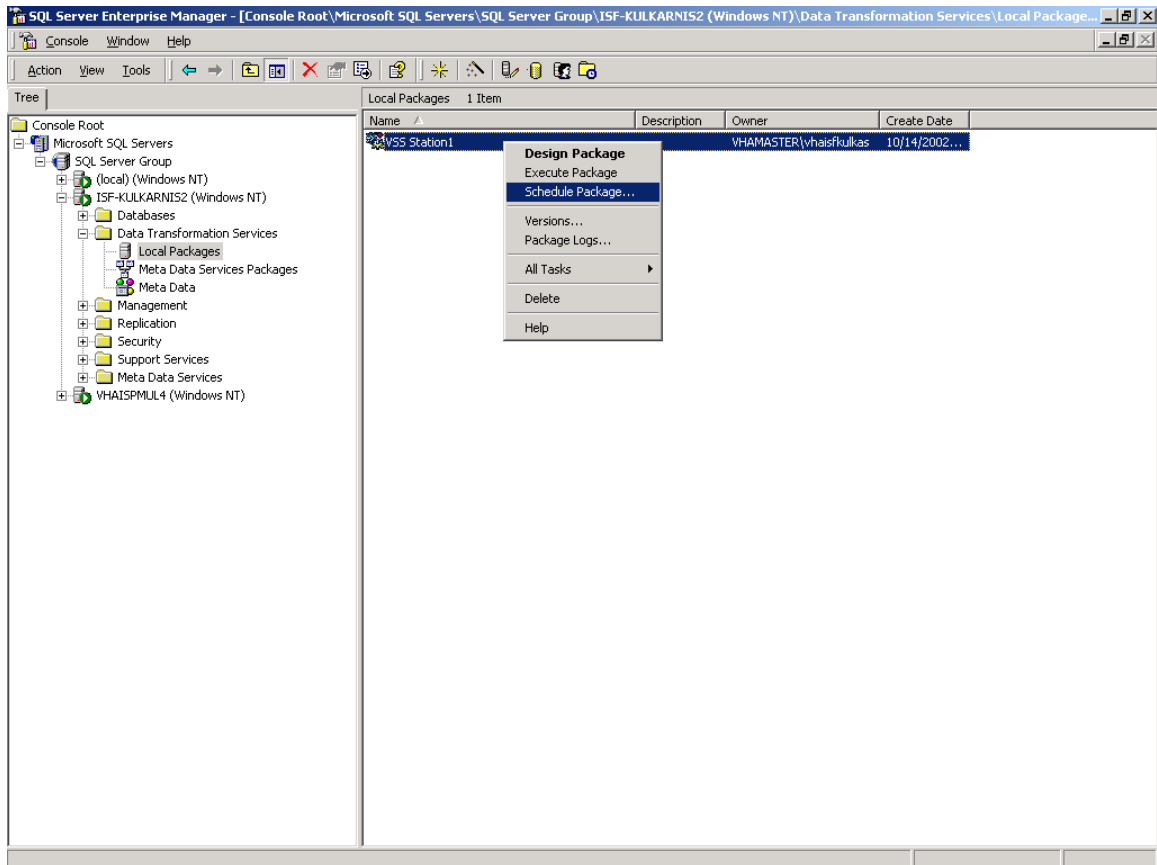
1. From the Start/Programs menu, select Enterprise Manager from the Microsoft SQL Server menu.
2. Select a Server under SQL Server Group and expand it.
3. Select either a Server name or Local (Windows NT) and expand it.
4. Select Management and expand it.
5. Select Jobs option under SQL Server Agent node.
6. Confirm that no DTS Package is already scheduled to run. If something is already scheduled, delete the schedule.



7. Now select the Local Packages option under Data Transformation Services.

## Migrating Site Data to the EMC

8. Select the latest VSS package, right click, and choose the Schedule Packages option.



9. On the Edit Recurring Job Schedule screen, click OK.

## Migrating Site Data to the EMC

**Edit Recurring Job Schedule**

Job name: VSS Station1

Occurs

Daily  
 Weekly  
 Monthly

Daily

Every 1 day(s)

Daily frequency

Occurs once at: 12:00:00 AM  
 Occurs every: 1 Hour(s) Starting at: 12:00:00 AM  
Ending at: 11:59:59 PM

Duration

Start date: 12/25/2002  End date: 12/25/2002  
 No end date

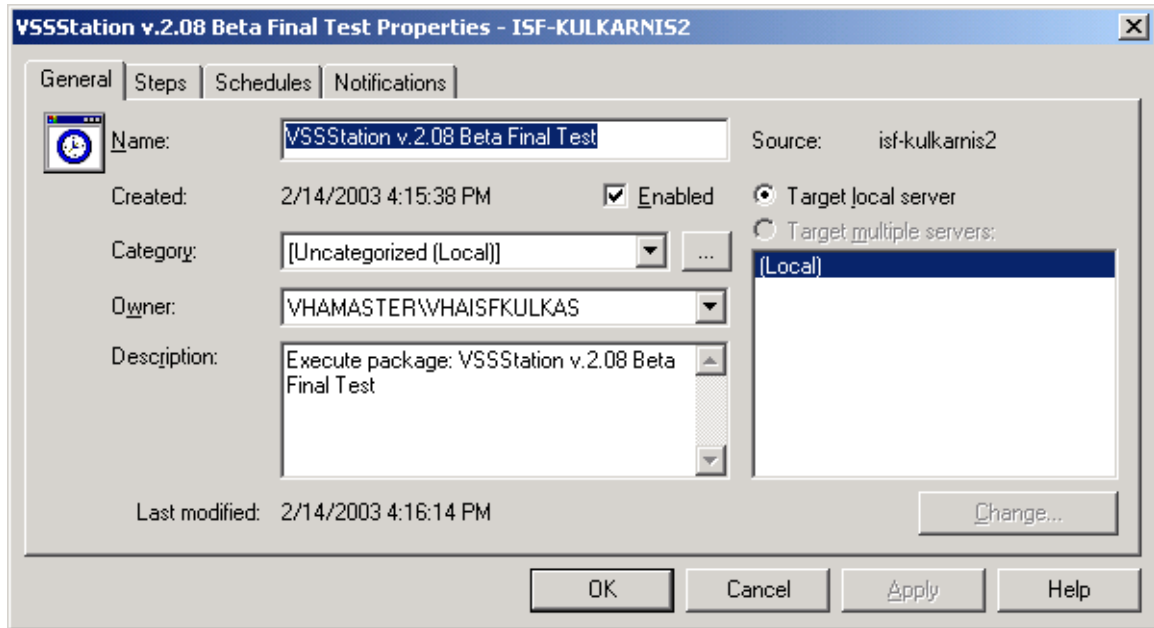
OK Cancel Help

10. In “Enterprise Manager,” locate an item called Management for the SQL Server and expand it.
11. Locate the item Jobs under SQL Server Agent service, right-click on Jobs, and select Refresh.
12. The above scheduled job will appear in the right side pane if it was not already there.

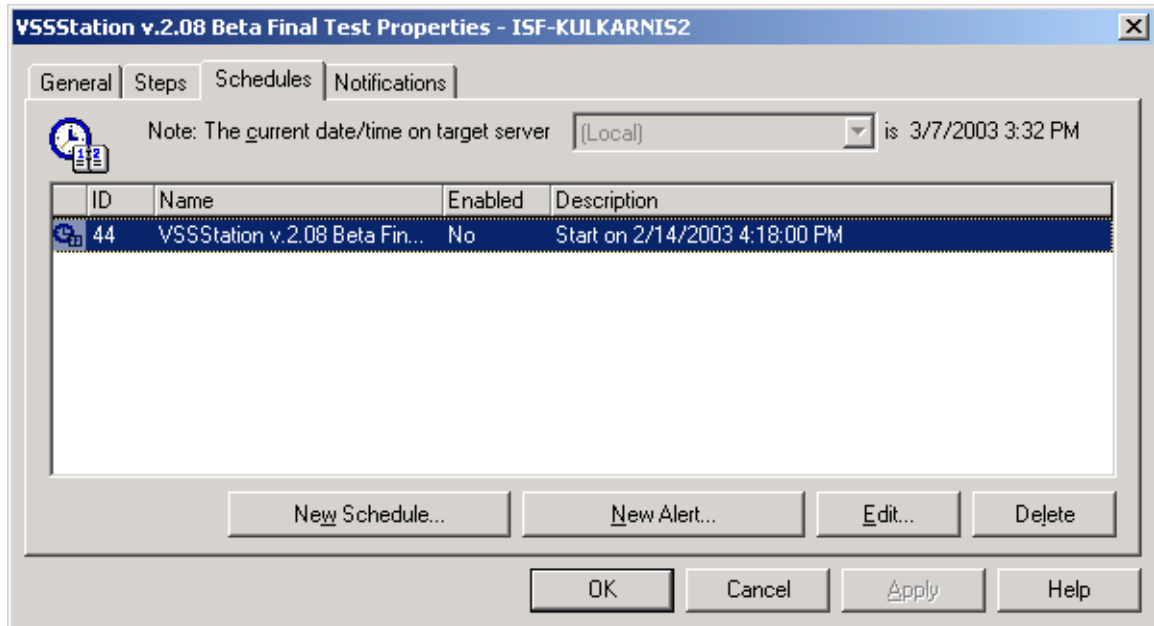
### **Setting Up a Job Time**

1. Right-click on the job in the right side pane, and select Properties.

## Migrating Site Data to the EMC

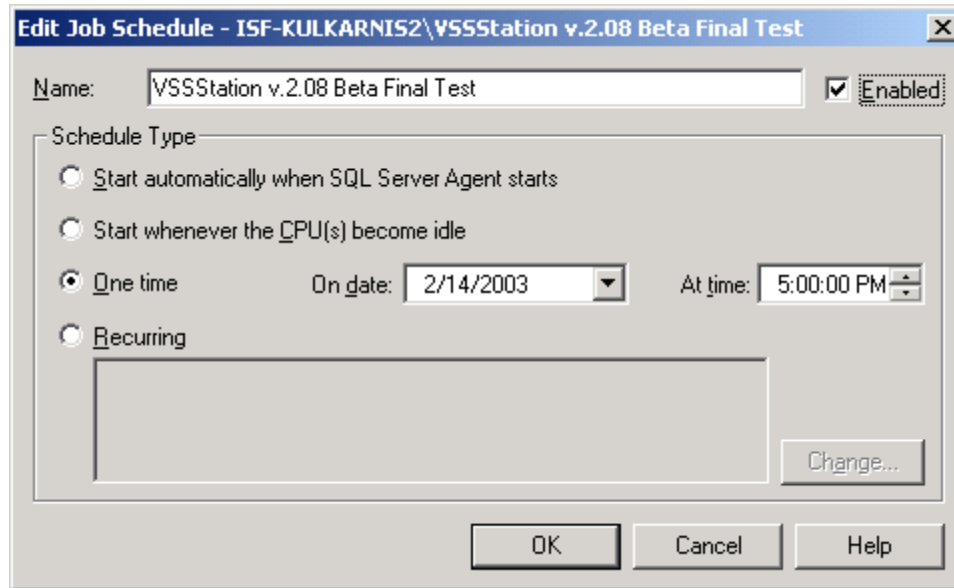


- From the Property screen, select the Schedules tab.



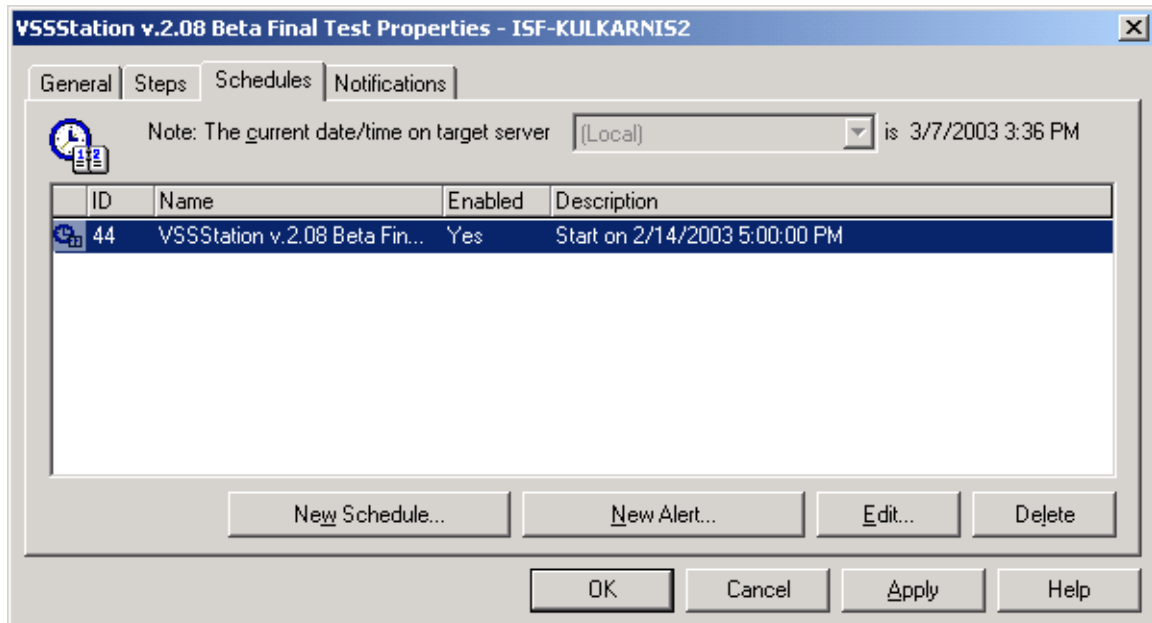
- On this screen, click on Edit... button to change the schedule time for this job. The Edit Job Schedule screen will appear.

## Migrating Site Data to the EMC



4. Check the Enable option.
5. Select Schedule Type as One time, and enter the proper schedule date and time and click OK.

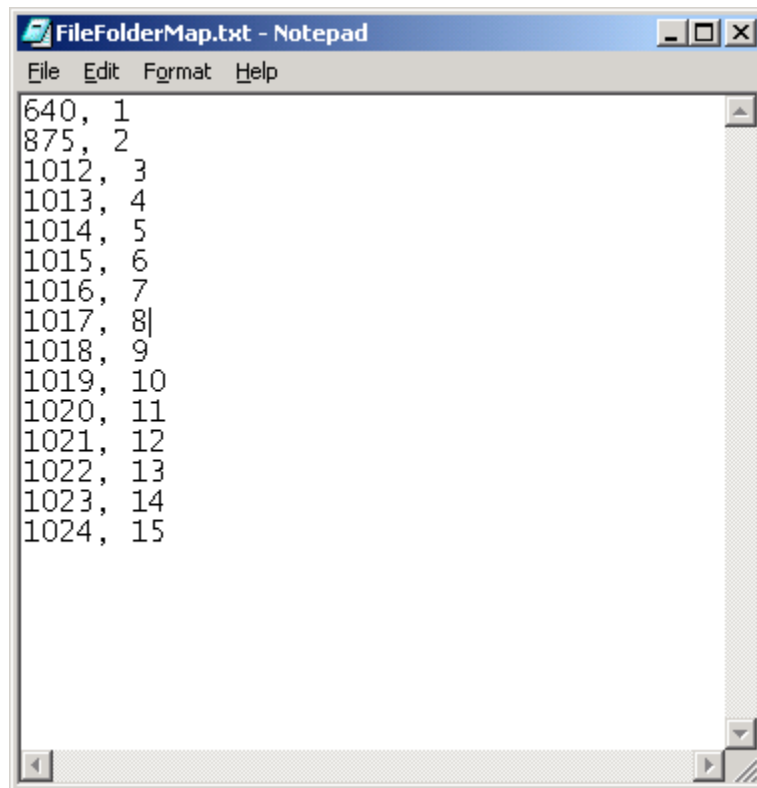
You will be back on the Property screen but again, but the task in the list will now show as enabled with the proper Start time. See the screen below to compare with the property screen given before.



6. Click Apply and then OK to finish the scheduling job.

## **Setting a Station Number and Path**

1. Locate the folder VSSDataMigration on the database server machine.
2. From the FileFolder Mapping folder, under the VSSDataMigration folder, open FileFolderMap.txt in Notepad.
3. You will find 15 rows that have two numbers separated by a comma. The first number is a site number and second number is a folder number where flat files will be stored.



For example, “640, 1” in the first row means that when Outlook receives emails from site #640, the flat files will be created in Station 1. The second row, “875, 2” means that flat files from site 875 will be created in Station 2. And so on.

4. Select up any row from this file that has not been used for the migration so far or that has completed its migration, and change the first column value to an appropriate site number, as dictated by System Implementation (SI).
5. From the Start/Programs menu, select Enterprise Manager from the Microsoft SQL Server menu.
6. Select a Server under SQL Server Group and expand it.
7. Select a Server name and expand it.
8. Select Databases and expand it.
9. Select VistaIntermediate and expand it.
10. Select the VtkMigrationStatus table under the Tables option.
11. Right-click on the table in the right-side panel, select Open Table, and then Return all rows option.

## Migrating Site Data to the EMC

12. Select up any row from this file that has not been used for the migration so far or that has completed its migration, and enter a station number for the migrating site.
13. For the same row, change the path field to the location appropriate for flat files. Use the full path for the station's folder that you used in preceding step 4.

Station	StationNumber	StartDate	Path	ParentPath	Completion	UpdateTime	RollupCompletion
Station1	640	<NULL>	C:\VSS\WSSDataMigration\Station 1	C:\VSS\WSSDataMigration\	1	<NULL>	1
Station2	875	<NULL>	C:\VSS\WSSDataMigration\Station 2	C:\VSS\WSSDataMigration\	1	<NULL>	1
Station3	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station4	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station5	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station6	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station7	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station8	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station9	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station10	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station11	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station12	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station13	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station14	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>
Station15	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>	<NULL>

14. For the parent folder enter the parent folder for Station x.
15. Make sure Completion and RollupCompletion fields are empty. Delete the contents of these fields if anything is there.
16. Close the window.

### **Acknowledgements/Notifications**

One stage of the migration process involves sending Mailman messages to the EMC hosting servers over the VA network. These messages notify those administering the migration process of the status of each migration

Depending upon the situation, the Microsoft Outlook messaging component can send one or more of seven different messages to the people in the recipients list. Each type of message is generated and sent for the occurrence of a specific event. For example, when all the messages are received by Messaging components, Outlook generates a message stating the status of the migration.



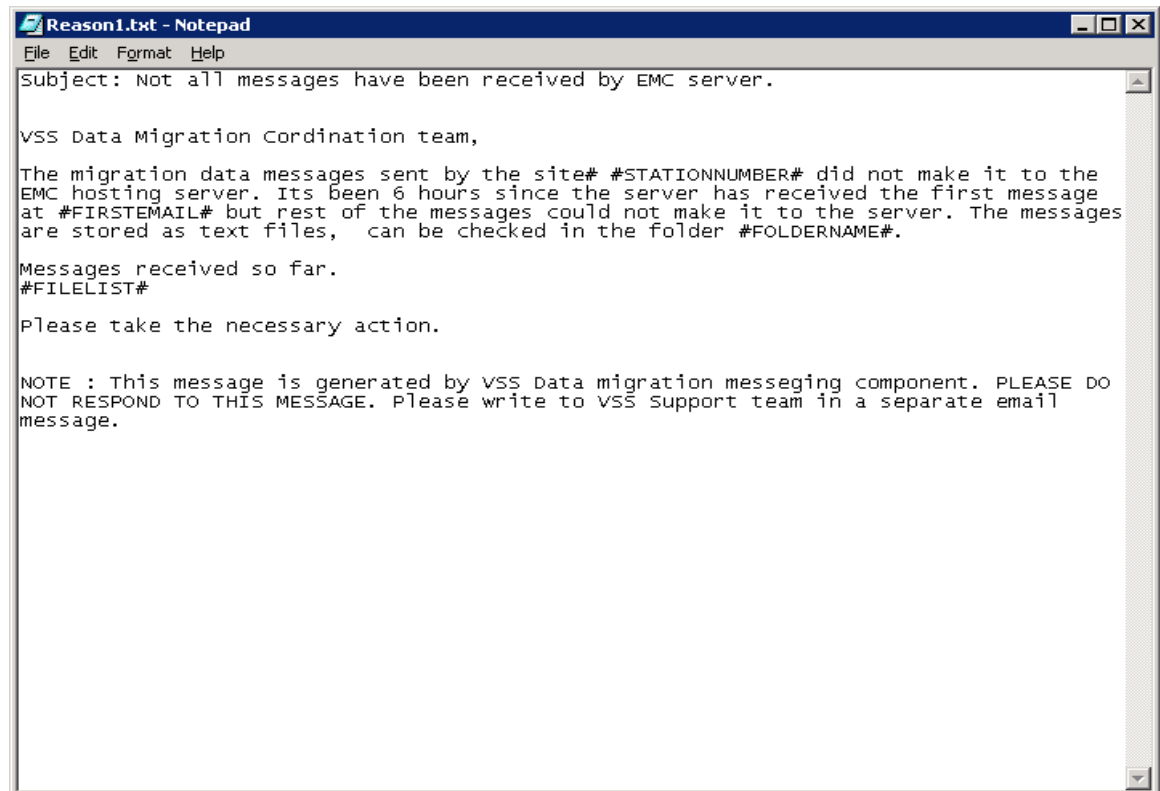
## Migrating Site Data to the EMC

Each reason or event is well defined by the messaging component. There is an associated template file stored in the Acknowledgements folder under the VSSDataMigration folder for each reason. This text file can be modified

### **Notification Types**

- **Type 1** is sent when all the emails have not been received 6 hours after the first email is received. No further messages are sent to this site after this one.
- **Type 2** is sent when all the emails for a site have been received. Six hours after the first email is received, the migration status is sent one more time.
- **Type 3** is sent when all the emails for a site have been received and data migration is complete. No further messages are sent to this site after this one.
- **Type 4** is sent when all emails have been received but DTS has encountered an error. The error details are sent as well.
- **Type 5** is message is sent when all emails have been received but the Migration is in process. This is the last notification for this site.
- **Type 6** is sent when an error occurs in the Outlook messaging component while receiving emails and aligning the data. This is the last notification for this site.
- **Type 7** is sent when a site starts sending data that is not in the schedule given by NVS.

Shown below is an example of a template (Reason1.txt) used to generate a message.



```
Reason1.txt - Notepad
File Edit Format Help
Subject: Not all messages have been received by EMC server.

VSS Data Migration Coordination team,

The migration data messages sent by the site# #STATIONNUMBER# did not make it to the
EMC hosting server. Its been 6 hours since the server has received the first message
at #FIRSTEMAIL# but rest of the messages could not make it to the server. The messages
are stored as text files, can be checked in the folder #FOLDERNAME#.

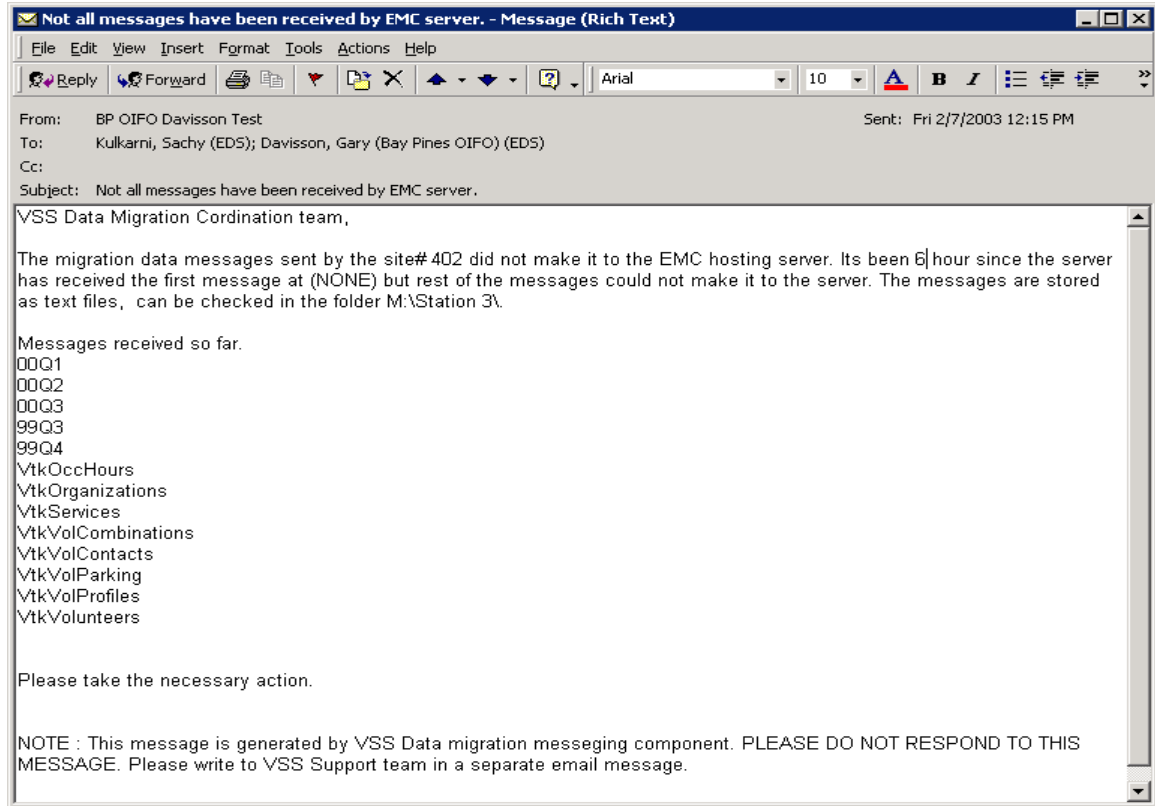
Messages received so far.
#FILELIST#

Please take the necessary action.

NOTE : This message is generated by VSS Data migration messeging component. PLEASE DO
NOT RESPOND TO THIS MESSAGE. Please write to VSS Support team in a separate email
message.
```

## Migrating Site Data to the EMC

The following image shows the actual message generated by the template above:



### **Messaging Events**

The following are the events and the timings that cause the messaging component to send these notifications.

- All the emails from a site are received. (Reason 2)
- An error is encountered. (Reason 6)
- Data is received from an unscheduled site. (Reason 7)
- Six hours have elapsed since the first email was received from the site. (Reason 1, 3, 4, 5)

### **Templates Variables**

The following variables are used by the various messaging component templates:

- #STATIONNUMBER# - Station number for which the notification is generated.
- #CURRENTMESSAGE# - The subject of the current message when the notification is generated.
- #FIRSTEMAIL# - The time when first email was received for a site.
- #LASTEMAIL# - The time when last email was received for a site.

## Migrating Site Data to the EMC

- #ERROR# - An exact error number of the error that occurred while processing the email from a site. The value for this variable will be populated only when error occurs.
- #DESCRIPTION# - An exact error description of the error that occurred while processing the email from a site. The value for this variable will be populated only when error occurs.
- #SOURCEFILENAME# - The source of an error. The value for this variable will be populated only when error occurs.
- #PROCEDURESTACK# - The stack of all procedures at any given time.
- #FILELIST# - The list of emails that are received so far. This variable will help in finding out which emails are yet to be received.
- #FOLDERNAME# - Name of the folder where flat files are stored for the site.
- #CURRENTMESSAGE# - The subject of the current email message.

### **Recipient's List**

This is a text file stored in the Acknowledgements folder of the data migration. The messaging component sends notification to all the people in this list. Each entry in this file is made on a separate line. The email address or the exchange account names are the two types of entries that can be made here. The entries must be enclosed in the double quotes. For example, "Lastname, FirstName", which becomes

[firstname.lastname@va.gov](mailto:firstname.lastname@va.gov)

## Migrating Site Data to the EMC

# EMC Application Administration

## Introduction

The EMC Site within the Voluntary Service System (VSS) includes the ability to administrate the entire VSS application. The administration role is performed by the National Administrator.

At installation, the application/database administrator performs a one-time assignment of the first VSS National Administrator through the database (see “Assigning the First Application Administrator,” below), giving him or herself access to perform all administrative functions within the VSS application GUI. Thereafter, only the Application Administrator can assign another user the role of National Administrator, using the VSS User Management GUI.

## ***Application Administrator’s Responsibilities***

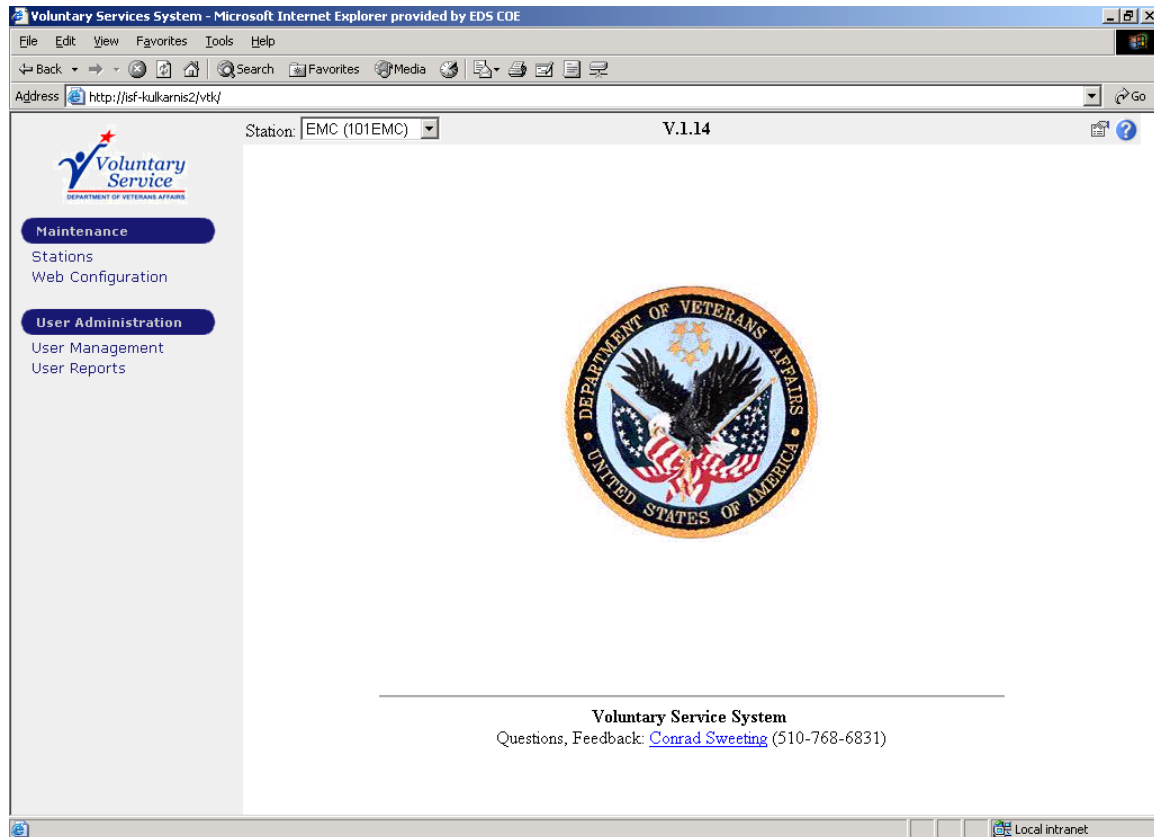
Though the application administrator may be responsible for backend functionality -- including database maintenance and administration, network and system administration, and data migration --he or she does not perform these functions as the National Administrator through the VSS application.

The National Administrator user is responsible for coordinating and verifying site and site user data with the VSS Systems Implementation Manager and then setting up each site and initial site User Administrator via the EMC Site User Management GUI. Specifically, the National Administrator performs the following tasks for each new site:

1. Adds a new site and associated verified data into the VSS application via the GUI.
2. Adds the primary Site User Administrator via the User Management GUI to a new Site.
3. Edits the site institution data for the sites
4. Edits the VSS web.config specifications

The EMC Site displays Maintenance and User Management menu items on the left-hand side of the screen:

## EMC Application Administration



The Maintenance menu includes the Stations and Web Configuration links. The Stations takes you to the Station Add/Edit screen, where you can create a new site or edit an existing site's station information. The Web Configuration link takes you to the Web Configuration screen, where you can edit the Web configuration specifications for VSS as a whole.

The User Administration menu includes the User Management and User Report links.

## The Maintenance Menu

### ***Adding A New Site***

The Application Administration creates each site after its Vtk data has been migrated to the EMC during VSS implementation. When a site has been created, that site can begin using the VSS application. To create a site the Application Administrator must obtain the following information from the VSS Systems Implementation Manager:

- Site Institution name (required)
- Site Station Number (required)
- State (required)
- VISN Number
- Street Address Line1
- Street Address Line2

## EMC Application Administration

- City
- Zip

To create a new site, follow the steps below:

1. Open the EMC Site in the VSS application.
2. Click “Stations” from under the Maintenance menu on the left-hand side of the screen. The Station Add/Edit screen displays.

Station: EMC (101EMC) V.1.14

### Stations

Edit an Existing Station:

or Create a New Station:

(\*) fields are required!

\*Station Name:  \*Station Number:

VISN:  Primary Station:

Street Address #1:  City:

Street Address #2:  \*State:

Zip Code:

User Administrator:

**Voluntary Service System**  
Questions, Feedback: [Conrad Sweeting](#) (510-768-6831)

3. Click New. The data entry screens for new SI Site data display.
4. From the user list, select the users who will be assigned the role of User Administrator. This selection automatically grants the Site User Administrator role at that Site to the selected user.

If the user is not listed already in the VSS User list, you must go to the User Management screen to create a user for the site to whom you can assign the role of User Administrator. (See the “Add New Primary Site User Administrator” section, below.) When the user has been created, continue with step 5 directly below.

5. Select the User Administrator from the User list. This selection automatically grants the Site User Administrator role at that Site to the selected user.
6. Enter the data in the appropriate fields.

7. Click “Post” to process the new site addition. The “Record Posted” message displays, indicating successful submission of the data.

### ***Editing Site Information***

Perform the following steps to change or add site station information:

1. Open the EMC Site in the VSS application.
2. Click “Stations” from under the Maintenance menu on the left-hand side of the screen. The Station Add/Edit screen displays
3. Select the station to be edited from the Edit an existing Station dropdown menu, and click Edit. The existing station information displays.
4. Edit the station information as necessary.
5. Click Post to process the changes.

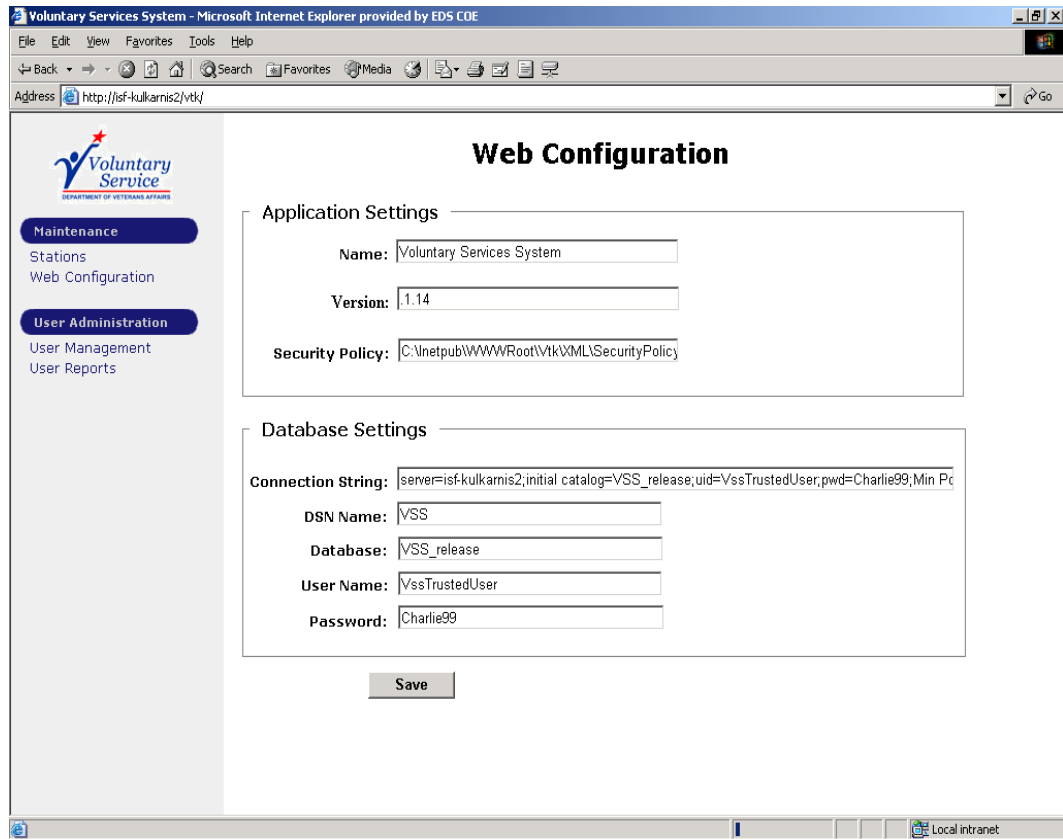
### ***Editing Specifications for Web.config file***

The Web Configuration link under the Maintenance menu allows the EMC Application Administrator to edit the application and database setting specifications for the web.config file. The web.config file contains the web configuration settings for the entire VSS application.

To edit the web.config file follow the steps below:

1. Click the Web Configuration link under Maintenance menu. The Web Configuration screen appears.





2. Enter the appropriate information in the web configuration fields, as follows:

### Application Settings:

- Name – Application name
- Version – Version number.
- Security Policy – Path location of the security policy

### Database Settings:

- Connection String – Database connection string
- DSN Name – Dedicated Server name
- Database – Database Name
- User Name – Application User Name
- Password – Database password

3. Click Save.

## User Administration

### ***Adding a Central Office Site User Administrator***

You must create a User Administrator for the Central Office site. To do so, obtain the following data from the Systems Implementation Manager to add a new user

## EMC Application Administration

- Last Name (required)
- First Name (required)
- NT User Name (required)
- Primary Station (required) = **CO (101)**
- Middle Name
- Email Address

When you have created the new user for CO, you can return to the Station screen to assign the User Administrator role to that user.

Once a User Administrator has been selected, editing of the Site User Administrator must be done by the Site User Administrator from the User management screens *at the site*. Selecting another User Administrator will only make multiple users for the site. Removing the User Administrator role from a user must be performed from the site's User Management screen by a User Administrator.

Perform the following steps to add a new Central Office Site User Administrator:

1. Open the EMC Site in the VSS application.
2. Click "User Management" from under the User Administration menu on the left-hand side of the screen. The User Management screen displays.

Voluntary Services System - Microsoft Internet Explorer provided by EDS COE

File Edit View Favorites Tools Help

Address http://isf-kulkarnis2/vtkj

**User Management**

Edit an Existing User: - select user -

(\*) fields are required!

Record Id: NEW

\*Last Name: [text box]

\*First Name: [text box]

Middle Name or Initials: [text box]

\*NT User Name: [text box]

E-Mail Address: [text box]

\*Primary Station: EMC (101EMC)

(Change Primary Station field only if user has moved to a new station)

**Roles for EMC**

Roles	Current Roles
VtkNationalAdministrator	

Post Delete Clear Exit

1. Enter the user data in the appropriate fields.

**Do not add the VTKNationalAdministrator role to Current Roles in the Roles for EMC section of the screen.**

2. Click Post to process the new information. A “Record Posted” message will display, indicating successful submission of the data.

At this point you can add the newly created Central Office user to the Central Office Site as the User Administrator for the Site, as follows.

3. Open CO from the Station dropdown list at the top of the screen.
4. Click Stations from the Maintenance menu on the left-hand side of the screen. The *Station Add/Edit* screen displays.
5. Select CO from the dropdown list in Select an Existing Site and Click Edit. The data entry screens for Central Office Site data display.
6. From the user list, select that newly created user to assign the role of User Administrator. (This selection automatically grants the Site User Administrator role at that Site to the selected user.)
7. Select that User Administrator from the User list. (This selection automatically grants the Site User Administrator role at that Site to the selected user.)
8. Click Post to process the CO Site User Administrator addition. A “Record Posted” message displays, indicating successful submission of the data.
9. The site user you have entered now has access to the Central Office Site.

### ***Adding a New Primary Site User Administrator***

You must enter Site User Administrator data for the site you are adding. Obtain the following data from the Systems Implementation Manager to add the primary Site User Administrator as a new user:

- Last Name (required)
- First Name (required)
- NT User Name (required)
- Primary Station (required) –the site that user is being added to.
- Middle Name
- Email Address

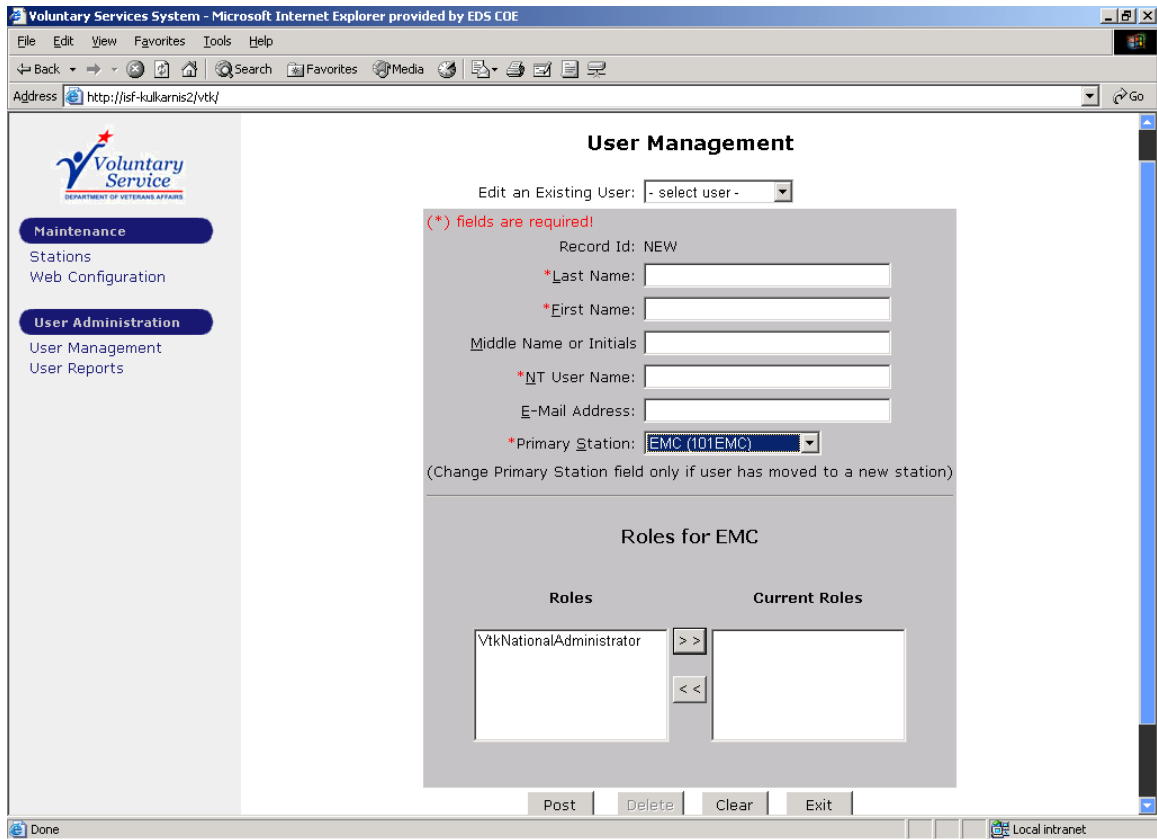
When you have created the new user, you can return to the Station screen to assign the User Administrator role to that user. (These steps are included below.)

Once a User Administrator has been selected, editing of the Site User Administrator must be done by the Site User Administrator from the User management screens *at the site*. Selecting another User Administrator will only make multiple users for the site. Removing the User Administrator role from a user must be performed from the site's User Management screen by a User Administrator.

You must enter Site User Administrator data for the site you are adding. Obtain the following data from the Systems Implementation Manager to add the primary Site User Administrator as a new user:

Perform the following steps to add a new primary Site User Administrator:

1. Open the EMC Site in the VSS application.
2. Click "User Management" from under the User Administration menu on the left-hand side of the screen. The User Management screen displays.



3. Enter the user data into the appropriate fields.

**Do not add the VTKNationalAdministrator role to Current Roles in the Roles for EMC section of the screen.**

4. Click Post to process the new information. A “Record Posted” message will display, indicating successful submission of the data.

At this point you can add the newly created Central Office user to the Central Office Site as the User Administrator for the Site, as follows.

5. Select the site in the Station dropdown list at the top of the screen.
6. Click Stations under the Maintenance menu on the left-hand side of the screen. The *Station Add/Edit* screen displays.
7. Select the appropriate station from the dropdown list in “Select an Existing Site” and Click Edit. The data entry screens for the site are displayed.
8. From the user list, select the newly created site user to assign the role of User Administrator. (This selection automatically grants the Site User Administrator role at that Site to the selected user.)
9. Select that User Administrator from the User list. (This selection automatically grants the Site User Administrator role at that Site to the selected user.)
10. Click “Post” to process the new information. A “Record Posted” message displays, indicating successful submission of the data.

## Generating User Reports

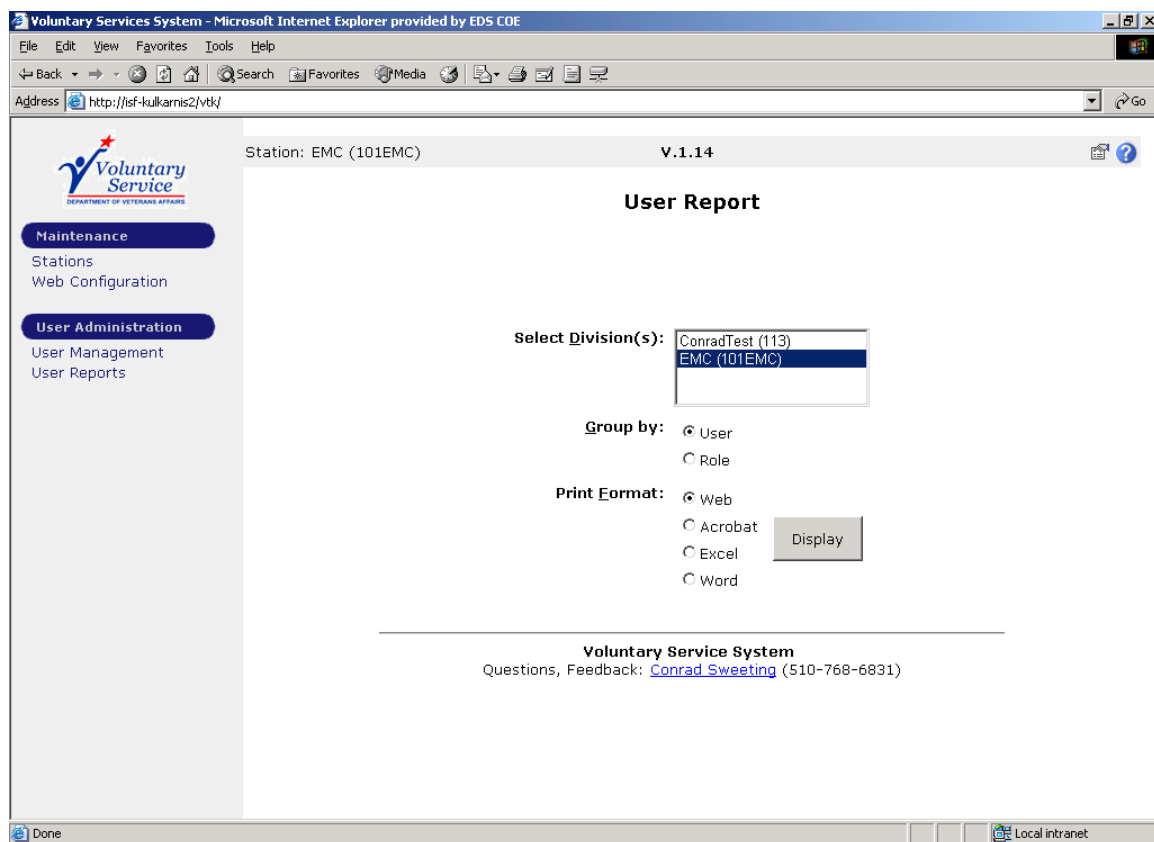
The User Report tells you one of the following:

- What roles specified users have at a site
- What users at a site have a specified role

This screen is used by the Application Administrator at the EMC to see what users have been assigned which roles at the EMC.

To generate a User Report for the EMC:

1. Click the User Reports link under the User Administration menu. The User Report screen displays.



2. Highlight EMC in the Select Division field.
3. Click one of the Group By radio buttons.
4. Select a print format (Word is usually the best option)
5. Click Display. The report will be displayed in the print format selected in a separate window.

## Appendix A: Loading SQL Server Flat File Packages

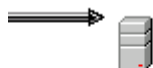
The SQL Server flat file and stored procedure packages must both be executed in the Local Packages section of SQL Server Enterprise Manager's Data Transformation Services. The flat file packages should be executed before the stored procedure packages. Instructions accompanying the update will specify any script that needs to be run prior to loading a particular flat file.

The general steps for loading each flat file package are as follows:

1. Execute any script necessary to load the particular flat file. (Specified in the update instructions)
2. Set connection properties for Microsoft OLE DB Provider
3. Set Dynamic properties
4. Set Text File properties
5. Set the Transform Data Task Properties (to alter the database table)
6. Execute the flat file package.

The detailed steps for executing flat file packages are as follows:

1. With SQL Query Analyzer connected to the VSS\_Production\_Test database, open and execute the script associated with the flat file that you want to load.
2. In SQL Server Enterprise Manager, locate the database server hosting the database you are upgrading and choose Data Transformation Services/Local packages.
3. Double-click the flat file package you want to execute.
4. Check the properties for the Microsoft OLE DB Provider for SQL Server by doing the following:
  - a. Right-click on the Microsoft OLE DB Provider icon

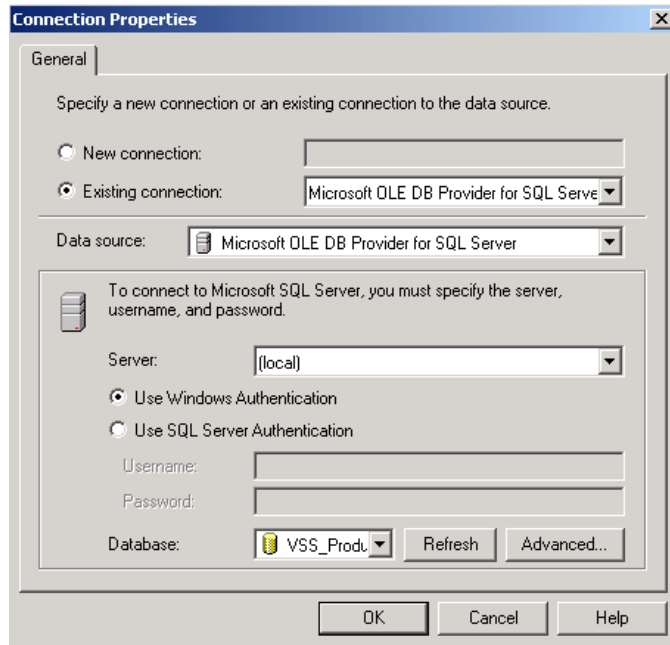


Microsoft OLE DB ...

- b. Select Properties from the popup menu.

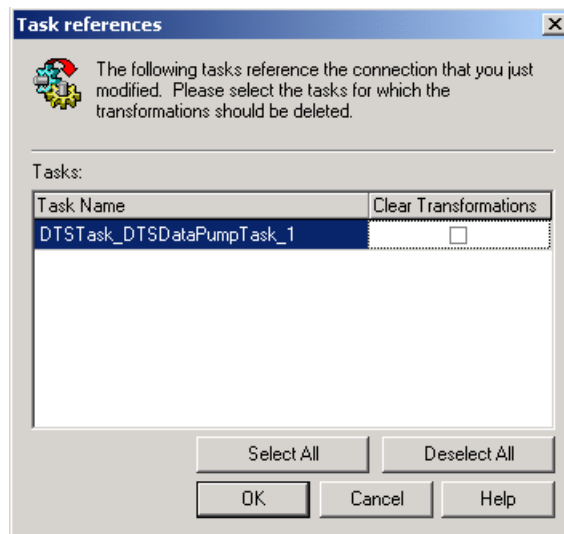
## Appendix A: Loading SQL Server Flat File Packages

The Connection Properties screen appears



- c. Check that Data Source shows the correct server for the database being upgraded.
- d. Check that Database shows the correct name for the database being upgraded.
- e. If you are connecting to the server remotely and are not using a Terminal Server do not use “Local” for Server.
- f. If you have made changes, click Refresh.
- g. Click OK to close the Connection Properties screen.

The Task References dialog appears.

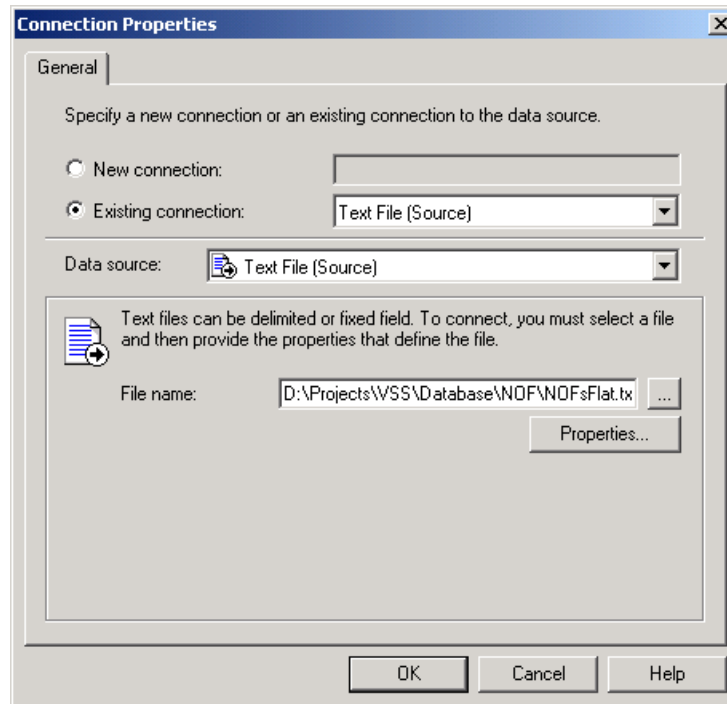





## Appendix A: Loading SQL Server Flat File Packages

- h. Click OK to close. (You will not need to clear any transformations.)
5. Check the properties of the text file by doing the following:
  - a. Right-click on the Text File icon located inside the package and select Properties from the pull-down menu.

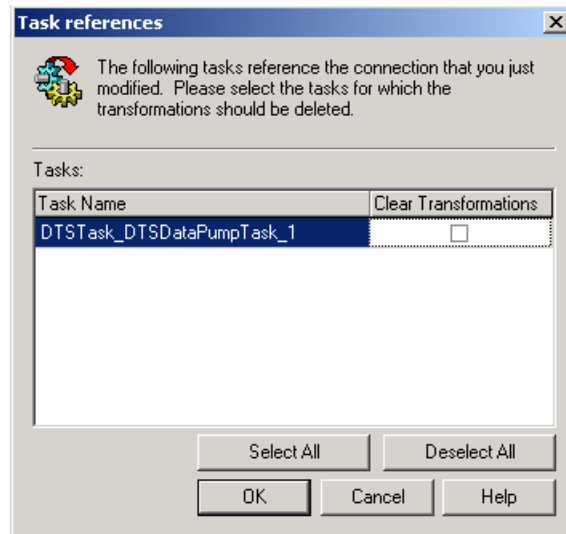
The Connection Properties screen appears.



- b. Check that File Name shows the correct path and file name. If not, use the  button to the right of the file name to browse for the flat file.
- c. Click OK to close the Connection Properties screen.

The Task References dialog appears.

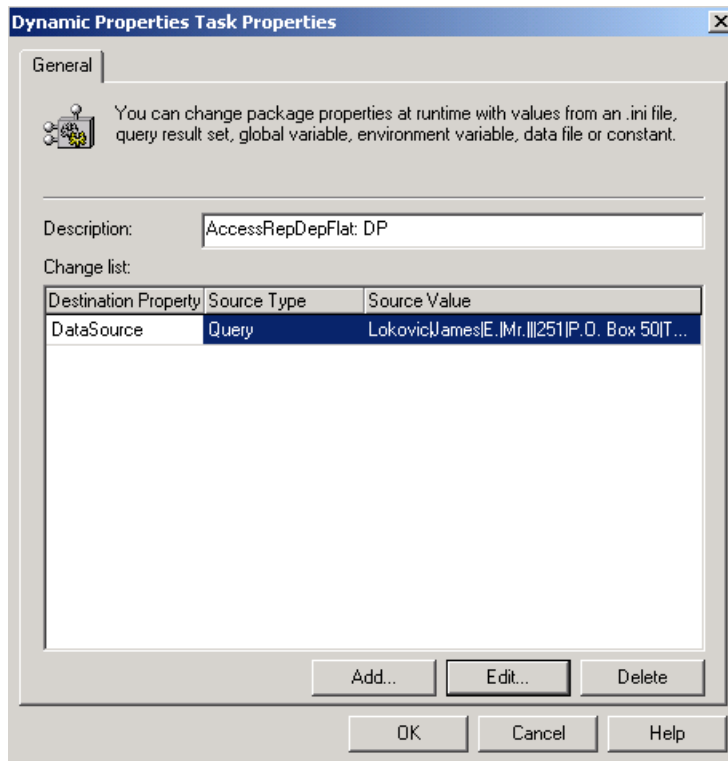
## Appendix A: Loading SQL Server Flat File Packages



d. Click OK to close. (You will not need to clear any transformations.)

6. Check the dynamic properties by doing the following:

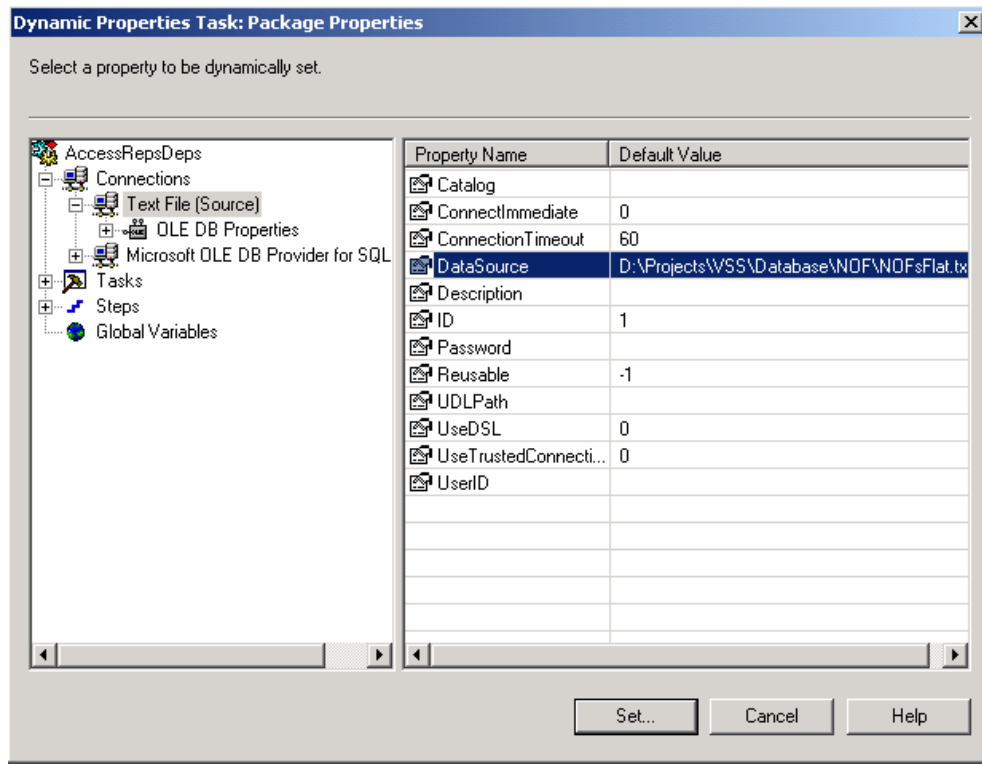
- a. Right-click on the DP icon located inside the flat file's package.
- b. Select Properties from the pull-down menu. The Dynamic Properties Task Properties screen appears.



c. Click Edit.

## Appendix A: Loading SQL Server Flat File Packages

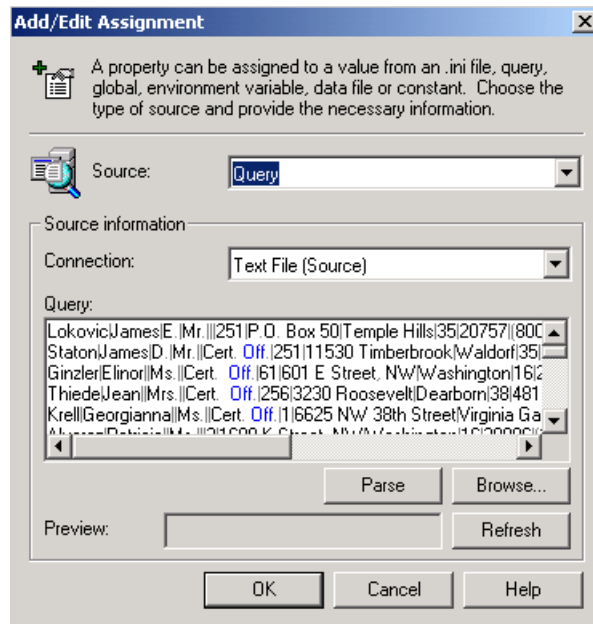
- d. Navigate to `<filename>/Connections/TextFile (Source)` in the left side of the window. Then locate the `DataSource` property in the right side of the window.




- e. Expand the “Default Value” column so that you can check that the path and filename are correct.
- f. If the path and file name are correct, click Cancel.

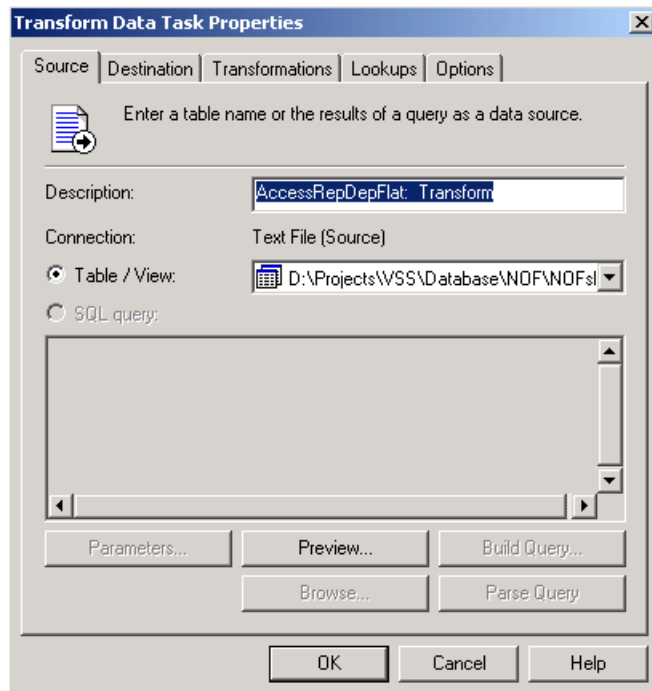
If the path and file name are not correct, click Set. The Add/Edit Assignment screen appears.

## Appendix A: Loading SQL Server Flat File Packages

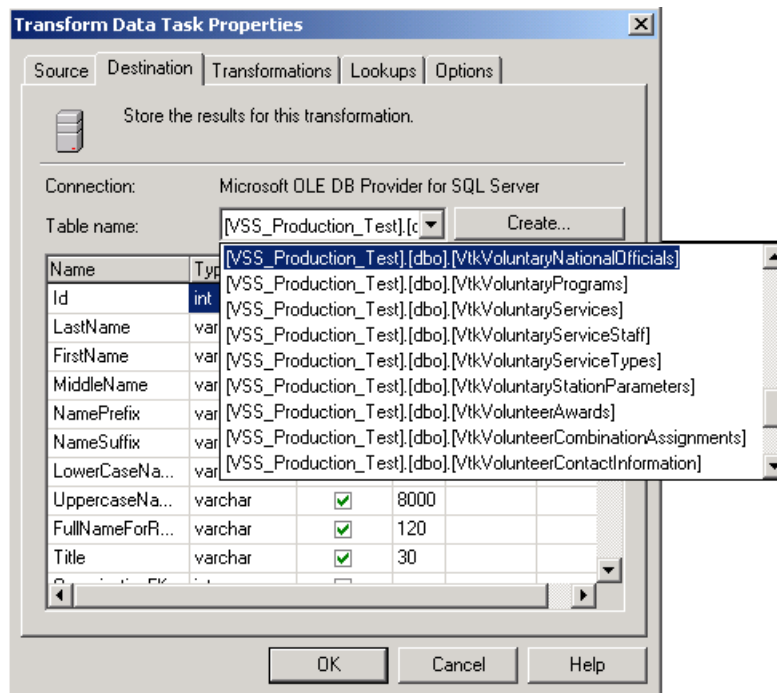


- i. Check that Source is set to Query and that Connection is set to Text File (Source).
  - ii. Click the Browse button to browse for and open the flat file.
  - iii. Click OK twice to set and exit the Dynamic Property screens.
7. To specify the transformation properties, to alter the table where the data will go, follow the steps below:
  - a. Right-click the transform arrow  and select Properties from the popup menu.
  - b. On the Source tab page of Transform Data Task Properties, make sure that Table/View shows the correct path and file name.

## Appendix A: Loading SQL Server Flat File Packages



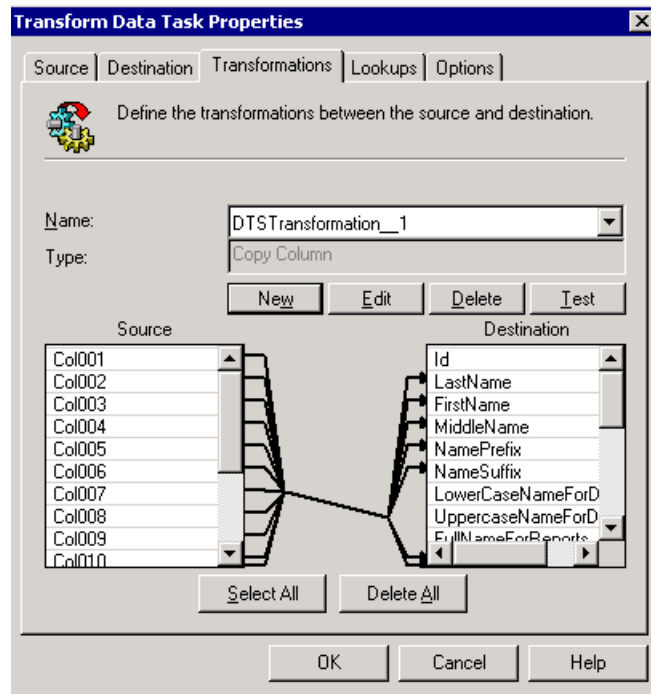
- c. On the Destination tab, make sure that the appropriate database has been selected for the table associated with the flat file. Click OK.



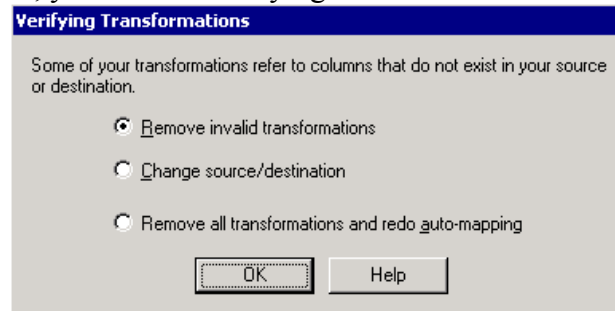
- d. Click the Transformation tab.

The Transform Data Task Properties screen should look like the screen below:

## Appendix A: Loading SQL Server Flat File Packages

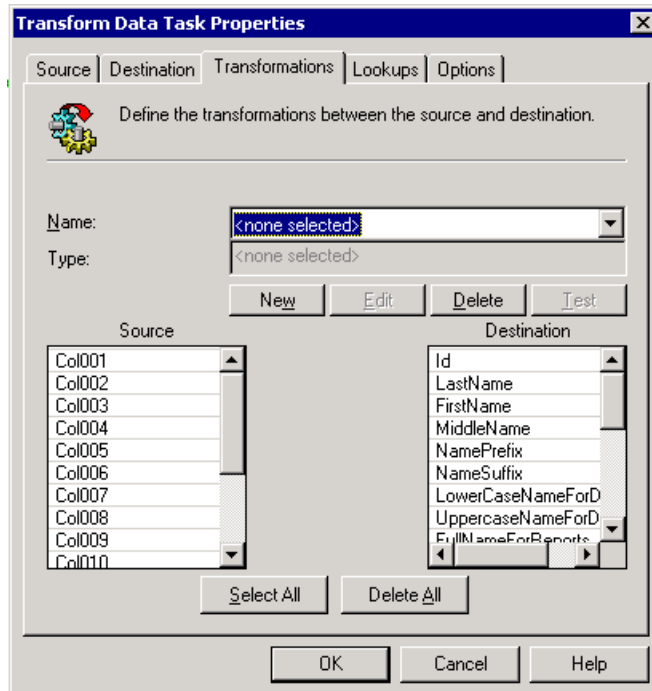


If instead, you see the Verifying Transformations screen:

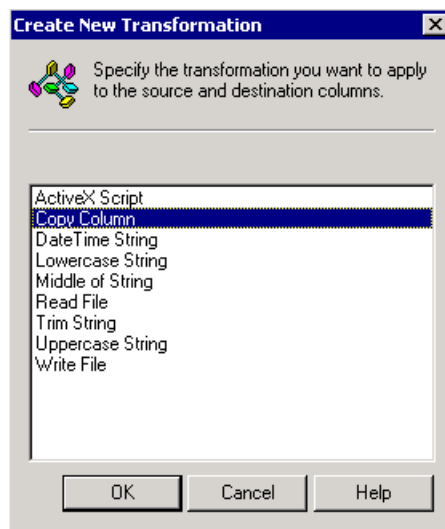


- i. Select “Remove invalid transformations” and the click OK.
- ii. When the Transformation tab page re-appears, click New.

## Appendix A: Loading SQL Server Flat File Packages

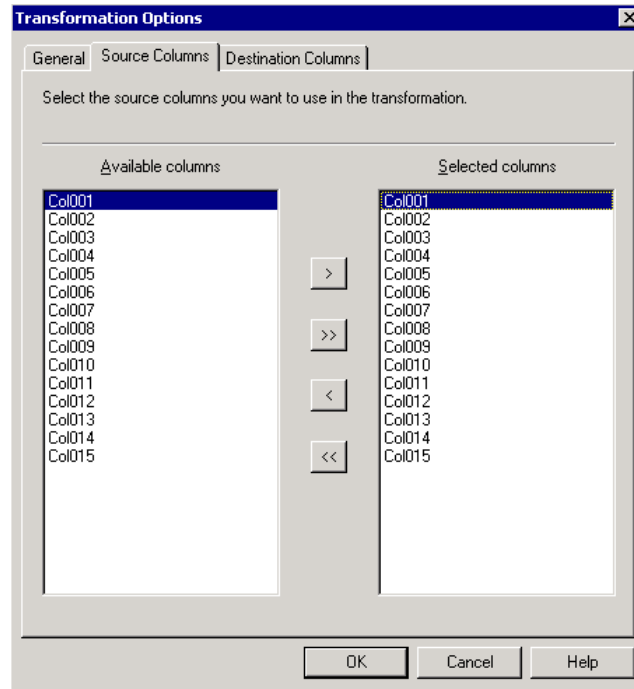


- iii. When the Create New Transformation dialog panel appears, select "Copy Column" and, click OK.

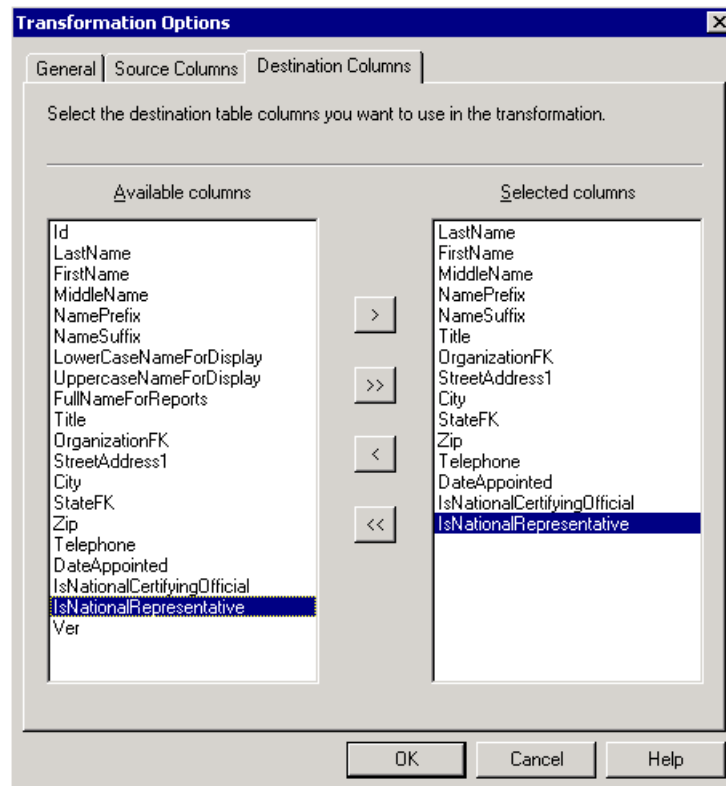


- iv. On the Transformation Options page, click the Source Columns tab.

## Appendix A: Loading SQL Server Flat File Packages



- v. Click all of the available columns and move them over to the selected columns. Then click OK.
- vi. Click on the Destinations Columns tab.







## Appendix A: Loading SQL Server Flat File Packages