

dopplerVUE Installation Guide

Version 2.3

doppler**VUE** 

June 2011

Preface

Software License Agreement

Software is defined as the SYS Technologies computer programs with which the Software License Agreement is included and any maintenance or update releases thereto. Do not use the Software until you have carefully read the Agreement. This Agreement sets forth the terms and conditions for licensing of the Software from SYS Technologies to You, and installing the Software indicates that you have read and understand this Agreement, and accept its terms and conditions.

Notices Regarding This Document

The information contained in this document is subject to change without notice. This document, or any part of this document may not be reproduced by any means without the express written consent of Kratos Networks, Incorporated.

U.S. Government Restricted Rights

Software and documentation delivered subject to the DOD FAR Supplement is 'commercial software' and its use, duplication and disclosure shall be subject to the licensing restrictions set forth in this Agreement. Otherwise, Software and documentation delivered subject to the Federal Acquisition Regulations is 'restricted computer software' and its use, duplication and disclosure shall be subject to the restrictions in FAR 52.227-14, Rights in Data – General, including Alternate III (June 1987).

Trademarks

dopplerVUE is a registered trademarks of SYS Technologies, Inc. All trade names referenced are the service mark, trademark, or registered trademark of the respective manufacturer.

Copyright

1996-2011 Kratos Networks, Inc. All Rights Reserved.

Table of Contents

Introduction	5
Installation Software.....	5
Licensing	5
Technical Support	6
Configure Windows System	7
System Requirements	7
<i>Hardware Requirements</i>	7
<i>Operating Systems</i>	7
<i>Database Management Systems</i>	7
<i>Additional Software</i>	7
Windows 7	8
<i>Verify .NET Framework 3.5 SP1 and 4.0</i>	8
<i>Enable IIS and MSMQ</i>	8
<i>Enable Telnet</i>	8
Windows Vista	9
<i>Verify .NET Framework 3.5 SP1 and 4.0</i>	9
<i>Enable IIS 6 Compatibility and MSMQ</i>	9
<i>Enable Telnet</i>	9
Windows XP and Windows Server 2003	10
<i>Verify .NET Framework 3.5 SP1 and 4.0</i>	10
<i>Verify Internet Explorer</i>	10
<i>Enable IIS 6 and MSMQ</i>	10
<i>Enable Application Server</i>	11
<i>Enable ASP</i>	11
Windows Server 2008	11
<i>Enable IIS and ASP.NET</i>	11
<i>Enable Required Features</i>	12
SQL Server 2005/2008	12
<i>SQL Server 2005 Express</i>	12
<i>SQL Server 2005 or 2008 (Standard/Enterprise)</i>	13
Install dopplerVUE System	14
Start the dopplerVUE Installer.....	14
Manually Requesting a License	22
Installing a dopplerVUE License.....	22
Installing a Remote Database	24
<i>Database Server in a Domain</i>	24
<i>Database Server in a Workgroup</i>	28
Upgrading to dopplerVUE 2.3	30
Start dopplerVUE Web Client	31

Install dopplerVUE Remote Client	32
Software Requirements	32
Creating User Accounts	32
Installing a Remote Client over a Network	32
Installing a Remote Client Using the dopplerVUE Installer	33
<i>Install Client</i>	33
<i>Set Web Site Permissions</i>	33
<i>Enable Remote Access</i>	34
Configure Server-Side Logging	34
Upgrading Remote Clients	35
<i>Recreate User Accounts</i>	35
<i>Install Client Software</i>	35
Install a dopplerVUE Web Server on a Remote IIS Server	37
Install dopplerVUE System	37
Install dopplerVUE Web Server	37
Software Modification, Repair, and Removal	39
Modifying dopplerVUE	39
Repairing dopplerVUE	40
Removing dopplerVUE	40
Appendix A – Configuring SSL for Remote Clients	41

Introduction

The dopplerVUE Installation Guide describes how to install the dopplerVUE network management solution on a Microsoft Windows system.

<i>Configure Windows System</i>	This section presents the system requirements and configuration steps for preparing a Windows system prior to installing dopplerVUE.
<i>Install dopplerVUE System</i>	This section explains how to install dopplerVUE on a Windows system.
<i>Start a dopplerVUE Web Client</i>	This section shows how to start the dopplerVUE Web Client.
<i>Install a dopplerVUE Remote Client</i>	This section explains how to install a dopplerVUE client on a remote computer.
<i>Install a dopplerVUE Web Server on a Remote IIS Server</i>	This section explains how to install a dopplerVUE web server on a remote IIS server, thereby allowing the IIS server to host web clients and remote dopplerVUE clients.
<i>Software Modification, Repair, and Removal</i>	This section describes how to modify, repair, or remove the dopplerVUE software on a Windows system.
<i>Configure SSL for Remote Clients</i>	This appendix explains how to enable SSL on the dopplerVUE server so remote clients can connect using SSL.

Installation Software

You can download dopplerVUE from www.dopplerVUE.com, or you can request a CD from Kratos Networks (see "Technical Support" below).

Licensing

You can request a 30-day trial license during the installation process, which will be emailed within minutes (an Internet connection is required), or you can choose to install dopplerVUE without a license and then request and install a 30-day trial license at a later time. For more information, see "Manually Request a License". Note that dopplerVUE will not start without a license.

To purchase a license, contact Kratos Networks (see "Technical Support" below).

Technical Support

Kratos Networks is committed to providing comprehensive technical support for its customers. You may contact Technical Support via telephone or email:

telephone: 888-dVUENOW (888-388-3669)

email: support@dopplerVUE.com

Configure Windows System

This section presents the system requirements and configuration steps for preparing a Windows system prior to installing the dopplerVUE product.

System Requirements

Hardware Requirements

The minimum hardware requirements for a Windows system are as follows:

- 2.4 GHz processor
- 4 GB of memory
- 10 GB of available disk space

Note that dopplerVUE system performance is highly dependent on a number of factors, including the number of network elements to be monitored, the rate at which elements are polled, and the type of performance metrics to be collected. To achieve optimal system performance, you may need to upgrade one or more hardware components. Additionally, you may want to consider using a remote database server and/or a remote IIS server, both of which can significantly reduce the performance demands on a dopplerVUE server. For more information, see “Install dopplerVUE System” and “Install a dopplerVUE Web Server on a Remote IIS Server”.

Operating Systems

The dopplerVUE product is compatible with the following operating systems:

- Windows 7
- Windows Vista
- Windows XP Professional (SP3)
- Windows Server 2003 (Standard or Enterprise Edition)
- Windows Server 2003 R2 (Standard or Enterprise Edition)
- Windows Server 2008 (Standard or Enterprise Edition)
- Windows Server 2008 R2 (Standard or Enterprise Edition)

Note: Windows Server 2003 Web Edition is not supported.

Database Management Systems

The dopplerVUE product requires one of the following database management systems:

- Microsoft SQL Server 2005 or 2008 Express
Note: The dopplerVUE installer automatically creates an instance of SQL Server 2005 Express SP2 named NINEFIVE.
- Microsoft SQL Server 2005 (Standard or Enterprise Edition)
- Microsoft SQL Server 2008 (Standard or Enterprise Edition).

Note: The dopplerVUE product fully supports only the U.S. English language setting.

Additional Software

The NeuralStar server requires Microsoft .Net Framework 3.5 SP1. To support NeuralStar web clients and remote clients, both .Net Framework 3.5 SP1 and 4.0 must be installed on the server. Firefox, Chrome, Safari, or Internet Explorer must be installed on computers hosting NeuralStar web clients and remote clients.

Windows 7

To prepare Windows 7 prior to installing the dopplerVUE product, complete the following tasks:

- Install the latest service pack and apply all Windows updates
- Verify .NET Framework 3.5 SP1 and 4.0 have been installed (.NET Framework 4.0 is required only if web clients and remote clients will be accessing the server)
- Enable IIS and MSMQ
- Enable Telnet (optional)
- Restart the system

Verify .NET Framework 3.5 SP1 and 4.0

To determine whether .NET Framework 3.5 SP1 and 4.0 are installed, do the following:

1. On the task bar, click **Start > Control Panel > Program and Features**.
2. Scroll down the list of installed programs and make sure Microsoft .NET Framework 3.5 SP1 and 4.0 are installed.
3. If .NET Framework 3.5 SP1 and 4.0 are not installed, see the Microsoft Web site for instructions on how to obtain and install .NET Framework 3.5 SP1 and 4.0.

Enable IIS and MSMQ

By default, IIS and the Microsoft Message Queuing (MSMQ) are disabled in Windows 7.

Note: Enabling MSMQ is optional; however, it's strongly recommended you enable MSMQ before installing dopplerVUE to ensure a fully functional system.

To enable these components, complete the steps below.

1. Open the Control Panel and click **Programs and Features**.
2. Under Tasks, click **Turn Windows Features on or off**.
3. Expand **Internet Information Services > Web Management Tools**.
4. Under **Web Management Tools**, select the following features:
 - **IIS Management Console**
 - **IIS Management Service**
6. Expand **Microsoft Message Queue (MSMQ) Server > Microsoft Message Queue (MSMQ) Server Core** and select the following features:
 - **MSMQ Active Directory Domain Services Integration**
 - **Multicasting Support**
7. Under **Microsoft Message Queue (MSMQ) Server**, select **MSMQ DCOM Proxy**.
8. Click **OK**.

Enable Telnet

By default, the Telnet utility is disabled in Windows 7. This is a useful utility for troubleshooting network devices, and, if enabled, Telnet can be started from the dopplerVUE client. To enable Telnet (optional), complete the steps below.

1. Open the Control Panel and click **Programs and Features**.
2. Under Tasks, click **Turn Windows Features on or off**.
3. Select **Telnet Client**.
4. Click **OK**.

Windows Vista

To prepare Windows Vista prior to installing the dopplerVUE product, complete the following tasks:

- Install the latest service pack and apply all Windows updates
- Verify .NET Framework 3.5 SP1 and 4.0 have been installed (.NET Framework 4.0 is required only if web clients and remote clients will be accessing the server)
- Enable IIS 6 Compatibility
- Enable Telnet (optional)
- Restart the system

Verify .NET Framework 3.5 SP1 and 4.0

To determine whether .NET Framework 3.5 and 4.0 are installed, do the following:

1. On the task bar, click **Start > Control Panel > Program and Features**.
2. Scroll down the list of installed programs and make sure Microsoft .NET Framework 3.5 SP1 and 4.0 are installed.
3. If .NET Framework 3.5 SP1 and 4.0 are not installed, see the Microsoft Web site for instructions on how to obtain and install .NET Framework 3.5 SP1 and 4.0.

Enable IIS 6 Compatibility and MSMQ

By default, IIS 6 Compatibility and the Microsoft Message Queuing (MSMQ) are disabled in Windows Vista.

Note: Enabling MSMQ is optional; however, it's strongly recommended you enable MSMQ before installing dopplerVUE to ensure a fully functional system.

To enable these components, complete the steps below.

1. Open the Control Panel and click **Programs and Features**.
2. Under Tasks, click **Turn Windows Features on or off**.
3. Expand **Internet Information Services > Web Management Tools**.
4. Expand **IIS 6 Management Compatibility** and select **IIS Metabase and IIS 6 configuration compatibility**.
5. Under **Web Management Tools**, select the following features:
 - **IIS Management Console**
 - **IIS Management Scripts and Tools**
 - **IIS Management Service**
6. Expand **Microsoft Message Queue (MSMQ) Server > Microsoft Message Queue (MSMQ) Server Core** and select the following features:
 - **MSMQ Active Directory Domain Services Integration**
 - **Multicasting Support**
7. Under **Microsoft Message Queue (MSMQ) Server**, select **MSMQ DCOM Proxy**.
8. Click **OK**.

Enable Telnet

By default, the Telnet utility is disabled in Windows Vista. This is a useful utility for troubleshooting network devices, and, if enabled, Telnet can be started from a dopplerVUE client. To enable Telnet (optional), complete the steps below.

1. Open the Control Panel and click **Programs and Features**.
2. Under Tasks, click **Turn Windows Features on or off**.

3. Select **Telnet Client**.
4. Click **OK**.

Windows XP and Windows Server 2003

To prepare Windows XP or Windows Server 2003 prior to installing the dopplerVUE product, complete the following tasks:

- Install the latest service pack and apply all Windows updates
- Verify .NET Framework 3.5 SP1 and 4.0 have been installed (.NET Framework 4.0 is required only if web clients and remote clients will be accessing the server)
- Verify Internet Explorer 6, 7 or 8 has been installed
- Enable IIS 6 and MSMQ (Windows XP only)
- Enable Application Server (Windows Server 2003 only)
- Enable ASP (Windows Server 2003 only)
- Restart the system

Verify .NET Framework 3.5 SP1 and 4.0

To determine whether .NET Framework 3.5 SP1 and 4.0 are installed, do the following:

1. On the task bar, click **Start > Control Panel**, or click **Start > Settings > Control Panel**.
2. Open **Add or Remove Programs**.
3. Scroll down the list of installed programs and make sure Microsoft .NET Framework 3.5 SP1 and 4.0 are installed.
4. If .NET Framework 3.5 SP1 and 4.0 are not installed, see the Microsoft Web site for instructions on how to obtain and install .NET Framework 3.5 SP1 and 4.0.

Verify Internet Explorer

To determine whether Internet Explorer is installed, do the following:

1. On the task bar, click **Start > Programs > Internet Explorer**.
2. If Internet Explorer 7 or 8 is not installed, see the Microsoft Web site for instructions on how to obtain and install Internet Explorer 7 or 8.

Note: Internet Explorer 6 is supported, but it is recommended you install Internet Explorer 7 or 8.

Enable IIS 6 and MSMQ

By default, Internet Information Services (IIS) and Microsoft Message Queuing (MSMQ) are disabled in Windows XP.

Note: Enabling MSMQ is optional; however, it's strongly recommended you enable MSMQ before installing dopplerVUE to ensure a fully functional system.

To enable these components, complete the steps below.

1. On the task bar, click **Start > Control Panel** or **Start > Settings > Control Panel**.
2. Open **Add or Remove Programs**.
3. Click **Add/Remove Windows Components**.
4. In the Components list, select **Internet Information Services (IIS)** and **Message Queuing**.
5. Click **Next**, then click **Finish**.

Enable Application Server

By default, Application Server is disabled in Windows Server 2003. To enable this component, complete the steps below.

1. On the task bar, click **Start > Settings > Control Panel**.
2. Open **Add or Remove Programs**.
3. Click **Add/Remove Windows Components**.
4. Select **Application Server**, and then click **Details**.
5. Select **ASP.NET** and **Message Queuing**. If not selected already, select **Application Server Console** and **Internet Information Services (IIS)**.
6. Click **OK**, and then click **Next**.
7. When all files have been installed, click **Finish**.

Enable ASP

By default, Active Server Pages (ASP) is disabled in Windows Server 2003. To enable this component, complete the steps below.

1. On the task bar, click **Start > Settings > Control Panel**.
2. Open the **Administrative Tools**.
3. Open **Internet Information Services (IIS) Manager**.
4. In the left pane, expand **hostname (local computer)**.
5. Click **Web Services Extensions**.
6. On the Extended tab, click **Active Server Pages**, and then click **Allow**.
7. Click **ASP.NET v2.0.50727**, and then click **Allow**.
8. Click the Standard tab and repeat Steps 6 and 7.

Windows Server 2008

To prepare Windows Server 2008 prior to installing the dopplerVUE product, complete the following tasks:

- Install the latest service pack and apply all Windows updates
- Install .NET Framework 4.0 if web clients and remote clients will be accessing the server
- Enable IIS and ASP.NET
- Enable required features
- Restart the system

Enable IIS and ASP.NET

1. Click **Start > Administrator Tools > Server Manager**.
2. Click **Roles**.
3. In the right-hand pane, click **Add Role** and then click **Next**.
4. Click **Web Server (IIS)**.
5. When prompted, click **Add Required Features**.
6. Under Web Server (IIS), click **Role Services**.
7. Expand Application Development, and select **ASP.NET**.
8. When prompted, click **Add Required Role Services**.

9. Expand Management tools, select **Management Tools**, and then select **IIS Management Console** and **Management Service**.
10. Click **Next** and then click **Install**.

Enable Required Features

1. Click **Start > Administrator Tools > Server Manager**.
2. Click **Features**.
3. In the right-hand pane, click **Add Features**.
4. Select the following features:
 - .NET Framework 3.0 Features (and 4.0 Features)
 - .NET Framework 3.5.1 (and 4.0)
 - XPS Viewer
 - WCF Activation
 - HTTP Activation
 - Non- HTTP Activation
 - Message Queuing
 - Message Queuing Services
 - Message Queuing Server
 - Remote Server Administration Tools
 - Role Administration Tools
 - Web Server (IIS) Tools
 - SNMP Services
 - SNMP Service
 - Telnet Client
 - Windows Process Activation Service
 - Process Model
 - .NET Environment
 - Configuration APIs
5. Click **Next** and then click **Install**.

SQL Server 2005/2008

SQL Server 2005 or 2008 Express is suitable for managing small networks, but it has the following constraints: a 4GB database, one processor, and 1GB of memory regardless of the number of processors and amount of memory available in the system. If you plan to manage a medium or large network, it is recommended you install SQL Server 2005 Standard or Enterprise, or SQL Server 2008 Standard or Enterprise.

SQL Server 2005 Express

The dopplerVUE installer (setup.exe) will automatically install SQL Server 2005 Express SP2, if requested. The SA password for the dopplerVUE database (NINEFIVE) is:

d0pplerVUE!

where "0" is zero.

SQL Server 2005 or 2008 (Standard/Enterprise)

To install SQL Server 2005 Standard/Enterprise or SQL Server 2008 Enterprise:

- Install the SQL Server Database Services and Workstation components.
- Select default instance name.
- Use the built-in System account.
- Enable Mixed Mode Authentication.
- Set server memory to 50% of physical memory as described below for an existing SQL Server 2005 Standard/Enterprise instance.
- Install the latest service pack.

If SQL Server 2005 Standard/Enterprise or SQL Server 2008 Enterprise has already been installed, make sure server memory has been set to 50% of the physical memory for the Windows system.

1. Start SQL Server Management Studio.
2. In the Object Explorer, right-click the SQL Server instance at the top of the tree, for example "mycomputer (SQLServer *version-id*)" and click **Properties**.
3. In the left pane, click **Memory**.
4. Set **Minimum server memory** and **Maximum server memory** to 50% of the physical memory for the Windows system.
5. Restart the system if prompted.

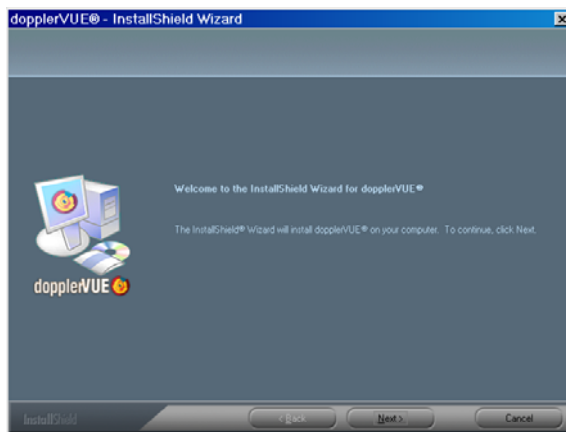
Install dopplerVUE System

This section explains how to install the dopplerVUE system on a Windows server or workstation.

- If you plan to install the database on a remote database server, see "Installing a Remote Database".
- If you are upgrading from a prior version to dopplerVUE 2.3, see "Upgrading to dopplerVUE 2.3".

Start the dopplerVUE Installer

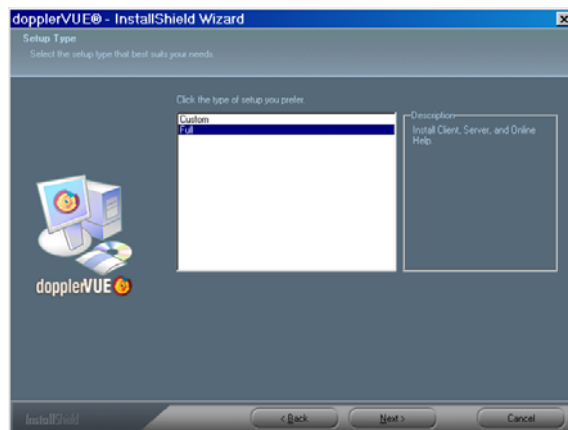
1. Logon to Windows using an administrator account (or an account with administrator privileges).
2. Double-click the installation file (setup.exe) you downloaded from www.dopplerVUE.com.
3. In the Welcome window, click **Next**.



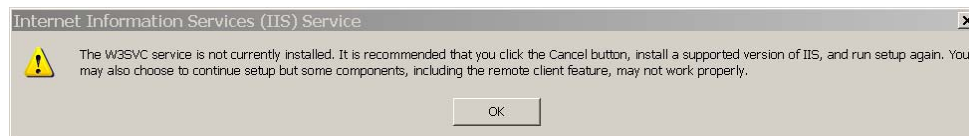
4. In the License Agreement window, accept the license agreement and click **Yes**.



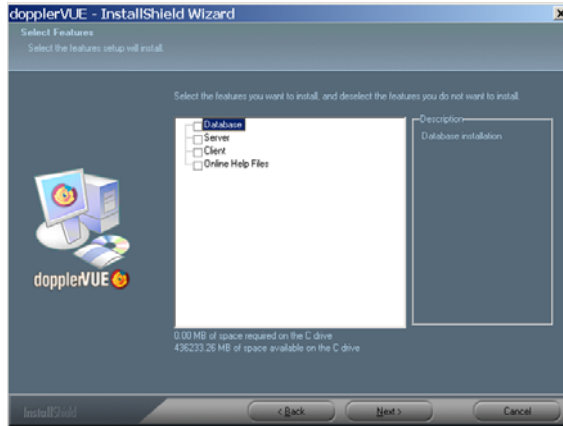
5. In the Setup Type window, select a setup type.
- **Full** – Install all dopplerVUE features: server, client, and online help (recommended). Click **Next** (go to Step 7).
 - **Custom** – Select the dopplerVUE features to install. Click **Next** (go to Step 6).



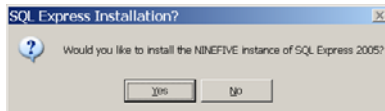
Note: If Internet Information Service (IIS) is not installed on the server, the dopplerVUE Installer (setup.exe) will display an advisory message and suspend the installation. It is recommended you cancel the installation, install IIS, and then rerun setup.exe. If you continue with the installation, some components, such as the Remote Client, may not work correctly.



6. Select the dopplerVUE features to install and click **Next**.
 - Database – Install the dopplerVUE database.
 - Server – Install the dopplerVUE server.
 - Client – Install the dopplerVUE client. If you are installing a remote client, see "Install Remote Client using the dopplerVUE Installer".
 - Online Help Files – Install the online help files (requires client installation).

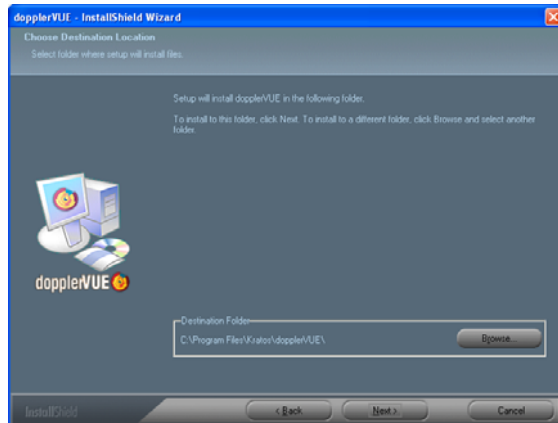


7. When prompted to install the NINEFIVE instance of SQL Server 2005 Express (dopplerVUE 2.3 database), do one of the following:
 - To install the NINEFIVE instance on your computer, click **Yes**.
 - If you plan to install the NINEFIVE instance on a remote SQL database server (see "Installing a Remote Database"), click **No**. If you click **No**, and a remote SQL database server is not available, the installer will not create the dopplerVUE 2.3 database and the installation will fail.

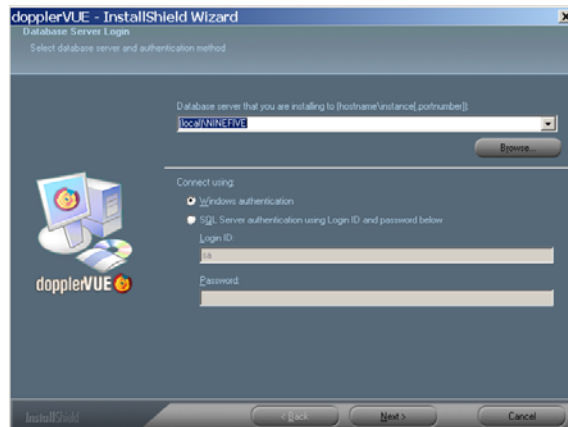


Note: The installer will skip this step if it detects a NINEFIVE instance on your computer from a previous dopplerVUE 2.3 installation.

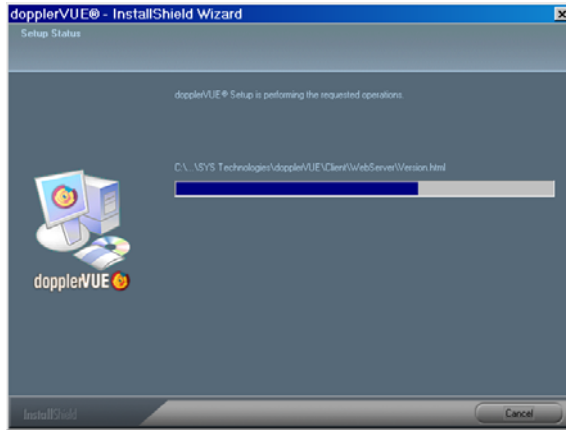
- In the Choose Destination Location window, accept the default destination folder or browse to an alternative location, and then click **Next**.



- In the Database Server Login window, select the local or remote database server on which to install the dopplerVUE 2.3 database.
 - If you selected **Yes** in Step 7, the local database server and the NINEFIVE instance are preselected. Make sure **Windows authentication** is selected, and then click **Next**.
 - If you selected **No** in Step 7, go to "Installing a Remote Database".



10. The Setup Status window shows the installation status. This step will take several minutes.

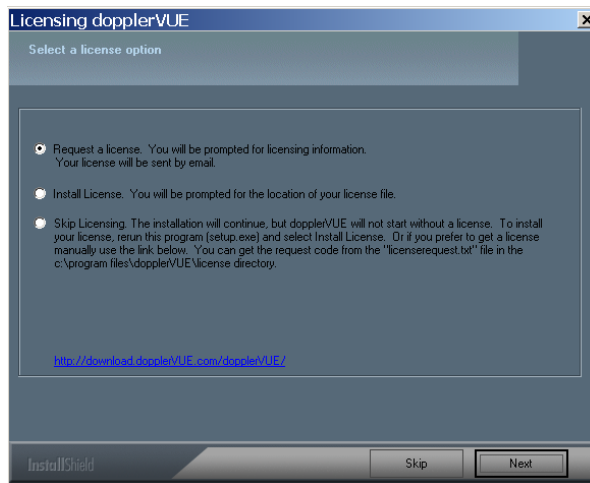


11. In the Select a License Option window, do one of the following:
- **Trial Users:** Select **Request a license** and click **Next** to request a free 30-day license (go to Step 12). Note that the Windows system must have an Internet connection to send the request.
 - If you have a dopplerVUE license, select **Install License** and click **Next** (go to Step 14).
 - If you want to skip licensing and complete the installation, select **Skip Licensing** and click **Next** (go to Step 15).

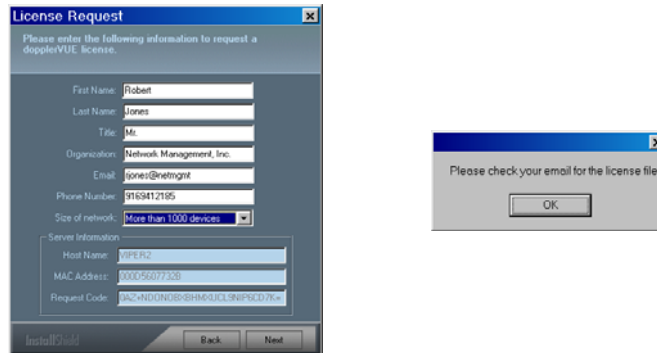
Notes:

dopplerVUE will not start without a license file; however, you may request and install a license after the initial installation (see "Manually Request a License" and "Install dopplerVUE License").

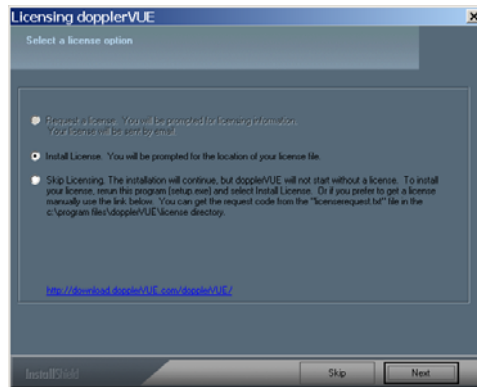
If you are reinstalling the dopplerVUE product, or upgrading to a new version, the installer will skip the licensing steps and use the existing license file (go to Step 15.). However, if you plan to use the new Configuration Manager feature in dopplerVUE 2.3, you will need to request and install an updated license file.



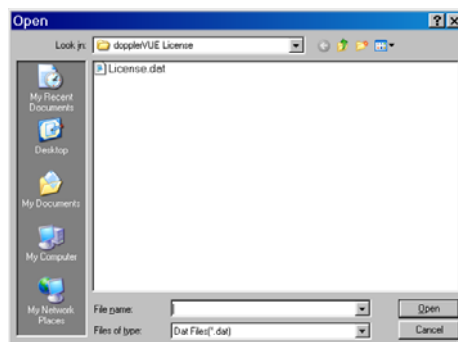
12. In the License Request window, complete all fields and click **Next**. The Installer will email your request, as indicated in the message box. When you receive the license email, download and save the license file (license.dat) to the Windows system.



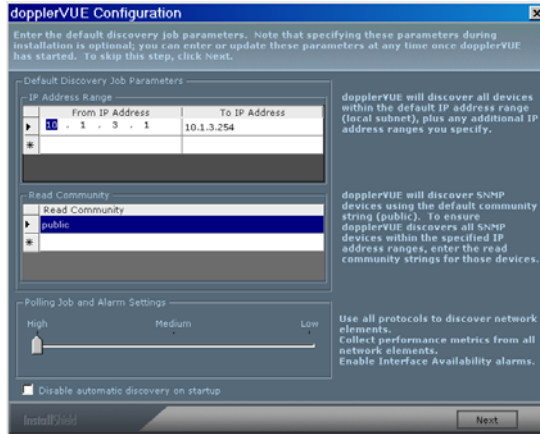
13. In the Select a License Option window, do one of the following:
- Click **Next** to install the license file (go to Step 14).
 - If you want to skip licensing and complete the installation, select **Skip Licensing** and click **Next** (go to Step 15). Note that dopplerVUE will not start without a license file; however, you may request and install a license after the initial installation (see "Install dopplerVUE License").



14. In the Open window, browse to and open the license file. Clicking **Cancel** will return you to the Select a License Option window.



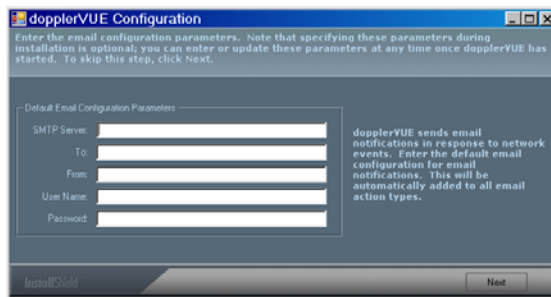
15. In the dopplerVUE Configuration window, do one of the following:
- Enter the parameters for the default discovery job, which will automatically discover network elements when you start the dopplerVUE system, or
 - Select **Disable automatic discovery on start up** and click **Next**. Later, after initial startup, you can create and run discovery jobs as needed.



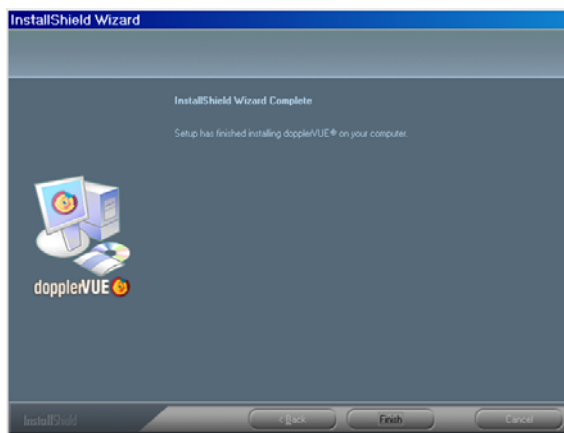
To enter the parameters for the default discovery job:

- Enter IP Address Range.
Accept the default IP address range (local subnet to which the dopplerVUE server is connected, or edit the default IP address range and/or enter additional IP address ranges. You can also enter an IP address in the **From** column to discover a single device.
- Enter Read Community
Enter the read community strings for any SNMP devices you want to discover.
- Select Polling Job and Alarm Settings.
High - Use all protocols (SNMP, ICMP, HTTP, DNS, FTP, SMTP/POP3) to discover network elements, start polling jobs and collect metrics for all discovered elements, and enable Interface Availability alarms.
Medium - Use all protocols to discover network elements, start polling jobs and collect metrics for all discovered elements except firewalls and printers, and enable Interface Availability alarms.
Low - Use SNMP and ICMP protocols to discover network elements, start polling jobs and collect metrics for routers, switches, and workstations only, and disable Interface Availability alarms.
- Click **Next**.

16. In the second dopplerVUE Configuration window, enter the email configuration for sending email notifications (optional). Click **Next**. Note that you can change the email configuration parameters at any time from the dopplerVUE Client.



17. In the Wizard Complete window, click **Finish**.



18. To start the dopplerVUE, go to the task bar and click **Start > Programs > Kratos Networks > dopplerVUE**.

Note: If you did not install a license file, dopplerVUE will not start (see "Manually Request a License" and "Install dopplerVUE License").

19. Typically, dopplerVUE will start using the same Windows account that was used to run the installer; however, in some situations you will need to log in to start dopplerVUE. To log in, enter the default user name and password, and then click **Login**. You will be prompted to reset the default user name and password.

Username: admin
Password: admin



Manually Requesting a License

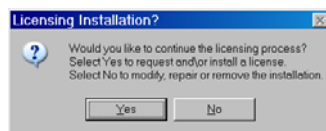
The dopplerVUE Installer prompts you for licensing information and then emails a 30-day trial license request to Kratos Networks; however, if you are installing dopplerVUE on a system that does not have Internet access, you must manually request a 30-day trial license as described below.

1. Install dopplerVUE and skip the licensing option as described in "Install dopplerVUE System".
2. Browse to c:\Program Files\Kratos Networks\dopplerVUE\Tools.
3. Double-click the LicenseRequest file.
4. In the Licensing dopplerVUE dialog box, click **Next**.
5. Close the License Request and Licensing dopplerVUE dialog boxes.
6. Open dopplerVUE\License\licenserequest text file and note the host name, MAC address, and request code parameters. You will need these parameters in Step 8.
7. On a computer with Internet access, browse to <http://download.dopplervue.com/dopplervue/>.
8. Complete the request form and enter the host name, MAC address, and request code from the licenserequest file (see Step 6). Click **Submit**. You should receive a license email within minutes.
9. Follow the instructions in the license email. Save the license file and then copy the file to the dopplerVUE server (Windows system). Install the file as described in "Install dopplerVUE License".

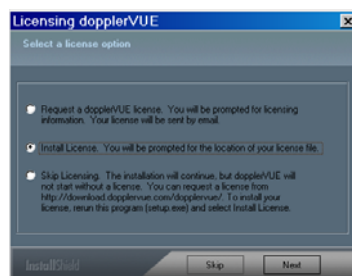
Installing a dopplerVUE License

If you manually requested a 30-day trial license, or you requested a 30-day trial license during the installation but decided to skip the license installation, you will need to install the license file.

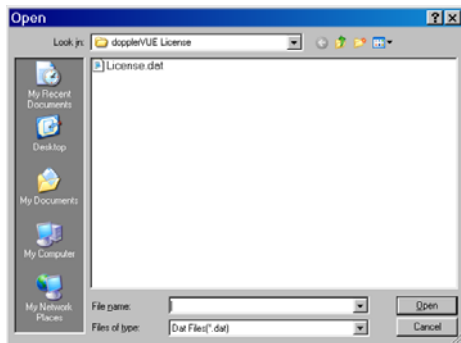
1. Start the dopplerVUE Installer (setup.exe).
2. In the Licensing Installation? message box, click **Yes** to install the license file.



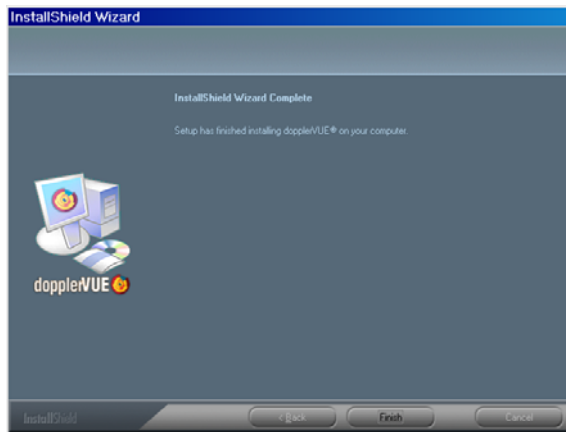
3. In the Select a License Option window, select **Install License** and click **Next**.



- In the Open window, browse to the location of the dopplerVUE license file (license.dat), select the file, and then click **Open**. The Installer completes the installation and starts the dopplerVUE services.



- In the Wizard Complete window, click **Finish**.



- To start dopplerVUE, go to the task bar and click **Start > Programs > Kratos Networks > dopplerVUE**.
- Typically, dopplerVUE will start using the same Windows account that was used to run the installer; however, in some situations you will need to log in to start dopplerVUE. To log in, enter the default user name and password, and then click **Login**. You will be prompted to reset the default user name and password.

Username: admin
Password: admin



Installing a Remote Database

Depending on your security requirements, you can install the dopplerVUE database instance on a remote database server in either a domain or a workgroup.

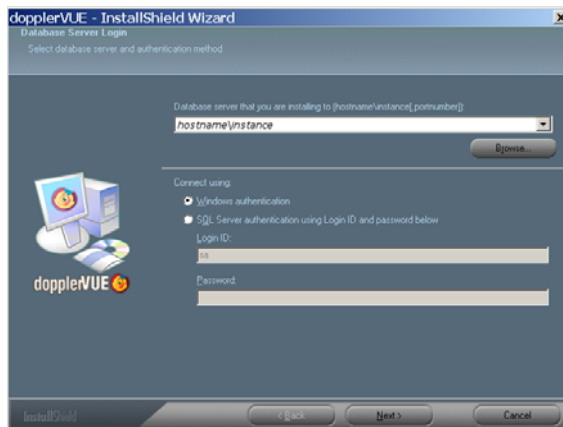
Database server in a domain The dopplerVUE services will use a domain account and Windows Integrated Security to connect to the remote database server.

Database server in a workgroup The dopplerVUE services will use the database user ID and password specified in the respective configuration files to connect to the remote database server. Because the user ID and password are in clear text, this may be considered a security risk.

Database Server in a Domain

To install the dopplerVUE database on a remote database server in a domain:

1. Create a SQL instance for the dopplerVUE database. Also, dopplerVUE requires a domain account to access the remote database. You can create a new domain account or use an existing account.
2. Complete Steps 1 – 8 in "Start the dopplerVUE Installer". In Step 7, make sure you select **No** when prompted to install the NINEFIVE instance.
3. In the Database Server Login window, Click **Browse** and select the remote database server\instance on which to install the dopplerVUE database.



If the remote database server uses a port other than the standard SQL port (1433), the database instance is considered "hidden" and does not appear in the browse list. You must enter the instance path as described below.

<i>hostname\instance[,port]</i>	
<i>hostname</i>	Hostname of the remote database server.
<i>instance</i>	Named instance on the remote database server. This value is not required for the default instance.
<i>port</i>	SQL TCP/IP port for the remote instance.

For example,

DBhost,49152

is the default instance on the DBhost server using port 49152, whereas

DBhost\SQL2005_2,49152

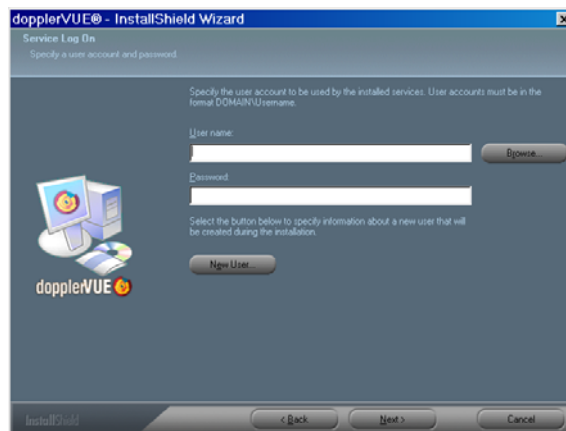
is the SQL2005_2 instance on the DBhost server using port 49152.

Note: On the database server, open SQL Configuration Manager and make sure TCP/IP is enabled.

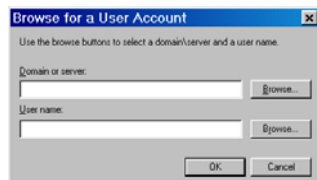
4. Select **Windows authentication** or **SQL Server authentication** and enter the SQL server **Login ID** and **Password** for the remote instance.
5. Click **Next**. The installer will test the database connection; if a problem occurs, an error message will be displayed. You must correct the problem before proceeding.
6. In the Advanced Configuration message box, click **Yes**. When the installer creates the dopplerVUE services, it will configure the services to run under a domain account using integrated security.



7. In the Services Log On window, click **Browse**.



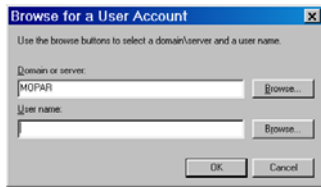
8. In the Browse for a User Account dialog box, click **Browse** to select the domain or server for the account.



- In the Select a Domain or Server box, select the domain or server for the account and click **OK**.



- In the Browse for a User Account dialog box, click **Browse** to select the user name for the account.



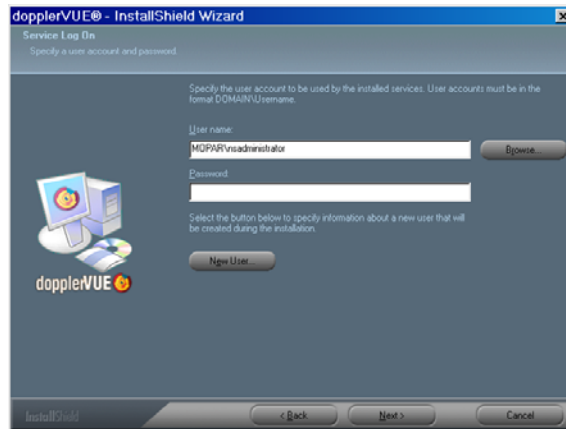
- In the Select a User Name box, select the name for the account and click **OK**.



- In the Browse for a User Account dialog box, click **OK**.



13. In the Service Log On window, enter the password for the account and click **Next**.

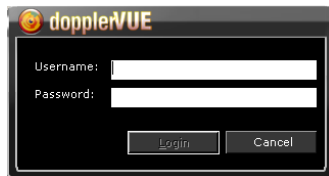


14. Complete Steps 10 – 17 in "Start the dopplerVUE Installer".
15. Add the domain account to the remote SQL Server instance and set the database role memberships.
- Connect to the remote database server as a SQL Server administrator.
 - In the Object Explorer, **expand the *hostname\instance*** for the dopplerVUE database.
 - Expand **Security > Logins**.
 - Right-click **Logins** and click **New Login**.
 - Click **Search**.
 - In the Select User or Group dialog box, click **Locations**.
 - Expand the tree and navigate to the domain for the domain account, click **domain_Users**, and then click **OK**.
 - In **Enter the object name to select**, enter the user name for the domain account.
 - Click **Check Names**. The user name should expand to the full domain account name. Click **OK**.
 - In the Login dialog box, select dopplerVUE as the default database.
 - In the upper-left corner, Under Select a page, click **User Mapping**.
 - Select the **Map** checkbox for the dopplerVUE database.
 - Select the following database role memberships and then click **OK**.
 - DB_DataReader
 - DB_DataWriter
 - DB_Owner
16. To start dopplerVUE, go to the task bar and click **Start > Programs > Kratos Networks > dopplerVUE**.

Note: If you did not install a license file, dopplerVUE will not start (see "Manually Request a License" and "Install dopplerVUE License").

17. Typically, dopplerVUE will start using the same Windows account that was used to run the installer; however, in some situations you will need to log in to start dopplerVUE. To log in, enter the default user name and password, and then click **Login**. You will be prompted to reset the default user name and password.

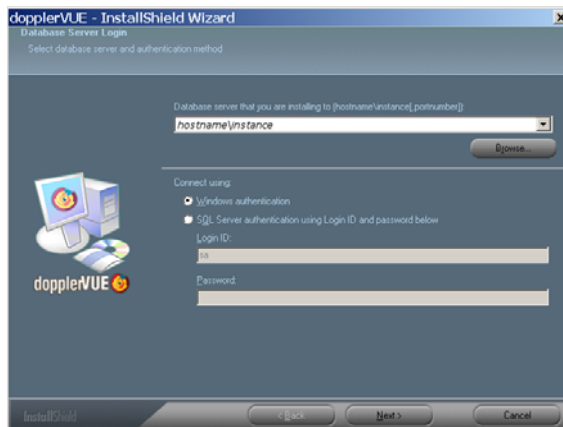
Username: admin
Password: admin



Database Server in a Workgroup

To install the dopplerVUE database on a remote database server in a workgroup:

1. Create a SQL instance for the dopplerVUE database.
2. Complete Steps 1 – 8 in "Start the dopplerVUE Installer". In Step 7, make sure you select **No** when prompted to install the NINEFIVE instance.
3. In the Database Server Login window, click **Browse** and select the remote database server\instance on which to install the dopplerVUE database.



If the remote database server uses a port other than the standard SQL port (1433), the database instance is considered "hidden" and does not appear in the browse list. You must enter the instance path as described below.

<i>hostname\instance,port</i>	
<i>hostname</i>	Hostname of the remote database server.
<i>instance</i>	Named instance on the remote database server. This value is not required for the default instance.
<i>port</i>	SQL TCP/IP port for the remote instance.

For example,

DBhost,49152

is the default instance on the DBhost server using port 49152, whereas

DBhost\SQL2005_2,49152

is the SQL2005_2 instance on the DBhost server using port 49152.

Note: On the database server, open SQL Configuration Manager and make sure TCP/IP is enabled.

4. Select **SQL Server authentication** and enter the SQL server **Login ID** and **Password** for the remote instance.
5. Click **Next**. The installer will test the database connection; if a problem occurs, an error message will be displayed. You must correct the problem before proceeding.
6. In the Advanced Configuration message box, click **No**. When the installer creates the dopplerVUE services, it will configure the services to run under the local system account.



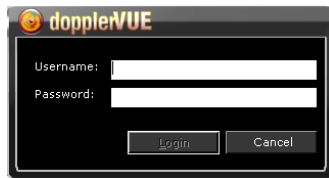
7. Complete Steps 10 – 17 in "Start the dopplerVUE Installer".
8. Set the database role memberships.
 - a. Connect to the remote database server as a SQL Server administrator.
 - b. In the Object Explorer, **expand the *hostname\instance*** for the dopplerVUE database.
 - c. Expand **Security > Logins**.
 - d. Double-click the **dopplerVUEUser** login.
 - e. In the Login Properties dialog box, under Select a page, click **User Mapping**.
 - f. Select the **DB_Owner** database role membership and then click **OK**.
9. To start dopplerVUE, go to the task bar and click **Start > Programs > Kratos Networks > dopplerVUE**.

Note: If you did not install a license file, dopplerVUE will not start (see "Manually Request a License" and "Install dopplerVUE License").

- Typically, dopplerVUE will start using the same Windows account that was used to run the installer; however, in some situations you will need to log in to start dopplerVUE. To log in, enter the default user name and password, and then click **Login**. You will be prompted to reset the default user name and password.

Username: admin

Password: admin



Upgrading to dopplerVUE 2.3

dopplerVUE 2.3 is not compatible with earlier versions of dopplerVUE. You must uninstall an earlier version using Add/Remove Programs (Programs and Features in Vista) and then install dopplerVUE 2.3. Note that uninstalling dopplerVUE will delete the dopplerVUE database. You cannot use a dopplerVUE database from an earlier version with dopplerVUE 2.3. dopplerVUE users should not access the system during the upgrade process.

You can use the license file from an earlier version of dopplerVUE (the installer will skip the licensing steps and use the existing license file); however, if you plan to use the new Configuration Manager feature in dopplerVUE 2.3, you will need to request and install an updated license file.

To upgrade to dopplerVUE 2.3:

- Uninstall the existing version of dopplerVUE using Add/Remove Programs (Programs and Features in Windows 7, Vista, and Server 2008).
- Start setup.exe for dopplerVUE 2.3 and install dopplerVUE as described in "Start the dopplerVUE Installer".
- Upgrade any remote clients as described in "Upgrading Remote Clients".

2

Start dopplerVUE Web Client

The dopplerVUE web client provides easy access to the dopplerVUE server from any computer supporting a Firefox, Chrome, Safari, or Internet Explorer browser.

Using the web client, you can:

- Monitor the availability, performance, and alarm status of network objects.
- View automatically generation network maps based on the discovered network inventory.
- Run inventory, alarm, and performance reports, as well as custom, user-defined reports.

dopplerVUE users will need valid user IDs and passwords to log in using dopplerVUE web clients. For instructions on how to create user accounts, see "Preferences > System Management > Security" in the dopplerVUE Client online help.

To start a dopplerVUE web client on a remote computer:

1. Open a web browser and enter the following URL:

`http://dopplerVUE-server-hostname/dopplervue/`

where *dopplerVUE-server-hostname* is the host name of either the dopplerVUE server or the IIS server hosting the dopplerVUE Web Server.

2. Enter a username and password and click **Login**.

Install dopplerVUE Remote Client

This section explains how to install a dopplerVUE client on a remote computer.

If you are upgrading to a new version of dopplerVUE, see "Upgrade Remote Clients".

Note: If you have installed the dopplerVUE web server on a remote IIS server, use the hostname for the IIS server (and not the dopplerVUE server) when installing and configuring dopplerVUE remote clients. For more information, see "Install a dopplerVUE Web Server on a Remote IIS Server".

Software Requirements

A dopplerVUE client installed on a remote computer is called a "remote client." To enable a web connection between the dopplerVUE remote client and the dopplerVUE server, you must install and configure the following software on the remote computer:

- .NET Framework 3.5 SP1
- MDAC 2.8
- Internet Explorer 6, 7, or 8.

See the Microsoft Web site for instructions on how to download and install the above software.

Creating User Accounts

dopplerVUE users will need valid user IDs and passwords to log in to dopplerVUE remote clients. For instructions on how to create user accounts, see "Preferences > System Management > Security" in the dopplerVUE Client online help.

Installing a Remote Client over a Network

It is recommended you download and install a dopplerVUE Remote Client from the dopplerVUE server.

Note: dopplerVUE must be installed on the server prior to installing a remote client.

To install the dopplerVUE Remote Client:

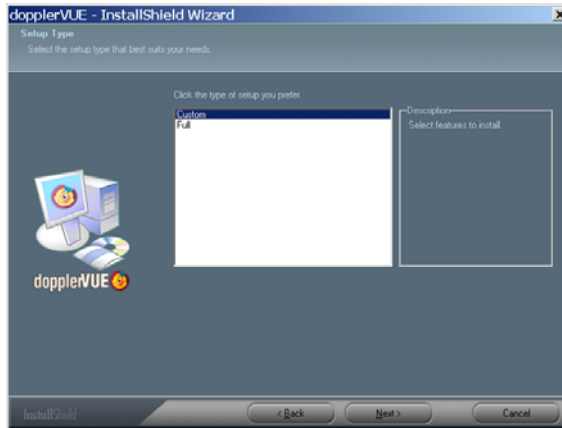
1. Open Internet Explorer.
2. Enter the URL for the dopplerVUE server (where *hostname* is the hostname for the dopplerVUE server).
`http://hostname/dopplerVUE/`
3. Follow the installation instructions on the remote client web page, then click **Start**.
4. Log in to the dopplerVUE client using a valid username and password.

Installing a Remote Client Using the dopplerVUE Installer

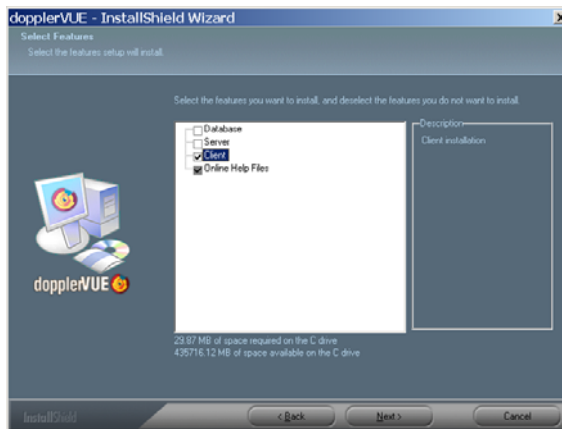
If you prefer not to install the remote client over the network, you can install it using the dopplerVUE Installer.

Install Client

1. On the remote computer, start the dopplerVUE Installer (see "Install dopplerVUE System").
2. In the Setup Type window, select **Custom**, and then click **Next**.



3. In the Select Features window, select **Client**, and then click **Next**.
Note: Online Help Files will be selected automatically.



4. Complete the installation.

Set Web Site Permissions

Note: You must have Administrative or Power User privileges.

To set the web site permissions for the dopplerVUE remote client:

1. Open a command prompt window on the remote computer.

2. Go to the Framework 2.0 directory.
 - 32-bit operating systems:


```
cd %WINDIR%\Microsoft.NET\Framework\v2.0.50727
```
 - 64-bit operating systems:


```
cd %WINDIR%\Microsoft.NET\Framework64\v2.0.50727
```
3. Set the web site permissions.


```
caspol -ag "All_Code" -site dopplerVUE-server-name FullTrust -n dopplerVUE-server-name
```

where *dopplerVUE-server-name* is the hostname of the dopplerVUE server.

Enable Remote Access

1. On the remote computer, browse to c:\Program Files\Kratos Networks\dopplerVUE\Client.
2. Open dopplerVUE.exe.config.
 3. Comment out the following text (using the "<!--" and "-->" tags):


```
<!--
    <add key="dopplerVUEDatabase" value="Data
      Source=.\SQLEXPRESS;Initial Catalog=nsnanodb;User
      ID=dopplerVUEUser;Password=dopplerVUE" />
  -->
```
 4. Uncomment the following text (remove the "<!--" and "-->" tags):


```
<add key="Nsda2DataPortalProxy"
      value="Nsda2.DataPortalClient.RemotingProxy, Nsda2"/>
    <add key="Nsda2DataPortalUrl"
      value="http://hostname/dopplerVUEPortal/RemotingPortal.soap"/>
    <add key="Nsda2EncryptRemoting" value="false" />
```

Note: Make sure *hostname* is the hostname of the dopplerVUE Server.
5. Save and close the file.
6. Create a desktop short cut pointing to c:\Program Files\Kratos Networks\dopplerVUE\Client\dopplerVUE.exe.
7. Restart the computer.

Configure Server-Side Logging

Server-side logging allows remote clients to write error messages to the dopplerVUE log file on the dopplerVUE server, which is helpful when troubleshooting client issues. If the client cannot communicate with the dopplerVUE server, error messages are written to the dopplerVUE log file on the computer hosting the client.

To configure server-side logging on the dopplerVUE server:

1. Navigate to C:\Program Files\Kratos Networks\dopplerVUE (or the alternative location to which you installed the dopplerVUE files).
1. Right-click the DataPortal folder and select **Properties**.
2. In the DataPortal Properties dialog box, click the Security tab, and then click **Add**.

3. In the Select Users or Groups dialog box, enter the appropriate user in the Enter the object names to select box.
Windows Vista, XP, and Server 2003:
hostname\IIS_WPG
Windows 7 and Server 2008:
hostname\IIS_IUSRS
where *hostname* is the hostname for the dopplerVUE server.
4. Click **Check Names** to verify the object name, and then click **OK**.
5. In the DataPortal Properties dialog box, make sure the **IIS_WPG** group is selected.
6. Select (allow) the following permissions:
 - Modify**
 - Read & Execute**
 - List Folder Contents**
 - Read**
 - Write**
7. Click **OK** to save the permissions settings.

Upgrading Remote Clients

When upgrading to dopplerVUE 2.3, you must also upgrade any remote clients.

Recreate User Accounts

Once you have reinstalled the dopplerVUE system, you must recreate the user accounts for any remote clients. For instructions on how to create user accounts, see "System Management > Security" in the dopplerVUE Client online help.

Install Client Software

If a remote client was originally installed over the network, the new client software will be automatically installed when the user connects to the dopplerVUE server; however, if you installed a remote client using the dopplerVUE Installer, you must manually reinstall client.

To manually reinstall a remote client:

1. On the remote computer, uninstall the existing remote client using Add/Remove Programs (Programs and Features in Windows 7, Vista, and Server 2008).
2. Install the remote client as described in "Install Remote Client Using the dopplerVUE Installer".

Install a dopplerVUE Web Server on a Remote IIS Server

Depending on the performance capabilities and resources available on a dopplerVUE server, hosting dopplerVUE web clients and remote clients can affect overall system performance. One alternative is to install a dopplerVUE web server on a remote IIS server, which allows the IIS server to host the dopplerVUE clients (instead of the dopplerVUE server).

Note that the IIS server must meet the hardware and software requirements defined in "Configure Windows System".

Install dopplerVUE System

1. Install dopplerVUE on the designated dopplerVUE server as described in "Install dopplerVUE System".
2. Start the local client on the dopplerVUE server and verify the installation was successful.
3. Go to Program Files > Kratos Networks > dopplerVUE > Data Portal > Server and copy the AiDataService.exe.config file to the IIS server on which you plan to install the dopplerVUE web server.

Note: On 64-bit operating systems, the initial directory shown above is named "Program Files (x86)".

4. To ensure remote clients cannot connect to the dopplerVUE server, disable or delete the following IIS virtual directories:

- dopplerVUE
- dopplerVUEportal

Install dopplerVUE Web Server

1. Install dopplerVUE on the IIS server as described in "Install dopplerVUE System".

Installation notes:

- In the Setup Type window, select the **Full** setup type.
- When prompted to install the NINEFIVE instance of SQL Server 2005 Express (dopplerVUE database), click **Yes**.
- In the Select a License Option window, select **Skip Licensing**.
- In the dopplerVUE Configuration window, select the **Disable automatic discovery on start up** checkbox.
- In the second dopplerVUE Configuration window, click **Next**.

2. Stop and disable the following services:

- dvCEPService
- dvCMSService
- dvDataService
- dvDiscoveryService
- dvEventService
- dvLicenseService
- dvMonitoringService

dvMTOSI2DataService
dvNetFlowService
dvPerformanceService
dvSchedulerService
dvSNMPTrapService
dvSyslogService
FLEXIm License Manager

3. Uninstall SQL Server 2005 Express.
4. Go to Program Files > Kratos Networks > dopplerVUE > WebServer > dopplerVUE > and open Web.config using Notepad.

Note: On 64-bit operating systems, the initial directory shown above is named "Program Files (x86)".

5. Using Notepad, open the AiDataService.exe.config file copied from the dopplerVUE server (see Step 3 "Install dopplerVUE System") and copy the following statement to the clipboard.

```
<add key="dopplerVUEDatabase" value="Integrated Security=SSPI;Initial Catalog=NineFive;Data Source=(local)\NineFive;Max Pool Size=500" />
```

Note: The data source will be either "local" or the hostname for the dopplerVUE server.

6. In the Web.config file, select the following statement.

```
<add key="dopplerVUEDatabase" value="Data Source=(local)\NineFive;Initial Catalog=NineFive;User ID=NineFiveUser;Password=9Kr@t0sN!neF!ve5;Max Pool Size=500" />
```

and replace it with the statement copied from the AiDataService.exe.config file.

```
<add key="dopplerVUEDatabase" value="Integrated Security=SSPI;Initial Catalog=NineFive;Data Source=(local)\NineFive;Max Pool Size=500" />
```

7. If the data source is "local", change the value to host name of dopplerVUE server.

```
<add key="dopplerVUEDatabase" value="Integrated Security=SSPI;Initial Catalog=NineFive;Data Source=hostname\NineFive;Max Pool Size=500" />
```

8. Save and close the Web.config file.
9. Install and configure dopplerVUE remote clients as described in "Install dopplerVUE Remote Client".

Software Modification, Repair, and Removal

This section describes how to modify, repair, or remove the dopplerVUE software on a Windows system.

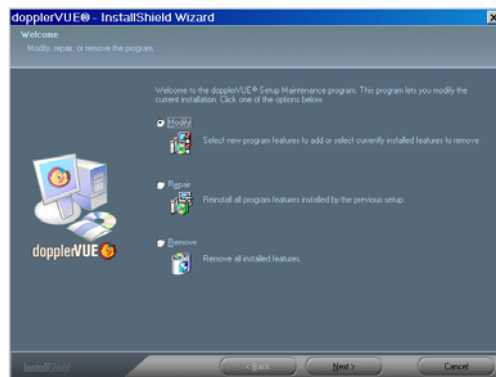
Modifying dopplerVUE

You can modify the software on a dopplerVUE server by installing or removing features.

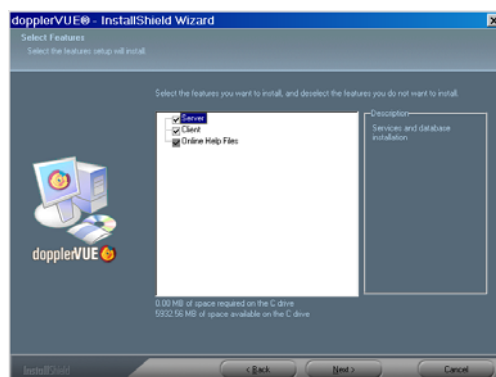
Note: The dopplerVUE Installer will not remove or alter any dopplerVUE configuration files or the dopplerVUE database.

To install or remove a feature:

1. Start the dopplerVUE Installer (setup.exe).
2. On the Welcome dialog box, **Modify** is the default option. Click **Next**.



3. The Select Features dialog box opens with all installed features (components) selected. Select the features you want to install and clear the features you want to remove. Once you've completed your selections, click **Next**.



4. In the Wizard Complete window, click **Finish**.

Repairing dopplerVUE

Selecting the Repair option in the dopplerVUE Installer (setup.exe) is not recommended.

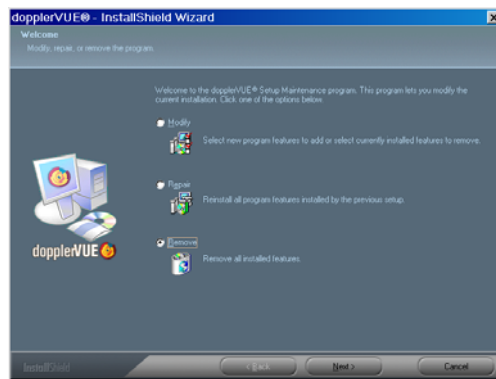
Removing dopplerVUE

You can remove all installed features (components) from a dopplerVUE server.

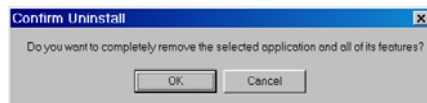
Note: The dopplerVUE Installer will remove the dopplerVUE database.

To remove all features, complete the following steps:

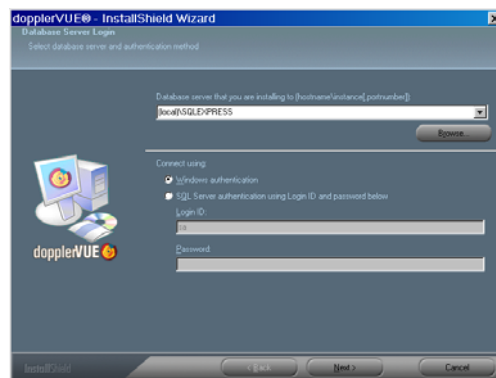
1. Start the dopplerVUE Installer (setup.exe).
2. On the Welcome dialog box, select **Remove**, and then click **Next**.



3. In the Confirm Uninstall dialog box, click **OK**.



4. If the authentication information for the database server has been changed since the database was installed, the installer displays the Database Server Login window. Update the authentication values and click **Next**.



5. In the Wizard Complete window, click **Finish**.

Appendix A – Configuring SSL for Remote Clients

The dopplerVUE system supports SSL in .NET remoting mode.

Once SSL is enabled and configured for IIS on the dopplerVUE server, complete the following steps:

1. Navigate to Program Files\SYSTechnologies\dopplerVUE\webserver\dopplervue\.
2. Using a text editor, open dopplervue.exe.config.jpg, change **http** to **https**, and save the file.

```
<add key="Nsda2DataPortalUrl" value="https://TRAINING5/dopplerVUEPortal/RemotingPortal.soap"/>
```

3. Using a text editor, open version.html, increment the final numeral by 1, and save the file.

```
version=9.8.376.1
```

4. Navigate to Program Files\SYSTechnologies\dopplerVUE\client\.
5. Using a text editor, open dopplervue.exe.config.jpg, change **http** to **https**, and save the file.

```
<add key="Nsda2DataPortalUrl" value="https://TRAINING5/dopplerVUEPortal/RemotingPortal.soap"/>
```

6. Open a browser on the remote computer and enter the following URL

<https://dopplerVUE-server-hostname/dopplerVUE/>