



Informatica™

Informatica® Vibe Data Stream for Machine  
Data

2.3.2

# Installation and Configuration Guide

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Publication Date: 2018-06-08

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# Preface

The Informatica Vibe Data Stream for Machine Data Installation and Configuration Guide is written for system administrators who are responsible for installing the Vibe Data Stream for Machine Data product. This guide assumes you have knowledge of operating systems, relational database concepts, and the database engines, flat files, or mainframe systems in your environment. This guide also assumes you are familiar with the interface requirements for your supporting applications.

## Informatica Resources

### Informatica Network

Informatica Network hosts Informatica Global Customer Support, the Informatica Knowledge Base, and other product resources. To access Informatica Network, visit <https://network.informatica.com>.

As a member, you can:

- Access all of your Informatica resources in one place.
- Search the Knowledge Base for product resources, including documentation, FAQs, and best practices.
- View product availability information.
- Review your support cases.
- Find your local Informatica User Group Network and collaborate with your peers.

### Informatica Knowledge Base

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### Informatica Documentation

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If you have questions, comments, or ideas about this documentation, contact the Informatica Documentation team through email at [infa\\_documentation@informatica.com](mailto:infa_documentation@informatica.com).

## Informatica Product Availability Matrixes

Product Availability Matrixes (PAMs) indicate the versions of operating systems, databases, and other types of data sources and targets that a product release supports. If you are an Informatica Network member, you can access PAMs at

<https://network.informatica.com/community/informatica-network/product-availability-matrixes>.

## Informatica Velocity

Informatica Velocity is a collection of tips and best practices developed by Informatica Professional Services. Developed from the real-world experience of hundreds of data management projects, Informatica Velocity represents the collective knowledge of our consultants who have worked with organizations from around the world to plan, develop, deploy, and maintain successful data management solutions.

If you are an Informatica Network member, you can access Informatica Velocity resources at <http://velocity.informatica.com>.

If you have questions, comments, or ideas about Informatica Velocity, contact Informatica Professional Services at [ips@informatica.com](mailto:ips@informatica.com).

## Informatica Marketplace

The Informatica Marketplace is a forum where you can find solutions that augment, extend, or enhance your Informatica implementations. By leveraging any of the hundreds of solutions from Informatica developers and partners, you can improve your productivity and speed up time to implementation on your projects. You can access Informatica Marketplace at <https://marketplace.informatica.com>.

## Informatica Global Customer Support

You can contact a Global Support Center by telephone or through Online Support on Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:

<http://www.informatica.com/us/services-and-training/support-services/global-support-centers>.

If you are an Informatica Network member, you can use Online Support at <http://network.informatica.com>.

# CHAPTER 1

## Installation and Configuration

This chapter includes the following topics:

- [Installation and Configuration Overview, 8](#)
- [Installation Tasks, 9](#)
- [Vibe Data Stream Upgrade, 10](#)

### Installation and Configuration Overview

Informatica Vibe Data Stream for Machine Data (VDS) is a highly available, distributed, real-time application that collects and aggregates machine data. You can collect machine data from different types of data sources, transform the data, and write it to different types of data targets.

When you run the VDS installer, it installs the VDS components.

VDS includes the following components:

#### **Administrator Daemon**

The Administrator Daemon is a process that collects statistics and state information from all VDS Nodes, aggregates the information, and sends them to the Administrator tool. The Administrator Daemon sends VDS Node configuration and VDS license details to Apache ZooKeeper. The Administrator Daemon runs an HTTP server. The VDS Nodes use the HTTP server to fetch configuration and libraries from the Administrator Daemon. The database stores configuration details.

The Administrator Daemon installation process also installs the UM Topic Resolution Daemon (LBMRD) and a persistent store. The persistent store provides storage to message streams.

#### **VDS Nodes**

A VDS Node is a Java program within which source services and target services exist. You can run multiple source services and target services on a single VDS Node. Source services collect data from data sources and publish the data. Target services receive and write that data to a data target.

You install VDS Nodes on all the hosts on which you want to run source services or target services. The VDS Nodes download plugins from the Administrator Daemon, and the configuration from Apache ZooKeeper.

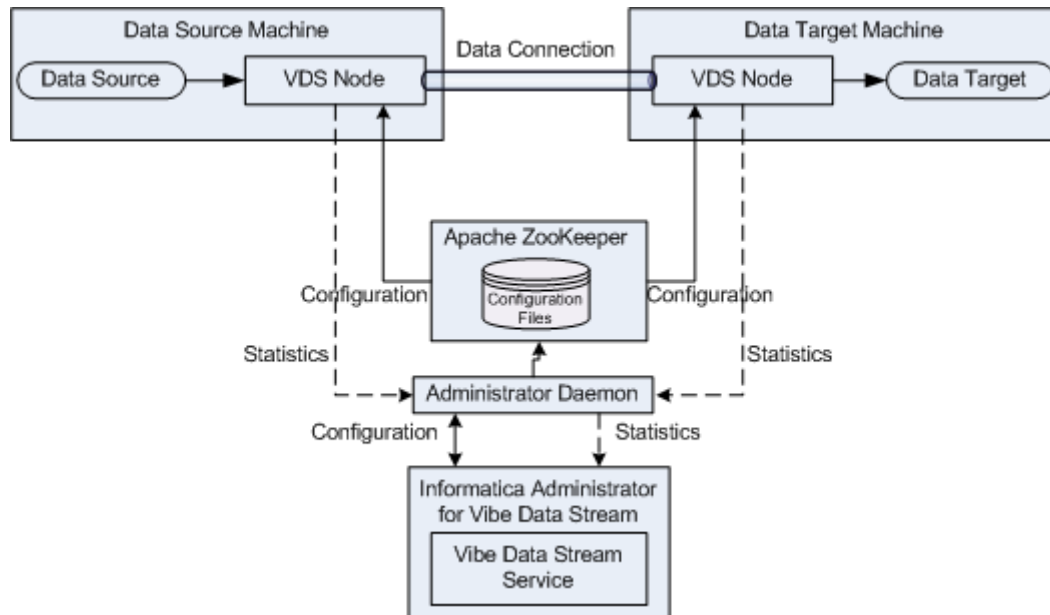
#### **Apache ZooKeeper**

Apache ZooKeeper is a centralized service that maintains the configuration information of the VDS Nodes in a deployment. You can deploy ZooKeeper as a standalone instance or, for reliability, as a cluster called a ZooKeeper ensemble. When you start a VDS Node, it fetches its configuration information from ZooKeeper.



You install the VDS components on the machines where PowerCenter is installed. Ensure that you install the Administrator Daemon on the gateway nodes of the Informatica domain. The VDS Node and Apache ZooKeeper can be installed on other machines. After you complete the installation process, log in to the Administrator tool, create and configure the Vibe Data Stream service.

The following figure shows a sample VDS deployment:



For more information about product requirements and supported platforms, see the Product Availability Matrix on Informatica Network:

<https://network.informatica.com/community/informatica-network/product-availability-matrices/overview>

For more information about the components in the VDS deployment, see the *Informatica Vibe Data Stream for Machine Data User Guide*.

## Installation Tasks

To install VDS, perform the following tasks:

1. Perform the pre-installation tasks to ensure that you can install the VDS components.
2. Get the VDS 2.3.1 license key.
3. Install the administration components, which include the Administrator Daemon, Administrator tool, and Apache ZooKeeper, and the VDS Node.
4. Perform the post-installation tasks. Start the VDS Node, and administration components.

After you perform the tasks in the installation process, log in to the Administrator tool and create and configure the Vibe Data Stream service.

# Vibe Data Stream Upgrade

If you have Vibe Data Stream 2.3.0 installed, you can upgrade the data flows in version 2.3.1. If you have an earlier version of Vibe Data Stream, you must uninstall the previous version and install Vibe Data Stream 2.3.1.

Perform the following steps to upgrade the data flows:

1. Log in to VDS 2.3.0 and undeploy the data flows.
2. Export the data flows.
3. Install and configure VDS 2.3.1.
4. Import the data flows that you exported in VDS 2.3.0 and deploy them again.

## CHAPTER 2

# Pre-Installation Tasks

This chapter includes the following topics:

- [Pre-Installation Tasks Overview, 11](#)
- [Guidelines for a High Availability Installation, 12](#)
- [Prepare for a Secure Installation, 12](#)
- [Get the Vibe Data Stream License Key, 15](#)
- [Pre-Installation Requirements for the Administration Components, 15](#)
- [Pre-Installation Requirements for the Vibe Data Stream Node, 16](#)
- [Set the File Descriptor Limit, 17](#)
- [Extract the Installer Files, 17](#)

## Pre-Installation Tasks Overview

Before you install VDS or upgrade to a new release, plan the installation to ensure that you can successfully install and use the product.

Before you install VDS, perform the following planning tasks:

- To install VDS in a high-availability environment, review the high availability installation information.
- To configure secure communication between the VDS components, review the security pre-installation information.
- Verify that you have installed Informatica 10.0.
- Get the VDS 2.3.0 license key.
- Verify information about product requirements and supported platforms.
- Verify minimum system requirements and port availability for VDS components.

VDS requires Apache ZooKeeper to store configuration. If you already have ZooKeeper installed, you can use it for your configuration. If you have an earlier version, install ZooKeeper for VDS.

# Guidelines for a High Availability Installation

To achieve high availability for VDS, you must have installed Informatica PowerCenter and configured it for high availability.

You can configure high availability for the Administrator Daemon and ZooKeeper when you install VDS. You can configure high availability for the VDS Node after you install VDS.

To achieve high-availability, perform the following steps:

1. Ensure that the Informatica domain of PowerCenter is configured for high availability. Get information about the gateway nodes of the Informatica domain.
2. For Administrator Daemon high availability, install the Administrator Daemon on the gateway nodes of the Informatica domain.
3. To configure high availability for the ZooKeeper, specify multiple comma-separated IP address and port combinations for the **Apache ZooKeeper URL** property.
4. After you install VDS, log in to the Administrator tool on the master gateway node of the Informatica domain and create the Vibe Data Stream Service.

For more information about configuring high availability for the VDS components, see the High Availability chapter in the *Informatica Vibe Data Stream for Machine Data User Guide*.

For more information about the Informatica domain high availability, see the *Informatica Administrator Guide*.

## Prepare for a Secure Installation

To configure secure communication among the VDS components and secure network authentication, you should install VDS on a secure Informatica domain.

You can set up secure communication between the VDS components and secure user authentication only if the Informatica domain is secure and uses secure network authentication to authenticate users.

When you install VDS, the installer checks the type of network authentication that is enabled for the Informatica domain. Depending on the type of network authentication that is enabled, the installer displays additional screens where you can specify the security configuration.

VDS can have one of the following security options configured:

- SSL certificates. VDS uses the SSL certificates that Informatica provides to secure the domain.
- Kerberos network authentication. Configure VDS to use Kerberos network authentication if the Informatica domain uses Kerberos network authentication. You can also configure Kerberos authentication between the Administrator Daemon and the Administrator tool when the Informatica domain uses SSL certificates to secure the domain. In this scenario, the Informatica domain need not use Kerberos network authentication.

**Note:** You can configure security in VDS only if you have configured security for the Informatica domain and the Administrator tool.

For more information about Informatica domain security, see the *Informatica Security Guide*.

## Prepare for Kerberos Authentication Setup

You can configure VDS to use Kerberos network authentication if the Informatica domain uses Kerberos network authentication to authenticate users and services on a network.

Kerberos is a network authentication protocol which uses tickets to authenticate access to services and nodes in a network. Kerberos uses a Key Distribution Center (KDC) to validate the identities of users and services and to grant tickets to authenticated user and service accounts. In the Kerberos protocol, users and services are known as principals. The KDC has a database of principals and their associated secret keys that are used as proof of identity. Kerberos can use an LDAP directory service as a principal database.

To use Kerberos authentication, you must install and run the Informatica domain on a network that uses Kerberos network authentication. Informatica can run on a network that uses Kerberos authentication with Microsoft Active Directory service as the principal database.

The Informatica domain requires keytab files to authenticate nodes and services in the domain without transmitting passwords over the network. The keytab files contain the service principal names (SPN) and associated encrypted keys. Create the keytab files before you create nodes and services in the Informatica domain.

You can also configure Kerberos authentication between the Administrator Daemon and the Administrator tool when the Informatica domain uses SSL certificates to secure the domain. You require the keytab files for the Administrator Daemon, Administrator tool, and the VDS Node.

Before you configure Kerberos authentication between the Administrator Daemon and the Administrator tool, perform the following tasks:

- Set up the Kerberos configuration file.
- Use the service principal and keytab file name format to generate the keytab files.

### Set Up the Kerberos Configuration File

Kerberos stores configuration information in a file named *krb5.conf*. Informatica requires specific properties set in the Kerberos configuration file so that the Informatica domain can use Kerberos authentication correctly. You must set the properties in the *krb5.conf* configuration file.

The configuration file contains the information about the Kerberos server, including the Kerberos realm and the address of the KDC. You can request the Kerberos administrator to set the properties in the configuration file and send you a copy of the file.

1. Back up the *krb5.conf* file before you make any changes.
2. Edit the *krb5.conf* file.
3. In the *libdefaults* section, set or add the properties required by Informatica.

The following table lists the values to which you must set properties in the *libdefaults* section:

Parameter	Value
default_realm	Name of the service realm for the Informatica domain.
forwardable	Allows a service to delegate client user credentials to another service. Set this parameter to True. The Informatica domain requires application services to authenticate the client user credentials with other services.

Parameter	Value
default_tkt_enctypes	Encryption type for the session key in the ticket-granting ticket (TGT). Set this parameter to <i>rc4-hmac</i> . Informatica supports only the <i>rc4-hmac</i> encryption type.
udp_preference_limit	Determines the protocol that Kerberos uses when it sends a message to the KDC. Set <code>udp_preference_limit = 1</code> to always use TCP. The Informatica domain supports only the TCP protocol. If the <code>udp_preference_limit</code> is set to any other value, the Informatica domain can shut down unexpectedly.

- In the *realms* section, include the port number in the address of the KDC separated by a colon.  
For example, if the KDC address is `kerberos.example.com` and the port number is 88, set the *kdc* parameter to the following:  

```
kdc = kerberos.example.com:88
```
- Save the `krb5.conf` file.
- Store the `krb5.conf` file in a directory that is accessible to the machine where you plan to install the Administrator Daemon and Administrator tool.

The following example shows the content of a `krb5.conf` with the required properties:

```
[libdefaults]
default_realm = AFNIKRB.AFNIDEV.COM
forwardable = true
default_tkt_enctypes = rc4-hmac
udp_preference_limit = 1

[realms]
AFNIKRB.AFNIDEV.COM = {
  admin_server = SMPLKERDC01.AFNIKRB.AFNIDEV.COM
  kdc = SMPLKERDC01.AFNIKRB.AFNIDEV.COM:88
}

[domain_realm]
afnikrb.afnidev.com = AFNIKRB.AFNIDEV.COM
.afnikrb.afnidev.com = AFNIKRB.AFNIDEV.COM
```

For more information about the Kerberos configuration file, see the Kerberos network authentication documentation.

## Generate Keytab Files

If you run the Informatica domain with Kerberos authentication, you must associate Kerberos service principal names (SPN) and keytab files with the nodes and Administrator Daemon. VDS requires keytab files so that services can be authenticated without being prompted for passwords. To generate keytab files, use the SPN and keytab file formats.

The following table describes the SPN format and the keytab file names for the VDS components:

VDS Component	SPN Format	Keytab File Name
Administrator Daemon	<code>admin/&lt;isp domain&gt;@&lt;realm name&gt;</code>	<code>vds_admin.keytab</code>
VDS Node	<code>node/&lt;isp domain&gt;@&lt;realm name&gt;</code>	<code>vds_node.keytab</code>
Administrator Tool	<code>_AdminConsole/&lt;isp domain&gt;@&lt;realm name&gt;</code>	<code>_AdminConsole.keytab</code>

To configure Kerberos authentication for VDS, generate keytab files for the Administrator Daemon and the VDS Node. To configure Kerberos authentication between the Administrator Daemon and the Administrator tool, generate keytab files for the Administrator Daemon, the VDS Node, and the Administrator tool.

The keytab files for VDS components must be available on the machines that host the component. During installation, you can specify a directory on the machine to store the keytab files. The installer picks up the keytab files from the keytabs directory you provide during installation.

After installation the Administrator Daemon keytab file is stored in the following directory:

```
<INFA_HOME>/isp/config/keys
```

The VDS Node keytab file is stored in the following directory:

```
<INFA_HOME>/node/config/keys
```

The Administrator tool keytab file is stored in the following directory:

```
<INFA_HOME>/isp/config/keys
```

## Get the Vibe Data Stream License Key

You can use the PowerCenter license if the license supports VDS options.

If the PowerCenter license does not support VDS options, contact Informatica Global Customer Support for the VDS license key. After you get the license key, add it to the Informatica domain after installing VDS.

## Pre-Installation Requirements for the Administration Components

Perform the pre-installation tasks on the machine hosting the administration components.

### Verify Minimum System Requirements for the Administration Components

Verify that the machine where you install the administration components meets the system requirements. The installer writes temporary files to the hard disk. Verify that you have enough available disk space on the machine to support the installation. When the installation completes, the installer deletes the temporary files and releases the disk space.

The following table describes the minimum system requirements for the administration components:

Processor	RAM	Disk Space	Operating System
4 CPU Cores	2.5 GB	2.5 GB to run the components 2 GB to run the installer	Red Hat Linux, Windows

For more information about product requirements and supported platforms, see the Product Availability Matrix on Informatica Network:  
<https://network.informatica.com/community/informatica-network/product-availability-matrices/overview>

## Verify Port Availability for the Administration Components

The installer sets up the ports for the administration components, and it designates the ports to use on the host where you install the them.

You can specify the port numbers to use for the administration components or you can use the default port numbers provided by the installer. Verify that the port numbers are available on the machines where you install the administration components.

The following table describes the ports used by the administration components:

Port Type	Description
Administrator Daemon HTTP port	Port on which the Administrator Daemon runs an HTTP server from which the VDS Node fetch the configurations. Default is 15381.
Administrator Daemon and Administrator tool communication port	Port for communication between the Administrator Daemon and Administrator tool. Default is 15386.
Topic Resolution Daemon (LBMRD) port	Port for the Topic Resolution Daemon (LBMRD). Default is 15380.
Administrator tool port	Port number used by the Administrator tool. Default is 6008.
Administrator tool shutdown port	Port number that controls server shutdown for the Administrator tool. The Administrator tool listens for shutdown commands on this port.
Monitoring Traffic Port	Port that the Administrator Daemon uses to receive statistics from the VDS Node. Default is 15385.

## Pre-Installation Requirements for the Vibe Data Stream Node

Perform the pre-installation tasks on each machine hosting the VDS Node since you have to install VDS Nodes on multiple machines.

### Verify Minimum System Requirements for the Vibe Data Stream Node

Verify that the machines where you install the VDS Node meet the system requirements. The installer writes temporary files to the hard disk. Verify that you have enough available disk space on the machine to support



the installation. When the installation completes, the installer deletes the temporary files and releases the disk space.

The following table describes the minimum system requirements for the VDS Node:

Processor	RAM	Disk Space	Operating System
2 CPU Cores	128 MB	600 MB to run the VDS Node 300 MB to run the installer	Red Hat Linux, Windows

For more information about product requirements and supported platforms, see the Product Availability Matrix on Informatica Network:

<https://network.informatica.com/community/informatica-network/product-availability-matrices/overview>

## Set the File Descriptor Limit

Verify that the operating system meets the file descriptor requirement.

The Informatica service processes can use a large number of files. Set the file descriptor limit per process to 8192 or higher. The recommended limit is 16,000 file descriptors per process.

## Extract the Installer Files

Before you perform the installation, extract the installer files. VDS includes a combined installer for the Administrator Daemon, the VDS Node, and the Administrator tool, and a standalone installer for the VDS Node.

### Extract the Installer Files on Linux

The installer files are compressed and distributed as .zip files.

VDS includes the following installer files:

- `vds-installer-linux-x86_64.zip`. The combined installer for all the components.
- `vds-node-installer-linux-x86_64.zip`. The standalone VDS Node installer.

Use a zip utility to extract the installer file that you require to a directory on your machine.

You can extract the installer files in the following ways:

- Installation DVD. Download the Informatica tar file from the installation DVD to a directory on your machine and then extract the installer files, or extract the installer files directly from the DVD to a directory on your machine.
- FTP download. Download the Informatica installation tar file from the Informatica Electronic Software Download (ESD) site to a directory on your machine and then extract the installer files.

## Extract the Installer Files on Windows

The installer files are compressed and distributed as a .zip file.

VDS includes the following installer files:

- `vds-installer-win-x86_64.zip`. The combined installer for all the components.
- `vds-node-installer-win-x86_64.zip`. The standalone VDS Node installer.

Use a zip utility to extract the installer file that you require to a directory on your machine. Verify that the zip utility version is compatible with the Windows operating system version. When you unzip the file, verify that the zip utility also extracts empty folders.

You can extract the installer files in the following ways:

- **Installation DVD.** Download the Informatica .zip file from the installation DVD to a directory on your machine and then extract the installer files, or extract the installer files directly from the DVD to a directory on your machine. If you download the .zip file to a directory on your machine, verify that the length of the entire installation directory path, including the .zip file name, is 60 characters or less.
- **FTP download.** Download the Informatica installation .zip file from the Informatica Electronic Software Download (ESD) site to a directory on your machine and then extract the installer files.

# CHAPTER 3

## Installation

This chapter includes the following topics:

- [Installation Overview, 19](#)
- [Installing Vibe Data Stream in Graphical Mode, 19](#)
- [Installing Vibe Data Stream in Console Mode, 21](#)
- [Installing Vibe Data Stream in Silent Mode, 23](#)
- [Vibe Data Stream Node Installation, 26](#)
- [Installing Vibe Data Stream Nodes on Remote Linux Systems, 30](#)

### Installation Overview

Install the Vibe Data Stream components on the same machine that hosts the PowerCenter repository. The installation loads the VDS component libraries in the installation directory.

You can enable security for VDS if security is configured for the Informatica domain and if the domain uses secure network authentication to authenticate users. You can also configure high availability for the VDS components.

If you use multiple PowerCenter repositories, install the VDS components on each machine that hosts the PowerCenter repository.

You can install VDS in graphical mode on Windows and in console mode on Linux.

### Installing Vibe Data Stream in Graphical Mode

You can install VDS in graphical mode on Windows.

1. Log in to the machine with a system user account.
2. Run `install.bat` from the directory where you extracted the installation files.  
The **Welcome** page appears.
3. Click **Next**.
4. Accept the terms of the license agreement.
5. Click **Next**.

The **VDS Installation** page appears.

6. Select the VDS components that you want to install.

The **Component Selection** page displays the following components:

#### **Apache ZooKeeper**

Select this option to install Apache ZooKeeper that is as part of the VDS installation. If you already have ZooKeeper installed, provide existing the configuration information in the **Components Configuration** page.

#### **Administration Components**

Select this option to install the following administration components:

- VDS Components on an existing Informatica Platform. Select this option if you have installed Informatica PowerCenter.
- Administrator Daemon. This option is selected by default.

**Note:** You must configure the administration components with HTTPS if you installed the Big Data Management with HTTPS.

#### **Vibe Data Stream Node**

Select this option to install the VDS Node.

7. To set up secure communication, storage, configuration, and authentication between the VDS components, select **Enable Security**.

If you select **Enable Security**, the installer sets up HTTPS connection between the VDS components.

8. Click **Next**.

The **PowerCenter Installation Directory** page appears.

9. Enter the path to the PowerCenter server installation.

10. Click **Next**.

The **Pre-Installation Summary** page appears.

11. Click **Install**.

The **Components Configuration** page appears when the installation completes. The configuration details that you specify depends on the components you selected in the **Component Selection** page.

If you selected the Administrator Daemon, enter the following configuration details:

#### **Unicast Topic Resolution Daemon Port (LBMRD)**

Port for the Topic Resolution Daemon (LBMRD).  
Default is 15380.

#### **Monitoring Traffic Port**

Port that the Administrator Daemon uses to receive statistics from the VDS Node. Default is 15385.

#### **Administrator Tool Monitoring Port**

Port that Informatica Administrator uses to communicate with the Administrator Daemon. Default is 15386.

#### **Daemon HTTP or HTTPS Server Port**

Port on which the Administrator Daemon runs an HTTP or HTTPS server from which the VDS Node fetches configuration. If you selected secure communication for the components, the Administrator Daemon runs an HTTPS server.  
Default is 15381.

If you selected the VDS Node and Apache ZooKeeper components, enter the following configuration details:

#### Apache ZooKeeper IP Address and Ports

The IP address and port that the Administrator Daemon uses to communicate with Apache ZooKeeper.

The IP address and port combination has the following format:

<IP Address or host name>:<port>

You can enter multiple comma-separated IP address and port combinations. If you have configured high availability on ZooKeeper and one instance of ZooKeeper is down, the Administrator Daemon connects to the next available ZooKeeper server.

#### Network Interface Address

Select the network interface if you are installing the components on a multi-homed host.

The interface has the following format:

<IP Address>. For example, 10.65.43.75

If you have enabled security for the Informatica domain, the installer enables the **SSL Network Authentication** option. VDS uses the same SSL certificates used by the Informatica domain.

If the Informatica domain uses Kerberos authentication, the installer enables the **Kerberos Network Authentication** option.

Optionally, you can configure Kerberos authentication between the Administrator Daemon and the Administrator tool.

Specify the location of the following keytab files:

- Administrator Daemon and VDS Node keytab files. To configure Kerberos authentication for VDS, specify these keytab files.
- Administrator Daemon, VDS Node, and Administrator tool keytab files. To configure Kerberos authentication between the Administrator Daemon and the Administrator tool, specify these keytab files.

12. Click **Next**.

The **Post-Installation Summary** page appears.

13. Click **Done** to close the installer.

## Installing Vibe Data Stream in Console Mode

You can install VDS in console mode on Linux.

1. Log in to the machine with a system user account.
2. On a command line, run `install.sh` from the directory where you extracted the installation files. Assign execute permissions before running the `install.sh` script or run the `sh ./install.sh` command.
3. Press **Enter** to continue.
4. Press 1 to accept the terms of the license agreement.  
The **VDS Installation** page appears.
5. Select the VDS components you want to install.

You can install the following components from the **VDS Installation** page:

### **Apache ZooKeeper**

Enter 1 and Press **Enter** to install Apache ZooKeeper that is part of the VDS installer. If you already have ZooKeeper installed, provide configuration information in the **Components Configuration** page.

### **Administration Components**

Enter 1 and press **Enter** to install the following components:

- VDS Components on an existing Informatica Platform. Select this option if you have installed Informatica PowerCenter.

The Administrator Daemon is installed if you select Administration components.

### **Vibe Data Stream Node**

Enter 1 and press **Enter** to install the VDS Node.

6. Optionally, to enable security, enter 1 and press **Enter**.

If you enable security, the installer sets up HTTPS connection between the VDS components.

The **PowerCenter Server Installation Directory** page appears.

7. Enter the path to the PowerCenter server installation.

8. Press **Enter**.

The **Pre-Installation Summary** details appear.

9. Press **Enter** to continue with the installation.

The **Components Configuration** page appears when the installation completes. The configuration details that you should specify depends on the components you selected in the **VDS Installation** page.

If you selected Administration components, enter the following configuration details:

#### **Unicast Topic Resolution Daemon Port (LBMRD)**

Port for the Topic Resolution Daemon (LBMRD).

Default is 15380.

#### **Administrator Tool Monitoring Port**

Port that Informatica Administrator uses to send statistics to the Administrator Daemon. Default is 15386.

#### **Daemon HTTP(S) Server Port**

Port on which the Administrator Daemon runs an HTTP or HTTPS server from which the VDS Node fetches configuration. If you selected secure communication for the components, the Administrator Daemon runs an HTTPS server.

Default is 15381.

#### **Monitoring Traffic Port**

Port that the Administrator Daemon uses to receive statistics from the VDS Node.

#### **Administrator Tool Monitoring Port**

Port that Informatica Administrator uses to communicate with the Administrator Daemon. Default is 15386.

If you selected the VDS Node and Apache ZooKeeper components, enter the following configuration details:

#### **Network Interface Address**

Select the network interface if you are installing the components on a multi-homed host.

The interface has the following format:

<IP Address>. For example, 10.65.43.75

#### Apache ZooKeeper IP Address and Ports

The IP address and port that the Administrator Daemon uses to communicate with Apache ZooKeeper.

The IP address and port combination has the following format:

<IP Address or host name>:<port>

You can enter multiple comma-separated IP address and port combinations. If you have configured high availability on ZooKeeper and one instance of ZooKeeper is down, the Administrator Daemon connects to the next available ZooKeeper server.

If you have enabled security for the Informatica domain, the installer enables the **SSL Network Authentication** option. VDS uses the same SSL certificates used by the Informatica domain.

If you have enabled Kerberos authentication for the Informatica domain, the installer enables the **Kerberos Network Authentication** option.

Optionally, you can configure Kerberos authentication between the Administrator Daemon and the Administrator tool. Press 1 to enable Kerberos authentication.

Specify the location of the following keytab files:

- Administrator Daemon and VDS Node keytab files. To configure Kerberos authentication for VDS, specify these keytab files.
- Administrator Daemon, VDS Node, and Administrator tool keytab files. To configure Kerberos authentication between the Administrator Daemon and the Administrator tool, specify these keytab files.

10. Press **Enter**.

The **Post-Installation Summary** page appears when the installation is complete.

11. Press **Enter** to exit the installation process.

## Installing Vibe Data Stream in Silent Mode

To install VDS without user interaction, use the `SilentInput.properties` properties file to install in silent mode. The VDS installer reads the file to determine the installation options. The `SilentInput.properties` file is stored in the root directory of the VDS installer files.

1. Use a text editor to open and change the values of the properties in the `SilentInput.properties` file.

Configure the following properties:

`INSTALLATION_MODE`

Set the value as 1 to perform a fresh installation of VDS.

`INSTALL_MODE`

Indicates the installation mode.

Set the value as 1 to install components in custom mode.

`SECURE_MODE`

Indicates if the secure communication, storage and configuration must be enabled for the VDS components.

If the value is 0, secure mode is not enabled. If the value is 1, secure mode is enabled.

INSTALLATION\_TYPE

Indicates whether to install VDS in express mode or custom mode.  
Set the value as 2 to perform a custom installation.

INSTALL\_AGENTNODE

Indicates whether to install the VDS Node.  
If the value is 0, the VDS Node is not installed. If the value is 1, the VDS Node is installed.

INSTALL\_ADMINCOMPS

Indicates whether to install the administration components when the `INSTALLATION_TYPE` is 1.  
If the value is 0, the components are not installed. If the value is 1, the components are installed.

INSTALL\_ADMIND

Indicates whether to install the Administrator Daemon when the `INSTALLATION_TYPE` is 2.  
If the value is 0, the Administrator Daemon is not installed. If the value is 1, the Administrator Daemon is installed.

INSTALL\_ZOOKEEPER

Indicates whether to install ZooKeeper.  
If the value is 0, the Administrator Daemon is not installed. If the value is 1, the Administrator Daemon is installed.

USER\_INSTALL\_DIR

The VDS installation directory. The location must have write permissions enabled. For example, `C:\Informatica\VDS\2.3.1`

LICENSE\_KEY\_LOC

The path and name of the VDS license key file.

IS\_AGREED

Set this to `true` to accept the license agreement.

DOMAIN\_PSSWD **and** DOMAIN\_CNFRM\_PSSWD

The password to the Informatica domain.

If you choose to install the Administrator Daemon, enter the following properties:

ADMIND\_LBMRD\_PORT

Port for the Topic Resolution Daemon (LBMRD).  
Default is 15380.

ADMIND\_HTTP\_PORT

Port on which the Administrator Daemon runs an HTTP or HTTPS server from which the VDS Node fetches configuration.

ADMIND\_MONITOR\_PORT

Port that the Administrator Daemon uses to receive statistics from the VDS Node.

H2\_PORT

Port of the H2 database.

DOMAIN\_PORT

Port on which the domain is started.

If you choose to install the VDS Node, enter the following properties:



#### NETWORK\_INTERFACE

This is an optional property.

If you are installing the components on a multi-homed host, specify the network interface

The interface can have one of the following formats:

- IP Address - <IP Address>. For example, 10.65.43.75
- Interface name. For example, Eth0

#### ZOOKEEPER\_URL

The IP address and port that the Administrator Daemon uses to communicate with Apache ZooKeeper.

The IP address and port combination has the following format:

<IP Address>:<port>

You can enter multiple comma-separated IP address and port combinations. If you have configured high availability on ZooKeeper and one instance of ZooKeeper is down, the Administrator Daemon connects to the next available ZooKeeper server.

#### NODE\_PORTNUMBER

The VDS Node uses this port to send monitoring statistics.

The default port is 15384.

If you are installing all VDS components or only the Administration components when the

INSTALLATION\_TYPE is 2, enter the following properties to enable security:

#### KERBEROS\_CHECKBOX

Indicate if Kerberos authentication is enabled for the domain of PowerCenter.

Specify `set` to enable Kerberos authentication. Specify `unset` to disable Kerberos authentication.

#### KERBEROS\_KEYTAB\_FIELD

Indicate whether you want to provide the location of the keytab files.

Specify `set` to provide the location of the keytab files. Specify `unset` if you do not want to provide the location of the keytab files.

#### KERBEROS\_KEYTAB\_LOCATION

Specify the location of the keytab files.

#### SSL\_CHECKBOX

Indicate whether SSL authentication is enabled for the domain of PowerCenter.

Specify `set` to enable SSL authentication. Specify `unset` if you do not want to enable SSL authentication.

If you are installing the VDS Node when the INSTALLATION\_TYPE is 1, enter the following properties to enable security:

#### KERBEROS\_CHECKBOX

Indicate if Kerberos authentication is enabled for the domain of PowerCenter.

Specify `set` to enable Kerberos authentication. Specify `unset` to disable Kerberos authentication.

#### KERBEROS\_KEYTAB\_FIELD

Indicate whether you want to provide the location of the keytab files.

Specify `set` to provide the location of the keytab files. Specify `unset` if you do not want to provide the location of the keytab files.

KERBEROS\_KEYTAB\_LOCATION

Specify the location of the keytab files.

SSL\_CHECKBOX

Indicate whether SSL authentication is enabled for the domain of PowerCenter.

Specify `set` to enable SSL authentication. Specify `unset` if you do not want to enable SSL authentication.

If you are installing the VDS Node when the `INSTALLATION_TYPE` is 2, enter the following properties to enable security:

KERBEROS\_CHECKBOX

Indicate if Kerberos authentication is enabled for the domain of PowerCenter.

Specify `set` to enable Kerberos authentication. Specify `unset` to disable Kerberos authentication.

KERBEROS\_KEYTAB\_FIELD

Indicate whether you want to provide the location of the keytab files.

Specify `set` to provide the location of the keytab files. Specify `unset` if you do not want to provide the location of the keytab files.

KERBEROS\_KEYTAB\_LOCATION

Specify the location of the keytab files.

SSL\_CHECKBOX

Indicate whether SSL authentication is enabled for the domain of PowerCenter.

Specify `set` to enable SSL authentication. Specify `unset` if you do not want to enable SSL authentication.

2. Save the properties file.
3. Run the silent installation.
  - In Windows: run `silentInstall.bat`
  - In Linux: run `silentInstall.sh`

**Note:** Assign execute permissions before running the `install.sh` script or run the `sh ./install.sh` command.

The silent installer runs in the background.

If you incorrectly configure the properties file or if the installation directory is not accessible, the silent installation will fail. View the installation log file in the user home directory. For example, `C:\silentErrorLog.log`. Correct the errors, and run the silent installation again.

## Vibe Data Stream Node Installation

Install the VDS Node on all Linux and Windows hosts that run sources and targets.

You can install the VDS Node as part of the complete VDS installation or you can use the standalone VDS Node installer. If you want to install VDS Nodes on multiple machine, you can use the standalone VDS Node.

You must enable security for the VDS Node if you have configured security for the Administrator Daemon.

For more information about VDS entities and monitoring them, see the *Vibe Data Stream for Machine Data User Guide*

## Installing the Vibe Data Stream Node in Graphical Mode

You can install the VDS Node in graphical mode on Windows.

1. Log in to the machine with a system user account.
2. Begin installation. Run `install.bat` from the directory where you extracted the installation files.  
The installer page appears.
3. Click **Next**.  
The **Installation Directory** page appears.
4. Enter the absolute path for the installation directory.  
By default, the installer places VDS in the following location: `<User Home Directory>\Informatica\vds\<version folder>`  
Optionally, enable security.
5. Click **Next**.  
The **Pre-Installation Summary** page appears.
6. Click **Install**.  
The **Configuration** page appears after the installation is complete.  
Enter the following configuration details:  
**ZooKeeper IP Address(es) and Port(s)**  
The IP address and port that the Administrator Daemon uses to communicate with Apache ZooKeeper.  
The IP address and port combination has the following format:  
`<IP Address>:<port>`  
You can enter multiple comma-separated IP address and port combinations. If you have configured high availability on ZooKeeper and one instance of ZooKeeper is down, the Administrator Daemon connects to the next available ZooKeeper server.  
**Network Interface Address**  
Select the network interface if you are installing the components on a multi-homed host.  
The interface can have one of the following formats:
  - IP Address - `<IP Address>`. For example, 10.65.43.75.
  - Interface name. For example, Eth0.If you have enabled security for the Informatica domain, the installer enables the **SSL Network Authentication** option. VDS uses the same SSL certificates used by the Informatica domain.  
If you have enabled Kerberos authentication for the Informatica domain, the installer enables the **Kerberos Network Authentication** option. Specify the location of the keytab files.
7. Click **Next**.  
The **Post-Installation Summary** page appears.
8. Click **Done** to close the installer.

## Installing the Vibe Data Stream Node in Console Mode

You can install the VDS Node in console mode on Linux.

1. Log in to the machine with a system user account.

2. Run `install.sh` from the directory where you extracted the installation files. Assign execute permissions before running the `install.sh` script or run the `sh ./install.sh` command.

The **Welcome** page appears.

3. Press **Enter** to continue.
4. Enter the path to the installation directory.

By default, the installer places the VDS Node in the following location:

```
<User Home Directory>\Informatica\vds\<version folder>
```

5. Press **Enter**.
6. Press **Enter**.
7. Enter the following VDS Node configuration details:

Optionally, to enable secure communication, storage, and configuration, press **1**.

The **Configuration** page appears after the installation is complete.

Enter the following configuration details:

#### **ZooKeeper IP Address(es) and Port(s)**

The IP address and port that the Administrator Daemon uses to communicate with Apache ZooKeeper.

The IP address and port combination has the following format:

```
<IP Address>:<port>
```

You can enter multiple comma-separated IP address and port combinations. If you have configured high availability on ZooKeeper and one instance of ZooKeeper is down, the Administrator Daemon connects to the next available ZooKeeper server.

#### **Network Interface Address**

Optionally, specify the network interface if you are installing the components on a multi-homed host.

Press **1** and press **Enter** and then type the network interface address.

The interface can have one of the following formats:

- IP Address - `<IP Address>`. For example, 10.65.43.75.
- Interface name. For example, Eth0.

If you have enabled security for the Informatica domain, the installer enables the **SSL Network Authentication** option. VDS uses the same SSL certificates used by the Informatica domain.

If you have enabled Kerberos authentication for the Informatica domain, the installer enables the **Kerberos Network Authentication** option. Specify whether to enable Kerberos by pressing **1** or **2**. Specify the location of the keytab files.

8. Press **Enter**.
  9. Press **Enter** to exit the installation process.
- The **Post-Installation Summary** page appears when the installation is complete.

# Installing the Vibe Data Stream Node in Silent Mode

To install the VDS Node without user interaction, install in silent mode by using a properties file that contains the installation options. The VDS Node installer reads the file to determine the installation options.

1. Use a text editor to open and change the values of the properties in the `SilentInput.properties` file.

The following table describes the installation properties that you can change:

`INSTALL_TYPE`

Set the value to 0 to perform a fresh installation of the VDS Node.

`USER_INSTALL_DIR`

The VDS Node installation directory. The location must have write permissions enabled. For example, `C:\\Informativa\\2.3.1\\VDS`.

`ZOOKEEPER_URL`

The IP address and port that the VDS Node uses to communicate with Apache ZooKeeper. The IP address and port combination has the following format:

`<IP Address>:<port>`

You can enter multiple comma-separated IP address and port combinations. If you have configured high availability on ZooKeeper and one instance of ZooKeeper is down, the VDS Node connects to the next available ZooKeeper server.

**Note:** Do not use the `http` prefix with the IP address and port combination.

`SECURE_MODE`

Indicates if the secure communication, storage and configuration must be enabled for the VDS Node.

If the value is 0, secure mode is not enabled. If the value is 1, secure mode is enabled.

`NETWORK_INTERFACE`

Optional. The network interface if you are installing the components on a multi-homed host. The interface has the following format:

`<IP Address>`. For example, `10.65.43.75`

2. Specify the following properties if you install the VDS Node on a machine where PowerCenter is not running and you want to enable security:

`PC_KERBEROS_ENABLED`

Indicate if you want to enable Kerberos authentication. Specify `true` to enable Kerberos authentication.

`KERBEROS_KEYTAB_LOCATION`

The location to the `vds_node.keytab` file.

`PC_TLS_ENABLED`

Indicate if you want to enable SSL. Specify `true` to enable SSL authentication.

3. Specify the following properties if you install the VDS Node on a machine where PowerCenter is running and you want to enable security:

`KERBEROS_KEYTAB_LOCATION`

The location to the keytab files.

4. Save the properties file.

5. Run the silent installation.

- In Windows: run `silentInstall.bat`
- In Linux: run `silentInstall.sh`

**Note:** Assign execute permissions before running the `install.sh` script or run the `sh ./install.sh` command.

The silent installer runs in the background. The silent installation is complete when the `node-install.out` is created.

The silent installation fails if you incorrectly configure the properties file or if the installation directory is not accessible. View the installation log file in the user home directory. For example, C:\silentErrorLog.log. Correct the errors, and run the silent installation again.

## Installing Vibe Data Stream Nodes on Remote Linux Systems

You can install VDS Nodes on remote Linux systems in silent mode.

After you install Vibe Data Stream, the installation process creates the remote VDS Node installation directory `remote_node_utils`, in the VDS installation directory. Place the `vds-node-installer-linux-x86_64.zip` file in this directory before you perform remote installation.

Before you run the remote installation, enable passwordless connection between the machines where you install the administration components and the machines where you install the VDS Nodes.

### Configure Passwordless SSH Connections

Configure passwordless connections between the machines where you install the administration components and the machines where you install the VDS Node. Because the remote installation process runs in silent mode, you might want to configure passwordless SSH connections to avoid asking for input from users.

To configure passwordless connections, you can create an SSH key pair on the machine where you install the administration components. The key pair consists of a public key and a private key. Copy the public key to all the remote hosts.

### Configuring Passwordless SSH Connections

Generate a pair of authentication keys on the host where you install the Administrator Daemon and Administrator tool.

1. To generate a pair of authentication keys, enter the following command:

```
ssh-keygen -t rsa
```

This command creates a public key and private key.

2. To create an SSH directory on the remote system if it does not exist, enter the following command

```
ssh $USER@<Remote machine> mkdir -p ~/.ssh
```

3. To copy the public key to the remote machines, enter the following command:

```
cat ~/.ssh/id_rsa.pub | ssh $USER@<Remote machine> 'cat >> .ssh/authorized_keys'
```

After you configure the passwordless connection, you can run the remote node installation on remote systems.

## Installing Vibe Data Stream Nodes on Remote Systems

To install VDS Nodes on remote systems in silent mode, use a properties file that contains the installation options. The VDS Node remote installer reads the file to determine the installation options.

1. Navigate to the `remote_node_utils` directory.
2. Use a text editor to open and change the values of the properties in the `SilentInput.properties` file.

The following table describes the installation properties that you can change:

`USER_INSTALL_DIR`

VDS Node installation directory. For example, `/home/$USER/Informatica/2.2.0/vds`

`ZOOKEEPER_URL`

The IP address and port that the VDS Node uses to communicate with Apache ZooKeeper.

The IP address and port combination has the following format:

`<IP Address>:<port>`

You can enter multiple comma-separated IP address and port combinations. If you have configured high availability on ZooKeeper and one instance of ZooKeeper is down, the VDS Node connects to the next available ZooKeeper server.

**Note:** Do not use the `http` prefix with the IP address and port combination.

`SECURE_MODE`

Indicates if the secure communication, storage and configuration must be enabled for the VDS Node.

If the value is 0, secure mode is not enabled. If the value is 1, secure mode is enabled.

`NETWORK_INTERFACE`

Optional. The network interface if you are installing the components on a multi-homed host.

The interface is of the following format:

`<IP Address>`. For example, `10.65.43.75`

3. Specify the following properties if you want to enable security:

`PC_KERBEROS_ENABLED`

Indicate if you want to enable Kerberos authentication. Specify `true` to enable Kerberos authentication.

`KERBEROS_KEYTAB_LOCATION`

The location to the `vds_node.keytab` file.

`PC_TLS_ENABLED`

Indicate if you want to enable SSL. Specify `true` to enable SSL authentication.

4. Save the properties file.
5. Use a text editor to open the `hostsList` and add the host names or IP addresses of the remote machines, separated by newline characters.

6. To run the remote installation, use the following command:

```
./remote-node.sh install
```

The silent installer runs in the background. The silent installation is complete when the `node-install.out` and `vds-install.out` are created in the `<VDS Node Installation Directory>\node\logs` directory of the remote machine.

The silent installation fails if you incorrectly configure the properties file or if the installation directory is not accessible. View the installation log file in the user home directory of the remote machine. For example, `/home/<username>/silentErrorLog.log`. Correct the errors, delete the files from the directory where the installation failed, and run the silent installation again.



# CHAPTER 4

## Post-Installation Tasks

This chapter includes the following topics:

- [Post-Installation Tasks Overview, 33](#)
- [Start the Administrator Daemon, 33](#)
- [Create Multiple Vibe Data Stream Node Services on Windows, 34](#)
- [Start the Vibe Data Stream Node, 34](#)
- [Start the Informatica Domain, 35](#)
- [Create a Vibe Data Stream Service, 36](#)

### Post-Installation Tasks Overview

After you install the VDS components and Apache ZooKeeper, start the VDS components, optionally add a license, and then create the VDS service.

### Start the Administrator Daemon

After you complete the installations, start the Administrator Daemon on Linux and Windows.

#### Starting or Stopping the Administrator Daemon on Linux

To start the Administrator Daemon, run the `admin.sh` command. The `admin.sh` command also starts or stops the topic resolution daemon (LBMRD), the persistence store (UM Store), and Apache ZooKeeper along with the Administrator Daemon.

To start the Administrator Daemon, LBMRD, the persistence store (UM Store), and ZooKeeper, run the following command from the `<VDS installation directory>/admind/bin` folder:

```
./admin.sh start
```

To start one of the components, run the following command:

```
./admin.sh start <component>
```

Where, `<component>` is `admind`, `lbmrd`, `umestored`, or `zookeeper`.

To stop the Administrator Daemon, run the following command:

```
./admin.sh stop
```

To stop one of the components, run the following command:

```
./admin.sh stop <component>
```

Where, <component> is admind, lbmrd, umestored, or zookeeper.

## Starting or Stopping the Administrator Daemon on Windows

You can start or stop the Administrator Daemon from Windows Administrative Tools.

1. From Windows **Administrative Tools**, select **Services**.
2. Right-click the **Informatica ADMIND Service 230** service.
3. Choose to start or stop the service.

## Create Multiple Vibe Data Stream Node Services on Windows

By default, the VDS Node installation process creates one Windows service. You can create multiple VDS Node services.

To create a VDS Node service run the following command from the <VDS Node installation directory> \node\bin folder:

```
node.bat install <node name>
```

**Note:** Do not include spaces in the node name.

To create multiple services, run the command multiple times with different node names.

## Start the Vibe Data Stream Node

After you complete the installation, start the VDS Node on all hosts you installed them on. The installation process does not automatically start the VDS Node. When you start the VDS Node, it gets the configuration information from Apache ZooKeeper and the plug-ins from the Administrator Daemon.

**Note:** When you start the VDS Nodes, verify that you have a valid license. If you do not have the license, the VDS Nodes start, but do not send or receive information.

## Starting or Stopping the Vibe Data Stream Node on Linux

To start the VDS Node, run the following command from the <VDS Node installation directory>/node/bin folder:

```
./node.sh start <node name>
```

To stop the VDS Node, run the following command:

```
./node.sh stop <node name>
```

To start a VDS Node installed on a remote machine, run the following command:

```
./remote-node.sh start <node name>
```

To stop a VDS Node installed on a remote machine, run the following command:

```
./remote-node.sh stop <node name>
```

**Note:** The node name is optional. If you do not specify it, the command uses the host name.

## Starting or Stopping the Vibe Data Stream Node on Windows

You can start or stop the VDS Node service from Windows Administrative Tools.

1. From Windows **Administrative Tools**, select **Services**.
2. Right-click the **Informatica VDS Node 230 <node name>** service.
3. Choose to start or stop the service.

## Start the Informatica Domain

To start the Informatica domain, use a command line program.

### Starting or Stopping Informatica Domain on Linux

On Linux, run `infaservice.sh` to start or stop the Informatica domain. By default, `infaservice.sh` is located in the following directory:

```
<Informatica Administrator Tool installation directory>/tomcat/bin
```

1. Go to the directory where `infaservice.sh` is located.
2. At the command prompt, enter the following command to start the domain:

```
./infaservice.sh startup
```

To stop the domain, enter the following command:

```
./infaservice.sh shutdown
```

**Note:** If you use a soft link to specify the location of `infaservice.sh`, set the `INFA_HOME` environment variable to the location of the Informatica installation directory.

### Starting or Stopping Informatica Domain on Windows

You can start or stop the VDS Node service from Windows Administrative Tools.

1. From Windows **Administrative Tools**, select **Services**.
2. Right-click the **Informatica10.0.0** service.
3. Choose to start or stop the service.

# Create a Vibe Data Stream Service

Create the Vibe Data Stream service in the Administrator tool to create and monitor VDS data flows.

Optionally, add a VDS license before you create the service.

For more information about VDS data flows, see the *Vibe Data Stream for Machine Data User Guide*.

## Log In to the Administrator Tool

You must have administrator privileges to log in to Administrator tool.

1. Start a web browser.  
Informatica recommends that you use Google Chrome.
2. In the **Address** field, enter the URL for the Administrator tool:  
`http://<host>:<port>/administrator/`
3. On the login page, enter the user name and password.
4. Click **Log In**.

## Adding a License

Add a license key file in the Administrator tool before you create a Vibe Data Stream Service. Place the license key file in a location that is accessible by the machine on which the browser is running. When you update the license, you must specify the location of the license key file.

**Note:** You must remove an existing license before you update it.

1. In the Administrator tool, click the **Manage** tab > **Services and Nodes** view.
2. Right-click **Domain** > **New** > **License**.  
The **Create License** dialog box appears.
3. Enter the following properties:

### Name

Name of the license. The name is not case sensitive and must be unique within the domain. It cannot exceed 128 characters or begin with @. Also, it cannot contain spaces or any of the following special characters:

```
` ~ % ^ * + = { } \ ; : ' " / ? . , < > | ! ( ) [ ]
```

### Description

Description of the license. The description cannot exceed 765 characters.

### Path

Path of the domain in which you create the license. Read-only field. Optionally, click **Browse** and select a domain in the **Select Folder** dialog box.

Optionally, click **Create Folder** to create a folder for the domain.

### License file

File containing the original key. Click **Choose Files** to find the file.

4. Click **OK**.

# Creating the Vibe Data Stream Service

Create the VDS Service in the Administrator tool.

Start the Administrator Daemon and Apache ZooKeeper before you create the service.

1. In the Administrator tool, click the **Services and Nodes** tab.
2. Click **Actions > New > Vibe Data Stream Service**.

The **New Vibe Data Stream Service** window appears.

3. Enter the following general properties for the service:

## **Name**

Name of the Vibe Data Stream Service. The name is not case sensitive and must be unique within the Informatica domain. The characters must be compatible with the code page of the associated repository. The name cannot exceed 128 characters or begin with @. It also cannot contain spaces or the following special characters:

` ~ % ^ \* + = { } \ ; : ' " / ? . , < > | ! ( ) [ ]

## **Description**

Description of the service. The description cannot exceed 765 characters.

## **Location**

Name of the Informatica domain and folder where you want to create the service. Optionally, click **Browse** to select another folder in the Informatica domain.

## **License**

License assigned to the service. Select from the list of VDS licenses available.

## **Assign**

Node on which the service runs. Select **Single Node** to assign the service to a node.

## **Node**

The host name or machine name where the service runs.

4. Click **Next**.
5. Enter the following database properties for the service:

## **Database Type**

The type of database that contains the VDS repository.

You can select one of the following databases:

- DB2
- Oracle
- SQLServer
- Sybase

## **Kerberos Authentication**

Indicate that the database uses Kerberos authentication. This option is supported only for SQLServer.

## **Username**

The database user.

### Password

Database password corresponding to the database user.

### JDBC Connect String

The connection string used to connect to the database.

- **IBM DB2.** `jdbc:informatica:db2://<host name>:<port>;DatabaseName=<database name>`
- **Microsoft SQL Server.** `Server: jdbc:informatica:sqlserver://<host name>:<port>;DatabaseName=<database name>`
- **Kerberos-enabled Microsoft SQL Server.** `jdbc:informatica:sqlserver://<host name>:<port>;DatabaseName=qadb;integratedSecurity=true;authenticationScheme=JavaKerberos;encrypt=false`
- **Oracle.** `jdbc:informatica:oracle://<host name>:<port>;ServiceName=<service name>`
- **Sybase.** `jdbc:informatica:sybase://<host name>:<port>;DatabaseName=<database name>`

### Secure JDBC Parameters

Secure JDBC parameters that you want to append to the database connection URL.

Use this property to specify secure connection parameters such as passwords. The Administrator tool does not display secure parameters or parameter values in the Vibe Data Stream Service properties. Enter the parameters as name=value pairs separated by semicolon characters (;). For example:

```
param1=value1;param2=value2
```

If secure communication is enabled for the database, enter the secure JDBC parameters in this property.

### Database Schema

The schema name for the Microsoft SQL Server database.

### Database Tablespace

Tablespace name for IBM DB2 database. When you specify the tablespace name, the Vibe Data Stream Service creates all repository tables in the same tablespace. You cannot use spaces in the tablespace name.

6. Click **Test Connection** to verify if the connection to the database is successful.
7. Click **Finish**.

## CHAPTER 5

# Uninstallation

This chapter includes the following topics:

- [Uninstallation Overview, 39](#)
- [Before You Uninstall, 39](#)
- [Vibe Data Stream Unistallation, 39](#)

## Uninstallation Overview

The VDS installation process creates an uninstallation directory for VDS. To completely uninstall VDS, you must uninstall the Administration components, VDS Node, and Apache ZooKeeper. The uninstallation process deletes all files and clears all configurations from a machine.

## Before You Uninstall

Before you uninstall VDS, perform the following tasks:

1. Undeploy all data flows.
2. Delete the Vibe Data Stream Service. The uninstallation process does not remove the Vibe Data Stream Service. If you do not delete the Vibe Data Stream Service before uninstalling VDS, you might see an empty Vibe Data Stream Service when you start PowerCenter.
3. Stop all VDS components. The uninstallation process cannot remove the files that are being used by a component that is running.

## Vibe Data Stream Unistallation

You can uninstall VDS in graphical mode on Windows and in console mode on Linux.

## Uninstalling Vibe Data Stream on Windows

You can uninstall the VDS in graphical mode on Windows.

1. Go to the following directory:  
`<VDS installation directory>/Uninstaller_VDS`
2. Run `uninstaller.exe` to uninstall VDS.
3. Click **Uninstall** to continue with the uninstallation.
4. Click **Done** to close the uninstaller.

## Uninstalling Vibe Data Stream in Console Mode

You can uninstall the VDS in console mode on Linux.

1. Go to the following directory:  
`<VDS installation directory>/Uninstaller_VDS`
2. Run the `./uninstaller` command.
3. Press **Enter**.  
The installer displays a warning messaging to shut down all VDS components.
4. Press **Enter** to continue with the uninstallation.  
The **Post-Uninstallation Summary** page appears.
5. Press **Enter** to exit the uninstallation process.

## Uninstalling the Vibe Data Stream Node in Graphical Mode

You can uninstall the VDS Node in graphical mode on Linux. Before you run the uninstaller, stop the VDS Node.

1. Go to the following directory:  
`<VDS Node installation directory>/Uninstaller_Node`
2. Run `uninstaller.exe` to uninstall the VDS Node.
3. Click **Uninstall** to continue with the uninstallation.
4. Click **Done** to exit the uninstallation process.

## Uninstalling the Vibe Data Stream Node in Console Mode

You can uninstall the VDS Node in console mode on Linux. Before you run the uninstaller, stop the VDS Node.

1. Go to the following directory:  
`<VDS Node installation directory>/node/Uninstaller_Node`
2. Run the `./uninstaller` command.
3. Press **Enter** to continue with the uninstallation.
4. Click **Enter** to exit the uninstallation process.



## Uninstalling the Remote Vibe Data Stream Node

You can uninstall the VDS Node on a remote machine in console mode on Linux. Before you run the uninstaller, stop the VDS Node.

1. Go to the following directory:

<VDS Node installation directory>

**Note:** Ensure that the `SilentInput.properties` file and the `hostsList` are present in this directory.

2. Run the `./remote-node.sh uninstall` command to uninstall the VDS Node.

## CHAPTER 6

# Troubleshooting the Installation

### When I run the VDS installer, the installer fails to run.

This issue might occur if you do not have permissions for the `/tmp` directory on the hard disk. Ensure that you have permissions for the `/tmp` directory and run the installer again.

### The Administrator Daemon process stops unexpectedly when I try to start the Administrator Daemon.

This error might occur if you change the host name of the machine on which you install the Administrator Daemon. After installation, do not change the host name of the machine on which you install the Administrator Daemon. If you change the host name, you must reinstall the Administrator Daemon.

### The VDS Node does not start after installation.

This error can occur if you have configured the VDS Node incorrectly. Check the `<VDS Installation Directory>/node/logs/<node-name>.out` log file for errors and correct them. Also see the `<VDS Installation Directory>/node/logs/<node name>-node.log` for other errors.

### I am not able to see the contents of the **Vibe Data Stream** tab after I create the Vibe Data Stream Service.

This issue can occur if the database user does not have sufficient privileges to create tables in the database. Check the Administrator Daemon log files for errors. Perform the following steps to resolve the issue:

1. Ensure that the database user has sufficient permissions to create tables in the database.
2. Delete the Vibe Data Stream Service.
3. Ensure that the Administrator Daemon is restarted.
4. Re-create the Vibe Data Stream Service.

## APPENDIX A

# Configuring Extended JVM Parameters

You can configure the JVM parameter heap size in the Administrator Daemon configuration. The heap size depends on the number of applications in your deployment.

By default the heap size allocated to Administrator Daemon is 2 GB. To change the heap size add the following configuration in the `admin.d.cnf` located in the `<Administrator Daemon Installation Directory>/admin.d/config` directory:

```
jvmOptions="-Xmx4G -Xms4G"
```

where

- `-Xmx4G` is the maximum heap size
- `-Xms4G` is the minimum heap size

# APPENDIX B

## Glossary

### **Administrator Daemon**

Daemon process that facilitates the creation, management, deployment, and undeployment of data flows through the Administrator tool. The Administrator Daemon also aggregates statistics and state information from Vibe Data Stream Nodes in the deployment, and send the information to the Administrator tool.

### **data flow**

Defines the path of data from source services to target services through zero or more transformations. You can create, design, deploy, and undeploy data flows in the Administrator tool. Data flows can be simple data flows, such as one-to-one, or complex data flows, such as, one-to-many, many-to-one, and many-to-many.

### **Informatica Administrator**

Informatica Administrator (Administrator tool) is a web application that you can use to manage, monitor, deploy, and undeploy data flows.

### **receiver type ID**

A 32-bit value that uniquely identifies the Ultra Messaging receiver.

### **source service**

A VDS Node contains one or more specialized threads that work together to transfer data from an application host to a target data store or data engine. Source services are threads that consume and publish events generated by a source application. Source services publish data in the form of Ultra Messaging or WebSocket messages.

### **target service**

Target services are the threads that subscribe to data published by source services and write the data to the target. Target services run on hosts that have access to the target.

### **topic resolution domain**

The domain of UDP multicast or unicast connectivity that allows Ultra Messaging topic resolution to occur. Topic resolution enables receivers to discover sources.

### **unicast topic resolution daemon (LBMRD)**

A daemon process that performs the same topic resolution activities as those performed by multicast topic resolution. By default, Ultra Messaging expects multicast connectivity between sources and targets. When only unicast connectivity is available, you must run one or more unicast topic resolution daemons (LBMRD).

**VDS Node**

A VDS Node is a Java program within which source services and target services run. You can run multiple source services and target services on a single node. You can also configure multiple nodes to run on a host machine.

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