DOCUMENTATION

# **Installation Guide**

# Kablink Vibe OnPrem

3.1

June 28, 2011

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# **About This Guide**

The *Kablink Vibe OnPrem 3.1 Installation Guide* covers the installation and configuration of the Kablink Vibe OnPrem software. The guide is divided into the following sections:

- Part I, "Product Overview," on page 11
- Part II, "Basic Installation," on page 23
- Part III, "Advanced Installation and Reconfiguration," on page 79
- Part IV, "Multi-Server Configurations and Clustering," on page 93
- Part V, "Update," on page 103
- Part VI, "Appendixes," on page 121

#### **Audience**

This guide is intended for Kablink Vibe OnPrem administrators.

### **Feedback**

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation.

## **Documentation Updates**

For the most recent version of this manual, visit the Kablink Vibe OnPrem 3.1 Documentation Web site (http://www.novell.com/documentation/kablinkvibe\_onprem31/).

## **Additional Documentation**

You can find more information in the Kablink Vibe documentation, which is accessible from the Kablink Vibe OnPrem 3.1 Documentation Web site (http://www.novell.com/documentation/kablinkvibe\_onprem31/).

To access the *Kablink Vibe OnPrem User Guide* from within Vibe, click the *Help* icon (question mark).

# **Product Overview**

- Chapter 1, "What Is Kablink Vibe OnPrem?," on page 13
- Chapter 2, "Vibe OnPrem System Requirements," on page 17

# What Is Kablink Vibe OnPrem?

Kablink Vibe OnPrem is an enterprise collaboration tool designed to increase individual productivity, team effectiveness, and organizational success by providing the right set of tools to the right people.

- Section 1.1, "Vibe Capabilities," on page 13
- Section 1.2, "Vibe Components," on page 14
- Section 1.3, "Vibe Configurations," on page 15

# 1.1 Vibe Capabilities

Kablink Vibe users fall into three basic groups:

- Section 1.1.1, "Content Consumers," on page 13
- Section 1.1.2, "Content Providers," on page 13
- Section 1.1.3, "Administrators," on page 14

# 1.1.1 Content Consumers

Content consumers use Kablink Vibe to work with important information that pertains to them. Content consumers:

- Maintain their personal workspaces, including setting up a personal Blog, Calendar, Files, Guestbook, Photo Album, and Tasks folder
- Participate in team workspaces set up for content providers, in order to better collaborate with colleagues and facilitate their work assignments
- Search the Vibe site for people, places, and other information that pertains to their personal work assignments
- Identify subject-matter experts to assist them in their personal work assignments

The typical tasks performed by content consumers are covered in the *Kablink Vibe OnPrem 3.1 User Guide*.

In many cases, content consumers quickly become content providers.

## 1.1.2 Content Providers

Content providers use Kablink Vibe to create and manage teams, customize the Vibe environment, and import data into the Vibe site for use by other Vibe users. Content providers:

- Create and manage team workspaces and folders
- Control user access to their team workspaces
- Establish unique branding for workspaces and folders to clearly differentiate them from other places on the Vibe site

- Create landing pages for workspaces that consolidate the most necessary workspace information into a single page
- Customize data entry forms for gathering information from users
- Create workflows to automate otherwise time-consuming manual processes

The typical tasks performed by content providers are covered in the *Kablink Vibe OnPrem 3.1* Advanced User Guide.

# 1.1.3 Administrators

A Kablink Vibe administrator is responsible for installing the Vibe software and setting up the Vibe site. This *Kablink Vibe OnPrem 3.1 Installation Guide* provides instructions for Vibe software installation. After installation, the Vibe site administrator can:

- Set up user access to the Vibe site
- Create initial workspaces and populate them with information that is of interest to Vibe users
- Control user access to workspaces and folders
- Configure e-mail integration, so that Vibe users can receive notifications of updated information on the Vibe site and post to the Vibe site by using e-mail messages
- Set up mirrored folders to make large sets of data that are already available on disk more easily available through the Vibe site
- Set up software extensions (add-ons) that enhance the power and usefulness of the Vibe site
- Set up remote applications that deliver data from a remote location, such as a remote database, for easy access on your Vibe site
- Manage users, workspaces, and folders as the Vibe site grows and evolves
- Perform regular backups to safeguard the data stored in the Vibe site

The typical tasks performed by Vibe site administrators are covered in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

# 1.2 Vibe Components

A Kablink Vibe site consists of four major components:

- Section 1.2.1, "Vibe Software," on page 14
- Section 1.2.2, "Vibe Database," on page 15
- Section 1.2.3, "Vibe File Repository," on page 15
- Section 1.2.4, "Lucene Index," on page 15

# 1.2.1 Vibe Software

The Vibe software is a customized version of Apache Tomcat. This software provides the Webbased functionality you use as you access the Vibe site through your Web browser.

## 1.2.2 Vibe Database

The Vibe database is used for storing information about the Vibe site and its users:

- Structural information about workspaces, folders, and entries (for example, their location in the workspace tree)
- Identification information about workspaces, folders, and entries (for example, titles, descriptions, dates of creation/modification, and users associated with creation/modification)
- User profile information (for example, full name, phone number, and e-mail address)

The Vibe database disk space requirements are relatively modest, because the database is not used for storing files.

# 1.2.3 Vibe File Repository

The Vibe file repository holds all files that are imported into Vibe, information related to the imported files, such as thumbnails and HTML renderings, and the search engine index.

The Vibe file repository disk space requirements depend on the size of the Vibe site. For a large Vibe site, disk space requirements can be substantial.

# 1.2.4 Lucene Index

The Lucene Index Server is a high-performance Java search engine. The Lucene index contains pointers to the actual data stored in the Vibe file repository. The index enables the Lucene search engine to perform very fast searches through large quantities of Vibe data.

# 1.3 Vibe Configurations

You can configure Kablink Vibe to run on a single server or multiple servers, depending on the size and needs of your Vibe site.

Configuration	Description
Single Server	By default, the Vibe Installation program installs all Vibe components on the same server.
Remote Database Server	For better performance and scalability, you can install the Vibe database on a remote server.
Remote Lucene Index Server	For better performance and scalability, you can install the Lucene index on a remote server.
	NOTE: This configuration is not available with Kablink Vibe.
Multiple Vibe Servers	By running Novell Vibe on multiple servers, you can achieve high availability, including failover and load balancing, depending on how you configure your servers.
	NOTE: This configuration is not available with Kablink Vibe.

Configuration	Description	
Multiple Remote Lucene Servers	Your Novell Vibe site depends on the Lucene Index Server for full functionality. Running multiple Lucene Index Servers provides high availability, so that if one Lucene Index Server goes down, Vibe users can still access the Vibe site because other Lucene Index Servers are still available.	
	NOTE: This configuration is not available with Kablink Vibe.	
Multiple Remote Database Servers	Each of the three databases supported by Vibe each has its own approach to clustering the database server. Information about clustering database servers is available on the Internet.	

For more information, see Part IV, "Multi-Server Configurations and Clustering," on page 93.

# Vibe OnPrem System Requirements

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You, as a Kablink Vibe OnPrem site administrator, must ensure that your system meets Vibe system requirements, so that your Vibe site can be set up successfully. After your Vibe site is set up, you must ensure that users' browsers and office applications meet Vibe user requirements, so that users can access the Vibe site successfully.

- Section 2.1, "Vibe Server Requirements," on page 17
- Section 2.2, "Vibe User Requirements," on page 19
- Section 2.3, "Mobile Device Requirements," on page 19
- Section 2.4, "Supported Environments," on page 20
- Section 2.5, "Recommended Hardware Configurations," on page 21

For the latest system requirements details, see the Novell Vibe OnPrem 3.1 Readme (http://www.novell.com/documentation/vibe\_onprem31/vibeprem31\_readme\_novell/data/vibeprem31\_readme\_novell.html).

# 2.1 Vibe Server Requirements

- Hardware for the Kablink Vibe server:
  - x86-32 processor or x86-64 processor
  - Minimum 2 GHz processor
  - Multi-CPU systems preferred
  - Minimum server memory:
    - At least 3 GB RAM for an x86-32 processor
    - At least 4 GB RAM for an x86-64 processor

See Section 2.5, "Recommended Hardware Configurations," on page 21 and Section 3.2.3, "Vibe Server Memory," on page 27.

- Any of the following supported server operating systems for the Vibe server:
  - Novell Open Enterprise Server (OES) 2, plus the latest Support Pack
  - Novell Open Enterprise Server 11, plus the latest Support Pack
  - SUSE Linux Enterprise Server (SLES) 10 or SLES 11, plus the latest Support Pack

**NOTE:** On SLES, the X Window System is required by the Vibe installation program. It is not required to run Vibe after installation.

- Windows Server 2003 or Windows Server 2008, plus the latest Service Pack
- Windows Server 2003R2 or Windows Server 2008R2, plus the latest Service Pack

Kablink Vibe can be run on additional Linux and Windows operating systems. For more information, see the Kablink Open Collaboration Web site (http://www.kablink.org).

- Database server:
  - Linux:
    - MySQL 5.0.26 or later server and client, or MySQL 5.1 server and client

**NOTE:** MySQL 5.0.26 is included with SLES 10 SP1 and OES 2 Linux. MySQL 5.0.67 is included with SLES 11.

- Oracle 10g or Oracle 11g
- Windows:
  - MySQL 5.0.26 or later server and tools, or MySQL 5.1 server and tools
  - Microsoft SQL Server 2005 or SQL Server 2008, plus the latest Service Pack
  - Oracle 10g or Oracle 11g

More information about MySQL is available in Section A.2, "MySQL Database Server," on page 125.

Tomcat 6.0.18

**NOTE:** Tomcat 6.0.18 is included with Vibe on Linux and Windows.

- Java Developer Kit (JDK):
  - Sun JDK 6.0
  - IBM JDK 6.0

Java scripting must be enabled for proper Vibe site functionality.

More information about JDKs is available in "Java Development Kit" in Appendix A, "Vibe System Requirements Assistance," on page 123.

- Directory service:
  - Linux: Novell eDirectory 8.8 or later, plus the latest Support Pack
     For information about eDirectory, see the Novell eDirectory 8.8 Documentation Web site (http://www.novell.com/documentation/edir88).
  - Windows: Microsoft Active Directory, plus the latest Service Pack, or Novell eDirectory 8.8 or later, plus the latest Support Pack

For information about Active Directory, see Windows Server 2003 Active Directory (http://www.microsoft.com/windowsserver2003/technologies/directory/activedirectory) or Windows Server 2008 Active Directory (http://www.microsoft.com/windowsserver2008/en/us/active-directory.aspx).

- Adequate server disk space:
  - Vibe software: At least 500 MB for a new installation

When you upgrade an existing Vibe system, ensure that your server has at least twice the amount of disk space available as is in the following directory, plus an additional 500 MB:

Linux: /var/opt/novell/teaming

Windows: c:\Program Files\Novell\Teaming

• Database server software: At least 500 MB for a new installation

When you upgrade an existing Vibe system, ensure that your server has at least twice the amount of disk space available as is in the following directory, plus an additional 500 MB:

Linux: /var/opt/novell/teaming

Windows: c:\Program Files\Novell\Teaming

- Vibe file repository: Depends on the anticipated size of the Vibe site
- Database content: Substantially less than the Vibe file repository
   See Section 3.6, "Planning the Vibe Database," on page 33 to plan for the disk space needs of your Vibe site.

# 2.2 Vibe User Requirements

- Web browser:
  - Linux: Mozilla Firefox 3 or later; Google Chrome (latest version)
  - Windows: Microsoft Internet Explorer 6 or later; Mozilla Firefox 3 or later; Google Chrome (latest version)

When you use Internet Explorer 6, some functionality might not be available.

- Mac: Safari 4 or later; Mozilla Firefox 3 or later
- Office applications:
  - Linux: OpenOffice.org 3.1.1 or later
  - Windows: Microsoft Office 2007 or later; OpenOffice.org 3.1.1 or later
  - Mac: OpenOffice.org 3.1.1 or later
- Collaboration clients:
  - Linux:
    - GroupWise 8 with the latest Support Pack
  - Windows:
    - GroupWise 8 with the latest Support Pack
    - Outlook 2007 with iCal support enabled
    - Notes 7 with iCal support enabled

# 2.3 Mobile Device Requirements

- Section 2.3.1, "Supported Mobile Devices," on page 19
- Section 2.3.2, "Device Browser Requirements," on page 20

# 2.3.1 Supported Mobile Devices

The Kablink Vibe mobile interface is supported on the following mobile devices:

- iPhone
- BlackBerry

**NOTE:** The BlackBerry Curve has issues with JavaScript, so it does not work with the Vibe mobile interface. For more information, see "Your BlackBerry Curve Does Not Work with the Mobile Interface" in "Troubleshooting" in the *Kablink Vibe OnPrem 3.1 User Guide*.

• Any other mobile device that provides an HTTP/HTML-based interface

Ensure that your device's browser meets the requirements that are discussed in Section 2.3.2, "Device Browser Requirements," on page 20.

# 2.3.2 Device Browser Requirements

To use Vibe from a mobile device, your device's browser must support:

- HTML 4
- JavaScript

# 2.4 Supported Environments

- Section 2.4.1, "File Viewer Support," on page 20
- Section 2.4.2, "IPV6 Support," on page 20
- Section 2.4.3, "Clustering Support," on page 20
- Section 2.4.4, "Xen Virtualization Support," on page 21
- Section 2.4.5, "VMware Support," on page 21
- Section 2.4.6, "Linux File System Support," on page 21

# 2.4.1 File Viewer Support

In Kablink Vibe, file viewing capabilities are provided by OpenOffice.org (http://www.openoffice.org) viewer technology. For more information, see:

- Section 4.1.6, "Configuring the Document Converter on Linux," on page 55
- Section 4.2.5, "Configuring the Document Converter on Windows," on page 63

The file viewers also support data indexing by the Lucene Index Server.

# 2.4.2 IPV6 Support

Kablink Vibe supports the IPV6 protocol when it is available on the server. If the protocol is available, Vibe detects it and supports IPV6 by default, along with IPV4.

# 2.4.3 Clustering Support

You can install Vibe components on multiple servers to provide failover support, as described in Part IV, "Multi-Server Configurations and Clustering," on page 93.

# 2.4.4 Xen Virtualization Support

You can install Vibe in virtual environments where a software program enables one physical server to function as if it were two or more physical servers. Xen virtualization technology in Novell Open Enterprise Server (Linux version) and SUSE Linux Enterprise Server is supported. For more information, see:

- Open Enterprise Server 2 Virtualization Documentation Web site (http://www.novell.com/documentation/oes2/virtualization.html#virtualization)
- SLES Virtualization Technology Documentation Web site (http://www.novell.com/documentation/vmserver).

# 2.4.5 VMware Support

Vibe is supported on the following versions of VMware:

- VMware Server (formally GSX Server), an enterprise-class virtual infrastructure for x86-based servers
- VMware ESX Server, a data-center-class virtual infrastructure for mission-critical environments

For more information, see the VMWare Web site (http://www.vmware.com).

# 2.4.6 Linux File System Support

For best Vibe performance on Linux, the ext3 file system is recommended. If you are running OES Linux and need the feature-rich environment of the NSS file system, Vibe is also supported there. The reiser3 file system is also supported.

# 2.5 Recommended Hardware Configurations

The hardware configuration that you set up for your Kablink Vibe site should be based on the number of active users that the Vibe site must support. Server machines can be physical or virtual.

Active Users	Vibe Components	СРИ	Memory	Java Heap
10	1 dedicated Vibe server with:	x86	2 GB	1 GB
	<ul><li>Tomcat</li><li>Lucene</li><li>SQL</li></ul>			
50	<ul><li>1 dedicated Vibe server with:</li><li>Tomcat</li><li>Lucene</li><li>SQL</li></ul>	x64 dual core	4 GB	2 GB

Active Users	Vibe Components	CPU	Memory	Java Heap
100	Multiple Vibe servers:	x64 dual core	4 GB	2 GB
	<ul> <li>1 dedicated Tomcat server</li> </ul>	dual core		
	<ul> <li>1 or more dedicated SQL servers</li> </ul>			

The Kablink Vibe Installation program provides two installation types: Basic and Advanced. When you perform a Basic installation, the result is a fully functional Vibe site with all required options configured and with typical defaults in use for optional settings.

If you are new to Vibe, the easiest way to get started is to perform a Basic installation first, with all Vibe components installed on the same server, then add advanced configuration options to your Vibe site after the Basic installation has been successfully tested. However, experienced Vibe administrators can choose to perform an Advanced installation immediately, which includes all installation and configuration options, as described in Part III, "Advanced Installation and Reconfiguration," on page 79.

You can perform a Basic installation to set up a single-server configuration, as described in Chapter 3, "Planning a Basic Vibe Installation," on page 25 and Chapter 4, "Installing and Setting Up a Basic Vibe Site," on page 49.

You can perform a Basic installation to set up a multiple-server configuration, but the remote database must be created manually and in advance of performing the installation, as described in Part IV, "Multi-Server Configurations and Clustering," on page 93.

# **Basic Installation**

- Chapter 3, "Planning a Basic Vibe Installation," on page 25
- Chapter 4, "Installing and Setting Up a Basic Vibe Site," on page 49
- Chapter 5, "Adding Users to Your Vibe Site," on page 65
- Chapter 6, "Setting Up Vibe," on page 71
- Chapter 7, "Basic Vibe Installation Summary Sheet," on page 73

# Planning a Basic Vibe Installation

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The installation program for Kablink Vibe OnPrem helps you install the Vibe software and file repository to the appropriate locations.

- Section 3.1, "What Is a Basic Vibe Installation?," on page 25
- Section 3.2, "Selecting the Operating Environment for Your Vibe Server," on page 26
- Section 3.3, "Selecting a Java Development Kit," on page 28
- Section 3.4, "Gathering Network Information for Your Vibe Site," on page 29
- Section 3.5, "Planning the WebDAV Authentication Method," on page 32
- Section 3.6, "Planning the Vibe Database," on page 33
- Section 3.7, "Gathering Outbound E-Mail Information," on page 36
- Section 3.8, "Enabling Inbound E-Mail," on page 38
- Section 3.9, "Planning Site Security," on page 40
- Section 3.10, "Gathering Directory Services Information," on page 40
- Section 3.11, "Accommodating Multiple Languages," on page 47

# 3.1 What Is a Basic Vibe Installation?

The Kablink Vibe installation program provides two installation types: Basic and Advanced. When you perform a Basic installation, the result is a fully functional Vibe site with all required options configured and with typical defaults in use for optional settings.

If you are new to Vibe, the easiest way to get started is to perform a Basic installation first, with all Vibe components installed on the same server, then add advanced configuration options to your Vibe site after the Basic installation has been successfully tested. However, experienced Vibe administrators can choose to perform an Advanced installation immediately, which includes all installation and configuration options, as described in Part III, "Advanced Installation and Reconfiguration," on page 79.

**IMPORTANT:** The following Vibe configurations require that you perform an Advanced installation as your initial installation of the Vibe software:

• Setting up the Vibe file repository so that some types of files are located outside the Vibe file repository root directory. See Section 8.2, "Distributing Different Data Types to Different Locations," on page 82 for Advanced installation instructions. You cannot move subdirectories within the Vibe file repository after they have been created.

If you want to implement an Advanced installation option, you should perform a Basic installation first, in a test environment, before performing the Advanced installation to set up your permanent Vibe site.

This section helps you make informed decisions about the required options for a Basic installation:

- Server platform (Linux or Windows)
- Server architecture (32-bit or 64-bit)

- Physical server memory requirements
- File locations (Vibe software and data)
- Java Development Kit (JDK) version (Sun or IBM)
- Database type (MySQL, Microsoft SQL Server, or Oracle)
- Database creation (during installation or before installation)
- Database authentication (username and password)
- Network information (Vibe server hostname or fully qualified domain name, and ports)
- Outbound e-mail configuration (SMTP vs. SMTPS, hostname, SMTP port, time zone, authentication)
- Inbound e-mail configuration (SMTP address, SMTP port, and TLS support)
- User and group for running the Vibe software (Linux only)

Before performing a Basic installation, make sure all system requirements are met, as listed in Chapter 2, "Vibe OnPrem System Requirements," on page 17.

As you proceed with planning, you can use the Basic Vibe Installation Summary Sheet to record your decisions about the options you want to use.

# 3.2 Selecting the Operating Environment for Your Vibe Server

- Section 3.2.1, "Vibe Server Platform," on page 26
- Section 3.2.2, "Vibe Server Architecture," on page 26
- Section 3.2.3, "Vibe Server Memory," on page 27
- Section 3.2.4, "Vibe Installation Locations," on page 28

## 3.2.1 Vibe Server Platform

Kablink Vibe can run on the versions of Linux and Windows listed in Section 2.1, "Vibe Server Requirements," on page 17.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Vibe Server Platform, mark your operating system of choice.

## 3.2.2 Vibe Server Architecture

Vibe can run on 32-bit or 64-bit processors. A 64-bit processor is recommended for a large Vibe site where the processor load is heavy and data storage requires a large amount of disk space.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Processor Architecture*, mark the processor capacity required for the size of Vibe site that you want to set up.

# 3.2.3 Vibe Server Memory

If a 32-bit processor is sufficient for your Vibe server, the server needs at least 3 GB of memory. If you plan to use a 64-bit processor in your Vibe server, the server needs more.

Vibe server memory usage is significantly affected by some factors and less affected by others:

- Number of users logged in: No significant effect.
- Number of concurrent active sessions: No significant effect.
- Database server caches: Significant memory usage.

When you follow the instructions for a Basic installation, the database is located on the same server as the Vibe software. After you have successfully tested your Basic installation, you can reconfigure Vibe to have its database on a remote server, so that the database uses separate memory resources, as described in Chapter 12, "Creating the Vibe Database on a Remote Server," on page 95.

Vibe internal data caches: Significant memory usage.

When you follow the instructions for a Basic installation, the Vibe internal data caches are subdirectories of the teamingdata directory, described in Section 3.2.4, "Vibe Installation Locations," on page 28. The Vibe internal data caches are separate from any caching or memory usage by the database server itself.

• Lucene index cache: Significant memory usage.

The Lucene Index Server is a high-performance Java search engine. Large file repositories (particularly with large files or a large number of files) can create a very large data index. When you perform a Basic installation, the Lucene index is created on the same server where the Vibe software is installed.

## **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Memory Requirements*, specify the amount of physical memory you plan to have for your Vibe server.

When you perform a Basic installation, the default amount of memory allocated to the Java Virtual Machine (JVM) where the Vibe software runs is 1 GB, which is adequate for a medium-sized Vibe site running on a 32-bit server. This memory allocation, called the Java "heap size," does not include memory used by your database server or by the Lucene Index Server when these programs are running on the same server as the Vibe software.

A general rule is that no more than 75% of the available physical memory should be allocated to the JVM. Memory not allocated to the JVM must be sufficient to support the operating system, the database server, and the Lucene Index Server if they are also running on the Vibe server, and any other processes running on the Vibe server.

**IMPORTANT:** A JVM on a 32-bit server should not be configured to take more than 1.5 G of memory. However, large numbers of users and documents often need memory settings higher than 2 GB to provide adequate performance. This type of Vibe system should be set up on 64-bit hardware.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Java JDK Location, specify the amount of memory to allocate to the JVM where Vibe runs.

Although it is possible to run Vibe with less than 1 GB of memory for the JVM, this applies only to very small test configurations, and is not suitable for production systems. In a test configuration, 512 MB is the minimum amount of memory required to produce a functioning Vibe installation.

## 3.2.4 Vibe Installation Locations

The default file location for the Vibe software varies by platform:

Linux: /opt/novell/teaming

Windows: c:\Program Files\Novell\Teaming

Included under the main Vibe software directory are subdirectories for Tomcat and file viewer software.

The default file location for the Vibe file repository also varies by platform:

Linux: /var/opt/novell/teaming

Windows: c:\Novell\Teaming

**IMPORTANT:** On Windows, the Vibe installation program displays the Windows pathname with forward slashes (/) rather than the traditional backslashes (\). This syntax is necessary in the installation program.

The Vibe file repository holds all files that are imported into Vibe, information related to the imported files, such as HTML renderings, and the search engine index.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *File Locations*, specify the directories where you want to install the Vibe software and data if you prefer not to use the default locations.

A Basic installation allows you to change the root directory for the Vibe software and the Vibe file repository.

**IMPORTANT:** If you want to organize the Vibe file repository so that some file types are not under the Vibe file repository root directory, you must perform an Advanced installation as your initial Vibe installation. You cannot move directories out of the Vibe file repository root directory after the initial installation has been performed. To perform an Advanced installation in order to organize the Vibe file repository to meet your needs, complete the planning steps for a Basic installation and complete the Basic Vibe Installation Summary Sheet, then follow the additional instructions in Section 8.2, "Distributing Different Data Types to Different Locations," on page 82.

# 3.3 Selecting a Java Development Kit

As listed in Section 2.1, "Vibe Server Requirements," on page 17, you need to install a Java Development Kit (JDK) before you install Kablink Vibe. You can use either the Sun JDK or the IBM JDK for the platform where you are installing Vibe (Linux or Windows).

If you want to use an SSL connection between your Kablink Vibe site and a WebDAV server, and if the WebDAV server has a self-signed certificate rather than a certificate provided by a certificate authority, you must use the Sun JDK. The existing Vibe functionality for handling self-signed certificates is not compatible with the way the IBM JDK handles self-signed certificates.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Java Development Kit, mark the JDK that you want to use with Vibe.

You must install the JDK on the Vibe server before you install the Vibe software. If you are not familiar with installing a JDK, see "Java Development Kit" in Appendix A, "Vibe System Requirements Assistance," on page 123 for instructions.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under Java Development Kit, specify the directory where you have installed the JDK.

The Vibe Installation program uses this path as if you had set the JAVA\_HOME environment variable. The path is stored for future reference in the installer.xml file so that you need to specify the path to the JDK only once.

# 3.4 Gathering Network Information for Your Vibe Site

When you perform a Basic installation, the Kablink Vibe installation program needs hostname and HTTP port information about the server where you are installing Vibe.

- Section 3.4.1, "Host Identification," on page 29
- Section 3.4.2, "Port Numbers," on page 29

## 3.4.1 Host Identification

When you install Vibe, the Vibe installation program needs to know the name of the server where you are installing the Vibe software. The default is localhost. Do not use the default.

For internal use, you can use the DNS hostname of the Vibe server. However, if you want your Vibe site to be accessible from the Internet, you must specify the fully qualified domain name for the Vibe server in order to allow external access.

## **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Network Information, specify the hostname or fully qualified domain name to use for the Vibe server.

## 3.4.2 Port Numbers

When you install Vibe, Tomcat is installed along with the Vibe software. Vibe uses Tomcat as a standalone Web server for delivering data to Vibe users in their Web browsers. For more information about Tomcat, see the Apache Tomcat Web site (http://tomcat.apache.org).

**IMPORTANT:** If the server where you want to install Vibe already has a Web server running on it, shut it down while you install and test Vibe. The instructions for a Basic Vibe installation assume that no other Web server is running on the Vibe server. If you want to maintain another Web server on the Vibe server, you are responsible for resolving any port conflicts that might arise.

On the command line, use the netstat command to see what ports are currently in use on the server where you plan to install Vibe:

Linux: netstat -tan

Windows: netstat -a -n -p tcp

Make sure that the port numbers that you specify during Vibe installation do not conflict with ports that are already in use on the server.

- "HTTP/HTTPS Ports" on page 30
- "HTTP/HTTPS Ports When You Use Novell Access Manager with Vibe OnPrem" on page 31
- "Shutdown Port" on page 32
- "AJP Port" on page 32

#### **HTTP/HTTPS Ports**

By default, standard Web servers such as Apache and Microsoft Internet Information Services (IIS) use port 80 for non-secure HTTP (Hypertext Transfer Protocol) connections and port 443 for secure HTTPS connections. HTTPS connections use SSL (Secure Sockets Layer) for added security. As a result, Web browsers default to port 80 when no port is specified in a non-secure HTTP URL and to port 443 when no port is specified in a secure HTTPS URL.

Tomcat defaults to port 8080 for non-secure HTTP connections and to port 8443 for secure HTTPS connections, so that it does not conflict with the standard Web server port numbers. If you configure Vibe with the Tomcat default port numbers, users must include the appropriate port number when providing the Vibe site URL. Typically, users prefer not to do this.

Unfortunately, the situation is not as simple as just configuring Vibe to use the default port numbers of 80 and 443. On Linux, non-root processes are not allowed access to port numbers lower than 1024 and you are counseled against running Vibe as root in Section 3.9.2, "Linux User ID for Vibe," on page 40. Also on Linux and Windows, the default Tomcat installation expects ports 8080 and 8443.

For a Basic installation, you can use the default port numbers as presented by the Vibe Installation program:

HTTP port: 80

Secure HTTP port: 443 Listen port: 8080

Secure listen port: 8443

**IMPORTANT:** If you are installing Vibe on Novell Open Enterprise Server 2, port 80 is already in use by iManager. To have Vibe listen on port 80 (which is the standard port), you need to change iManager to listen on a non-standard port, such as 81.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under *Network Information*, the default port numbers have been provided for you. You need to specify different port numbers only if you anticipate port conflicts with other software on the Vibe server. Resolving port conflicts is beyond the scope of this Vibe documentation.

After you install Vibe on Linux, you need to complete the steps in "Setting Up Port Forwarding" on page 53 so that users are not required to include the port number in the Vibe URL.

If you want to use secure HTTPS connections for your Vibe site, you must obtain signed certificate files as described in "Preparing for Secure HTTP Connections" in "Site Security" in the *Kablink Vibe OnPrem 3.1 Administration Guide* either before or after you install Vibe.

## HTTP/HTTPS Ports When You Use Novell Access Manager with Vibe OnPrem

If you are fronting Vibe with Novell Access Manager, ensure that you have configured the HTTP/ HTTPS ports as described in the following sections, depending on the operating system where Vibe is running.

Configuring Vibe in this way configures Novell Access Manager to access Vibe over port 80, which is the standard port.

- "Windows Port Configuration" on page 31
- "Linux Port Configuration" on page 31

## Windows Port Configuration

Use the following port configuration when Novell Access Manager is fronting your Vibe OnPrem system on Windows:

HTTP Port: 80

Secure HTTP Port: 443

Listen Port: 80

Secure Listen Port: 443

## **Linux Port Configuration**

Use the following port configuration when Novell Access Manager is fronting your Vibe OnPrem system on Linux:

HTTP Port: 80

Secure HTTP Port: 443

Listen Port: 8080

Secure Listen Port: 8443

With this suggested configuration on Linux, you also need to set up port forwarding, as described in Section 4.1.5, "Setting Up Port Forwarding," on page 53.

### **Shutdown Port**

By default, Vibe uses 8005 as its shutdown port. For an explanation of the shutdown port, see *Tomcat - Shutdown Port* (http://www.wellho.net/mouth/837\_Tomcat-Shutdown-port.html).

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Network Information*, specify the port you want Vibe to use as its shutdown port if the default of 8005 is already in use on the Vibe server.

#### **AJP Port**

By default, Vibe uses 8009 as its AJP port. For an explanation of the Apache JServ Protocol port, see *The AJP Connector* (http://tomcat.apache.org/tomcat-6.0-doc/config/ajp.html).

**IMPORTANT:** If you are installing Vibe on Novell Open Enterprise Server 2, port 8009 is already in use, so you need to select a different port, such as 8010.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Network Information*, specify the port you want Vibe to use as its AJP port if the default of 8009 is already in use on the Vibe server.

# 3.5 Planning the WebDAV Authentication Method

- Section 3.5.1, "Understanding WebDAV," on page 32
- Section 3.5.2, "Choosing the WebDAV Authentication Method," on page 33

# 3.5.1 Understanding WebDAV

WebDAV is a standard collaborative editing and file management protocol. Kablink Vibe relies on the WebDAV protocol for two key features:

- Edit-in-Place for using tools such as OpenOffice and Microsoft Office, as described in "Using WebDAV to Edit Individual Files" in the *Kablink Vibe OnPrem 3.1 Advanced User Guide*.
- Mapping Vibe folders as a Web folder on the client computer, which allows access to Vibe files
  from a WebDAV-compliant file navigation tool such as Windows Explorer or Nautilus, as
  described in "Creating a Mapped Drive to the Vibe Folder" in the Kablink Vibe OnPrem 3.1
  Advanced User Guide.

**IMPORTANT:** When Vibe users are running Windows 7 as the client operating system, various issues can be introduced because of WebDAV limitations in Windows 7. If your Vibe users are using the Windows 7 operating system, see "Configuring Vibe to Support WebDAV on Windows 7" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

# 3.5.2 Choosing the WebDAV Authentication Method

The WebDAV authentication method determines how user credentials are passed from Vibe to the WebDAV server. Vibe 3 and later supports three types of WebDAV authentication methods:

- "Choosing Basic Authentication" on page 33
- "Choosing Digest Authentication" on page 33

## **Choosing Basic Authentication**

Basic authentication uses a one-way encryption algorithm known as asymmetric encryption. Select this type of authentication when you plan to use Novell Access Manager or Internet Information Services (IIS) to authenticate users.

For more information about encryption algorithms, see Section 3.6.5, "Database Encryption Algorithm," on page 36.

## **Choosing Digest Authentication**

Digest authentication uses a reversible two-way encryption algorithm known as symmetric encryption. Select this type of authentication when client users are using Windows 7 as their operating system and Microsoft Office as their text editor.

For more information about encryption algorithms, see Section 3.6.5, "Database Encryption Algorithm," on page 36.

# 3.6 Planning the Vibe Database

Kablink Vibe database disk space requirements are relatively modest. Files that are imported into Vibe are saved in the Vibe file repository, as described in Section 3.2.4, "Vibe Installation Locations," on page 28.

The Vibe database is primarily used for storing the following information:

- Structural information about workspaces, folders, and entries (for example, their location in the workspace tree)
- Identification information about workspaces, folders, and entries (for example, titles, descriptions, dates of creation/modification, and users associated with creation/modification)
- User profile information (for example, full name, phone number, and e-mail address)

You or your database administrator must make the following decisions about the Vibe database:

- Section 3.6.1, "Database Type," on page 34
- Section 3.6.2, "Database Setup Method," on page 34
- Section 3.6.3, "Database Location," on page 34
- Section 3.6.4, "Database Credentials," on page 35
- Section 3.6.5, "Database Encryption Algorithm," on page 36

# 3.6.1 Database Type

By default, Vibe uses open source MySQL as its database on Linux and on Windows. On Linux, Vibe also supports Oracle. On Windows, Vibe also supports Microsoft SQL Server and Oracle.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Database Type, mark the type of database that you want to use with Vibe.

Make sure that a supported version of the database server, as listed in Section 2.1, "Vibe Server Requirements," on page 17, is installed and running before you install Vibe.

# 3.6.2 Database Setup Method

If you plan to use a MySQL database or a Microsoft SQL database, the Vibe installation program can automatically set up the database for you. This is the easiest way to get started.

If you plan to use an Oracle database, you must have your database administrator set up the database for you. Instructions for your database administrator are provided in Section 12.4, "Creating an Oracle Database," on page 98.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Database Setup Method*, mark whether you want the Vibe Installation program to automatically set up a MySQL or Microsoft SQL database, or whether you need your database administrator to manually set up an Oracle database before you install Vibe.

## 3.6.3 Database Location

When you have the Vibe Installation program create the database for you, the database is created on the same server where you install the Vibe software. This is the preferable location for your Basic installation. The default database name is sitescape, a reference to the company that previously developed the Vibe software.

Database Server	Default Linux Location	Default Windows Location
MySQL	/var/lib/mysql	<pre>c:\Documents and Settings\All Users\</pre>
Microsoft SQL	N/A	<pre>c:\Program Files\Microsoft SQL Server\</pre>
Oracle	N/A	N/A

You can have your database administrator create a database on a remote server later, after you have successfully tested your Basic installation. See Chapter 12, "Creating the Vibe Database on a Remote Server," on page 95.

If you need to have your database administrator create an Oracle database, you must decide before installation whether you want the database on the Vibe server or on a remote server. See Section 12.4, "Creating an Oracle Database," on page 98.

Vibe knows where to find its database from the JDBC (Java Database Connectivity) URL that you provide during installation. For a database that is local to the Vibe software, the default JDBC URL that provides localhost as the hostname of the Vibe server is appropriate. If the database is on a remote server, the JDBC URL must provide the hostname of the remote database server.

The JDBC URL also includes the port number on which Vibe can communicate with the database server. The default port number depends on the database server you are using:

Database Server	Default Port Number
MySQL	3306
Microsoft SQL	1433
Oracle	1521

Use this port number unless it is already in use by another process on the database server.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under JDBC URL, specify the appropriate hostname for the database server (localhost or the hostname of a remote server) and the port number it will use to communicate with Vibe.

## 3.6.4 Database Credentials

When you have the Vibe Installation program create the database for you, it defaults to the following administrator usernames for the database server:

Database	Default Administrative Username	
MySQL root		
	<b>IMPORTANT:</b> The MySQL root username is not the same as the Linux root user on a Linux server.	
Microsoft SQL	L sa (system administrator)	
Oracle	(no default) For an Oracle database, your database administrator establishes the administrator username and password for the database server.	

For an Oracle database, your database administrator establishes the administrator username and password for the database server.

Check with your database administrator to see if the default administrator username is still in use for your database server, and obtain the administrator password for the database server before you run the Vibe Installation program.

### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Database Credentials*, specify the administrator username and password for the database server so that Vibe can access its database.

# 3.6.5 Database Encryption Algorithm

Different encryption algorithms provide differing encryption strength. The supported algorithms for encrypting the Vibe database password are listed below, in order from least strength to most strength.

- MD5
- SHA

This is the default option when you use Basic Authentication for WebDAV authentication, as described in Section 3.5, "Planning the WebDAV Authentication Method," on page 32

- SHA-256
- PBEWithMD5AndDES

This is the only available option when you select Digest Authentication for WebDAV authentication, as described in Section 3.5, "Planning the WebDAV Authentication Method," on page 32

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under *Database Encryption Algorithm*, mark the encryption algorithm you want to use for Vibe passwords.

# 3.7 Gathering Outbound E-Mail Information

Your Kablink Vibe site can be configured to send outbound e-mail through an existing e-mail system. E-mail from the Vibe site is useful for the following activities:

- Vibe users can subscribe to e-mail notifications, so that they automatically receive a message whenever content of interest changes. For more information, see "Subscribing to a Folder or Entry" in "Getting Informed" in the *Kablink Vibe OnPrem 3.1 User Guide*.
- From the Vibe site, users can send e-mail messages to individual users or to teams. For more
  information, see "Sending E-Mail from within Vibe" in "Connecting With Your Co-Workers"
  in the Kablink Vibe OnPrem 3.1 User Guide.
- If your e-mail client is iCal-enabled, appointments created in a Vibe Calendar folder can be sent to your e-mail client for posting in your e-mail client Calendar.

In order for your Vibe site to communicate with your e-mail system, you need to gather the following information about your e-mail system.

- Section 3.7.1, "Outbound E-Mail Protocol," on page 37
- Section 3.7.2, "Outbound E-Mail Host," on page 37
- Section 3.7.3, "Outbound E-Mail Authentication," on page 37
- Section 3.7.4, "Outbound E-Mail Send Restriction," on page 38

After installation, outbound e-mail can be disabled and enabled again on the Vibe site, as described in "Configuring E-Mail Integration" in "Site Setup" in the *Kablink Vibe OnPrem 3.1 Administration Guide*. However, you must configure outbound e-mail in the Vibe installation program.

#### 3.7.1 Outbound E-Mail Protocol

E-mail systems communicate by using SMTP (Simple Mail Transfer Protocol). You need to determine whether the e-mail system that you want your Vibe site to communicate with is using SMTP or SMTPS (secure SMTP).

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under Outbound E-Mail Protocol, mark SMTP or SMTPS to match the e-mail system that you want Vibe to communicate with.

If the e-mail system requires SMTPS, see "Securing E-Mail Transfer" in "Site Security" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

#### 3.7.2 Outbound E-Mail Host

In order to send messages to your e-mail system, Vibe needs to know the hostname of your SMTP mail server.

The default SMTP port of 25 is typically appropriate, unless the SMTP mail server requires port 465 or 587 for SMTPS connections.

When the Vibe site sends e-mail notifications for scheduled events, the messages are time-stamped according to the time zone you specify here during installation. This setting allows you to use a time zone for e-mail notifications that is different from the time zone where the server is located. The time zone list is grouped first by continent or region, optionally by country or state, and lastly by city. Some common selections for United States time zones are:

Time Zone	Continent/City
Pacific Time	America/Los Angeles
Mountain Time	America/Denver
Central Time	America/Chicago
Eastern Time	America/New York

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Outbound E-Mail Host*, specify the name of the mail host, the SMTP port number it uses, and the time zone for the time stamp you want on scheduled event notifications.

#### 3.7.3 Outbound E-Mail Authentication

Many SMTP mail hosts require a valid e-mail address before they establish the SMTP connection. Some e-mail systems can construct a valid e-mail address if you specify only a valid username; other e-mail systems require that you specify the full e-mail address for successful authentication. You should provide a username (e-mail address) to ensure a successful connection. E-mail notifications from the Vibe system are sent using this e-mail address in the *From* field.

Some e-mail systems also require a password. Some do not. If authentication is required, you should also provide a password.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Outbound E-Mail Authentication*, indicate whether or not authentication is required for the Vibe site to communicate with your e-mail system. If it is, specify the username or e-mail address, and if necessary, the password for the e-mail account.

#### 3.7.4 Outbound E-Mail Send Restriction

By default, the Vibe site allows Vibe users to send messages to all Vibe users by using the All Users group on the Vibe site. On a very large Vibe site, this generates a very large number of e-mail messages. If desired, you can prevent messages from being sent to the All Users group.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Allow Sending E-Mail to All Users, mark whether or not you want users to be able to send messages to the All Users group.

## 3.8 Enabling Inbound E-Mail

You can configure your Kablink Vibe site so that users can post comments by e-mailing them to the folder where they want to post the comment. In order to receive e-mail postings, folders must be properly configured, as described in "Enabling Folders to Receive Entries through E-Mail" in "Managing Folders" in the *Kablink Vibe OnPrem 3.1 User Guide*. Also, users must know the e-mail address of the folder where they want to post their comment.

- Section 3.8.1, "Internal Mail Host for Inbound E-Mail," on page 38
- Section 3.8.2, "Inbound E-Mail Port Number," on page 39
- Section 3.8.3, "Inbound E-Mail IP Address," on page 39
- Section 3.8.4, "Inbound E-Mail Security," on page 39

After installation, inbound e-mail can be disabled and enabled again on the Vibe site, as described in "Disabling/Enabling Inbound E-Mail Postings" in "Site Setup" in the *Kablink Vibe OnPrem 3.1 Administration Guide*. However, you must configure inbound e-mail in the Vibe installation program.

#### 3.8.1 Internal Mail Host for Inbound E-Mail

Inbound e-mail is disabled by default. When you enable it, the Vibe site starts an internal SMTP mail host to receive incoming messages and post them to the folders associated with the e-mail addresses to which the messages are addressed. By default, the internal SMTP mail host uses port 2525, so that it does not conflict with another mail host that might be running on the Vibe server.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under Inbound E-Mail Configuration, mark whether or not you want users to be able to post to the Vibe site from their e-mail clients.

#### 3.8.2 Inbound E-Mail Port Number

Selecting the port number for the Vibe internal SMTP mail host presents the same issue that needs to be dealt with for the HTTP port numbers, as described in "HTTP/HTTPS Ports" on page 30. You might want to configure the Vibe internal SMTP mail host to use the standard SMTP port of 25. How you handle the issue depends on whether you are installing on Linux or on Windows.

Linux: Keep the default port number (2525) in the Vibe Installation program, then complete the

steps in Section 4.1.5, "Setting Up Port Forwarding," on page 53 so that requests incoming

on port 25 are forwarded to port 2525.

Windows: Specify port 25 for incoming e-mail in the Vibe Installation program.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Inbound E-Mail Configuration, specify the port number for the Vibe internal SMTP host to listen on.

#### 3.8.3 Inbound E-Mail IP Address

If you want to install Vibe on a server where an SMTP mail host is already running, you can do so if the server has multiple IP addresses. The existing SMTP mail host can use port 25 on one IP address and Vibe can use port 25 on another IP address. During installation, you need to specify an IP address only if the server has multiple IP addresses and you want Vibe to bind to a specific IP address rather than all of them.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under *Inbound E-Mail Configuration*, specify the IP address for the Vibe internal SMTP host to listen on, if you are installing Vibe on a server with multiple IP addresses and you want Vibe to bind to just one of them.

## 3.8.4 Inbound E-Mail Security

You can choose whether the Vibe internal mail host uses TLS (Transport Layer Security) when it communicates with other SMTP mail hosts. In order for TLS to function properly, you must have a certificate on the Vibe server, as described in "Securing E-Mail Transfer" in "Site Security" in the *Kablink Vibe OnPrem 3.1 Administration Guide*. When an SMTP mail host queries the Vibe mail host, the Vibe mail host communicates its ability or inability to handle TLS. The other SMTP mail host then communicates appropriately, taking into account how the Vibe internal mail host is configured. The default is to use TLS, because this provides more secure communication between mail hosts.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Inbound E-Mail Configuration, mark whether or not you want the Vibe server to announce that it can use TLS.

You can install Vibe with *Announce TLS* selected, and then set up the certificate afterwards. However, if you select *Announce TLS*, inbound e-mail does not work until the certificate is available on the Vibe server.

## 3.9 Planning Site Security

- Section 3.9.1, "Vibe Site Administrator Password," on page 40
- Section 3.9.2, "Linux User ID for Vibe," on page 40

#### 3.9.1 Vibe Site Administrator Password

When you first log in to the Kablink Vibe site, you use admin as the Vibe administrator username and admin as the password. You should immediately change the password to one of your own choosing.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Vibe Administrator Credentials, specify the password that you want to use whenever you log in as the Vibe site administrator.

#### 3.9.2 Linux User ID for Vibe

For optimum security, Vibe should not run as the Linux root user. For example, if an intruder manages to assume the identity of the Vibe program, the intruder gains all the privileges of the commandeered process. If the process is running with root user privileges, the intruder has root access to your system. If the process is running as a user with minimal privileges, the intruder has only restricted access to your system. Therefore, your system is more secure if the Vibe program does not run as root. For example, you might want to create a user named vibeadmin for the Vibe program to run as. Linux users require a full name and a password.

In addition to creating a Linux user for the Vibe program to run as, you can also create a Linux group for that user to belong to. This enables the Vibe program to create directories and files with consistent ownership and permissions. For example, you might want to create a group named vibeadmin for the vibeadmin user to belong to. Groups do not require passwords.

As an alternative to creating a custom Linux username and group for Vibe, you can use the existing wwwrun username and the www group. This account is typically used to start Web server processes.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Linux Username and Group*, specify the non-root Linux username and group name to use for running the Vibe program. If you are creating a new Linux user, specify its full name and password.

**IMPORTANT:** The non-root Linux username and group must exist before you start the Vibe Installation program. Instructions for creating the username and group are provided in Section 4.1.1, "Performing Pre-Installation Tasks on Linux," on page 49.

## 3.10 Gathering Directory Services Information

Unless you are planning a very small Kablink Vibe site, the most efficient way to create Vibe users is to synchronize initial user information from your network directory service (Novell eDirectory, Microsoft Active Directory, or other LDAP directory service) after you have installed the Vibe software. Over time, you can continue to synchronize user information from the LDAP directory to your Vibe site.

**IMPORTANT:** The following limitations apply when synchronizing user information to Vibe from an LDAP directory service:

- Vibe performs one-way synchronization from the LDAP directory to your Vibe site. If you
  change user information on the Vibe site, the changes are not synchronized back to your LDAP
  directory.
- Vibe does not support multi-value attributes. If your LDAP directory contains multi-value attributes, Vibe recognizes only the first attribute. For example, if your LDAP directory contains multiple e-mail addresses for a given user, only the first e-mail address is synchronized to Vibe.
- Section 3.10.1, "LDAP Directory Service," on page 41
- Section 3.10.2, "LDAP Connections," on page 41
- Section 3.10.3, "LDAP Synchronization Options," on page 44

## 3.10.1 LDAP Directory Service

You can synchronize initial Vibe user information from any LDAP directory. This guide provides instructions for synchronizing user information from eDirectory and Active Directory. If you are using another LDAP directory, use the instructions as guidelines for the tasks you need to perform.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *LDAP Directory Service*, mark the LDAP directory service from which you want to synchronize Vibe user information.

#### 3.10.2 LDAP Connections

You can configure one or more LDAP connections. Each connection requires the following configuration information:

- "LDAP Server" on page 41
- "LDAP Attribute to Identify a User or Group" on page 42
- "LDAP Attribute for Vibe Name" on page 43
- "User and Group Object Locations" on page 43

#### **LDAP Server**

In order to synchronize initial user information, Vibe needs to access an LDAP server where your directory service is running. You need to provide the hostname of the server, using a URL with the following format:

ldap://hostname

If the LDAP server requires a secure SSL connection, use the following format:

ldaps://hostname

If the LDAP server is configured with a default port number (389 for non-secure connections or 636 for secure SSL connections), you do not need to include the port number in the URL. If the LDAP server uses a different port number, use the following format for the LDAP URL:

```
ldap://hostname:port_number
ldaps://hostname:port_number
```

In addition, Vibe needs the username and password of a user on the LDAP server who has sufficient rights to access the user information stored there. You need to provide the username, along with its context in your LDAP directory tree, in the format expected by your directory service.

Directory Service	Format for the Username	
eDirectory	cn=username,ou=organizational_unit,o=organization	
Active Directory	cn=username,ou=organizational_unit,dc=domain_component	

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *LDAP Server URL*, specify the LDAP URL of the server, a fully qualified username with sufficient rights to read the user information, and the password for that user.

If the LDAP server requires a secure SSL connection, additional setup is required. You must complete the steps in "Securing LDAP Synchronization" in "Site Security" in the *Kablink Vibe OnPrem 3.1 Administration Guide* to import the root certificate for your LDAP directory into the Java keystore on the Vibe server before you configure Vibe for LDAP synchronization.

#### LDAP Attribute to Identify a User or Group

The LDAP attribute that uniquely identifies a user or group helps facilitate renaming and moving Vibe users and groups in the LDAP directory. If this attribute is not set, and you rename or move a user in the LDAP directory, Vibe assumes that the new name (or the new location of the same name) represents a new user, not a modified user, and creates a new Vibe user.

For example, suppose you have a Vibe user with a given name of William Jones. If William changes his name to Bill, and you make that change in the LDAP directory, Vibe creates a new user named Bill Jones.

To ensure that Vibe modifies the existing user instead of creating a new user when the user is renamed or moved in the LDAP directory, map each user to a binary attribute, such as the GUID or objectGUID attribute in the LDAP directory. This attribute always has a unique value that does not change when you rename or move a user in the LDAP directory. If you want to map users to a different attribute, you must ensure that the attribute that you use is a binary attribute. For example, the cn attribute cannot be used because it is not a binary attribute.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under LDAP that uniquely identifies a user or group, mark GUID or objectGUID, depending on whether your LDAP directory is eDirectory or Active Directory.

#### **LDAP Attribute for Vibe Name**

LDAP directories differ in the LDAP attribute used to identify a User object. eDirectory and Active Directory both use the cn (common name) attribute. Other LDAP directories might use the uid (unique ID) attribute. Vibe needs to know which attribute to look for in order to find User objects.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under LDAP attribute used for Vibe name, mark cn or uid, based on the convention used by your LDAP directory service for User objects. Ensure that users have a value for the attribute that you mark.

Vibe calls the User object attribute screenName, so when you configure LDAP synchronization, you map screenName to either on or uid.

As needed, other LDAP attributes can be used for logging in to the Vibe site, as long as the attribute is unique for each User object. For example, the mail LDAP attribute on User objects could be used to enable Vibe users to log in to the Vibe site by using their e-mail addresses.

**NOTE:** Because the login name becomes part of the user's workspace URL, the at sign (@) in the email address is replaced with an underscore (\_) in the workspace URL because @ is not a valid character in a URL.

#### **User and Group Object Locations**

Vibe can find and synchronize initial user information from User objects located in one or more containers in the LDAP directory tree. A container under which User objects are located is called a base DN (distinguished name). The format you use to specify a base DN depends on your directory service.

Directory Service	Format for the User Container
eDirectory	ou=organizational_unit,o=organization
Active Directory	ou=organizational_unit,dc=domain_component

To identify potential Vibe users, Vibe by default filters on the following LDAP directory object attributes:

- ◆ Person
- orgPerson
- ◆ inetOrgPerson

If you want to create Vibe groups based on information in your LDAP directory, Vibe filters on the following LDAP directory object attributes:

- group
- groupOfNames
- groupOfUniqueNames

You can add attributes to the user or group filter list if necessary. You can use the following operators in the filter:

- | OR (the default)
- & AND
- ! NOT

You can choose whether you want Vibe to search for users (and optionally, groups) in containers underneath the base DN (that is, in subtrees).

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under LDAP User Context, specify a base DN, along with object attributes if any, and mark whether you want subtrees searched for Vibe users.

Under LDAP Group Context, specify a base DN, along with object attributes if any, and mark whether you want subtrees searched for Vibe groups.

You might find it convenient to create a group that consists of all the users that you want to set up in Vibe, regardless of where they are located in your LDAP directory. After you create the group, you can use the following filter to search for User objects that have the specified group membership attribute:

(groupMembership=cn=group name,ou=organizational unit,o=organization)

**IMPORTANT:** Be sure to include the parentheses in your filter.

## 3.10.3 LDAP Synchronization Options

The following synchronization options apply to all LDAP configurations within the same Vibe zone:

- "Synchronization Schedule" on page 44
- "User Synchronization Options" on page 45
- "Group Synchronization Options" on page 46

**NOTE:** Because the synchronization options apply to all LDAP configurations within the same zone, you cannot have customized synchronization settings for each LDAP configuration. However, the Novell Vibe site can have multiple zones. A Kablink Vibe site has one zone.

#### Synchronization Schedule

When you enable LDAP synchronization, you can set up a schedule for when it is convenient for synchronization to occur. In planning the schedule, take into account how often your LDAP directory user (and, optionally, group) information changes and the server resources required to perform the synchronization for the number of users (and, optionally, groups) that you have.

You can choose to have LDAP synchronization performed every day, or you can select specific days of the week when you want it performed (for example, on Monday, Wednesday, and Friday). You can choose to have it performed once a day at a specified time (for example, at 2:00 a.m.), or you can set a time interval, so that it is performed multiple times each day (for example, every four hours). The smallest time interval you can set is .25 hours (every 15 minutes).

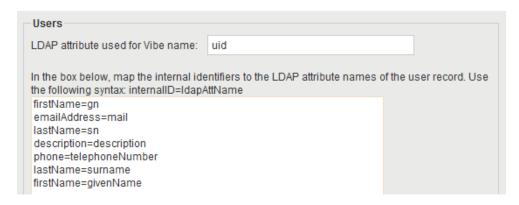
#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under Synchronization Schedule, record the schedule for when you want LDAP synchronization to take place.

#### **User Synchronization Options**

The following options are available for enabling and configuring user synchronization from your LDAP directory to your Vibe site:

• Synchronize User Profiles: Select this option to synchronize user information whenever the LDAP directory information changes after initial Vibe site setup. The attributes that are synchronized are the attributes that are found in the map box in the *Users* section on the Configure LDAP Synchronization page.



By default, Vibe synchronizes the following attributes from the LDAP directory:

- First name
- Last name
- Phone number
- E-mail address
- Description

For information about how to add additional attributes to be automatically synchronized, see "Synchronizing Additional LDAP Attributes" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

- Register LDAP User Profiles Automatically: Select this option to automatically add LDAP
  users to the Vibe site. However, workspaces are not created until users log in to the Vibe site for
  the first time.
- Delete Users That Are Not in LDAP: Select this option to delete users that exist on the Vibe site but do not exist in your LDAP directory. Use this option under the following conditions:
  - You have deleted users from your LDAP directory and you want the LDAP synchronization process to delete them from Vibe as well.

- In addition to the users synchronized from LDAP, you create some Vibe users manually, as described in Section 5.2, "Creating a User," on page 66, and you want the LDAP synchronization process to delete the manually created users.
- In addition to the users synchronized from LDAP, you allow Guest users to self-register, as described in "Allowing Guest Access to Your Vibe Site" in "Site Setup" in the Kablink Vibe OnPrem 3.1 Administration Guide, and you want the LDAP synchronization process to delete the self-registered users.
- When Deleting Users, Delete Associated User Workspaces and Content: Select this option to remove obsolete information along with the user accounts.
- Time Zone for New Users Select this option to set the time zone for user accounts that are synchronized from the LDAP directory into your Vibe site. The time zone list is grouped first by continent or region, optionally by country or state, and lastly by city. Some common selections for United States time zones are:

Time Zone	Continent/City
Pacific Time	America/Los Angeles
Mountain Time	America/Denver
Central Time	America/Chicago
Eastern Time	America/New York

• Locale for New Users: Select this option to set the locale for user accounts that are synchronized from the LDAP directory into your Vibe site. The locale list is sorted alphabetically by language.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under LDAP User Options, mark the synchronization options you want to use.

#### **Group Synchronization Options**

The following options are available for enabling and configuring user and group synchronization from your LDAP directory to your Vibe site:

- **Synchronize Group Profiles:** Select this option to synchronize group information, such as the group description, to the Vibe site whenever this information changes in LDAP.
- Register LDAP Group Profiles Automatically: Select this option to automatically add LDAP groups to the Vibe site.
- Synchronize Group Membership: Select this option so that the Vibe group includes the same users (and possibly groups) as the group in your LDAP directory. If you do not select this option, and you make changes to group membership in the LDAP directory, the changes are not reflected on your Vibe site.

- Delete Local Groups That Are Not in LDAP: Select this option to delete groups that exist on the Vibe site but do not exist in your LDAP directory. Use this option under the following conditions:
  - You have deleted groups from your LDAP directory and you want the LDAP synchronization process to delete them from Vibe as well.
  - In addition to the groups synchronized from LDAP, you create some Vibe groups manually, as described in "Creating Groups of Users" in "Site Setup" in the *Kablink Vibe OnPrem 3.1 Administration Guide*, and you want the LDAP synchronization process to delete the manually created groups.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under LDAP Group Options, mark the synchronization options you want to use.

## 3.11 Accommodating Multiple Languages

The Kablink Vibe installation program runs in English only. When you install the Vibe software, you can choose to have the primary language of the Vibe site to be any of the following languages:

- Chinese-Simplified
- Chinese Traditional
- Danish
- Dutch
- English
- French
- German
- Hungarian
- Italian
- Japanese
- Polish
- Portuguese
- Russian
- Spanish
- Swedish

Some languages have an additional distinction by locale (the country where the language is spoken).



The language you select also establishes the default interface language and locale for creating new workspaces.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Default Locale, mark the default language and specify the default country for your Vibe site.

Additional language customization can be done after installation, as described in "Managing a Multiple-Language Vibe Site" in "Site Setup" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

# Installing and Setting Up a Basic Vibe Site

4

Follow the setup instructions for the platform where you are installing Kablink Vibe OnPrem:

- Section 4.1, "Linux: Installing and Setting Up a Basic Vibe Site," on page 49
- Section 4.2, "Windows: Installing and Setting Up a Basic Vibe Site," on page 58

## 4.1 Linux: Installing and Setting Up a Basic Vibe Site

You should already have reviewed Chapter 3, "Planning a Basic Vibe Installation," on page 25 and filled out the Basic Vibe Installation Summary Sheet. The following sections step you through the process of installing and starting Kablink Vibe on Linux.

- Section 4.1.1, "Performing Pre-Installation Tasks on Linux," on page 49
- Section 4.1.2, "Running the Linux Vibe Installation Program," on page 51
- Section 4.1.3, "Installing Missing Libraries," on page 53
- Section 4.1.4, "Configuring Vibe to Start Automatically on Reboot," on page 53
- Section 4.1.5, "Setting Up Port Forwarding," on page 53
- Section 4.1.6, "Configuring the Document Converter on Linux," on page 55
- Section 4.1.7, "Starting Vibe on Linux," on page 56
- Section 4.1.8, "Checking the Status of the Vibe Server," on page 57
- Section 4.1.9, "Restarting Vibe," on page 57
- Section 4.1.10, "Stopping Vibe," on page 57
- Section 4.1.11, "Uninstalling Vibe," on page 58

## 4.1.1 Performing Pre-Installation Tasks on Linux

- 1 Make sure that the Linux server where you plan to install Vibe meets the system requirements listed in Section 2.1, "Vibe Server Requirements," on page 17.
- **2** In a terminal window, become root by entering su and the root password.
- **3** Set the Linux open file limit to meet the needs of the Vibe software:
  - **3a** Open the /etc/security/limits.conf file in an ASCII text editor.
  - **3b** Add the following lines to the bottom of the list, following the format of the example lines:
    - \* hard nofile 65535
      \* soft nofile 4096
  - **3c** Save the file, then exit the text editor.

- **4** Perform the following conditional tasks if necessary:
  - "Stopping and Disabling an Existing Web Server" on page 50
  - "Creating a Vibe User and Group" on page 50

#### Stopping and Disabling an Existing Web Server

If a Web server is currently running on the Vibe server, stop it, and preferably disable it.

For example, to stop the Apache Web server and its associated instance of Tomcat:

1 Enter the following commands to stop Apache and Tomcat:

```
/etc/init.d/tomcat5 stop
/etc/init.d/apache2 stop
```

**2** Enter the following commands to make sure that Apache and Tomcat do not start again when you reboot the server:

```
chkconfig --del apache2
chkconfig --del tomcat5
```

#### Creating a Vibe User and Group

If the user and group that you want to use for Vibe, as described in Section 3.9.2, "Linux User ID for Vibe," on page 40 do not exist yet, create them. It is easier if you create the group first.

- 1 Create the Linux group that you want to own the Vibe software and data store directories:
  - **1a** In YaST, click *Security and Users > User and Group Management* to display the User and Group Administration page.
  - **1b** Click *Groups*, then click *Add*.
  - **1c** Specify the group name, then click *Accept* or *OK*. The group does not need a password.
- **2** Create the Linux user that you want Vibe to run as:
  - **2a** Click *Users*, then click *Add*.
  - **2b** On the *User Data* tab, specify the user's full name, username, and password, then select *Disable User Login*.
    - Like any Linux system user, the Vibe Linux user does not need to manually log in. The Vibe Linux user does not need a password, either, but YaST requires you to provide one.
  - **2c** Click the *Details* tab.
  - **2d** In the *Login Shell* drop-down list, select /*bin/false*, because this user does not need to manually log in.
  - **2e** In the *Default Group* drop-down list, select the Linux group that you created in Step 1.
  - **2f** In the *Groups* list, select the Linux group that you created in Step 1.
  - **2g** Click *Accept* or *OK*.
- 3 Exit YaST.

## 4.1.2 Running the Linux Vibe Installation Program

When you run the Vibe installation program for the first time, you typically want to use the GUI interface. However, if you are installing Vibe on a server where the X Window System is not available, a text-based installation program is also available. After you are familiar with the Vibe installation process, you can use a silent installation to automate the process.

- "Using the GUI Installation Program" on page 51
- "Using the Text-Based Installation Program" on page 52
- "Performing a Silent Installation" on page 53

#### **Using the GUI Installation Program**

- 1 In a terminal window, enter su to become the root user, then enter the root password.

  You need root permissions in order to install the Vibe software, but you should not run the Vibe software as root.
- **2** Change to the directory where you downloaded and extracted the Vibe software.
- **3** Enter the following command to start the Vibe installation program:
  - ./installer-teaming.linux
- **4** Accept the License Agreement, then click *Next*.



**5** Click *Next* to accept the default of *New installation*.



- **6** Click *Next* to accept the default of *Basic*.
- **7** Use the information that you have gathered on the Basic Vibe Installation Summary Sheet to provide the information that the Vibe installation program prompts you for:

Installation Locations
Default Locale for Kablink Vibe
User ID for Kablink Vibe
Network Information

```
Database Selection
Database Type
JDBC URL
Credentials
Setup
Encryption Algorithm
Java JDK Location
Outbound E-Mail Configuration
Protocol
Host, Port, and Time Zone
Username, Password, and Authentication
Allow Sending E-Mail to All Users
Inbound E-Mail Configuration
```

The installation program stores the information it gathers in the installer.xml file in the same directory where you started the installation program.

- **8** After you have provided all the requested information, click *Install* to begin the Vibe installation.
- **9** When the installation is completed, click *Finish* to exit the Vibe installation program. Information about the installation process is written to the installer.log file in the same directory where you ran the Installation program. If a problem arises during the installation, the installer.log file provides information that can help you resolve the problem.
- 10 Continue with Section 4.1.4, "Configuring Vibe to Start Automatically on Reboot," on page 53.

#### Using the Text-Based Installation Program

If you try to start the GUI Vibe installation program in an environment where the X Windows System is not running, the text-based Vibe Installation program starts.

If you want to use the text-based installation program in an environment where the GUI starts by default, use the following command in the directory where the installation program is located:

```
./installer-teaming.linux --text
```

The text-based installation program gathers the same configuration information as the GUI installation program does. This information is stored in the installer.xml file in the directory where you run the installation program.

The installation program does not write the information it gathers into the installer.xml file until you exit the installation program, and you cannot go back when you use the text-based installation program. Therefore, when you use the text-based installation program, you should plan your installation carefully in advance, using the Basic Vibe Installation Summary Sheet or the Advanced Vibe Installation Summary Sheet. If you make a mistake during the installation, continue to the end of the installation process and exit the installation program normally, so that all information is saved. Then run the text-based installation program again. Your previous information is supplied as defaults and you can change the information as needed.

#### **Performing a Silent Installation**

If your Vibe system expands beyond one server, you might need to repeatedly install the same Vibe components. A silent installation makes this an easy process. Edit an existing installer.xml file so that it has the hostname of the server where you want to perform the silent installation and copy it to that server. In the directory where the installation program is located, use the appropriate command to run the Vibe installation program, depending on the action that you want the silent installation to perform:

```
./installer-teaming.linux --silent --install
./installer-teaming.linux --silent --upgrade
./installer-teaming.linux --silent --reconfigure
```

The Installation program obtains all the information it needs from the installer.xml file and completes the installation without user interaction.

## 4.1.3 Installing Missing Libraries

After you install Vibe on SLES 10 SP3, you should check for and install any missing libraries.

1 Change to the following directory:
 /opt/novell/teaming/stellent-converter/linux/x86

**2** Run the exporter program.

The errors about missing input and output files are expected, and you can safely ignore them.

- **3** Look for errors about missing libraries.
- **4** If there are library errors, install any libraries that are missing.

  On 64-bit Linux systems, a common missing library is libstdc++33-32bit.

## 4.1.4 Configuring Vibe to Start Automatically on Reboot

You can configure Vibe to start automatically each time you reboot the Linux server.

**1** As the Linux root user, enter the following command:

```
chkconfig --add teaming
```

**2** To verify that automatic startup is turned on, enter the following command:

```
chkconfig teaming
```

## 4.1.5 Setting Up Port Forwarding

In order to make Vibe available on the default HTTP/HTTPS ports of 80 and 443, you must set up port forwarding in order to forward the browser default ports (80 and 443) to the Vibe server ports (8080 and 8443). In addition, you must set up port forwarding if you want to forward the default SMTP mail host port (25) to the default Vibe internal mail host port (2525).

You can set up port forwarding in one of two ways, depending on whether or not you are using the Vibe server as a firewall.

- "Using the SuSEfirewall2 File" on page 54
- "Using iptables Commands" on page 54

#### Using the SuSEfirewall2 File

To enable port forwarding on a SUSE Linux server that uses SuSEfirewall2:

**1** As the Linux root user, open the following file:

```
/etc/sysconfig/SuSEfirewall2
```

**2** Find the following line:

```
FW REDIRECT=""
```

**3** Between the quotation marks, copy and insert the following string:

```
0/0, ip_address, tcp, 80, 8080 0/0, ip_address, tcp, 443, 8443 0/0, ip_address, tcp, 25, 2525
```

- **4** Replace *ip* address with the IP address of the Vibe server.
- **5** Save the SuSEfirewall2 file, then exit the text editor.
- **6** Use the following command to restart the firewall:

```
/sbin/SuSEfirewall2 start
```

**7** Use the following command to verify that the default browser ports (80 and 443) have been forwarded to the Vibe server ports (8080 and 8443) and that the default SMTP mail host port (25) has been forwarded to the Vibe internal mail host:

```
iptables-save | grep REDIRECT
```

Now, users do not need to include a port number in the Vibe site URL.

#### **Using iptables Commands**

To use iptables commands to enable port forwarding on any type of Linux server:

- **1** As the Linux root user, change to the /etc/init.d directory.
- **2** In a text editor, create a new file for a set of iptables commands, for example:

```
gedit vibe-iptables
```

**3** Copy and paste the following lines into the vibe-iptables file:

```
iptables -t nat -A OUTPUT -d localhost -p tcp --dport 80
-j REDIRECT --to-ports 8080

iptables -t nat -A OUTPUT -d hostname -p tcp --dport 80
-j REDIRECT --to-ports 8080

iptables -t nat -A PREROUTING -d hostname -p tcp --dport 80
-j REDIRECT --to-ports 8080

iptables -t nat -A OUTPUT -d localhost -p tcp --dport 443
-j REDIRECT --to-ports 8443

iptables -t nat -A OUTPUT -d hostname -p tcp --dport 443
-j REDIRECT --to-ports 8443

iptables -t nat -A PREROUTING -d hostname -p tcp --dport 443
-j REDIRECT --to-ports 8443

iptables -t nat -A OUTPUT -d localhost -p tcp --dport 25
```

```
-j REDIRECT --to-ports 2525

iptables -t nat -A OUTPUT -d hostname -p tcp --dport 25
-j REDIRECT --to-ports 2525

iptables -t nat -A PREROUTING -d hostname -p tcp --dport 25
-j REDIRECT --to-ports 2525
```

In this example, the lines are wrapped for readability. When you paste them into the text editor, if the lines are still wrapped, remove the hard returns so that you have six iptables commands, each on its own line.

- **4** Replace hostname with the hostname or IP address of the Vibe server.
- **5** Save the vibe-iptables file, then exit the text editor.
- **6** Use the following command to make the file executable:

```
chmod +x vibe-iptables
```

- **7** Use the following command to immediately execute the commands in the vibe-iptables file: chkconfig vibe-iptables on
- **8** Use the following command to add vibe-iptables to future server boot initialization: chkconfig --add vibe-iptables
- **9** Use the following command to verify that the default browser ports (80 and 443) have been forwarded to the Vibe server ports (8080 and 8443) and that the default SMTP mail host port (25) has been forwarded to the Vibe internal mail host:

```
iptables-save | grep REDIRECT
```

Now, users do not need to include a port number in the Vibe site URL.

## 4.1.6 Configuring the Document Converter on Linux

Kablink Vibe uses OpenOffice.org converters to prepare documents for indexing by the Lucene Index Server. The OpenOffice.org converters are also used on the Vibe site for converting documents to HTML for viewing. OpenOffice.org must be continuously running as a daemon in order for it to perform its document conversion function.

- "Installing OpenOffice.org as the Document Converter for Vibe" on page 55
- "Running OpenOffice.org as the Document Converter for Vibe" on page 56
- "Excluding File Types from Being Indexed and Displayed" on page 56

#### Installing OpenOffice.org as the Document Converter for Vibe

- 1 Download the OpenOffice.org software for Linux from OpenOffice.org (http://www.openoffice.org) to a convenient temporary location on the Vibe server.
- **2** Extract the contents of the downloaded file, then change to the subdirectory into which the software files have been extracted.
- **3** Run the OpenOffice.org Installation program.
  - ./setup
- **4** Click *Next* to begin the installation.
- **5** Select *Custom*, then click *Next*.

- **6** Click the blue down-arrow to select all optional components for installation, then click *Next*. This includes the OpenOffice.org Java Runtime Environment (JRE) and other components required for document conversion.
- **7** Click *Install Now*.

The OpenOffice.org software is installed to:

```
/opt/openoffice.org3
```

- 8 Click Finish.
- **9** Manually start OpenOffice.org as the user who will also start the OpenOffice daemon. This starts OpenOffice.org with its full user interface, including a wizard that gathers personal information.
- **10** Provide the requested personal information, then exit OpenOffice.org.
- 11 Continue with Running OpenOffice.org as the Document Converter for Vibe.

#### Running OpenOffice.org as the Document Converter for Vibe

OpenOffice.org must be running as a daemon process on the Vibe server in order for indexing and viewing to take place for Vibe users.

1 Use the following command to start the OpenOffice.org converters:

IMPORTANT: Execute the command as the same Linux user that runs Vibe.

**2** Use the following command to verify that OpenOffice.org is running as a daemon:

```
ps -eaf | grep soffice
```

- **3** Test HTML conversion on your Vibe site by viewing a document that has been added as a File Entry in your Vibe site.
- **4** Configure the Vibe server so that OpenOffice.org is always running as a daemon whenever Vibe is running.

#### **Excluding File Types from Being Indexed and Displayed**

After Vibe is installed and running, if OpenOffice is crashing with certain file types during either of the conversion processes, you can restrict the problematic file types from being converted.

For more information, see "Understanding and Configuring Document Conversions with OpenOffice" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

## 4.1.7 Starting Vibe on Linux

The Vibe Installation program created a teaming startup script in the /etc/init.d directory.

- 1 In a terminal window, become root by entering su and the root password.
- **2** Enter the following command to start Vibe:

```
/etc/init.d/teaming start
```

You must execute the teaming script as root, but the script runs Vibe as the user you selected in Section 3.9.2, "Linux User ID for Vibe," on page 40 and specified during installation.

You should see output similar to the following example:

```
Using CATALINA_BASE: /opt/teaming/apache-tomcat
Using CATALINA_HOME: /opt/teaming/apache-tomcat
Using CATALINA_TEMPDIR: /opt/teaming/apache-tomcat/temp
Using JRE HOME: /use/java/jdk1.6.0 02/jre
```

- **3** To make sure that Vibe is ready for work:
  - **3a** Change to the following directory:

```
/opt/novell/teaming/apache-tomcat/logs
```

**3b** Enter the following command to display the end of the Tomcat log:

```
tail --f catalina.out
```

At the end of the log file listing, you should see:

```
INFO: Server startup in nnnn ms
```

**4** Press Ctrl+C when you finish viewing the catalina.out file.

## 4.1.8 Checking the Status of the Vibe Server

You can see if Vibe is running by checking for its process ID (PID).

1 In a terminal window, enter the following command:

```
ps -eaf | grep teaming
```

You should see the Vibe PID number, along with a listing of configuration settings.

## 4.1.9 Restarting Vibe

You need to restart Vibe whenever you use the Vibe installation program to make configuration changes, as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

**1** As root in a terminal window, enter the following command:

```
/etc/init.d/teaming restart
```

You should see the same output as when you originally started Vibe.

## 4.1.10 Stopping Vibe

**1** As root in a terminal window, enter the following command:

```
/etc/init.d/teaming stop
```

You should see the same output as when you started Vibe.

**2** To verify that Vibe has stopped, check for its PID number:

```
ps -eaf | grep teaming
```

The Vibe PID number, along with a listing of configuration settings, should no longer be displayed.

### 4.1.11 Uninstalling Vibe

If you move the Vibe site to a different server, you can delete the Vibe files from the original server to reclaim disk space. The default Vibe file locations are:

Vibe Software /opt/novell/teaming

Vibe File Repository and /var/opt/novell/teaming

Lucene Index

MySQL Database /var/lib/mysql

For a complete list of your Vibe files, check the installer.xml file in the directory where you originally ran the Vibe installation program.

## 4.2 Windows: Installing and Setting Up a Basic Vibe Site

You should already have reviewed Chapter 3, "Planning a Basic Vibe Installation," on page 25 and filled out the Basic Vibe Installation Summary Sheet. The following sections step you through the process of installing and starting Kablink Vibe on Windows.

- Section 4.2.1, "Performing Pre-Installation Tasks on Windows," on page 58
- Section 4.2.2, "Running the Windows Vibe Installation Program," on page 59
- Section 4.2.3, "Running Vibe as a Windows Service," on page 61
- Section 4.2.4, "Running Vibe as a Windows Application," on page 62
- Section 4.2.5, "Configuring the Document Converter on Windows," on page 63
- Section 4.2.6, "Uninstalling Vibe," on page 64

## 4.2.1 Performing Pre-Installation Tasks on Windows

- "Verifying System Requirements" on page 58
- "Stopping an Existing Web Server" on page 58
- "Setting Environment Variables" on page 59
- "Copying Executable and Library Files" on page 59

#### **Verifying System Requirements**

Make sure that the Windows server where you plan to install Vibe meets the system requirements listed in Section 2.1, "Vibe Server Requirements," on page 17.

#### Stopping an Existing Web Server

If a Web server is currently running on the Vibe server, stop it, and preferably disable it.

For example, to stop and disable the Internet Information Services (IIS) Web server:

- **1** On the Windows desktop, click *Start* > *Administrative Tools* > *Services*.
- 2 Right-click World Wide Web Publishing Service, then click Properties.

- **3** In the *Startup type* drop-down list, select *Disabled*.
- **4** Click *Stop*, then click *OK*.

#### Setting Environment Variables

Make sure that the JAVA\_HOME environment variable is set to the path where you installed the JDK and that the Windows PATH environment variable includes the path to your database server.

- **1** Right-click My Computer, then click Properties.
- **2** On the *Advanced* tab, click *Environment Variables*.
- **3** Set the JAVA\_HOME environment variable:
  - **3a** In the System variables box, click New.
  - **3b** In the *Variable name* field, specify JAVA\_HOME.
  - **3c** In the *Variable value* field, specify the path where you installed the JDK.
  - **3d** Click *OK* to add the JAVA\_HOME environment variable to the list of system variables, then click *OK* again to save the setting and return to the *Advanced* tab.
- **4** Check the PATH environment variable:
  - **4a** On the *Advanced* tab, click *Environment Variables*.
  - **4b** In the *System variables* list, locate the PATH environment variable.
  - **4c** If the path includes your database server software directory, click *Cancel*.

or

If the path does not include your database server software directory, add the directory, then click *OK*.

#### **Copying Executable and Library Files**

During the initial installation of Vibe, Vibe fails to copy certain .exe and .dll files from the apache-tomcat/bin/windows/architecture directory into the apache-tomcat/bin/windows directory. You must manually perform this process.

**1** Navigate to the following directory on the Vibe server:

```
apache-tomcat/bin/windows/architecture
```

For example, if you are running a 64-bit server, navigate to the apache-tomcat/bin/windows/x64 directory.

- **2** Copy the .exe and .dll files in the directory.
- **3** Paste the .exe and .dll files that you copied in Step 2 into the following directory on the Vibe server:

apache-tomcat/bin/windows

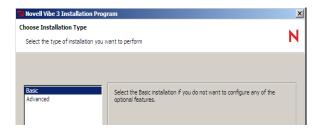
## 4.2.2 Running the Windows Vibe Installation Program

- 1 Log in to the Windows server as a user with Administrator rights.
- **2** In Windows Explorer, browse to the directory where you downloaded and extracted the Vibe software.
- **3** Double-click the installer-teaming. exe file to start the Vibe installation program.

**4** Accept the License Agreement, then click *Next*.



**5** Click *Next* to accept the default of *New installation*.



- **6** Click *Next* to accept the default of *Basic*.
- **7** Use the information that you have gathered on the Basic Vibe Installation Summary Sheet to provide the information that the Vibe installation program prompts you for:

**Installation Locations** 

Default Locale for Kablink Vibe

**Network Information** 

**Database Selection** 

Database Type

JDBC URL

Credentials

Setup

**Encryption Algorithm** 

Java JDK Location

**Outbound E-Mail Configuration** 

Protocol

Host, Port, and Time Zone

Username, Password, and Authentication

Allow Sending E-Mail to All Users

**Inbound E-Mail Configuration** 

The installation program stores the information it gathers in the installer.xml file in the same directory where you started the installation program.

- **8** After you have provided all the requested information, click *Install* to begin the Vibe installation.
- **9** When the installation is completed, click *Finish* to exit the Vibe installation program.

Information about the installation process is written to the installer.log file in the same directory where you ran the Installation program. If a problem arises during the installation, the installer.log file provides information that can help you resolve the problem.

- 10 Continue with one of the following sections, depending on how you want to run the Vibe software:
  - Section 4.2.3, "Running Vibe as a Windows Service," on page 61
  - Section 4.2.4, "Running Vibe as a Windows Application," on page 62

## 4.2.3 Running Vibe as a Windows Service

- "Configuring Vibe as a Windows Service" on page 61
- "Starting Vibe as a Windows Service" on page 61
- "Configuring the Vibe Service to Start Automatically on Reboot" on page 62
- "Restarting the Vibe Service" on page 62
- "Stopping the Vibe Service" on page 62

#### **Configuring Vibe as a Windows Service**

The Vibe installation program created a service.bat file for configuring Vibe to run as a Windows service.

- **1** In a Command Prompt window, change to the following directory:
  - c:\Program Files\Novell\Teaming\apache-tomcat\bin\windows
- **2** In the windows directory, copy the files from the appropriate subdirectory.
  - The following subdirectories exist: x86, x64, ia64.
  - If you are unsure which subdirectory is appropriate for your server, use the readme.txt file located in the c:\Program Files\Novell\Teaming\apache-tomcat\bin\windows directory as a reference.
- **3** Paste the files into the c:\Program Files\Novell\Teaming\apache-tomcat\bin directory.
- **4** (Conditional) If Vibe is running on a supported 64-bit Windows operating system and you have a 64-bit JDK, complete the following steps:
  - **4a** Change to the c:\Program Files\Novell\Teaming\apachetomcat\bin\windows\x64 directory.
  - **4b** Copy any 64-bit .exe files and paste them into the c:\Program Files\Novell\Teaming\apache-tomcat\bin directory, overwriting any existing files.
- **5** Use the following command to configure Vibe as a Windows service:

```
service.bat install Teaming
```

This creates a service named Apache Tomcat Teaming.

#### Starting Vibe as a Windows Service

- 1 On the Windows desktop, click Start > Administrative Tools > Services.
- 2 Right-click Apache Tomcat Teaming, then click Start.

#### Configuring the Vibe Service to Start Automatically on Reboot

When you run Vibe as a Windows service, you can configure Vibe to start automatically each time you reboot the Windows server.

- **1** On the Windows desktop, click *Start > Administrative Tools > Services*.
- **2** Right-click *Apache Tomcat Teaming*, then click *Properties*.
- **3** In the *Startup type* drop-down list, select *Automatic*, then click *OK*.

#### **Restarting the Vibe Service**

You need to restart Vibe whenever you use the Vibe installation program to make configuration changes, as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

- **1** On the Windows desktop, click *Start > Administrative Tools > Services*.
- 2 Right-click Apache Tomcat Teaming, then click Restart.
- **3** Close the Services window.

#### Stopping the Vibe Service

- **1** On the Windows desktop, click *Start > Administrative Tools > Services*.
- **2** Right-click *Apache Tomcat Teaming*, then click *Stop*.
- **3** Close the Services window.

## 4.2.4 Running Vibe as a Windows Application

- "Starting Vibe as an Application" on page 62
- "Stopping Vibe as an Application" on page 62

#### Starting Vibe as an Application

The Vibe installation program created a startup.bat file for starting Vibe.

- **1** In a Command Prompt window, change to the following directory:
- c:\Program Files\Novell\Teaming\apache-tomcat\bin
  - **2** Run the startup.bat file to start Vibe as an application.

#### Stopping Vibe as an Application

- **1** In a Command Prompt window, change to the following directory:
- c:\Program Files\Novell\Teaming\apache-tomcat\bin
  - **2** Run the shutdown.bat file to stop the Vibe application.

## 4.2.5 Configuring the Document Converter on Windows

Kablink Vibe uses OpenOffice.org converters to prepare documents for indexing by the Lucene Index Server. The OpenOffice.org converters are also used on the Vibe site for converting documents to HTML for viewing.

- "Installing OpenOffice.org as the Document Converter for Vibe" on page 63
- "Configuring OpenOffice.org for Proper HTML Conversion" on page 63
- "Running OpenOffice.org as the Document Converter for Vibe" on page 64
- "Excluding File Types from Being Indexed and Displayed" on page 64

#### Installing OpenOffice.org as the Document Converter for Vibe

- 1 Download the OpenOffice.org software for Windows from OpenOffice.org (http://www.openoffice.org) to a convenient temporary location on the Vibe server.
- **2** Run the downloaded executable, then click *Next* to unpack the OpenOffice.org software.
- **3** Browse to or select the destination directory for the unpacked files, then click *Unpack*. This starts the OpenOffice.org Installation program.
- **4** Click *Next* to begin the installation.
- **5** Provide your customer information, then click *Next*.
- **6** Select *Custom*, then click *Next*.
- **7** In the *Optional Components* drop-down list, select *This feature, and all subfeatures, will be installed on local hard drive*, then click *Next*.
  - This includes the OpenOffice.org Java Runtime Environment (JRE) and other components required for document conversion.
- 8 Click Install.
  - The OpenOffice.org software is installed to:
  - c:\Program Files\OpenOffice.org 3
- 9 Click Finish.
- **10** Continue with Configuring OpenOffice.org for Proper HTML Conversion.

#### Configuring OpenOffice.org for Proper HTML Conversion

- **1** Start OpenOffice.org from the desktop.
- **2** Proceed through the Welcome pages.
- **3** Click *Tools > Options*.
- **4** Expand *Load/Save*, then click *HTML Compatibility*.
- **5** In the *Character Set* field, select *Unicode (UTF-8)*.
- **6** Click *OK* to save the character set setting, then exit OpenOffice.org.
- **7** Continue with Running OpenOffice.org as the Document Converter for Vibe.

#### Running OpenOffice.org as the Document Converter for Vibe

OpenOffice.org must be running as a background process on the Vibe server in order for indexing and viewing to take place for Vibe users.

**1** Edit the properties of the OpenOffice.org desktop icon so that the *Target* field includes the following additional options:

**2** Double-click the OpenOffice.org desktop icon to start OpenOffice.org as a background process.

**IMPORTANT:** Run OpenOffice.org as a user that has full rights to the Vibe file repository.

- **3** Use Windows Task Manager to observe that the soffice.exe and soffice.bin processes are running.
- **4** Test HTML conversion on your Vibe site by viewing a document that has been added as a File Entry in your Vibe site.
- **5** Configure the Vibe server so that OpenOffice.org is always running as a background process whenever Vibe is running.

#### **Excluding File Types from Being Indexed and Displayed**

After Vibe is installed and running, if OpenOffice is crashing with certain file types during either of the conversion processes, you can restrict the problematic file types from being converted.

For more information, see "Understanding and Configuring Document Conversions with OpenOffice" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

## 4.2.6 Uninstalling Vibe

If you move the Vibe site to a different server, you can delete the Vibe files from the original server to reclaim disk space. The default Vibe file locations are:

```
Vibe Software c:\Program Files\Novell\Teaming
```

Vibe File Repository and c:\Novell\Teaming

Lucene Index

MS SQL Database c:\Program Files\Microsoft SQL Server\MSSQL\Data

For a complete list of your Vibe files, check the installer.xml file in the directory where you originally ran the Vibe Installation program.

After you have installed Kablink Vibe OnPrem and made sure that Vibe starts successfully, you are ready to access your Vibe site from your Web browser and add users.

- Section 5.1, "Accessing Your Basic Vibe Site as the Site Administrator," on page 65
- Section 5.2, "Creating a User," on page 66
- Section 5.3, "Adding Vibe Users from Your LDAP Directory," on page 67

## 5.1 Accessing Your Basic Vibe Site as the Site Administrator

1 In your Web browser, specify one of the following URLs, depending on whether or not you are using a secure SSL connection:

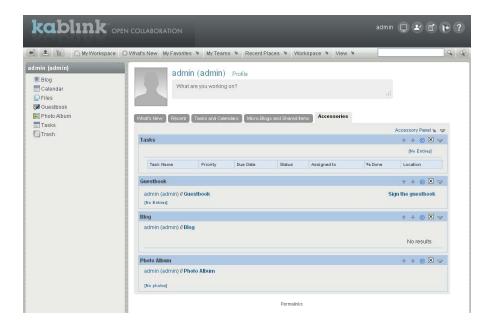
```
http://vibe_server
https://vibe_server
```

Replace *vibe\_server* with the DNS hostname or fully qualified domain name of the Kablink Vibe server. If you have configured the HTTP ports correctly, you do not need to include the port number in the Vibe URL.



- **2** Log in using admin as the login name and admin as the password.
- **3** Click *My Workspace* in the Action toolbar.

  The Vibe administrator's personal workspace is displayed.



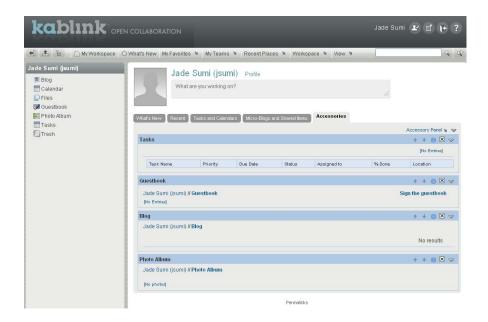
- **4** Change the default administrator password to a secure password:
  - 4a Click Profile, then in the upper right corner of the Profile page, click Edit.
  - **4b** Specify your own password for the Vibe administrator in the *New Password* and *Confirm New Password* fields.
  - **4c** (Optional) Provide useful information in the additional fields of the Vibe administrator's profile.
  - **4d** Click *OK* to return to the administrator's profile.

## 5.2 Creating a User

For testing purposes or for a very small Kablink Vibe site, you can create each Vibe user manually.

- 1 Log in as the Vibe administrator.
- **2** Click the *Administration* icon in the upper right corner of the page.
- **3** In the *Management* section, click *User Accounts*.
- **4** In the *Add Account* tab, provide the user's information, then click *OK*.
- **5** Specify at least the user ID, password, first name, and last name.
- **6** (Optional) Provide useful information in the additional fields for the new user.
- 7 Click *OK*, then click *Close* to return to the administrator's workspace.

  If you click the *Workspace tree* icon , then expand *Personal Workspaces*, you see that the workspace for the user you just created does not exist yet. Workspaces are not created for users until the users log in for the first time.
- **8** Click the *Log Out* icon to log out as the Vibe administrator.
- **9** On the login page, provide the username and password for the Vibe user you just created, then click *OK* to log in to the Vibe site.
- **10** Click *My Workspace* in the Action toolbar to see the workspace for the new user.



As each new user logs into the Vibe site, a personal workspace is created.

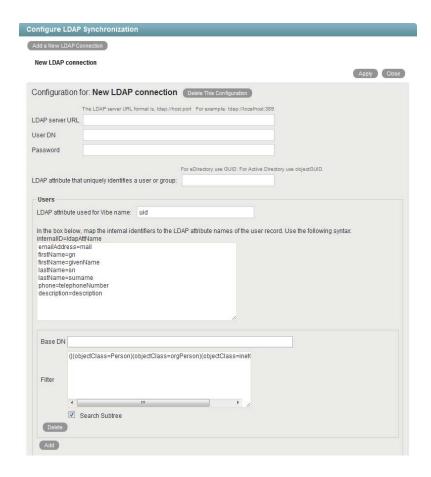
11 Click the *Log Out* icon **t** to leave the new user's personal workspace.

## 5.3 Adding Vibe Users from Your LDAP Directory

Unless you have a very small Kablink Vibe site, you create Vibe users by synchronizing their user information from an LDAP directory service such as Novell eDirectory or Microsoft Active Directory.

**IMPORTANT:** For a large Vibe site with thousands of users, the synchronization process can consume substantial server resources and can take some time to complete. Perform the initial import from the LDAP directory at a time when this processing does not conflict with other activities on the server.

- 1 If the LDAP server requires a secure SSL connection in order to access the directory service, create a public key certificate for the Vibe server.
  - For instructions, see "Securing LDAP Synchronization" in "Site Security" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.
- **2** In a Web browser, log in to the Vibe site as the Vibe administrator, then click the *Administration* icon ...
- **3** Under *System*, click *Configure LDAP*, then click *Add a New LDAP Connection*.
- **4** Fill in the following fields based on the information you gathered on the Basic Vibe Installation Summary Sheet:



LDAP Server URL

User DN

**Password** 

LDAP attribute that uniquely identifies a user or group

LDAP attribute used for Vibe name

Base DN

**5** Set the following synchronization options based on the information you gathered on the Basic Vibe Installation Summary Sheet:



**Enable Schedule** 

Synchronize User Profiles

Register LDAP User Profiles Automatically

- **6** Click *Apply* to save the information and settings.
- **7** Select *Run Immediately*, then click *Apply* to test LDAP synchronization.

A status box displays the users and groups that have been added, modified, or deleted on the Vibe site.

**IMPORTANT:** If you used an LDAP user attribute of uid and some users were not synchronized from the LDAP directory to Vibe, repeat the procedure and use cn instead of uid.

The usernames admin and guest are reserved for use by Vibe. If your LDAP directory includes users with these names, LDAP information for these reserved usernames is not imported into the Vibe site.

**8** Click *Close* to close the status box, then click *Close* to close the Configure LDAP Synchronization page.

Vibe performs one-way synchronization from the LDAP directory to your Vibe site. If you change user information on the Vibe site, the changes are not synchronized back to your LDAP directory.

**IMPORTANT:** At this point, users could log into the Vibe site by using their eDirectory or Active Directory usernames and passwords. However, you should not invite users to visit the Vibe site until after you have finished setting up the Vibe site, as described in "Site Setup" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

## **Setting Up Vibe**

After you have installed and started Kablink Vibe OnPrem, there are still administrative tasks to perform before your Vibe site is ready for users to log in and use Vibe efficiently. Refer to the following sections of the Kablink Vibe OnPrem 3.1 Administration Guide as you finish setting up your Vibe site.

- "Setting Up Initial Workspaces"
- "Planning and Controlling User Access to Workspaces and Folders"
- "Setting Up User Access to the Vibe Site"
- "Setting Up Site-Wide Customizations"
- "Setting Up User Access to the Vibe Site"
- "Configuring Vibe to Support WebDAV on Windows 7"
- "Configuring E-Mail Integration"
- "Configuring Weekends and Holidays"
- "Configuring Real-Time Communication Tools"
- "Enabling Custom JSPs to Be Used on Your Vibe Site"
- "Enabling Custom JAR Files to Be Used on Your Vibe Site"
- "Adding Software Extensions to Your Vibe Site"
- "Using Remote Applications on Your Vibe Site"
- "Managing a Multiple-Language Vibe Site"

## **Basic Vibe Installation Summary Sheet**

Installation Program Field	Value for Your Vibe Site	Explanation
Vibe Server Platform:		See Section 3.2.1, "Vibe Server
<ul> <li>Windows</li> </ul>		Platform," on page 26.
◆ Linux		
Vibe Server Architecture:		See Section 3.2.2, "Vibe Server
• 32-bit		Architecture," on page 26.
◆ 64-bit		
Vibe Server Memory:		See Section 3.2.3, "Vibe Server
◆ 4 GB		Memory," on page 27.
◆ 8 GB		
◆ More		
Java Development Kit (JDK):		See Section 3.3, "Selecting a
• Sun JDK		Java Development Kit," on page 28.
• IBM JDK		
Vibe Installation Locations:		See Section 3.2.4, "Vibe
◆ Software		Installation Locations," on page 28.
Linux default:		
/opt/novell/teaming		
Windows default:		
<pre>c:\Program Files\Novell\Teaming</pre>		
File repository     File repository		
Linux default:		
/var/opt/novell/teaming		
Windows default:		
c:\Novell\Teaming		

Installation Program Field	Value for Your Vibe Site	Explanation
Vibe Site Locale:		See Section 3.11,
Language:		"Accommodating Multiple Languages," on page 47.
<ul> <li>Chinese-Simplified</li> </ul>		
Chinese Traditional		
◆ Danish		
• Dutch		
• English		
◆ French		
German		
<ul> <li>Hungarian</li> </ul>		
◆ Japanese		
◆ Polish		
<ul> <li>Portuguese</li> </ul>		
◆ Russian		
◆ Spanish		
<ul> <li>Swedish</li> </ul>		
Country:		
User ID for Kablink Vibe (Linux only):		See Section 3.9.2, "Linux User ID for Vibe," on page 40.
• User ID:		
Full name:		
Password:		
• Group ID:		
Network Information:	Section 3.4, "Gathering	
Host:		Information for Your Vibe Site," on page 29.
HTTP port: 80		011 page 25.
Secure HTTP port: 443		
Listen port: 8080		
Secure listen port: 8443		
Shutdown port:		
◆ AJP port:		
Database Type:		See Section 3.6.1, "Database
◆ MySQL		Type," on page 34.
Microsoft SQL		
.morocon o QL		

Installation Program Field	Value for Your Vibe Site	Explanation
JDBC URL:		See Section 3.6.3, "Database
Hostname:		Location," on page 34.
• Port number:		
Database Credentials:		See Section 3.6.4, "Database
Username:		Credentials," on page 35.
Password:		
Database Setup Method:		See Section 3.6.2, "Database
<ul> <li>During installation (automatically by the Vibe Installation program)</li> </ul>		Setup Method," on page 34.
<ul> <li>Before installation (manually by your database administrator)</li> </ul>		
Database Encryption Algorithm:		See Section 3.6.5, "Database
◆ SHA		Encryption Algorithm," on page 36.
• SHA-256		. •
◆ MD5		
◆ PBEWithMD5AndDES		
Java JDK Location:		See Section 3.3, "Selecting a Java Development Kit," on
<ul><li>Java home:</li></ul>		page 28.
<ul><li>JVM heap size:</li></ul>		
Outbound E-Mail Protocol:		See Section 3.7.1, "Outbound
• SMTP		E-Mail Protocol," on page 37.
◆ SMTPS		
Outbound E-Mail Host:		See Section 3.7.2, "Outbound
Hostname:		E-Mail Host," on page 37.
SMTP port:		
Default: 25		
<ul> <li>◆ Time zone</li> </ul>		
<ul><li>Continent/region:</li></ul>		
<ul><li>Country/state:</li></ul>		
• City:		
Outbound E-Mail Authentication:		See Section 3.7.3, "Outbound
Username:		E-Mail Authentication," on page 37.
• Password:		page or.
<ul> <li>Authentication required? No / Yes</li> </ul>		
Allow Sending E-Mail to All Users		See Section 3.7.4, "Outbound
Yes / No		E-Mail Send Restriction," on page 38.

Installation Program Field	Value for Your Vibe Site	Explanation
Inbound E-Mail Configuration		See Section 3.8, "Enabling
• Enable: No / Yes	Inbound E-Mail," on	
<ul> <li>SMTP bind address:</li> </ul>		
SMTP port:		
<ul> <li>Announce TLS: Yes / No</li> </ul>		
Vibe Site Password:		See Section 3.9.1, "Vibe Site
Administrator username: admin		Administrator Password," on page 40.
<ul> <li>Default password: admin</li> </ul>		. •
<ul><li>Your password:</li></ul>		
LDAP Directory Service:		See Section 3.10, "Gathering
Novell eDirectory		Directory Services Information,' on page 40.
<ul> <li>Microsoft Active Directory</li> </ul>		
<ul> <li>Other LDAP directory</li> </ul>		
LDAP Server:		See "LDAP Server" on page 41
◆ LDAP server URL:		
• User DN:		
<ul><li>Password:</li></ul>		
LDAP Attribute to Identify User:		See "LDAP Attribute to Identify
◆ GUID		a User or Group" on page 42.
screenName=GUID		
• object GUID		
screenName=objectGUID		
LDAP Attribute for Vibe Name:		See "LDAP Attribute for Vibe Name" on page 43.
♦ cn		Name on page 45.
screenName=cn		
◆ uid		
screenName=uid		
LDAP User Search Context:		See "User and Group Object
Base DNs:		Locations" on page 43.
<ul> <li>Additional filter attributes:</li> </ul>		
• Search subtree: Yes / No		
LDAP Group Search Context:		See "User and Group Object
Base DNs:		Locations" on page 43.
<ul> <li>Additional filter attributes:</li> </ul>		
Search Subtree: Yes / No		

Installation Program Field	Value for Your Vibe Site	Explanation
LDAP Synchronization Schedule:		See "Synchronization Schedule" on page 44.
• Days		on page 44.
<ul><li>Every day</li></ul>		
<ul><li>Weekly</li></ul>		
Sun Mon Tue Wed Thu Fri Sat		
◆ Hours:		
• At time:		
<ul> <li>Repeat every nn hours</li> </ul>		
LDAP User Options:	·	
<ul> <li>Synchronize user profiles</li> </ul>		Options" on page 45.
<ul> <li>Register LDAP user profiles automatically</li> </ul>		
<ul> <li>Delete users that are not in LDAP</li> </ul>		
<ul> <li>When deleting a user, delete associated user workspaces and content</li> </ul>		
<ul> <li>Time zone for new users</li> </ul>		
LDAP Group Options:		See "User Synchronization
Synchronize group profiles		Options" on page 45.
<ul> <li>Register LDAP group profiles automatically</li> </ul>		
<ul> <li>Synchronize group membership</li> </ul>		
Delete local groups that are not in LDAP		

# Advanced Installation and Reconfiguration



- Chapter 8, "Planning an Advanced Vibe Installation," on page 81
- Chapter 9, "Performing an Advanced Vibe Installation," on page 87
- Chapter 10, "Setting Configuration Options after Installation," on page 89
- Chapter 11, "Advanced Vibe Installation Summary Sheet," on page 91

## Planning an Advanced Vibe Installation

The Advanced installation provides additional options for you to customize Kablink Vibe OnPrem.

- Section 8.1, "What Is an Advanced Installation?," on page 81
- Section 8.2, "Distributing Different Data Types to Different Locations," on page 82
- Section 8.3, "Using Advanced Network Information Settings," on page 83
- Section 8.4, "Configuring Web Services," on page 84
- Section 8.5, "Changing Your Lucene Index Server Configuration," on page 84
- Section 8.6, "Managing RSS Feeds," on page 86

As you proceed with planning, you can use the Advanced Vibe Installation Summary Sheet to record your decisions about the options you want to use.

### 8.1 What Is an Advanced Installation?

In addition to the Basic installation options described in Section 3.1, "What Is a Basic Vibe Installation?," on page 25, the installation program for KablinkVibe provides several advanced installation and configuration alternatives. You can implement the advanced options after performing a Basic installation, or you can have the installation program present all the options together.

Compared to a Basic installation, an Advanced installation offers the following additional options:

- Changing the session timeout
- Specifying a keystore file
- Specifying different directories for different types of data
- Disabling and enabling four different Web services
- Changing the configuration of the Lucene Index Server
- Configuring a remote Lucene Index Server or a group of high-availability Lucene nodes
- Reconfiguring how RSS feeds are retained or disabling them entirely
- Installing Vibe in a clustered environment

**IMPORTANT:** The following Vibe configurations require that you perform an Advanced installation as your initial installation of the Vibe software:

Setting up the Vibe file repository so that some types of files are located outside the Vibe file repository root directory. See Section 8.2, "Distributing Different Data Types to Different Locations," on page 82 for Advanced installation instructions. You cannot move subdirectories within the Vibe file repository after they have been created.

If you want to implement an Advanced installation option, you should perform a Basic installation first, in a test environment, before performing the Advanced installation to set up your permanent Vibe site.

## 8.2 Distributing Different Data Types to Different Locations

The default location for the Kablink Vibe file repository varies by platform:

Linux: /var/opt/novell/teaming

Windows: c:\Novell\Teaming

Under the main Vibe file repository root directory are subdirectories for various kinds of data files that are not stored in the Vibe database (MySQL, Microsoft SQL Server, or Oracle). You can use an Advanced installation to store Vibe data files in various locations.

The data files not stored in the Vibe database are divided into several functional areas:

• Simple file repository: A large consumer of disk space.

All attachment files are stored in the file repository. All versions of files are also stored here.

• **Jackrabbit repository:** (Optional) Takes only a fraction of the space consumed by the file repository.

By default, Vibe stores all data files individually on disk, in the file repository. If you prefer to store data files in the database itself, you can use Apache Jackrabbit with Vibe. See the Apache Jackrabbit Web site (http://jackrabbit.apache.org) for setup instructions.

• Extensions repository: Disk space consumption depends on the number of extensions you add to your Vibe site.

An extension is a software program that you can incorporate into your Vibe site in order to enhance (extend) Vibe capabilities. Adblock Plus is an example of a Firefox browser extension that filters out advertisements. You or a Java developer can create custom extensions for your Vibe site. For more information about creating and using Vibe extensions, see the *Kablink Vibe OnPrem 3.1 Developer Guide*.

• Cache store: Consumes less disk space than the file repository.

Information derived from the attachments, such as HTML renderings, scaled images, and word lists for indexing are stored in the cache store.

Lucene index: Takes only a fraction of the space consumed by the file repository.

The Lucene index contains only pointers to the actual data stored in the file repository. The index enables the Lucene search engine to perform very fast searches through large quantities of data.

The directories for the various types of data can be on the Vibe server or on a remote server. Data access is fastest if the data is local, but depending on the size of your Vibe site and the types of data you store, the Vibe server might not be the best place to store all the Vibe data. If you want to store any of the data types on a remote server, you must ensure that the remote location of the data appears local to the Vibe server and that it is always available with read/write access.

Linux: Mount the file repository to the Vibe server.

Windows: Map a drive from the Vibe server to the file repository.

Linux and Place the file repository on a SAN (storage area network) with read/write access. This Windows alternative provides the most reliable remote location for the Vibe file repository.

#### ADVANCED VIBE INSTALLATION SUMMARY SHEET

Under Data Locations, specify the directories where you want to store the various types of Vibe data.

Complete the planning process for additional Advanced installation features as needed, then perform the Advanced installation as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

## 8.3 Using Advanced Network Information Settings

- Section 8.3.1, "Changing the Vibe Session Timeout," on page 83
- Section 8.3.2, "Providing a Secure Keystore File," on page 83

### 8.3.1 Changing the Vibe Session Timeout

By default, if a user's Kablink Vibe session is idle for four hours (240 minutes), Vibe logs the idle user out. For increased convenience to Vibe users, you can make the session timeout interval longer. For increased security for your Vibe site, you can make the session timeout shorter.

### ADVANCED VIBE INSTALLATION SUMMARY SHEET

Under Network Information, specify the session timeout interval (in minutes) for your Vibe site.

Complete the planning process for additional Advanced installation features as needed, then perform the Advanced installation as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

### 8.3.2 Providing a Secure Keystore File

For your convenience, the Vibe software includes a self-signed public certificate that enables you to specify secure HTTP and listen ports during installation. This certificate is stored in the .keystore file in the following directory:

Linux: /opt/novell/teaming/apache-tomcat/conf

Windows: c:\Program Files\Novell\Teaming\apache-tomcat\conf

To ensure secure SSL connections for your Vibe site, you should replace the self-signed public certificate with a public certificate issued by a valid certificate authority.

#### ADVANCED VIBE INSTALLATION SUMMARY SHEET

Under Network Information, specify the name and location of the public certificate.

If you do not already have a permanent public certificate for your Vibe server, see "Securing HTTP Browser Connections" in "Site Security" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

Complete the planning process for additional Advanced installation features as needed, then perform the Advanced installation as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

## 8.4 Configuring Web Services

When you install and set up your Kablink Vibe site, three Web services are enabled by default. A fourth is available for selection. These Web services enable programs to access information on your Vibe site just as users would. Allowing programmatic access to your Vibe site can be useful or can be viewed as a security risk.

- WSS authentication: Uses OASIS Web Services Security (WSS) (http://www.oasis-open.org).
- HTTP Basic authentication: Uses HTTP Basic Access authentication (http://tools.ietf.org/ html/rfc2617).
- Token-based authentication: Uses custom Vibe tokens to communicate with Vibe remote applications. For more information, see "Using Remote Applications on Your Vibe Site" in "Site Setup" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.
- Anonymous access: Allows access to your Vibe site without authentication. It is similar to the Guest access provided for users, as described in "Allowing Guest Access to Your Vibe Site" in "Site Setup" in the *Kablink Vibe OnPrem 3.1 Administration Guide*.

#### ADVANCED VIBE INSTALLATION SUMMARY SHEET

Under Web Services, mark which Web services you want enabled for your Vibe site. The first three are enabled by default. The fourth is disabled by default.

Complete the planning process for additional Advanced installation features as needed, then perform the Advanced installation as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

## 8.5 Changing Your Lucene Index Server Configuration

The default Lucene Index Server configuration is appropriate for a medium-sized Kablink Vibe site. If you have a larger Vibe site, you can change its Lucene Index Server configuration.

- Section 8.5.1, "Understanding Indexing," on page 85
- Section 8.5.2, "Changing Lucene Configuration Settings," on page 85

After planning your Lucene configuration, complete the planning process for additional Advanced installation features as needed, then perform the Advanced installation as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

### 8.5.1 Understanding Indexing

The Lucene Index Server is responsible for indexing all data on the Vibe site so that Vibe users can easily use the Find and Search features to retrieve the information that they need. Text posted in folder entries is easy to index, because the formatting is simple. However, text in attached files arrives in many different file formats, many of which require conversion before the text in the files can be indexed. Therefore, the Lucene Index Server is dependent on the available file conversion technology in order to perform its indexing function. For information about the file viewers that Vibe uses, see Section 2.4.1, "File Viewer Support," on page 20.

The Lucene Index Server provides additional services on your Vibe site in addition to indexing. In fact, you cannot access your Vibe site if the Lucene Index Server is not running. For this reason, Novell Vibe provides multi-server Lucene configuration options that are not available in Kablink Vibe.

### 8.5.2 Changing Lucene Configuration Settings

If you have an extremely large Vibe site and you need to reindex the Vibe data, you might see improved performance by increasing these settings.

- Max booleans: The default is 10000. This means that 10,000 Boolean clauses are allowed in a query. You need to increase this only if your Vibe site includes more than 10,000 users, groups, or teams.
- RAM in MB that may be used for buffering: The default is 256 MB for remote and high availability Lucene configurations and 32 MB for local Lucene configurations. This is the amount of RAM that is allocated for buffering documents and deletions before they are flushed to the directory. (This setting can be changed only in the Lucene installer; it is not available in the Vibe installer.)
- Merge factor: The default is 10. This sets the number of index segments that are created on disk. When additional index segments are needed, existing segments are merged to keep the merge factor constant.
- Network interface for RMI service: (Optional) Specify the IP address or hostname for the network interface for the RMI (Remote Method Invocation (http://java.sun.com/javase/ technologies/core/basic/rmi/index.jsp)) service.

This is the hostname of the server where the Lucene Index is installed.

#### ADVANCED VIBE INSTALLATION SUMMARY SHEET

Under Lucene Configuration, specify any Lucene configuration settings that you want to change.

## 8.6 Managing RSS Feeds

By default, Kablink Vibe users can set up RSS feeds in folders on the Vibe site, as described in "Viewing Folders as RSS or Atom Feeds" in "Getting Informed" in the *Kablink Vibe OnPrem 3.1 User Guide*.

- Section 8.6.1, "Configuring RSS Feeds," on page 86
- Section 8.6.2, "Disabling RSS Feeds," on page 86

After planning the RSS settings, complete the planning process for additional Advanced installation features as needed, then perform the Advanced installation as described in Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

### 8.6.1 Configuring RSS Feeds

The following aspects of RSS functionality on your Vibe site are configurable:

- Max elapsed days: By default, items from RSS feeds are retained on the Vibe site for 31 days.
   You can decrease the number of days to reduce the amount of disk space occupied by the RSS files.
- Max inactive days: By default, if no one on the Vibe site accesses an RSS feed for 7 days, the
  feed is no longer updated. Increase or decrease the retention time for inactive feeds to meet the
  needs of Vibe users and disk space considerations.

#### ADVANCED VIBE INSTALLATION SUMMARY SHEET

Under RSS Configuration, specify the number of days that meet the needs of your Vibe site.

### 8.6.2 Disabling RSS Feeds

Some administrators consider RSS feeds to be a security risk because the RSS feed URL includes username and password information. If you do not want Vibe site users to be able to subscribe to RSS feeds from the Vibe site, you can disable this feature.

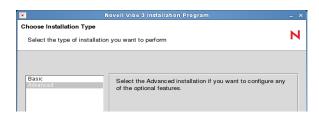
### ADVANCED VIBE INSTALLATION SUMMARY SHEET

Under RSS Configuration, mark No.

## Performing an Advanced Vibe Installation

You should already have reviewed Chapter 3, "Planning a Basic Vibe Installation," on page 25 and filled out the Basic Vibe Installation Summary Sheet. You should also have reviewed Chapter 8, "Planning an Advanced Vibe Installation," on page 81 and filled out the Advanced Vibe Installation Summary Sheet for those aspects of an Advanced installation that you want to implement for your Kablink Vibe OnPrem site.

- 1 Follow the Basic installation instructions provided in Chapter 4, "Installing and Setting Up a Basic Vibe Site," on page 49 for the platform where you are installing Vibe.
- **2** When you run the installation program, select *Advanced* on the Choose Installation Type page.



**3** Use the information that you have gathered on the Basic Vibe Installation Summary Sheet and the Advanced Vibe Installation Summary Sheet to provide the information that the Vibe Installation program prompts you for:

### **Basic Installation Pages:**

**Installation Locations** 

Default Locale for Kablink Vibe

User ID for Kablink Vibe (Linux only)

**Network Information** 

**Database Selection** 

Java JDK Location

**Outbound E-Mail Configuration** 

**Inbound E-Mail Configuration** 

Some Basic installation pages have additional options available when you perform an Advanced installation.

#### **Advanced Installation Pages:**

Web Services

Lucene Configuration

**RSS** Configuration

The Installation program stores the information it gathers in the installer.xml file in the same directory where you started the Installation program.

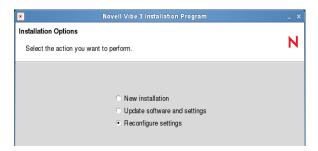
**4** After you have provided all the requested information, click *Install* to begin the Advanced installation.

- **5** When the installation is complete, click *Finish* to exit the Vibe installation program. Information about the installation process is written to the installer.log file in the same directory where you ran the Installation program. If a problem arises during the installation, the installer.log file provides information that can help you resolve the problem.
- **6** After you complete the Advanced installation, continue setting up your Vibe site, as described in Chapter 5, "Adding Users to Your Vibe Site," on page 65.

## Setting Configuration Options after Installation

After you install Kablink Vibe OnPrem, following the instructions in Part II, "Basic Installation," on page 23 or Part III, "Advanced Installation and Reconfiguration," on page 79, you can rerun the Vibe installation program to change configuration options or add new functionality to your Vibe site.

- 1 Stop Vibe.
- **2** Start the Vibe installation program as described in Section 4.1.2, "Running the Linux Vibe Installation Program," on page 51 and Section 4.2.2, "Running the Windows Vibe Installation Program," on page 59.



Because the Installation program finds an existing installer.xml file, it defaults to *Reconfigure settings*.

**3** Click *Next*.

The Vibe Installation program asks you to verify that you have stopped Vibe.

4 Click Yes.



- **5** Select *Basic* or *Advanced*, depending on the configuration settings that you want to change, then click *Next*.
- **6** Click *Next* until you reach an installation page where you want to reconfigure settings.

### **Basic Installation Pages:**

Installation Locations
Default Locale for Kablink Vibe
User ID for Kablink Vibe (Linux only)
Network Information

Database Selection
Java JDK Location
Outbound E-Mail Configuration
Inbound E-Mail Configuration

### **Advanced Installation Pages:**

Web Services Lucene Configuration RSS Configuration

- 7 When you reach the Ready to Install page, click *Install* to implement the reconfigured settings.
- 8 Start Vibe.

# Advanced Vibe Installation Summary Sheet

Installation Program Field	Value for Your Vibe Site	Explanation
Data Locations:		See Section 8.2, "Distributing Different Data Types to Different
Linux default:	inux default:	
/var/opt/novell/teaming		
Windows default:		
c:\Novell\Teaming		
<ul><li>Simple file repository</li><li>Jackrabbit repository</li><li>Extensions repository</li></ul>		
• Cache store		
◆ Lucene index		
Network Information:		See Section 8.3, "Using
• Enable Web services:		Advanced Network Information Settings," on page 83.
No / Yes		
<ul> <li>Session timeout</li> </ul>		
Default: 240 minutes		
• Enable Tomcat access log:		
No / Yes		
<ul> <li>Keystore file:</li> </ul>		
Web Services:		See Section 8.4, "Configuring
• Enable WSS authentication		Web Services," on page 84.
Enable Basic authentication		
<ul> <li>Enable token-based authentication</li> </ul>		
• Enable anonymous access		
Lucene Configuration:		See Section 8.5.2, "Changing
Configuration type: all		Lucene Configuration Settings," on page 85.
Max booleans:		
Default: 10000		
Merge factor:		
10		

Installation Program Field	Value for Your Vibe Site	Explanation
RSS Configuration:		See Section 8.6, "Managing RSS
Enable RSS: No / Yes		Feeds," on page 86.
<ul> <li>Max elapsed days:</li> </ul>		
Max inactive days:		

# Multi-Server Configurations and Clustering



- Chapter 12, "Creating the Vibe Database on a Remote Server," on page 95
- Chapter 13, "Running Multiple Database Servers," on page 101

## Creating the Vibe Database on a Remote Server

The default database location for Kablink Vibe OnPrem is on the same server with the Vibe software, as described in Section 3.6.3, "Database Location," on page 34. However, for better performance and scalability, you can install the database server (MySQL, Microsoft SQL, or Oracle) on a remote server, then use the scripts that are included with the Vibe software to manually create the Vibe database in any location that you prefer.

- Section 12.1, "Preparing to Manually Create a Database," on page 95
- Section 12.2, "Creating a MySQL Database," on page 96
- Section 12.3, "Creating a Microsoft SQL Database," on page 97
- Section 12.4, "Creating an Oracle Database," on page 98
- Section 12.5, "Installing Vibe with a Remote Database," on page 99

**NOTE:** This section assumes that you already have a Basic installation of Vibe up and running successfully. We highly recommend that you follow the instructions in Part II, "Basic Installation," on page 23 before attempting a more complex Vibe configuration.

## 12.1 Preparing to Manually Create a Database

Kablink Vibe includes scripts for creating the Vibe database on a remote server.

1 Copy the teaming-3.1.*n*-sql.zip file from the Vibe server where the Vibe installation program is located and copy it to the database server.

or

Download and unzip the Vibe software onto the database server.

**2** In the directory where the Vibe Installation program is located on the database server, or in the location where you copied the teaming-3.1.*n*-sql.zip file, unzip the teaming-3.1.*n*-sql.zip file.

This creates two new subdirectories, the create subdirectory for database creation scripts and the update-3.0.n-3.1.n directory for database update scripts.

- **3** Change to the create subdirectory.
- **4** Copy all the scripts for your database type to a convenient temporary location on the server where you want to create the database, and make sure that your database management utility is on your path so that you can run it from that directory

Database	Database Script	Database Management Utility
MySQL	*mysql.sql	mysql
Microsoft SQL	*sqlserver.sql	osql
Oracle	*oracle.sql	sqlplus

- **5** Continue with the instructions for the type of database that you want to create:
  - Section 12.2, "Creating a MySQL Database," on page 96
  - Section 12.3, "Creating a Microsoft SQL Database," on page 97
  - Section 12.4, "Creating an Oracle Database," on page 98

### 12.2 Creating a MySQL Database

Before you begin, you should be familiar with standard database maintenance procedures.

For more information about MySQL, see the following references:

- MySQL 5.0 Reference Manual (http://dev.mysql.com/doc/refman/5.0/en)
- MySQL 5.1 Reference Manual (http://dev.mysql.com/doc/refman/5.1/en)

The following database tools can be helpful:

- MySQL GUI Tools (http://dev.mysql.com/downloads/gui-tools)
- SQLyog (http://www.webyog.com)
- Squirrel SQL Client (http://squirrel-sql.sourceforge.net)
- 1 Review the MySQL requirements listed in Section 2.1, "Vibe Server Requirements," on page 17.
- **2** Make sure that the MySQL database server and client have been installed and configured, as described in Section A.2, "MySQL Database Server," on page 125.
- **3** Make sure that the MySQL database client is also installed on the Vibe server. The Vibe installation program needs the MySQL client in order to communicate with the remote MySQL database server.
- 4 Make sure that you know the password for the MySQL root administrator user.
- **5** Make sure that innodb support is enabled.

It is enabled by default. To verify that innodb support is enabled:

**5a** Enter the following command to access the MySQL monitor:

```
mysql -u root -p
```

For information on how to set a password for your MySQL database if you have not already done so, see "Configuring MySQL" on page 126.

- **5b** Specify your password.
- **5c** From the MySQL prompt, enter the following command to display status information about the server's storage engines:

```
SHOW ENGINES\G
```

- **5d** Locate the InnoDB engine, and ensure that innodb support is enabled.
- **6** Update the MySQL configuration file:
  - **6a** Locate the MySQL configuration file and open it in a text editor.

```
Linux: /etc/my.cnf
Windows: c:\Program Files\MySQL\MySQL Server version\my.ini
```

**6b** Under the [client] section, add the following line:

```
default character set = utf8
```

**6c** Under the [mysqld] section, add the following line:

```
character_set_server = utf8
```

Setting the character set to UTF-8 ensures that extended characters are handled correctly in the database.

**6d** (Conditional) For a system with multiple network interfaces, in the [mysqld] section, add the following line:

```
bind-address = mysql server address
```

Replace <code>mysql\_server\_address</code> with the IP address that you want MySQL to bind to and to listen on.

- **6e** Save the updated configuration file, then exit the text editor.
- 7 In the directory where you copied the database scripts (Step 4 in Section 12.1, "Preparing to Manually Create a Database," on page 95), enter the following command to run the MySQL database creation script:

```
mysql -uuser -ppassword < create-database-mysql.sql
```

**8** Configure MySQL to allow access from a remote server:

**9** Skip to Section 12.5, "Installing Vibe with a Remote Database," on page 99.

### 12.3 Creating a Microsoft SQL Database

Before you begin, you should be familiar with standard database maintenance procedures.

For more information about Microsoft SQL, see the following references:

- Microsoft SQL Server 2008 Learning Resources (http://www.microsoft.com/sqlserver/2008/en/us/learning.aspx)
- Microsoft SQL Server 2005 Learning Resources (http://www.microsoft.com/sqlserver/2005/en/us/learning-resources.aspx)

The following database tool can be helpful:

Squirrel SQL Client (http://squirrel-sql.sourceforge.net)

To create a Microsoft SQL database:

- 1 Review the Microsoft SQL requirements listed in Section 2.1, "Vibe Server Requirements," on page 17.
- **2** Make sure that the Microsoft SQL Server and Client have been installed and configured properly.

**IMPORTANT:** Make sure that TCP/IP is enabled for the Microsoft SQL Server.

For more information, see "Microsoft SQL Server" (http://msdn.microsoft.com/en-us/library/bb545450.aspx).

- **3** Make sure that the Microsoft SQL database client is also installed on the Vibe server. The Vibe installation program needs the Microsoft SQL client in order to communicate with the remote Microsoft SQL database server.
- **4** When you install Microsoft SQL Server, select *SQL Server and Windows* for authentication. The default is *Windows Only*, which is not appropriate for Vibe.
- **5** Immediately establish the database administrator username and password for the SQL database server.
- **6** Change to the directory where you copied the database scripts in Step 4 in Section 12.1, "Preparing to Manually Create a Database," on page 95.
- **7** Enter the following command to run the Microsoft SQL database creation script:

```
osql -Uuser -Ppassword -i create-database-sqlserver.sql
```

**8** Skip to Section 12.5, "Installing Vibe with a Remote Database," on page 99.

## 12.4 Creating an Oracle Database

When you use an Oracle database, your database administrator must create it for you. The Kablink Vibe installation program cannot create an Oracle database.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under *Database Creation*, make sure you have marked that you want your database administrator to manually create the Oracle database before installation.

Before you begin, you should be familiar with standard database maintenance procedures.

For more information about your Oracle database, see the following references:

- Oracle Product Documentation (http://www.oracle.com/technetwork/indexes/documentation/)
- Oracle SQL Plus Documentation (http://download.oracle.com/docs/cd/B19306\_01/server.102/b14357/toc.htm)

The following database tool can be helpful:

- Squirrel SQL Client (http://squirrel-sql.sourceforge.net)
- 1 Review the Oracle database requirements listed in Section 2.1, "Vibe Server Requirements," on page 17.
- **2** Make sure that the Oracle database server software has been installed and configured properly. For more information, see Oracle Database (http://www.oracle.com/database).
- 3 Set up the Oracle database character set to support Unicode character encodings.

  Vibe requires either the UTF-8 or AL32UTF8 character set for proper operation. Oracle recommends AL32UTF8, because it has increased support for certain Asian languages. For more information, see "Choosing a Character Set" (http://download.oracle.com/docs/cd/B19306\_01/server.102/b14225/ch2charset.htm) in the *Oracle Database Globalization Support Guide*.

- **4** Change to the directory where you copied the Oracle database scripts in Step 4 in Section 12.1, "Preparing to Manually Create a Database," on page 95.
- 5 Edit the create-database-oracle.sql script with your Oracle database password.

### **Original:**

```
drop user sitescape cascade;
create user sitescape identified by sitescape;
grant connect, resource to sitescape;
connect sitescape/sitescape;
```

SiteScape is the name of the company that previously owned the Vibe software.

### **Updated:**

```
drop user sitescape cascade;
create user sitescape identified by your_oracle_password;
grant connect, resource to sitescape;
connect sitescape/your oracle password;
```

**IMPORTANT:** Unless you are very familiar with editing scripts, change only the password. Do not attempt to change the name of the database from the legacy default of sitescape.

**6** Enter the following commands to run the database creation script:

```
sqlplus "/ as sysdba"
SQL> spool create-database-oracle.out;
SQL> @create-database-oracle;
SQL> quit
```

- 7 Check the resulting create-database-oracle.out file for errors and resolve them.
- **8** If you created the Oracle database on the Vibe server, skip to Chapter 4, "Installing and Setting Up a Basic Vibe Site," on page 49 or Chapter 9, "Performing an Advanced Vibe Installation," on page 87.

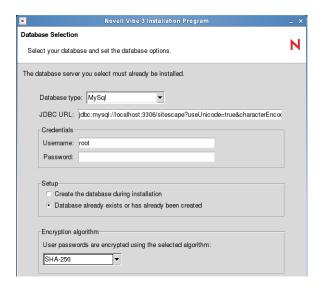
**IMPORTANT:** On the Database Selection page in the Installation program, be sure to select *Database already exists or has already been created*.

or

If you created the Oracle database on a remote server, continue with Installing Vibe with a Remote Database.

## 12.5 Installing Vibe with a Remote Database

- 1 Run the Kablink Vibe installation program, as described in Chapter 4, "Installing and Setting Up a Basic Vibe Site," on page 49 or Chapter 9, "Performing an Advanced Vibe Installation," on page 87.
- **2** Fill in the fields on the Database Selection page:



**Database type:** Select the type of database that you just created.

JDBC URL: Replace localhost, with the hostname of the server where you created the Vibe database. If needed, replace the port number with the port that Vibe uses to communicate with the database, and replace the database name with the name of your database.

**Credentials:** Specify the password for the database administrator user.

**Setup:** Select *Database already exists or has already been created* so that the installation program does not create one for you.

**Encryption algorithm:** Set the encryption appropriate for the security needs of the Vibe site. For more information, see Section 3.6.5, "Database Encryption Algorithm," on page 36.

3 Click Next.

The Vibe installation program tries to connect to the database. If it connects successfully, you can continue with the installation. If the Vibe installation program cannot connect to the database, you must resolve the problem with the database before you can continue with the Vibe installation.

4 When the Vibe installation program can successfully connect to the remote database, continue as usual with the installation.

## **Running Multiple Database Servers**

Each of the three databases supported by Kablink Vibe OnPrem (MySQL, Microsoft SQL, and Oracle) has its own approach to clustering the database server. Information about clustering database servers is available on the Internet, for example:

- MySQL Cluster (http://www.mysql.com/products/database/cluster)
- SQL Server Clustering (http://www.sql-server-performance.com/articles/clustering/ clustering\_intro\_p1.aspx)
- Oracle Real Application Clusters (http://www.oracle.com/technology/products/database/ clustering)

NOTE: We highly recommend that you follow the instructions in Part II, "Basic Installation," on page 23 before attempting a more complex Vibe configuration.

## **Update**



- Chapter 14, "What's New in Kablink Vibe OnPrem 3.x," on page 105
- Chapter 15, "Updating from Kablink Vibe 3 to Kablink Vibe 3.1," on page 107
- Chapter 16, "Updating the Operating System Where Vibe Is Running," on page 113
- Chapter 17, "Migrating Existing Kablink Vibe Data into a New Vibe 3.1 System," on page 115

## What's New in Kablink Vibe OnPrem 3.x

Kablink Vibe OnPrem is the new name for the product formerly known as Kablink Teaming. This section describes new features that have been added to Kablink Vibe 3.x.

- Section 14.1, "Vibe 3.x User Enhancements," on page 105
- Section 14.2, "Vibe 3.x Administration Enhancements," on page 105

### 14.1 Vibe 3.x User Enhancements

For a list of Kablink Vibe enhancements and instructions for use, see:

- "What's New in Kablink Vibe 3.x" in the Kablink Vibe OnPrem 3.1 User Guide
- "What's New in Vibe 3x"in the Kablink Vibe OnPrem 3.1 Advanced User Guide

### 14.2 Vibe 3.x Administration Enhancements

- Disable User Accounts (v3.1): You can disable user accounts rather than delete them. For more information, see "Disabling Vibe User Accounts" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- E-Mail Report (v3.1): You can generate reports for all e-mail messages sent from and into the Vibe site, as well as e-mail errors that have been encountered. For more information, see "E-Mail Report" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- Restricting User Access by IP Address (v3.1): You can restrict what information users can access when they are outside your corporate firewall. For more information, see "Restricting Access Rights of Users Outside the Firewall" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- Workspace and Folder Data Quotas (3.1): You can limit the amount of information that can exist in specific workspaces and folders. For more information, see "Managing Workspace and Folder Data Quotas" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- Configuring Search Functionality (3.1): Kablink For more information, see "Understanding and Configuring Search Functionality" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- Site-wide brand: You can create a site-wide brand and manage users' ability to create individual brands on lower-level workspaces. For more information, see "Creating a Site-Wide Brand" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- **Default home page:** You can set a default home page where all users are first taken when they access the Kablink Vibe site. You can create a separate default home page for visitors. For more information, see "Setting a Default Home Page" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- **User and group management:** When you move or rename users and groups that are being synchronized via LDAP, Vibe now recognizes the change and maintains the association between the user or group that was moved or renamed and the LDAP server. For more information, see "LDAP Attribute to Identify a User or Group" on page 42.

- User Visibility: You can hide one set of users from another set of users. For example, you might want to do this if your Vibe site has users from more than one company and you want users to see only the users who belong to the same company. For more information, see "Restricting Groups of Users from Seeing One Another" in the Kablink Vibe OnPrem 3.1 Administration Guide.
- Expanded User Profile: The User Profile section in Vibe 3 has been expanded to rival other professional knowledgebases such as LinkedIn. Now users can include more information to share with their colleagues, such as education, qualifications, and competencies. For more information, see "Modifying Your Profile" in the Kablink Vibe OnPrem 3.1 User Guide.

For information about how Vibe administrators can modify the information that is displayed in the profile view, see "Customizing the Default User Profile View" in "Setting Up Users' Personal Workspaces" in the Kablink Vibe OnPrem 3.1 Administration Guide.

If you have modified the User Profile definition for your Vibe site, these changes are not displayed when you upgrade to Vibe 3. To display these changes, complete the steps in Section 15.4.1, "Resetting Your Definitions," on page 111.

• Profile Quick View Dialog Box: The Profile Quick View dialog box is displayed when users click a user's Presence icon . It enables them to see information about that user, view the user's micro-blog or workspace, follow the user, and more.

For information about how Vibe administrators can modify the information that is displayed in the Profile Quick View, see "Customizing the Default Profile Quick View" in the Kablink Vibe OnPrem 3.1 Administration Guide.

If you have modified the User Profile definition for your Vibe site, this dialog box is not displayed when you upgrade to Vibe 3. To display these changes, complete the steps in Section 15.4.1, "Resetting Your Definitions," on page 111.

• Ability to Send Vibe Mail Messages from a Custom Address: You can configure Vibe to send e-mail messages and notifications from a zone-specific or site-wide address. In previous versions of Vibe, when a user sends an e-mail message from Vibe, the message can be shown only as being from that specific user.

For more information, see "Configuring Vibe to Send E-Mail Messages and Notifications from a Custom Address" in the Kablink Vibe OnPrem 3.1 Administration Guide.

## **Updating from Kablink Vibe 3 to** Kablink Vibe 3.1

This section describes how to update to Kablink Vibe 3.1 from Kablink Vibe 3. If you are updating from an earlier version of Kablink Vibe (earlier versions of Kablink Vibe are called Kablink Teaming), you must first update to Kablink Vibe 3 before you can update to Kablink Vibe 3.1. For information on how to update to Novell Vibe 3, see "Update" in the Kablink Vibe OnPrem 3 Installation Guide (http://www.novell.com/documentation/kablinkvibe\_onprem3/vibeprem3\_inst/ data/bookinfo.html)

- Section 15.1, "Understanding the Update Process," on page 107
- Section 15.2, "Updating a Single-Server System from Vibe 3 to Vibe 3.1," on page 107
- Section 15.3, "Updating a Multiple-Server System from Vibe 3 to Vibe 3.1," on page 109
- Section 15.4, "Performing Post-Update Tasks," on page 111

### 15.1 Understanding the Update Process

When you upgrade to Kablink Vibe 3.1, each user who has used a previous version of Vibe must clear his or her browser's cache, regardless of which browser he or she is using. Not clearing the browser cache results in Vibe not displaying correctly.

Ensure that you communicate this to each Vibe user in your system.

During the update from Kablink Vibe 3 to Vibe 3.1, the following aspects of your Vibe system are modified:

- The software is updated from Vibe 3 to Vibe 3.1.
- A backup copy of your existing Vibe 3 installation is created in the following directory:

Linux: /opt/novell/teaming/teaming-backup

Windows: C:\Program Files\Novell\Teaming\teaming-backup

If your original Vibe system began with version 1.0 (this version of Kablink Vibe is called Kablink Teaming), the backup copy is located in the following directory:

Linux: /opt/icecore

Windows: C:\Program Files\icecore

### 15.2 Updating a Single-Server System from Vibe 3 to Vibe 3.1

When you update a single-server Kablink Vibe installation from Vibe 3 to Vibe 3.1, the Vibe Installation program can perform the entire update in a single process.

**1** Make sure you have a current backup of your Vibe 3 system.

- 2 Stop Vibe.
- 3 Ensure that no application (such as a command prompt or Windows Explorer) is running on the Vibe 3 system.
- 4 Copy the installer.xml file from the directory where the Vibe 3 Installation program is located to the directory where you have extracted the Vibe 3.1 software.

You must obtain a new license-key.xml file when upgrading to Vibe 3.1.

The installer.xml file provides default values when you run the Vibe 3.1 Installation program.

**5** Start the Vibe 3.1 installation program.

If you need assistance with this task, see the detailed installation instructions for the platform where you are updating Vibe:

- Section 4.1.2, "Running the Linux Vibe Installation Program," on page 51
- Section 4.2.2, "Running the Windows Vibe Installation Program," on page 59
- **6** Accept the License Agreement, then click *Next*.



Because you provided your Vibe 3 installer.xml file in the directory with the Vibe 3.1 installation program, the *Update software and settings* installation option is selected by default.

- **7** Click *Next* to continue.
- **8** Click *Yes* to let the Installation program know that you have stopped Vibe.
- **9** Select the check box to let the installation program know that you have backed up all of your data, then click Next.
- **10** Select *Basic* or *Advanced*, depending on the type of Vibe installation you are updating, then click Next.
- 11 Continue through the installation process, retaining or changing configuration information depending on the needs of your Vibe 3.1 system.
- **12** Click *Install* when you are ready to perform the update.

The Installation program might seem to pause at this point. It needs to update tables and indexes in the Vibe database. If you have a large database, this process can be time-consuming.

- **13** Click *Finish* when the update is completed.
- **14** Start Vibe 3.1 in the same way that you have been starting Vibe 3.

When you start Vibe for the first time after the update, it takes longer to start than usual because data in the Vibe database must be updated before the Vibe site is ready to use.

### 15.2.1 Updating an Oracle Database from 3 to 3.1

The Vibe Installation program can update MySQL and Microsoft SQL databases as part of the Vibe software update, but it cannot update an Oracle database. Therefore, if you are using Oracle, you must manually run the database update script after you have stopped Vibe:

- 1 Change to the directory where the Vibe 3.1 Installation program is located.
- 2 Unzip the teaming-3.1.n-sql.zip file to create the update-3.0.0-3.1.n directory The update-3.0.0-3.1.n directory contains an update script for each type of database (MySQL, Microsoft SQL, and Oracle).
- **3** Run the update-oracle.sql script to update the database structure.

```
sqlplus "/ as sysdba"
SQL>spool update-oracle.out;
SQL>@update-oracle;
SQL>quit;
```

4 Return to Step 5 in Section 15.2, "Updating a Single-Server System from Vibe 3 to Vibe 3.1," on page 107.

# 15.3 Updating a Multiple-Server System from Vibe 3 to Vibe 3.1

If your Kablink Vibe 3 system is distributed across multiple servers, the Vibe 3.1 installation program can update Vibe components on the Vibe server, but you must manually update any Vibe components that you have placed on remote servers.

- Section 15.3.1, "Manual Vibe Database Update," on page 109
- Section 15.3.2, "Remote Lucene Index Server Update," on page 110

# 15.3.1 Manual Vibe Database Update

In order to update a database from Vibe 3 to 3.1 when the Vibe installation program cannot do it for you, you must run the Vibe 3.1 database update script.

- 1 Stop Vibe.
- 2 Ensure that no application (such as a command prompt or Windows Explorer) is running on the Vibe 3 system.
- **3** Change to the directory where the Vibe 3 installation program is located.
- **4** Unzip the teaming-3.1.n-sql.zip file to create the update-3.0.0-3.1.n directory The update-3.0.0-3.1.n directory contains an update script for each type of database (MySQL, Microsoft SQL, and Oracle).
- **5** Copy the script for your database type to the server where the Vibe database is located.
- **6** Use the database client utility for your database type to run the script:

```
MySQL:
          mysql -uusername -ppassword < /path/update-mysql.sql</pre>
```

Microsoft osql -Uusername -Ppassword -i update-sqlserver.sql

SQL:

You can also use the script with the SQL Server Express Utility (http://

www.microsoft.com/downloads/details.aspx?familyid=fa87e828-173f-472e-a85c-

27ed01cf6b02&displaylang=en) to update the database.

Oracle: sqlplus "/ as sysdba"

SQL>spool update-oracle.out;

SQL>@update-oracle

SOL>quit;

**7** After you have updated the database from Vibe 3 to Vibe 3.1:

If your Lucene Index Server is also on a remote server, continue with Section 15.3.2, "Remote Lucene Index Server Update," on page 110.

If all remaining components that need to be updated from Vibe 3 to Vibe 3.1 are on the Vibe server, follow the instructions in Section 15.2, "Updating a Single-Server System from Vibe 3 to Vibe 3.1," on page 107.

### 15.3.2 Remote Lucene Index Server Update

In order to update your index from Kablink Vibe 3 to Kablink Vibe 3.1 when the Vibe installation program cannot do it for you, you need to run the Remote Lucene Server installation program.

- **1** Stop Vibe.
- **2** Stop the Lucene Index Server.
- **3** Ensure that no application (such as a command prompt or Windows Explorer) is running on the Vibe 3 system.
- 4 Copy the Vibe 3.1 Remote Lucene Server Installation program from the directory where the Vibe 3.1 Installation program is located to a convenient directory on the server where the remote Lucene Index Server is located.

The name of the Remote Lucene Server Installation program varies by platform:

Linux: lucene-installer.linux Windows: lucene-installer.exe

- **5** Start the Vibe 3.1 Remote Lucene Server installation program.
- **6** Accept the License Agreement, then click *Next*.
- **7** Select *Update software and settings*.
- **8** Click *Next* to continue.
- **9** Click *Next* to accept the installation location.
- **10** Click *Next* to accept the Java JDK location.
- 11 In the *Host* field, specify the hostname where you are installing the remote Lucene Index Server.
- **12** Change Lucene configuration settings as needed, then click *Next*.

For information about Lucene configuration settings, see Section 8.5.2, "Changing Lucene Configuration Settings," on page 85.

- **13** Click *Install* to install the updated Lucene Index Server software.
- **14** Click *Finish* when the update is completed.
- **15** Start the Lucene Index Server.
- **16** Now that all remote Vibe components have been updated, follow the instructions in Section 15.2, "Updating a Single-Server System from Vibe 3 to Vibe 3.1," on page 107.

# 15.4 Performing Post-Update Tasks

After you start Kablink Vibe 3.1, you can access your Vibe site as usual. However, you need to reset some aspects of the interface before you allow users to access the updated site. The interface reset affects only those definitions and templates that are included with the Vibe product. If you have created custom definitions and templates, they are unaffected by the interface reset.

- Section 15.4.1, "Resetting Your Definitions," on page 111
- Section 15.4.2, "Resetting the Search Index," on page 112
- Section 15.4.3, "Resetting the Standard Templates," on page 112

### 15.4.1 Resetting Your Definitions

Various aspects of the Vibe interface have been redesigned and enhanced in Vibe 3.1. Some of these enhancements affect entries, folders, user profiles, and user workspaces. If you have made customizations to these areas of Vibe, you must reset these definitions in order to see the Vibe 3.1 enhancements, as described in this section.

**WARNING:** The following procedure deletes any custom modifications that you have previously made to the default Vibe definitions. If you want to save any modified definitions before proceeding, you can export the modified definitions. Also, you might want to document exactly what changes you have made in order to make it easier to reconstruct the definition after you reset it.

To reset your Vibe definitions:

- **1** Log in to the Vibe site as the Vibe administrator.
- **2** Click the *Administration* icon in the upper right corner of the page.
- **3** In the System section, click Form/View Designers to display the Form and View Designers page.
- **4** Click *Reset*.
  - The Reset Definitions page is displayed.
- **5** Click Select All.
  - You can expand each definition to ensure that all definitions have been selected.
- 6 Click OK.

### 15.4.2 Resetting the Search Index

Search functionality has been improved in Vibe 3.1. For optimal search performance, you need to reindex the search index after you upgrade to Vibe 3.1.

- 1 Log in to the Vibe site as the Vibe administrator.
- **2** Click the *Administration* icon in the upper right corner of the page.
- **3** In the *Management* section, click *Search Index*.
- **4** Select *Re-Index Everything*.
- **5** Click *OK*, then click *Close*.

### 15.4.3 Resetting the Standard Templates

**IMPORTANT:** If you have manually customized any templates that are included with the Vibe product, back up the files you have modified before performing the interface reset.

- **1** Log in to the Vibe site as the Vibe administrator.
- **2** Click the *Administration* icon in the upper right corner of the page.
- **3** In the *Management* section, click *Workspace and Folder Templates*.



- 4 Click Reset.
- **5** Click *OK* to confirm, then click *Close*.

Your Vibe 3.1 site is now ready for use.

**IMPORTANT:** If Vibe users encounter problems displaying any pages on the Vibe site after the update, simply have them clear the browser cache.

# **Updating the Operating System** Where Vibe Is Running

You can upgrade the operating system where Vibe OnPrem is running.

- 1 Upgrade the Linux or Windows operating system to a version that Vibe supports. For information about which versions are supported, see Section 2.1, "Vibe Server Requirements," on page 17.
  - For information about how to upgrade the operating system, view the appropriate documentation for your operating system.
- 2 (Conditional) If you upgraded a Linux server, the TrueType font path that Vibe uses for document conversion might be broken after the upgrade. To fix this problem, you need to rerun the Vibe installation after upgrading the Linux operating system.
  - For information on how to run the Vibe installation, see Section 4.1, "Linux: Installing and Setting Up a Basic Vibe Site," on page 49 for a basic installation, or Chapter 9, "Performing an Advanced Vibe Installation," on page 87 for an advanced installation.

# Migrating Existing Kablink Vibe Data into a New Vibe 3.1 System

If your existing Kablink Vibe 3 system has outgrown the server where you originally set it up, or if you want to move to a different operating system, you can install Vibe 3.1 on a new server, then migrate your existing Vibe data from a previous version to your new Vibe 3.1 system.

You might also want to migrate an existing Vibe 3 system to a Vibe 3.1 system on another server.

If you are migrating from a Teaming 2.1 server, follow the instructions in "Update" in the *Kablink* Vibe OnPrem 3 Installation Guide (http://www.novell.com/documentation/kablinkvibe\_onprem3/ vibeprem3\_inst/data/bookinfo.html).

- Section 17.1, "Linux Migration with a MySQL Database," on page 115
- Section 17.2, "Windows Migration with an MS SQL Database," on page 117

**NOTE:** In these instructions, "target server" refers to the server where you install the Vibe 3.1 software, and "source server" refers to the existing server from which you are migrating Vibe data.

The instructions in this section are based on a single-server Vibe configuration. If you have a multiserver Vibe configuration, the single-server instructions can serve as a foundation to get you started with your more complex migration process.

This section does not include instructions for migrating an Oracle database. Use the instructions for your Vibe platform as a guideline for the tasks that are involved in migrating Vibe data, then apply these guidelines to your Oracle database migration.

# 17.1 Linux Migration with a MySQL Database

- Section 17.1.1, "Preparing the Target Linux Server," on page 115
- Section 17.1.2, "Preparing the Source Linux Server," on page 116
- Section 17.1.3, "Transferring Data from the Source Server to the Target Server," on page 116
- Section 17.1.4, "Importing the Vibe Database to the Target Server," on page 117
- Section 17.1.5, "Updating the Vibe Database on the Target Server," on page 117
- Section 17.1.6, "Finalizing Your New Vibe 3.1 Site," on page 117

# 17.1.1 Preparing the Target Linux Server

On the target server:

- 1 Install the Vibe 3.1 software on the target server, as described in Part II, "Basic Installation," on page 23, paying special attention to these important details:
  - Set up the same Linux user to run the Vibe software that has been used to run the Vibe software in the past.
  - Select the same encryption algorithm for the Vibe database that was used in Vibe 3.

**IMPORTANT:** If the database encryption algorithms do not match between the source and target Vibe systems, you cannot log in to the new Vibe 3.1 site.

- **2** Start Vibe on the target server.
- **3** Verify that the new Vibe site is working as expected.
- **4** Stop Vibe on the target server.
- 5 Rename the teaming directory to teaming backup. This is because in a future step you will copy the teaming directory from the source server to the target server.

The location of the teaming directory varies by platform:

Linux: /var/opt/novell/teaming

Windows: c:\novell\teaming

**6** Continue with Section 17.1.2, "Preparing the Source Linux Server," on page 116.

### 17.1.2 Preparing the Source Linux Server

On the source server:

- 1 Stop Vibe.
- **2** Back up your existing database:

```
mysqldump -uusername -ppassword sitescape > sitescape.sql
```

This creates a file named sitescape.sql in the directory where you executed the mysqldump command.

- **3** Make sure that you have a recent backup of your entire Vibe system.
- 4 Continue with Section 17.1.3, "Transferring Data from the Source Server to the Target Server," on page 116.

### 17.1.3 Transferring Data from the Source Server to the Target Server

On the source server:

- 1 Mount the target server to the source server so that data can be copied from one server to the
- **2** In a terminal window on the source server, become the Linux user that runs the Vibe software.
- 3 Copy the database backup of your existing Vibe database (sitescape.sql file) that you created in Step 2 in Section 17.1.2, "Preparing the Source Linux Server," on page 116 to a convenient temporary location on the target server.
- 4 Copy the entire data area from /var/opt/novell/teaming on the source server to the same location on the target server.
- **5** Continue with Section 17.1.4, "Importing the Vibe Database to the Target Server," on page 117.

### 17.1.4 Importing the Vibe Database to the Target Server

On the target server:

- 1 Remove the empty Vibe database that was created when you installed the Vibe 3.1 software: mysql>drop database sitescape;
- 2 Change to the directory where you copied the sitescape. sql file in Step 3 in Section 17.1.3, "Transferring Data from the Source Server to the Target Server," on page 116.
- **3** Create an empty database called sitescape:

```
mysql -uusername -ppassword -e "create database sitescape"
```

**4** Manually re-create the Vibe database with the data that you copied from the source server:

```
mysql -uusername -ppassword sitescape < sitescape.sql
```

### 17.1.5 Updating the Vibe Database on the Target Server

On the target server:

1 Unzip the teaming-3.1.n.zip file, change to the resulting update-3.0.0-3.1.n directory, then run the update script to update the database from Vibe 3 to Vibe 3.1:

```
mysql -uusername -ppassword < update-mysql.sql
```

For more complete database update instructions, refer to Section 15.3.1, "Manual Vibe Database Update," on page 109.

**2** Continue with Section 17.1.6, "Finalizing Your New Vibe 3.1 Site," on page 117.

### 17.1.6 Finalizing Your New Vibe 3.1 Site

- 1 Start Vibe 3.1, as described in Section 4.1.7, "Starting Vibe on Linux," on page 56.
- 2 Reindex the Vibe site, as described in "Rebuilding the Lucene Index" in "Site Maintenance" in the Kablink Vibe OnPrem 3.1 Administration Guide.

Your Vibe site should now function just as it did on the original source server.

# 17.2 Windows Migration with an MS SQL **Database**

- Section 17.2.1, "Preparing the Target Windows Server," on page 118
- Section 17.2.2, "Preparing the Source Windows Server," on page 118
- Section 17.2.3, "Transferring Data from the Source Server to the Target Server," on page 118
- Section 17.2.4, "Importing the Database to the Target Server," on page 119
- Section 17.2.5, "Updating the Vibe Database on the Target Server," on page 119
- Section 17.2.6, "Finalizing Your New Vibe 3.1 Site," on page 120

### 17.2.1 Preparing the Target Windows Server

On the target server:

1 Install the Vibe 3.1 software, as described in Part II, "Basic Installation," on page 23.

**IMPORTANT:** Select the same encryption algorithm for the Vibe 3.1 database as you selected for the Vibe 3 database. If the database encryption algorithms do not match between the source and target systems, you cannot log in to the new Vibe 3.1 site.

- **2** Start Vibe on the target server.
- **3** Verify that the new Vibe site is working as expected.
- **4** Stop Vibe on the target server.
- 5 Rename the teaming directory to teaming backup. This is because in a future step you will copy the teaming directory from the source server to the target server.

The location of the teaming directory varies by platform:

Linux: /var/opt/novell/teaming

Windows: c:\Program Files\Novell\Teaming

**6** Continue with Section 17.2.2, "Preparing the Source Windows Server," on page 118.

### 17.2.2 Preparing the Source Windows Server

On the source server:

- 1 Stop Vibe.
- **2** Back up your existing database:
  - 2a In Microsoft SQL Server Management Studio, browse to and right-click the existing database (named sitescape), then click *Tasks* > *Back Up*.
  - **2b** For *Backup type*, select *Full*.
  - **2c** Set other backup options as desired, then click *OK*.

This creates a file named sitescape.bak in the following directory:

```
c:\Program Files\Microsoft SQL Server\MSSQL\Backup
```

- **3** Make sure that you have a recent backup of your entire system.
- 4 Continue with Section 17.2.3, "Transferring Data from the Source Server to the Target Server," on page 118.

## 17.2.3 Transferring Data from the Source Server to the Target Server

On the source server:

- 1 Map a drive from the target server to the source server so that data can be copied from one server to the other.
- **2** Copy your existing software extensions to the target server:

```
From:
        c:\home\icecoredata\extensions
To:
        c:\novell\teaming\extensions
```

Beginning with Vibe 3, the extensions directory now contains kablink and liferay.com directories.

- **3** Delete the empty kablink directory.
- 4 Delete or rename the following directories to make room for the corresponding directories that you are copying from the source server:

```
c:\novell\teaming
c:\novell\teaming\lucene
c:\novell\teaming\extensions
```

- **5** Copy the entire data area from c:\novell\teaming on the source server to the same location on the target server.
- **6** Continue with Section 17.2.4, "Importing the Database to the Target Server," on page 119.

### 17.2.4 Importing the Database to the Target Server

On the target server:

- 1 In Microsoft SQL Server Management Studio, browse to and right-click the existing Vibe database (named sitescape) that was created when you installed the Vibe 3.1 software, then click Delete.
- **2** To import the data from your source database, browse to and right-click *Databases*, then click Tasks > Restore.
- **3** In the *To database* field, specify sitescape.
- 4 In the From device field, browse to and select the sitescape.bak file that you transferred to the target server.
- **5** Set other restore options as desired, then click *OK*.

This creates the sitescape database in the following directory on the target server:

```
c:\Program Files\Microsoft SQL Server\MSSQL
```

Backed-up data from the source database is imported into the database for your new Vibe 3.1 system.

# 17.2.5 Updating the Vibe Database on the Target Server

On the target server:

1 Unzip the teaming-3.1.n-sql.zip file, change to the resulting update-3.0.0-3.1.n directory, then run the update script to update the database from Vibe 3 to Vibe 3.1:

```
osql -Uusername -Ppassword -i update-sqlserver.sql
```

For more complete database update instructions, refer to Section 15.3.1, "Manual Vibe Database Update," on page 109.

**2** Continue with Section 17.2.6, "Finalizing Your New Vibe 3.1 Site," on page 120.

## 17.2.6 Finalizing Your New Vibe 3.1 Site

- 1 Start Vibe 3.1, as described in Section 4.1.7, "Starting Vibe on Linux," on page 56.
- 2 Reindex the Vibe site, as described in "Rebuilding the Lucene Index" in "Site Maintenance" in the Kablink Vibe OnPrem 3.1 Administration Guide.

Your Vibe site should now function just as it did on the original source server.

# **Appendixes**



- Appendix A, "Vibe System Requirements Assistance," on page 123
- Appendix B, "Third-Party Materials," on page 129

# **Vibe System Requirements Assistance**



The system requirements for Kablink Vibe OnPrem include supporting components that might or might not be already installed on your Vibe server. This section helps you meet the Vibe system requirements if you are not familiar with how to install these supporting components.

- Section A.1, "Java Development Kit," on page 123
- Section A.2, "MySQL Database Server," on page 125

# Java Development Kit

The Kablink Vibe software runs inside a Java Virtual Machine (JVM). At present, Vibe requires a Java Development Kit (JDK), not a Java Runtime Environment (JRE), in order to run properly. You can use either the Sun JDK or the IBM JDK. Follow the instructions in the section below for your operating system and JDK preference:

If you want to use an SSL connection between your Novell Vibe site and a WebDAV server, and if the WebDAV server has a self-signed certificate rather than a certificate provided by a certificate authority, you must use the Sun JDK. The existing Vibe functionality for handling self-signed certificates is not compatible with the way the IBM JDK handles self-signed certificates.

- Section A.1.1, "Sun JDK on Linux," on page 123
- Section A.1.2, "IBM JDK on Linux," on page 124
- Section A.1.3, "Sun JDK on Windows," on page 125

#### A.1.1 Sun JDK on Linux

**1** Go to the following URL:

Java SE Downloads (http://java.sun.com/javase/downloads/index.jsp)

- **2** Click *Download JDK*.
- **3** Accept the License Agreement.
- 4 Click the jdk-6unn-linux-version-rpm. bin file in the Download column, then save the file to an empty temporary directory on your Linux server.
- 5 As the root user, change to that temporary directory, then use the following command to make sure that the download arrived safely:

```
ls -1
```

You should see a file named jdk-6unn-linux-version-rpm.bin.

**6** Change the permissions on the file to include execute permissions:

```
chmod +x jdk-6unn-linux-version-rpm.bin
```

**7** Run the self-extracting file:

```
./jdk-6unn-linux-version-rpm.bin
```

This creates a file named jdk-6unn-linux-version.rpm, and a directory named /usr/ java/jdk.1.6.0 nn with the Sun JDK software in it.

The Sun JDK is now installed on your Linux server.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under Java JDK Location on the Basic Vibe Installation Summary Sheet, specify the directory where you install the JDK. The Vibe installation program prompts you for this location.

#### A.1.2 IBM JDK on Linux

- "Installing the IBM JDK on SUSE Linux Enterprise Server 11" on page 124
- "Installing the IBM JDK on Open Enterprise Server 2 and SUSE Linux Enterprise Server 10" on page 124

#### Installing the IBM JDK on SUSE Linux Enterprise Server 11

The IBM JDK 6.0 is available with SUSE Linux Enterprise Server (SLES) 11, which is used for Open Enterprise Server (OES) 2. You can install it by using YaST.

- 1 In YaST, click Software > Software Management.
- **2** In the *Search* field, type ibm, then click *Search*.
- **3** Select Java 5 SDK, Standard Edition (java-1 5 0-ibm-devel), then click Accept.
- 4 Click Continue to accept the suggested dependencies, then click No because you don't need any more packages.
- **5** Exit YaST.

This creates a directory named /usr/lib/jvm/java-1 5 0-ibm-1.5.0 sr3 with the IBM JDK software in it.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Java JDK Location on the Basic Vibe Installation Summary Sheet, specify the directory where you install the JDK. The Vibe installation program prompts you for this location.

#### Installing the IBM JDK on Open Enterprise Server 2 and SUSE Linux Enterprise Server 10

The IBM JDK 6.0 is not included with SUSE Linux Enterprise Server (SLES) 10.

To download the IBM JDK 6.0:

- **1** Go to the following URL:
  - Java SE Downloads (http://www.ibm.com/developerworks/java/jdk/linux/download.html)
- **2** In the Java SE Version 6 table, in the Download column, click the appropriate link for your operating system.
- 3 Sign in using your IBM account. If you don't have an account, create one.
- **4** Agree to IBM's License Agreement, then continue.

- **5** Download the ibm-java-i386-sdk-6.0-n.n.i386.rpm file to an empty temporary directory on your Linux server.
- **6** Change to that directory, then run the downloaded file.

This creates a directory named opt\ibm with the IBM JDK in it.

The IBM JDK is now installed on your Linux server.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Java JDK Location on the Basic Vibe Installation Summary Sheet, specify the directory where you install the JDK. The Vibe installation program prompts you for this location.

#### A.1.3 Sun JDK on Windows

**1** Go to the following URL:

Java SE Downloads (http://java.sun.com/javase/downloads/index.jsp)

The update you need is listed as "JDK 6 Update nn."

- **2** Click *Download JDK* next to this update.
- 3 In the *Platform* field, select *Windows* or *Windows x64*, depending on the processor in your Vibe server.
- **4** Select *I agree*, then click *Continue* to accept Sun's License Agreement.
- 5 Click the jdk-6unn-windows-version. exe file, then save the file to an empty temporary directory on your Windows server.
- **6** Change to that temporary directory, then run the downloaded executable.

This creates a directory named c:\Program Files\Java\jdk6unn with the Sun JDK software in it.

The Sun JDK is now installed on your Windows server.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Java JDK Location on the Basic Vibe Installation Summary Sheet, specify the directory where you install the JDK. The Vibe installation program prompts you for this location.

# A.2 MySQL Database Server

- Section A.2.1, "MySQL on Linux," on page 125
- Section A.2.2, "MySQL on Windows," on page 127

# A.2.1 MySQL on Linux

Depending on the options you select when installing Open Enterprise Server 2 and SUSE Linux Enterprise Server (SLES), the MySQL database server might be installed along with the operating system. Check for the following directory:

/usr/bin/mysql

If the /usr/bin/mysql directory does not exist, you need to install the MySQL database server. If MySQL is already installed, you still need to configure it for use with Vibe.

- "Installing MySQL" on page 126
- "Configuring MySQL" on page 126
- "Learning More about MySQL" on page 127

#### Installing MySQL

- 1 Make sure you have access to your operating system installation media.
- **2** In YaST, click *Software > Software Management*.
- **3** In the *Search* field, type mysql, then click *Search*.
- **4** Select *mysql*, then click *Accept*.
- **5** Click *Continue* to resolve dependencies.
- **6** Click *Continue* to acknowledge package support status.
  - MySOL is then installed from the SLES media.
- **7** Continue with "Configuring MySQL" on page 126.

#### Configuring MySQL

When MySQL is initially installed, it is not configured with an administrator password, nor is it configured to start automatically. Follow the steps below to set up the MySQL database server for use with Vibe:

- **1** In YaST, click *System > System Services*.
- **2** Scroll to and select the MySQL service, then click *Enable*.
- **3** Click *Continue* to install dependencies, then click *OK* to close the status box.
- **4** Click OK > Yes to finish the installation, then exit YaST.
- **5** In a terminal window, become the root user.
- **6** To verify that the MySQL database server has started, use the following command:

```
ps -eaf | grep mysql
```

You should see MySQL processes running.

**7** Set the administrator password for the MySQL database server:

```
mysqladmin -u root password new password
```

This command changes the password for the MySQL root user, which is the default administrator username for the MySQL database server. This command is part of the MySQL client package.

**IMPORTANT:** The MySQL root username is not the same as the Linux root user. The Linux root user has a password established for it when you install Linux. In a parallel fashion, the MySQL root user needs to have a password established for it when you install MySQL.

#### **BASIC VIBE INSTALLATION SUMMARY SHEET**

Under Database Credentials on the Basic Vibe Installation Summary Sheet, specify the MySQL administrator password. The Vibe installation program prompts you for this information.

#### Learning More about MySQL

The following table includes some basic and useful MySQL commands:

Action	Command
Stop MySQL	/etc/initd/mysql stop
Start MySQL	/etc/initd/mysql start
Show MySQL status	mysqladmin -u root -p extended-status

If you want to administer MySQL through a GUI interface, you can download tools from:

MySQL GUI Tools Downloads (http://dev.mysql.com/downloads/gui-tools/5.0.html)

For more information about MySQL, see:

MySQL Documentation (http://dev.mysql.com/doc)

### A.2.2 MySQL on Windows

- 1 In your Web browser, go to the following URL: MySQL 5.1 Downloads (http://dev.mysql.com/downloads/mysql/5.1.html)
- 2 Scroll down if necessary, then click the type of Windows operating system you are using (32bit or 64-bit).
- **3** On the *Windows Essentials* line, click *Download*.
- **4** Click *Save File*, browse to and select a convenient temporary directory, then click *Save*.
- 5 In Windows Explorer, browse to the directory where you saved the MySQL . exe file.
- **6** Double-click the MySQL . exe file to start the MySQL Setup Wizard.
- 7 Follow the online instructions to install the MySQL software on the Windows server, then continue with Step 8 to configure the server.
- 8 Unless you are already familiar with configuring MySQL on a Windows server, select Standard Configuration, then click Next.
- **9** Select *Include Bin Directory in Windows PATH*, then click *Next*.
- **10** Set the MySQL root user password, then click *Next*.

#### BASIC VIBE INSTALLATION SUMMARY SHEET

Under Database Credentials on the Basic Vibe Installation Summary Sheet, specify the MySQL administrator password. The Vibe installation program prompts you for this information.

- 11 Click *Execute* to configure the MySQL database server, then click *Finish*.
  - Some messages report the status of your MySQL installation.
- **12** To monitor the MySQL database server, click Start > All Programs, then click MySQL > *MySQL Server 5.1 > MySQL Command Line Client.*

# **Third-Party Materials**

- Section B.1, "ANTLR 3 License," on page 129
- Section B.2, "Colt License Agreement," on page 130
- Section B.3, "Dom4j License," on page 130
- Section B.4, "iCal4j License," on page 131
- Section B.5, "ICU4J license (ICU4J 1.3.1 and later)," on page 131
- Section B.6, "JAXEN License," on page 132
- Section B.7, "Jung," on page 133
- Section B.8, "ASM," on page 133
- Section B.9, "Firebug Lite," on page 134

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# B.7 Jung

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