



vizioncore™  
A QUEST SOFTWARE COMPANY

# vFoglight™ Pro 5.2.4

Installation and Setup Guide

*Installing on Windows with an  
External MySQL Database*



## © 2008 Quest Software, Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software, Inc.

If you have any questions regarding your potential use of this material, contact:

Quest Software World Headquarters

LEGAL Dept

5 Polaris Way

Aliso Viejo, CA 92656

[www.quest.com](http://www.quest.com)

email: [legal@quest.com](mailto:legal@quest.com)

Refer to our Web site for regional and international office information.

## Trademarks

Quest, Quest Software, the Quest Software logo, Aelita, Akonix, Akonix L7 Enterprise, Akonix L7 Enforcer, AppAssure, Benchmark Factory, Big Brother, DataFactory, DeployDirector, ERDisk, Foglight, Funnel Web, I/Watch, Imceda, InLook, IntelliProfile, InTrust, Invertus, IT Dad, I/Watch, JClass, Jint, JProbe, LeccoTech, LiteSpeed, LiveReorg, MessageStats, NBSpool, NetBase, Npulse, NetPro, PassGo, PerformaSure, Quest Central, SharePlex, Sitraka, SmartAlarm, Spotlight, SQL LiteSpeed, SQL Navigator, SQL Watch, SQLab, Stat, StealthCollect, Tag and Follow, Toad, T.O.A.D., Toad World, vANALYZER, vAUTOMATOR, vCONTROL, vCONVERTER, vEssentials, vFOGLIGHT, vOptimizer Pro, vRanger Pro, vReplicator, Vintela, Virtual DBA, VizionCore, Xaffire, and XRT are trademarks and registered trademarks of Quest Software, Inc in the United States of America and other countries. Other trademarks and registered trademarks used in this guide are property of their respective owners.

## Disclaimer

The information in this document is provided in connection with Quest products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest products. EXCEPT AS SET FORTH IN QUEST'S TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest does not make any commitment to update the information contained in this document.

## License Credits and Third Party Information

To view license credit information, click the License Credits link on the Welcome to vFoglight online help page.

## Installation and Setup Guide

March 2009

Version 5.2.4 - Professional Edition

# Table of Contents

<b>Introduction to this Guide .....</b>	<b>7</b>
About vFoglight .....	8
About this Guide.....	8
vFoglight Documentation Suite .....	9
Core Documentation Set .....	9
Cartridge Documentation Sets .....	10
Feedback on the Documentation.....	10
Text Conventions .....	11
About Vizioncore Inc. ....	11
Contacting Dell .....	12
<b>Before Installing vFoglight.....</b>	<b>25</b>
What Is vFoglight?.....	26
Planning Your Installation or Upgrade.....	27
High Availability Mode .....	28
Using External Databases.....	29
Licensing .....	29
Hardware Requirements and Guidelines .....	31
Installation Recommendations .....	31
Hardware Requirements.....	31
<b>Installing vFoglight .....</b>	<b>33</b>
Preparing to Install .....	34
Installing a New Version of the vFoglight Management Server.....	34
Installing the vFoglight Management Server .....	34
Next Steps .....	55
External MySQL Database Access for Remote Users .....	56

Manual Database Configuration .....	56
Installation Modes .....	57
Upgrading vFoglight.....	60
Installed Directories .....	61
vFoglight Settings .....	62
Editing the foglight.config File .....	63
Setting Memory Parameters for the Server .....	63
Adding Command Line Options .....	64
Changing External Database Credentials.....	64
Setting the SQL Parser Properties.....	65
Setting Up vFoglight Server Federation.....	65
Configuring vFoglight to Access the Server Only Through the HTTPS Port.....	67
Setting Up an Encrypted Database Connection with SSL .....	68
Setting Up an Encrypted LDAP Connection with SSL .....	69
Uninstalling vFoglight.....	70
<b>Running the vFoglight Management Server .....</b>	<b>71</b>
Before You Begin.....	72
Migrating Data from an Existing Database .....	72
Initializing and Tuning the Database.....	73
Initializing the Database.....	73
Tuning an External MySQL Database for vFoglight.....	73
Starting and Stopping the vFoglight Management Server .....	75
Starting the vFoglight Management Server as a Windows Service .....	75
Stopping the Server .....	76
Starting and Stopping the Server in High Availability Mode.....	77
Remote Monitor .....	78
Enabling Email Notification .....	79
Logging in to vFoglight.....	79
Next Steps .....	79
Running the vFoglight Management Server FAQ.....	80
<b>Installing and Upgrading Cartridges .....</b>	<b>81</b>
Accessing the Cartridge Inventory Page .....	82
Installing Cartridges .....	82

Upgrading Cartridges .....	83
Next Steps .....	83
<b>Installing and Running the vFoglight Agent Manager (FglAM) .....</b>	<b>85</b>
Installing the vFoglight Agent Manager .....	86
Deploying the vFoglight Agent Manager Cartridge .....	86
Downloading the vFoglight Agent Manager Installer .....	87
Installing the vFoglight Agent Manager .....	88
Upgrading the vFoglight Agent Manager .....	98
Configuring the vFoglight Agent Manager .....	98
Configuring the vFoglight Agent Manager .....	98
Installing the vFoglight Agent Manager as a Windows Service .....	100
Running the vFoglight Agent Manager .....	100
Next Steps .....	101
Uninstalling the vFoglight Agent Manager .....	101
vFoglight Agent Manager Platform Support Matrix .....	102
<b>Installing Agents .....</b>	<b>103</b>
vFoglight Agents .....	104
Agent Installers .....	104
Remote Agent Installation .....	105
<b>Index .....</b>	<b>107</b>



# Introduction to this Guide

This chapter provides information about what is contained in the *vFoglight Installation and Setup Guide*. It also provides information about the vFoglight documentation suite and Vizioncore.

This chapter contains the following sections:

<a href="#">About vFoglight</a> .....	8
<a href="#">About this Guide</a> .....	8
<a href="#">vFoglight Documentation Suite</a> .....	9
<a href="#">Text Conventions</a> .....	11
<a href="#">About Vizioncore Inc.</a> .....	11

## About vFoglight

vFoglight helps IT organizations understand the virtual infrastructure by managing the relationships and interaction between all the components in the environment, including data centers, data stores, clusters, resource pools, hosts and virtual machines. With vFoglight, administrators can quickly determine the root-cause of an incident or problem, track virtual machine (VM) movements and understand their impact, and identify contention for resources between virtual machines.

## About this Guide

This guide walks you through a vFoglight installation. Before you begin, ensure that your system and development environments are set up correctly. For more information, refer to the *vFoglight System Requirements and Platform Support Guide*.

This guide is organized as follows:

**Chapter 1, Before Installing vFoglight** — This chapter introduces vFoglight and outlines the steps you must take in order to assure a successful installation.

**Chapter 2, Installing vFoglight** — This chapter guides you through the installation process. It also provides information on the vFoglight directory structure, and how to adjust certain vFoglight settings to best suit your environment.

**Chapter 3, Running the vFoglight Management Server** — This chapter outlines how to start and stop the vFoglight Management Server, how to initialize the database, how to migrate data from an existing database, and how to log into vFoglight.

**Chapter 4, Installing Cartridges** — This chapter describes the process for installing and upgrading vFoglight cartridges.

**Chapter 5, Installing the vFoglight Agent Manager** — This chapter outlines how to install, upgrade and configure the vFoglight Agent Manager.

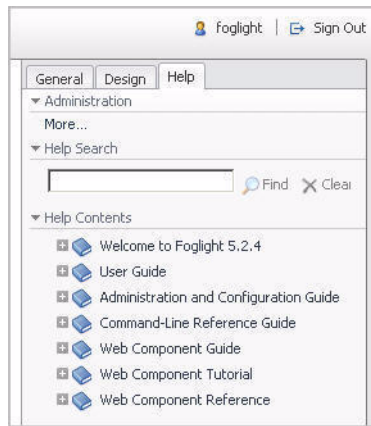
**Chapter 6, Installing Agents** — This chapter guides you through installing Agents that may be required by installed cartridges.



# vFoglight Documentation Suite

The vFoglight documentation suite is made up of the core documentation set, plus the documentation set for each vFoglight cartridge that you deploy. Documentation is provided in a combination of online help, PDF and HTML.

- **Online Help:** You can open the online help by selecting the Help tab from vFoglight's action panel.



- **PDF:** The *Getting Started Guide*, *What's New Guide*, *System Requirements and Platform Support Guide*, *Installation and Setup Guide* set, *Administration and Configuration Guide*, *vFoglight User Guide*, *Command-Line Reference Guide*, *Web Component Guide*, and *Web Component Tutorial*, are provided as PDF files. The PDF guides are included in the zip file downloaded from Vizioncore. Adobe® Reader® is required.
- **HTML:** Release Notes are provided in HTML.

## Core Documentation Set

The core documentation set consists of the following files:

- *Release Notes* (HTML)
- *Getting Started Guide* (PDF)
- *What's New Guide* (PDF)
- *System Requirements and Platform Support Guide* (PDF)

- *Installation and Setup Guide* set (all in PDF format):
  - *Installation and Setup Guide—Installing on Windows with an Embedded MySQL Database*
  - *Installation and Setup Guide—Installing on Windows with an External MySQL Database*
  - *Installation and Setup Guide—Installing on Windows with an External Oracle Database*
- *Administration and Configuration Guide* (PDF and online help)
- *vFoglight User Guide* (PDF and online help)
- *Advanced Configuration Guide* set
  - *Command-Line Reference Guide* (PDF and online help)
  - *Web Component Guide* (PDF and online help)
  - *Web Component Tutorial* (PDF and online help)
  - *Web Component Reference* (online help)

## Cartridge Documentation Sets

When you deploy a cartridge, the documentation set for the cartridge is installed. The online help for the cartridge is integrated automatically with the core vFoglight help. When you open the help, the name of the cartridge is displayed in a top level entry within the table of contents.

Some cartridges include additional PDF guides, which may be one or more of the following: a *Getting Started Guide*, an *Installation Guide*, a *User Guide*, and a *Reference Guide*.

## Feedback on the Documentation

We are interested in receiving feedback from you about our documentation. For example, did you notice any errors in the documentation? Were any features undocumented? Do you have any suggestions on how we can improve the documentation? All comments are welcome. Please submit your feedback to the following email address:

[info@vizioncore.com](mailto:info@vizioncore.com)

**Please do not submit Technical Support related issues to this email address.**

## Text Conventions

The following table summarizes how text styles are used in this guide:

Convention	Description
Code	Monospace text represents code, code objects, and command-line input. This includes: <ul style="list-style-type: none"><li>• Java language source code and examples of file contents</li><li>• Classes, objects, methods, properties, constants, and events</li><li>• HTML documents, tags, and attributes</li></ul>
<i>Variables</i>	Monospace-plus-italic text represents variable code or command-line objects that are replaced by an actual value or parameter.
<b>Interface</b>	Bold text is used for interface options that you select (such as menu items) as well as keyboard commands.
<i>Files, components, and documents</i>	Italic text is used to highlight the following items: <ul style="list-style-type: none"><li>• Pathnames, file names, and programs</li><li>• The names of other documents referenced in this guide</li></ul>

## About Vizioncore Inc.

Vizioncore was formed in July 2002 as a consulting and software-development company with the mission to create easy-to-use software solutions that performed reliable and repeatable automation of datacenter functions specifically for the Citrix platform. A main corporate goal was to enable business partners to offer solutions that targeted real-world IT issues and provided the best possible installation and automation for their clients' systems.

Vizioncore's solutions have proved successful in organizations from small to mid-sized businesses to large enterprises, in a wide variety of vertical industries, including Financial Services, Government, Healthcare, Manufacturing, and High Tech. Vizioncore, Inc. can be found in offices around the globe and at [www.vizioncore.com](http://www.vizioncore.com)

# Contacting Dell

Note: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- 1 Visit <http://support.dell.com>.
- 2 Verify your country or region in the Choose A Country/Region drop-down menu at the bottom of the page.
- 3 Click Contact Us on the left side of the page. Note: Toll-free numbers are for use within the country for which they are listed.
- 4 Select the appropriate service or support link based on your need.
- 5 Choose the method of contacting Dell that is convenient for you.

Country (City)	Service Type	Area Codes, Local Numbers, and Toll-Free Numbers Web and E-Mail Addresses
International Access Code Country Code City Code		
Anguilla	Web Address E-Mail Address Technical Support., Customer Service, Sales	<a href="http://www.Dell.com/ai">www.Dell.com/ai</a> <a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a> toll-free: 800-335-0031
Antigua and Barbuda	Web Address E-Mail Address Technical Support., Customer Service, Sales	<a href="http://www.Dell.com.ag">www.Dell.com.ag</a> <a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a> 1-800-805-5924
Aomen	Technical Support Dell™ Dimension™, Dell Inspiron™, Dell Optiplex™, Dell Latitude™, and Dell Precision™ Servers and Storage	0800-105 0800-105
Argentina (Buenos Aires) International Access Code: 00 Country Code: 54 City Code: 11	Web Address E-Mail Address for Desktop/ Portable Computers E-Mail Address for Servers and EMC® Storage Products Customer Service Technical Support Technical Support Services Sales	<a href="http://www.dell.com.ar">www.dell.com.ar</a> <a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a> <a href="mailto:la_enterprise@dell.com">la_enterprise@dell.com</a> toll-free: 0-800-444-0730 toll-free: 0-800-444-0733 toll-free: 0-800-444-0724 0-800-444-3355
Aruba	Web Address E-Mail Address Technical Support., Customer Service, Sales	<a href="http://www.Dell.com/aw">www.Dell.com/aw</a> <a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a> toll-free: 800-1578
Australia (Sydney) International Access Code: 0011 Country Code: 61 City Code: 2	Web Address Contact Dell Web Address Technical Support., Customer Service, Sales	<a href="http://support.ap.dell.com">support.ap.dell.com</a> <a href="http://support.ap.dell.com/contactus">support.ap.dell.com/contactus</a> 13DELL-133355

Austria (Vienna)	Web Address	Support.euro.dell.com
International Access Code: 900	E-Mail Address	<a href="mailto:Tech_support_central_europe@dell.com">Tech_support_central_europe@dell.com</a>
Country Code: 43	Home/Small Business Sales	0820 240 530 00
City Code: 1	Home/Small Business Fax	0820 240 530 49
	Home/Small Business Customer Service	0820 240 530 14
	Home/Small Business Support	0820 240 530 17
	Preferred Accounts/Corporate Customer	0820 240 530 16
	Service Preferred Accounts/Corporate Customer	0820 240 530 17
	Switchboard	0820 240 530 00
Bahamas	Web Address	<a href="http://www.dell.com/bs">www.dell.com/bs</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support., Customer Service, Sales	toll-free: 1-866-874-3038
Barbados	Web Address	<a href="http://www.dell.com/bb">www.dell.com/bb</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support., Customer Service, Sales	1-800-534-3142
Belgium (Brussels)	Web Address	Support.euro.dell.com
	General Support	02 481 92 88
	General Support Fax	02 481 92 95
	Customer Service	02 713 15 65
	Corporate Sales	02 481 91 00
	Fax	02 481 91 99
	Switchboard	02 481 91 00
Bolivia	Web Address	<a href="http://www.dell.com/bo">www.dell.com/bo</a>
	E-Mail Address	<a href="mailto:la_techsupport@dell.com">la_techsupport@dell.com</a>
	Technical Support., Customer Service, Sales	toll-free: 800-10-0238
Brazil	Web Address	<a href="http://www.dell.com/br">www.dell.com/br</a>
International Access Code: 00	E-Mail Address	<a href="mailto:BR_TechSupport@dell.com">BR_TechSupport@dell.com</a>
Country Code: 55	Customer Service and Tech Support	0800 970 3355
City Code: 51	Technical Support Fax	51 2104 5470
	Customer Service Fax	51 2104 5480
	Sales	0800 722 3498
British Virgin Islands	Technical Support, Customer Service, Sales	toll-free: 1-866-278-6820
Brunei	Technical Support (Penang, Malaysia)	604 633 4966
Country Code: 673	Customer Service (Penang, Malaysia)	604 633 4888
	Transaction Sales (Penang, Malaysia)	604 633 4955
Canada (North York, Ontario)	Online Order Status Web Address	<a href="http://www.dell.ca/ostatus">www.dell.ca/ostatus</a>
International Access Code: 011	AutoTech (automated Hardware and Warranty Support)	support.ca.dell.com
	Customer Service	toll-free: 1-800-247-9362
	Home/Home Office	toll-free: 1-800-847-4096
	Small Business	toll-free: 1-800-906-3355
	Medium/Large Business, Government, Education	toll-free: 1-800-387-5757
	Hardware Warranty Phone Support	
	Computers for Home/Home Office	toll-free: 1-800-847-4096
	Computers for Small/Medium/Large Business	toll-free: 1-800-387-5757
	Government	
	Printers, Projectors, Televisions, Handheld, Digital	1-877-335-5767
	Jukebox, and Wireless Sales	toll-free: 1-800-999-3355
	Home and Home Office Sales	toll-free: 1-800-387-5752
	Small Business	toll-free: 1-800-387-5755
	Medium/Large Business, Government	1 866 440 3355
	Spare Parts and Extended Service	
Cayman Islands	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	1-877-262-5415

Chile (Santiago)	Web Address	<a href="http://www.dell.com/cl">www.dell.com/cl</a>
Country Code: 56	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
City Code: 2	Sales and Customer Support	toll-free: 1230-020-4823
China (Xiamen)	Technical Support Web Address	support.dell.com.cn
Country Code: 86	Technical Support E-Mail Address	support.dell.com.cn/email
City Code: 592	Customer Service E-Mail Address	<a href="mailto:customer_cn@dell.com">customer_cn@dell.com</a>
	Technical Support Fax	592 818 14350
	Technical Support – Dimension and Inspiron	toll-free: 800 858 2969
	Technical Support – OptiPlex, Latitude and Dell Precision	toll-free: 800 858 0950
	Technical Support – Servers and Storage	toll-free: 800 858 0960
	Technical Support – Projectors, PDAs, Switches, Routers, etc	toll-free: 800 858 2920
	Technical Support – Printers	toll-free: 800 858 2311
	Customer Service	toll-free: 800 858 2060
	Customer Service Fax	592 818 1308
	Home and Small Business	toll-free: 800 858 2222
	Preferred Accounts Division	toll-free: 800 858 2557
	Large Corporate Accounts GCP	toll-free: 800 858 2055
	Large Corporate Accounts Key Accounts	toll-free: 800 858 2628
	Large Corporate Accounts North	toll-free: 800 858 2999
	Large Corporate Accounts North Government and Education	toll-free: 800 858 2955
	Large Corporate Accounts East	toll-free: 800 858 2020
	Large Corporate Accounts East Government and Education	toll-free: 800 858 2669
	Large Corporate Accounts Queue Team	toll-free: 800 858 2572
	Large Corporate Accounts South	toll-free: 800 858 2355
	Large Corporate Accounts West	toll-free: 800 858 2811
	Large Corporate Accounts Spare Parts	toll-free: 800 858 2621
Columbia	Web Address	<a href="http://www.dell.com/co">www.dell.com/co</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	01-800-915-4755
Costa Rica	Web Address	<a href="http://www.dell.com/cr">www.dell.com/cr</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	0800-012-0231
Czech Republic (Prague)	Web Address	support.euro.dell.com
International Access	E-Mail Address	<a href="mailto:czech_dell@dell.com">czech_dell@dell.com</a>
Code: 00	Technical Support	22537 2727
Country Code: 420	Customer Service	22537 2707
	Fax	22537 2714
	Technical Fax	22537 2728
	Switchboard	22537 2711
Denmark (Copenhagen)	Web Address	Support.euro.dell.com
International Access	Technical Support	7023 0182
Code: 00	Customer Service – Relational	7023 0184
Country Code: 45	Home/Small Business Customer Service	3287 5505
	Switchboard – Relational	3287 1200
	Switchboard Fax – Relational	3287 1201
	Switchboard – Home/Small Business	3287 5000
	Switchboard Fax – Home/Small Business	3287 5001
Dominica	Web Address	<a href="http://www.dell.com/dm">www.dell.com/dm</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-866-278-6821

Dominican Republic	Web Address	<a href="http://www.dell.com/do">www.dell.com/do</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	1-800-156-1588
Ecuador	Web Address	<a href="http://www.dell.com/ec">www.dell.com/ec</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales (Calling from Quito)	toll-free: 999-119-877-655-3355
	Technical Support, Customer Service, Sales (Calling from Guayaquil)	toll-free: 1800-999-119-877-655-3355
El Salvador	Web Address	<a href="http://www.dell.com/sv">www.dell.com/sv</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	800-6132
Finland (Helsinki)	Web Address	<a href="mailto:support@euro.dell.com">support@euro.dell.com</a>
International Access Code: 990 Country Code: 358 City Code: 9	E-Mail Address	<a href="mailto:fi_support@dell.com">fi_support@dell.com</a>
	Technical Support	0207 533 555
	Customer Service	0207 533 538
	Switchboard	0207 533 533
	Sales under 500 employees	0207 533 540
	Fax	0207 533 530
	Sales over 500 employees	0207 533 533
	Fax	0207 533 530
France (Paris) (Montpellier) International Access Code: 00 Country Code: 33 City Codes: (1) (4)	Web Address	Support.euro.dell.com
	Home and Small Business	
	Technical Support	0825 387 270
	Customer Service	0825 832 833
	Switchboard	0825 004 700
	Switchboard (calls from outside of France)	04 99 75 40 00
	Sales	0825 004 700
	Fax	0825 004 701
	Fax (calls from outside of France)	04 99 75 40 01
	Corporate	
	Technical Support	0825 004 719
	Customer Service	0825 338 339
	Switchboard	55 94 71 00
	Sales	01 55 94 71 00
Germany (Frankfurt)	Web Address	support.euro.dell.com
	E-mail Address	<a href="mailto:tech_support_central_europe@dell.com">tech_support_central_europe@dell.com</a>
	Technical Support	069 9792-7200
	Home/Small Business Customer Service	0180-5-224400
	Global Segment Customer Service	069 9792-7320
	Preferred Accounts Customer Service	069 9792-7320
	Large Accounts Customer Service	069 9792-7320
	Public Accounts Customer Service	069 9792-7320
Greece	Switchboard	069 9792-7000
	Web Address	Support.euro.dell.com
	Technical Support	00800-44 14 95 18
	Gold Service Technical Support	00800-44 14 00 83
	Switchboard	2108129810
	Gold Service Switchboard	2108129811
	Sales	2108129800
	Fax	2108129812
Grenada	Web Address	<a href="http://www.dell.com/gd">www.dell.com/gd</a>
	E-Mail Address	<a href="mailto:la-techsuppo@dell.com">la-techsuppo@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-866-540-3355

Guatemala	Web Address	<a href="http://www.dell.com/gt">www.dell.com/gt</a>
	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	1-800-999-0136
Guyana	E-Mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-877-270-4609
Hong Kong	Web Address	<a href="http://support.ap.dell.com">support.ap.dell.com</a>
International Access Code: 001 Country Code: 852	Technical Support E-mail Address	<a href="mailto:support.dell.com.cn/email">support.dell.com.cn/email</a>
	Technical Support - Dimension and Inspiron	00852-2969 3188
	Technical Support - OptiPlex, Latitude, and Dell Precision	00852-2969 3191
	Technical Support - Servers and Storage	00852-2969 3196
	Technical Support - Projectors, PDAs, Switches, Routers, etc .	00852-3416 0906
	Customer Service	00852-3416 0910
	Large Corporate Accounts	00852-3416 0907
	Global Customer Programs	00852-3416 0908
	Medium Business Division	00852-3416 0912
Home and Small Business Division	00852-2969 3105	
India	Dell Support Website	<a href="http://support.ap.dell.com">support.ap.dell.com</a>
<b>Portable and Desktop Support</b>		
	Desktop Support E-mail Address	<a href="mailto:india_support_desktop@dell.com">india_support_desktop@dell.com</a>
	Portable Support E-mail Address	<a href="mailto:india_support_notebook@dell.com">india_support_notebook@dell.com</a>
	Phone Numbers	080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-free: 1-800-425-8045
<b>Server Support</b>		
	E-mail Address	<a href="mailto:india_support_Server@dell.com">india_support_Server@dell.com</a>
	Phone Numbers	080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-free: 1-800-425-8045
<b>Gold Support Only</b>		
	E-mail Address	<a href="mailto:eec_ap@dell.com">eec_ap@dell.com</a>
	Phone Numbers	080-25068033 or your city STD code + 60003355 or toll-free: 1-800-425-9045
<b>Customer Service</b>		
	Home and Small Business	<a href="mailto:India_care_HSB@dell.com">India_care_HSB@dell.com</a> toll-free : 1800-4254051
	Large Corporate Accounts	<a href="mailto:India_care_REL@dell.com">India_care_REL@dell.com</a> toll free : 1800-4252067
<b>Sales</b>		
	Large Corporate Accounts	1600 33 8044
	Home and Small Business	1600 33 8046



Ireland (Cherrywood)	Web Address	Support.euro.dell.com
International Access Code: 00	<b>Technical Support</b>	
Country Code: 353	E-mail Address	<a href="mailto:dell_direct_support@dell.com">dell_direct_support@dell.com</a>
City Code: 1	Business computers	1850 543 543
	Home computers	1850 543 543
	At Home Support	1850 200 889
	<b>Sales</b>	
	Home	1850 333 200
	Small Business	1850 664 656
	Medium Business	1850 200 646
	Large Business	1850 200 646
	E-mail Address	<a href="mailto:Dell_IRL_Outlet@dell.com">Dell_IRL_Outlet@dell.com</a>
	<b>Customer Service</b>	
	Home and Small Business	204 4014
	Business (greater than 200 employees)	1850 200 982
	<b>General</b>	
	Fax/Sales fax	204 0103
	Switchboard	204 4444
	U.K. Customer Service (dealing with U.K. only)	0870 906 0010
	Corporate Customer Service (dial within U.K. only)	0870 907 4499
	U.K. Sales (dial within U.K. only)	0870 907 4000
Italy (Milan)	Web Address	Support.euro.dell.com
International Access Code: 00	<b>Home and Small Business</b>	
Country Code: 39	Technical Support	02 577 826 90
City Code: 02	Customer Service	02 696 821 14
	Fax	02 696 821 13
	Switchboard	02 696 821 12
	<b>Corporate</b>	
	Technical Support	02 577 826 90
	Customer Service	02 577 825 55
	Fax	02 575 035 30
	Switchboard	02 577 821
Jamaica	E-mail Address	<a href="mailto:ja-techsupport@dell.com">ja-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales (dial from within Jamaica only)	1-800-440-920

Japan (Kawasaki)	Web Address	support.jp.dell.com
International Access Code: 001 Country Code: 81 City Code: 44	Technical Support - Dimension and Inspiron	toll-free: 0120-198-26
	Technical Support outside of Japan - Dimension and Inspiron	81-44-520-1435
	Technical Support - Dell Precision, OptiPlex, and Latitude	toll-free: 0120-198-433
	Technical Support outside of Japan - Dell Precision, OptiPlex, and Latitude	81-44-556-3894
	Technical Support - Dell PowerApp™, Dell PowerEdge™, Dell PowerConnect™, and Dell PowerVault™,	toll-free: 0120-198-498
	Technical Support outside of Japan - PowerApp, PowerEdge, PowerConnect, and PowerVault	81-44-556-4162
	Technical Support - Projectors, PDAs, Printers, Routers	toll-free: 0120-981-690
	Technical Support outside of Japan - Projectors, PDAs, Printers, Routers	81-44-556-3468
	Faxbox Service	044-556-3490
	24-Hour Automated Order Status Service	044-556-3801
	Customer Service	044-556-4240
	Business Sales Division - up to 400 employees	044-556-1465
	Preferred Accounts Division Sales - over 400 employees	044-556-3433
	Public Sales - government agencies, educational institutions, and medical institutions	044-556-5963
Global Segment Japan	044-556-3469	
Individual User	044-556-1657	
Individual User Online Sales	044-556-2203	
Individual User Real Site Sales	044-556-4649	
Switchboard	044-556-4300	
Korea (Seoul)	Web Address	Support.ap.dell.com
International Access Code: 001 Country Code: 82 City Code: 2	Technical Support, Customer Service	toll-free: 080-200-3800
	Technical Support - Dimension, PDA, Electronics, and Accessories	toll-free: 080-200-3801
	Sales	toll-free: 080-200-3600
	Fax	2194-6202
	Switchboard	2194-6000
Latin America	Customer Technical Support (Austin, Texas, U.S.A.)	512 728-4093
	Customer Service (Austin, Texas, U.S.A.)	512 728-3619
	Fax (Technical Support and Customer Service) (Austin, Texas, U.S.A.)	512 728-3883
	Sales (Austin, Texas, U.S.A.)	512 728-4397
	SalesFax (Austin, Texas, U.S.A.)	512 728-4600 or 512 728-3772
Luxemborg	Web Address	Support.euro.dell.com
International Access Code: 00 Country Code: 352	Support	3420808075
	Home/Small Business Sales	+32 (0)2 713 15 96
	Corporate Sales	26 25 77 81
	Customer Service	+32 (0)2 481 91 19
	Fax	26 25 77 82
Macao	Technical Support	toll-free: 0800 105
Country Code: 83	Customer Service (Xiamen, China)	34 160 910
	Transaction Sales (Xiamen, China)	29 693 115

Malaysia (Penang)	Web Address	Support.ap.dell.com
International Access Code: 00	Technical Support - Dell Precision, OptiPlex, and Latitude	toll-free: 1800 880 193
Country Code: 60	Technical Support - Dimension, Inspiron, and Electronics and Accessories	toll-free: 1800 881 306
City Code: 4	Technical Support - PowerApp, PowerEdge, PowerConnect, and PowerVault	toll-free: 1800 881 386
	Customer Service	toll-free: 1800 881 306 (option 6)
	Transaction Sales	toll-free: 1800 888 202
	Corporate Sales	toll-free: 1800 888 213
Mexico	Web Address	<a href="http://www.dell.com/mx">www.dell.com/mx</a>
International Access Code: 00	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
Country Code: 52	Customer Technical Support	001-877-384-8979 or 001-877-269-3383
	Sales	50-81-8800 or 01-800-888-3355
	Customer Service	001-877-384-8979 or 001-877-269-3383
	Main	50-81-8800 or 01-800-888-3355
Montserrat	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	Toll-free: 1-866-278-6822
Netherlands	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
Antilles	Web Address	support.euro.dell.com
Netherlands (Amsterdam)	Technical Support	020 674 45 00
International Access Code: 00	Technical Support Fax	020 674 47 66
Country Code: 31	Home/Small Business Customer Service	020 674 42 00
City Code: 20	Relational Customer Service	020 674 43 25
	Home/Small Business Sales	020 674 55 00
	Relational Sales	020 674 50 00
	Home/Small Business Sales Fax	020 674 47 75
	Relational Sales Fax	020 674 47 50
	Switchboard	020 674 50 00
	Switchboard Fax	020 674 47 50
New Zealand	Web Address	Support.ap.dell.com
International Access Code: 00	E-mail Address	Support.ap.dell.com/contactus
Country Code: 64	Technical Support, Customer Service, Sales	0800 441 567
Nicaragua	Web Address	<a href="http://www.dell.com/ni">www.dell.com/ni</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	001-800-220-1377
Norway (Lysaker)	Web Address	Support.euro.dell.com
International Access Code: 00	Technical Support	671 16882
Country Code: 47	Relational Customer Service	671 17575
	Home/Small Business Customer Service	231 62298
	Switchboard	671 16800
	Fax Switchboard	671 16865
Panama	Web Address	<a href="http://www.dell.com/pa">www.dell.com/pa</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	011-800-507-1264
Peru	Web Address	<a href="http://www.dell.com/pe">www.dell.com/pe</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	0800-50-669

Poland (Warsaw)	Web Address	support.euro.dell.com
International Access Code: 011	E-mail Address	<a href="mailto:pl_support_tech@dell.com">pl_support_tech@dell.com</a>
Country Code: 48	Customer Service Phone	57 95 700
City Code: 22	Customer Service	57 95 999
	Sales	57 95 999
	Customer Service Fax	57 95 806
	Reception Desk Fax	57 95 998
	Switchboard	57 95 999
Portugal	Web Address	Support.euro.dell.com
International Access Code: 00	Technical Support	707200149
Country Code: 351	Customer Service	800 300 413
	Sales	800-300-410 or 800-300 -411 or 800-300-412 or 21-422-07-10
	Fax	21-424-01-12
Puerto Rico	Web Address	www.dell.com/pr
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	1-877-537-3355
St. Kitts and Nevis	Web Address	www.dell.com/kn
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-866-540-3355
St. Lucia	Web Address	www.dell.com/lc
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-866-464-4352
St. Vincent and the Grenadines	Web Address	www.dell.com/vc
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-866-464-4353
Singapore	NOTE: The phone numbers in this section should be called from within Singapore or Malaysia only.	
International Access Code: 005	Web Address	support.ap.dell.com
Country Code: 65	Technical Support - Dimension, Inspiron, and Electronics and Accessories	toll-free: 1 800 394 7430
	Technical Support - OptiPlex, Latitude, and Dell Precision	toll-free: 1 800 394 7488
	Technical Support - PowerApp, PowerEdge, PowerConnect, and PowerVault	toll-free: 1 800 394 7478
	Customer Service	toll-free: 1 800 394 7430 (option 6)
	Transaction Sales	toll-free: 1 800 394 7412
	Corporate Sales	toll-free: 1 800 394 7419
Slovakia (Prague)	Web Address	<a href="http://support.euro.dell.com">support.euro.dell.com</a>
International Access Code: 00	E-mail Address	<a href="mailto:czech_dell@dell.com">czech_dell@dell.com</a>
Country Code: 421	Technical Support	02 5441 5727
	Customer Service	420 22537 2707
	Fax	02 5441 8328
	Tech Fax	02 5441 8328
	Switchboard (Sales)	02 5441 8328 02 5441 7585
South Africa (Johannesburg)	Web Address	support.euro.dell.com
International Access Code: 09/091	E-mail Address	<a href="mailto:dell_za_suppor@dell.com">dell_za_suppor@dell.com</a>
Country Code: 27	Gold Queue	011 709 7713
City Code: 11	Technical Support	011 709 7710
	Customer Service	011 709 7707
	Sales	011 709 7700

Spain (Madrid)	Web Address	Support.euro.com
International Access	Home and Small Business	
Code: 00	Technical Support	902 100 130
Country Code: 34	Customer Service	902 118 540
City Code: 91	Sales	902 118 541
	Switchboard	902 118 541
	Fax	902 118 539
	Corporate	
	Technical Support	902 100 130
	Customer Service	902 115 236
	Switchboard	91 722 92 00
	Fax	91 722 95 83
Sweden (Upplands Vasby)	Web Address	support.euro.dell.com
International Access	Technical Support	08 590 05 199
Code: 00	Relational Customer Service	08 590 05 642
Country Code: 46	Home/Small Business Customer Service	08 587 70 527
City Code: 8	Employee Purchase Program (EPP) Support	020 140 14 44
	Technical Support Fax	08 590 05 594
Switzerland (Geneva)	Web Address	Support.euro.dell.com
International Access	E-mail Address	<a href="mailto:Tech_support_central_Europe@dell.com">Tech_support_central_Europe@dell.com</a>
Code: 00	Technical Support – Home and Small Business	0844 811 411
Country Code: 41	Technical Support – Corporate	0844 822 844
City Code: 22	Customer Service – Home and Small Business	0848 802 202
	Customer Service – Corporate	0848 821 721
	Fax	022 799 01 90
	Switchboard	022 799 01 01
Taiwan	Web Address	support.ap.dell.com
International Access	E-mail Address	support.dell.com.cn/email
Code: 002	Technical Support - OptiPlex, Latitude, Inspiron, Dimension, and Electronics and Accessories	toll-free: 0080 186 1011
Country Code: 886	Technical Support - Servers and Storage	toll-free: 0080 160 1256
	Customer Service	toll-free: 0080 160 1250 (option 5)
	Transaction Sales	toll-free: 0080 165 1228
	Corporate Sales	toll-free: 0080 165 1227
Thailand	Web Address	Support.ap.dell.com
International Access	Technical Support (OptiPlex, Latitude, and Dell Precision)	toll-free: 1800 0060 07
Code: 001	Technical Support (PowerApp, PowerEdge, PowerConnect, and PowerVault)	toll-free: 1800 0600 09
Country Code: 66	Customer Service	toll-free: 1800 006 007 (option 7)
	Corporate Sales	toll-free: 1800 006 009
	Transaction Sales	toll-free: 1800 006 006
Trinidad/Tobago	Web Address	<a href="http://www.dell.com/ff">www.dell.com/ff</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-888-799-5908
Turks and Caicos Islands	Web Address	<a href="http://www.dell.com/tc">www.dell.com/tc</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-877-441-4735

U.K.(Bracknell)	Web Address	upport.euro.dell.com
International Access Code: 00	E-mail Address	<a href="mailto:dell_direct_support@dell.com">dell_direct_support@dell.com</a>
Country Code: 44	Customer Service Website	support.euro.dell.com/uk/en/ECare/form/home.asp
City Code: 1344	<b>Sales</b>	
	Home and Small Business Sales	0870 907 4000
	Corporate/Public Sector Sales	01344 860 456
	<b>Customer Service</b>	
	Home and Small Business	0870 906 0010
	Corporate	01344 373 185
	Preferred Accounts (500-5000 employees)	0870 906 0010
	Global Accounts	01344 373 186
	Central Government	01344 373 196
	Local Government & Education	01344 373 199
	Health	01344 373 194
	<b>Technical Support</b>	
	Corporate/Preferred Accounts/PCA (1000+ employees)	0870 908 0500
	Other Dell Products	0870 353 0800
	<b>General</b>	
	Home and Small Business Fax	0870 907 4006
Uruguay	Web Address	<a href="http://www.dell.com/uy">www.dell.com/uy</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 000-413-598-2521
U.S.A. (Austin, Texas)	Automated Order-Status Service	toll-free: 1-800-433-9014
International Access Code: 011	AutoTech (portable and desktop computers)	toll-free: 1-800-247-9362
Country Code: 1	Hardware and Warranty Support (Dell TV, Printers, and Projectors ) for Relationship customers	toll-free: 1-877-459-7298
	Consumer (Home and Home Office) Support for Dell products	toll-free: 1-800-624-9896
	Customer Service	toll-free: 1-800-624-9897
	Employee Purchase Program (EPP) Customers	toll-free: 1-800-695-8133
	Financial Services Web Address	www.dellfinancialservices.com
	Financial Services (lease/loans)	toll-free: 1-877-577-3355
	Financial Services (Dell Preferred Accounts [DPA])	toll-free: 1-800-283-2210
	<b>Business</b>	
	Customer Service	toll-free: 1-800-624-9897
	Employee Purchase Program (EPP)	toll-free: 1-800-695-8133
	Customer s Support for printers, projectors, PDAs, and MP3 players	toll-free: 1-877-459-7298
	<b>Public (government, education, and healthcare)</b>	
	Customer Service and Support	toll-free: 1-800-456-3355
	Employee Purchase Program (EPP) Customers	toll-free: 1-800-695-8133
	Dell Sales	toll-free: 1-800-289-3355 or toll-free: 1-800-879-3355
	Dell Outlet Store (Dell refurbished computers)	toll-free: 1-888-798-7561
	Software and Peripherals Sales	toll-free: 1-800-671-3355
	Spare Parts Sales	toll-free: 1-800-357-3355
	Extended Service and Warranty Sales	toll-free: 1-800-247-4618
	Fax	toll-free: 1-800-727-8320
	Dell Services for the Deaf, Hard-of-Hearing, or Speech-Impaired	toll-free: 1-877-DELLTTY (1-877-335-5889)

---

U.S. Virgin Islands	Web Address	<a href="http://www.dell.com/vi">www.dell.com/vi</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	toll-free: 1-877-702-4360
Venezuela	Web Address	<a href="http://www.dell.com/ve">www.dell.com/ve</a>
	E-mail Address	<a href="mailto:la-techsupport@dell.com">la-techsupport@dell.com</a>
	Technical Support, Customer Service, Sales	0800-100-4752

---





# Before Installing vFoglight

This chapter provides you with setup information and provides an initial overview of installing vFoglight or upgrading your vFoglight installation.

This chapter contains the following sections:

<a href="#">What Is vFoglight?</a> .....	26
<a href="#">Planning Your Installation or Upgrade</a> .....	27
<a href="#">Hardware Requirements and Guidelines</a> .....	31

## What Is vFoglight?

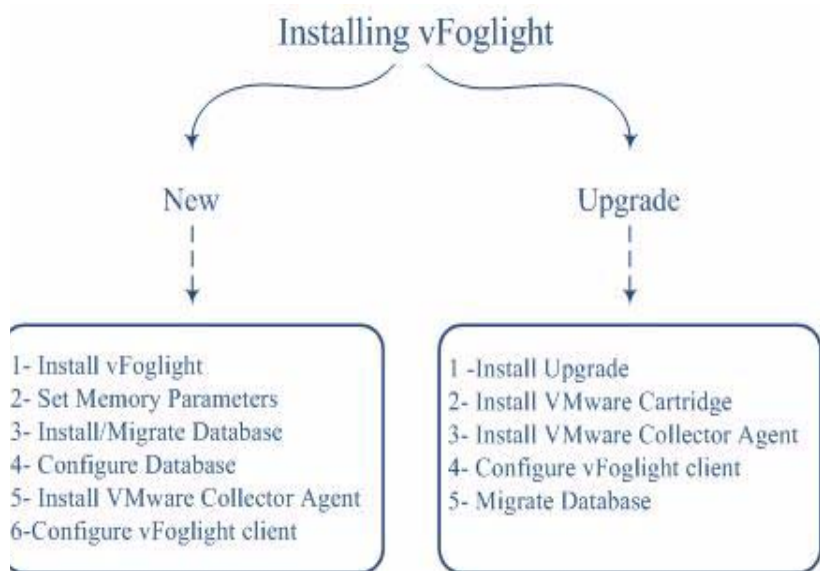
vFoglight is a powerful system and application performance management solution that detects problems and alerts information technology managers. vFoglight has the ability to dynamically create unique data schemas based on any data from any source. Rather than store data based on how it is collected by the agents, vFoglight organizes data based on your perception of the data. Using vFoglight, application and information technology managers can understand user service levels and notify stakeholders when those service levels are violated.

vFoglight helps you to:

- Focus on system and application availability and performance.
- Observe system capacity and application efficiency.
- Gauge user response time from multiple geographic locations.
- Identify and bridge gaps between business and information technology staff.
- Highlight historical information for planning and reporting.

## Planning Your Installation or Upgrade

Before you install or upgrade vFoglight, you need to review the components that you are going to install or upgrade. Ensure that you have the necessary information, such as port numbers and server names, and the locations where you are going to install the components.



The following list summarizes the main steps involved in installing (or upgrading) and configuring vFoglight:

**Step 1:** Install the vFoglight Management Server (or upgrade your installation to version 5.2.4) and configure the Management Server. The Management Server is the data collection and processing server.

**Step 2:** Install the database (or upgrade it, if you are upgrading your Management Server installation to version 5.2.4) and configure it. You can choose to use an embedded database or an external database. The instructions in this guide are for external database installations only.

**Step 3:** Install and configure cartridges. Cartridges extend the functionality of vFoglight, and are installed on the machine hosting the vFoglight Management Server. A cartridge contains one or more cartridge components, such as agents for deployment,

communication capabilities, modifications to the way that data is transformed or handled, rules, reports, and views.

**Step 4:** Install and configure Agents. Agents are deployed on machines in your monitored environment and send data to the vFoglight Management Server. There are several types of agents. One or more instances of each type of agent managed by the vFoglight Agent Manager can be deployed per host. For example, there is an agent that collects metrics from the operating system of the host machine. There are also agents that are embedded into systems or the software that they monitor. The Java™ EE Agent, which collects service request traces, runs embedded in Java™ EE application servers.

---

**Caution** You must install and configure the vFoglight Agent Manager before you can deploy agents (excluding Java™ EE Agents) that are installed on a monitored host.

---

## High Availability Mode

Before you install vFoglight, you need to determine if you are going to set up and run the vFoglight Management Server in High Availability (HA) mode or as a standalone server. High Availability mode enables you to install multiple servers where one server is the primary server and the others are standby servers. If the primary server stops responding, then the responsibility is taken over by one of the standby servers.

Configuring multiple servers using the high availability mode offers the following benefits:

- **Automatic restart:** The restart process (FoglightHA Daemon) runs on the same host as the vFoglight Management Server it is monitoring and monitors the state of the server. If the server stops responding or has a fatal error, then the restart process stops and restarts the server automatically. The process can also send out email notifications about various conditions of the server.

---

**Note** The default value for the restart process is five minutes (300s). Machines with a slower processing speed will take longer to reboot. The default time can be modified by editing the `startup.grace` variable in the `<vfoglight_home>/config/foglight.config` file.

---

- **Standby Server:** To reduce outage times, a standby server instance is created (for a particular vFoglight Management Server), and forms a partition. One server becomes the primary server and communicates with the agents, receives and processes data, and processes rules. All other servers are standby servers. If a

primary server stops responding, one of the standby servers resumes service and becomes the primary server.

---

**Note** In both High Availability Mode and Single Server Mode, the database must be running for vFoglight to operate. You may have to implement a combined database-backup and High Availability solution to achieve true failover of all components.

---

---

**Note** A server running in HA mode can only use an external database.

---

## Using External Databases

An external instance of MySQL can be used if your DBA has installed one. Please see the *vFoglight System Requirements and Platform Support Guide* for information about the external databases supported for vFoglight 5.2.4.

A setup with an external database has the advantage of using existing infrastructure. For setup, a remote administrator user/password is required that has rights to create users and tables in the user/temp tablespace.

## Licensing

This section provides information about licensing for vFoglight.

### Providing a License File During Installation

You can install a license file during the installation process. See “[Step 11: Add vFoglight License File](#)” on page 47 in [Installing a New Version of the vFoglight Management Server](#).

### Managing a License After Installation

You can also manage licenses after installing vFoglight. There are three ways of providing a license file to the Management Server after installation.

#### Manual Process

- Move an existing license file into the `<vfoglight_home>\license` folder.

## Using the vFoglight Administration Module

- Upload a license file using the vFoglight Administration Module. See the *Administration and Configuration Guide* for instructions.

## Using the Command Line

- 1 Start the vFoglight Management Server.
- 2 Ensure that `JAVA_HOME` is set.
- 3 If you have not already done so, extract the file `fglcmd.zip` in `<vfoglight_home>\tools`.
- 4 Upload a license by navigating to `<vfoglight_home>\tools` and entering the following commands:

```
fglcmd -usr <username> -pwd <password> -cmd license:import -f <license-file>
fglcmd -usr <username> -pwd <password> -cmd license:list
fglcmd -usr <username> -pwd <password> -cmd license:remove -serial <serial>
```

**Note** The commands listed above assume that you are using a default port=8080 and a localhost. If you are not running with these default values, use the following options to indicate server and port:

```
-prt <xx> -srv <servername>
```

# Hardware Requirements and Guidelines

The hardware requirements to run vFoglight can vary widely, based on a number of factors, including:

- The number and type of agents that are being used
- The persistence and data-rollup policies
- Agent configuration settings

You should not consider doing a production implementation without conducting a proper scoping and sizing exercise with a qualified Vizioncore representative. You can arrange for a sizing analysis by contacting your Vizioncore Sales Representative. At a minimum, you will be required to provide hardware matching the specifications below.

## Installation Recommendations

Running a vFoglight server requires:

- The vFoglight Management Server
- The vFoglight database repository

While these components can be installed on a single tier or on multiple tiers, it is critical to realize that the management server and database repository will require separately dedicated resources to support them. In order to help facilitate sizing, the resources required to support each component are addressed separately. They can either be summed to support a single-tier installation, or treated independently as the requirements for each server in a two-tier installation.

## Hardware Requirements

For the current single- and multi-tier hardware requirements, consult the *vFoglight System Requirements and Platform Support Guide*.





# Installing vFoglight

The vFoglight 5.2.4 installer allows you either to install a new instance of the vFoglight Management Server or to upgrade an existing installation of a vFoglight 5.x Management Server. This guide provides the procedures for a new installation of version 5.2.4 of the Management Server. For upgrade procedures, please refer to the *vFoglight 5.2.4 Upgrade Field Guide*.

This chapter contains the following sections:

Preparing to Install.....	34
Installing a New Version of the vFoglight Management Server .....	34
Upgrading vFoglight .....	60
Installed Directories .....	61
vFoglight Settings .....	62
Uninstalling vFoglight .....	70

---

**Note** The vFoglight Management Server should be installed on a dedicated machine.

---

## Preparing to Install

You will need the following to install vFoglight:

- A machine to host the vFoglight Management Server. The Management Server should run on a dedicated machine because it must process and store large volumes of data.

---

**Note** Please ensure that a hostname resolution and reverse lookup are confirmed prior to installing the vFoglight Management Server.

---

- Administrator or root access to all machines requiring a vFoglight agent.
- An administrator password for vFoglight. The user name *foglight* and the default password for this account can initially be used to log in to the consoles and use command-line options with administrator privileges. Vizioncore recommends that you change the default password for this account.

## Installing a New Version of the vFoglight Management Server

Once all system requirements are in place you are ready to install the vFoglight Management Server. The installer prompts you to input data, and provides you with progress feedback during the installation process.

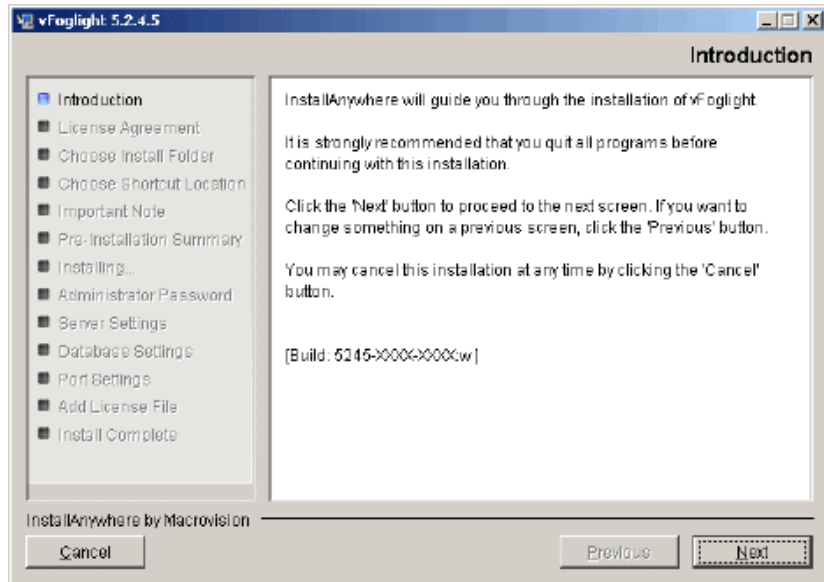
The vFoglight installation process consists of the same basic steps for all platforms. For specific platform customizations, see “[Installed Directories](#)” on page 61.

### Installing the vFoglight Management Server

Start the installation process by initiating the executable included on the vFoglight install media. Each installation screen includes a **Previous** button, allowing you to go back and adjust the information you have entered.

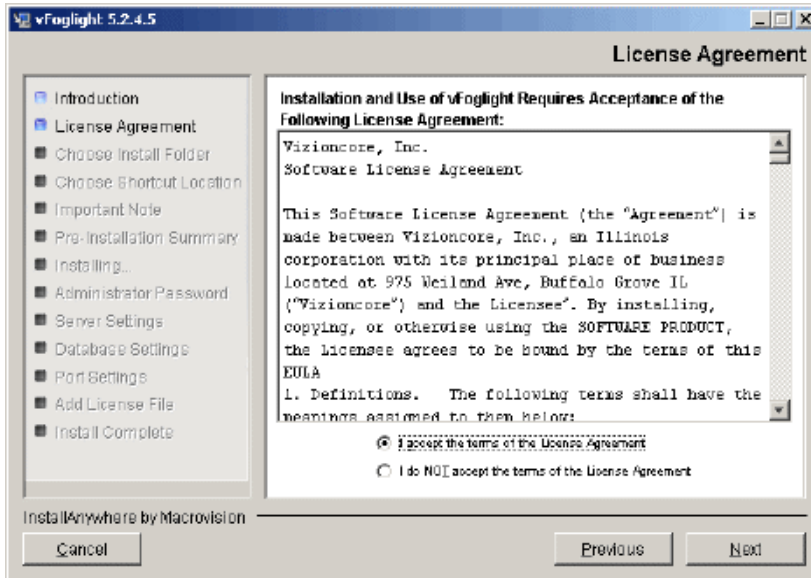
## Step 1: Introduction

The Introduction screen provides an overview of the mechanics of the installation interface. Click **Next** after reading the contents of this screen.



## Step 2: License Agreement

- 1 Read the License Agreement statement, and accept or decline the terms of the license agreement.



- 2 If you selected **I accept the terms of the License Agreement**, click **Next**.

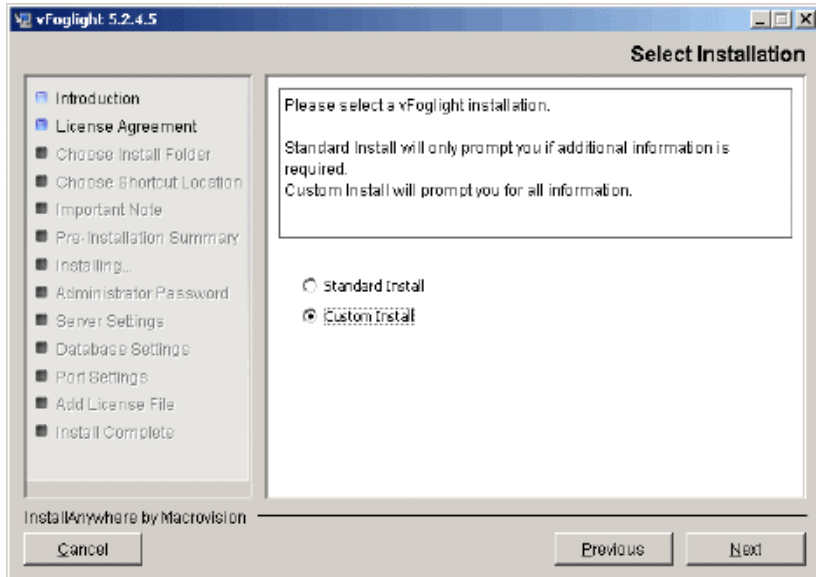
## Step 3: Select Installation

---

**Note** This screen allows you to choose an installation type. The Standard Install option is only available if you are using an embedded database.

---

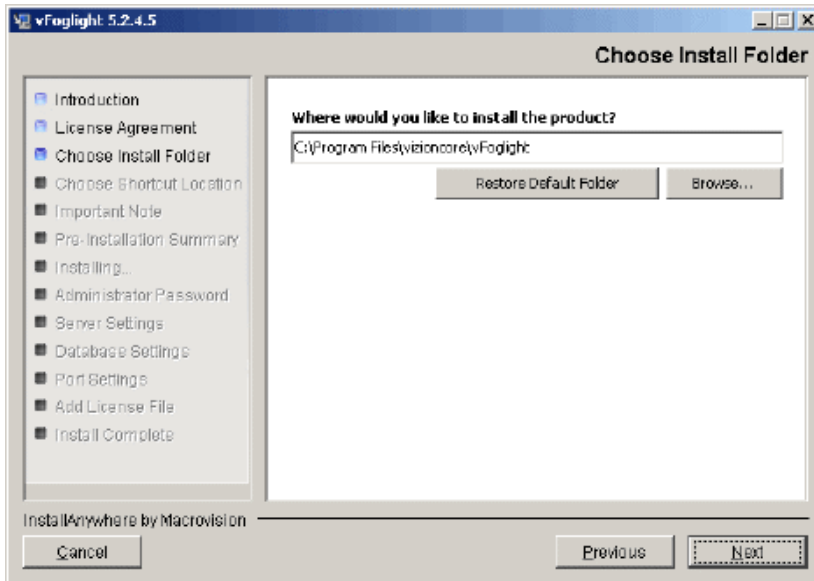
- 1 Choose the Custom Install option.



- 2 Click Next.

## Step 4: Choose Install Folder

- 1 Choose the location where you want to install vFoglight. You can accept the default location `C:\Vizioncore\vFoglight` or click the **Browse** button to navigate to another location.



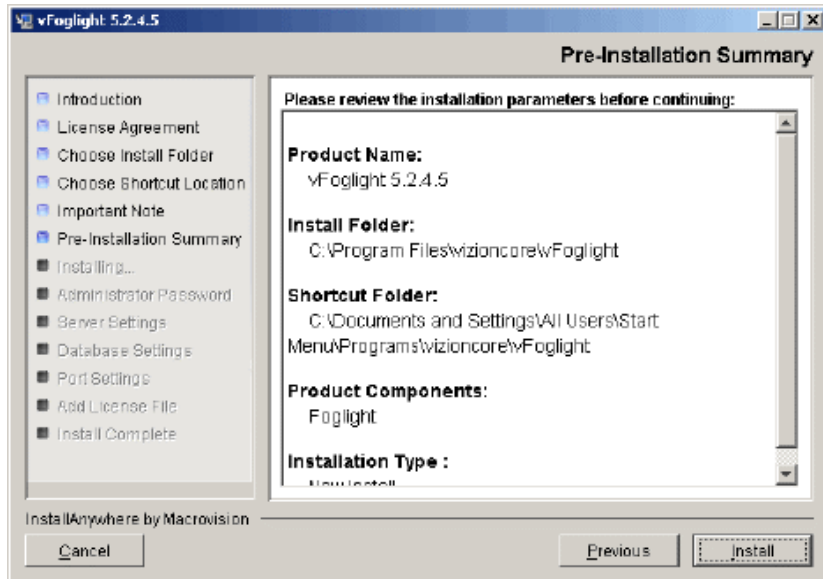
- 2 Click **Next**.

## Step 5: Pre-Installation Summary

- 1 Review the installation information.
- 2 If you are satisfied with the parameters of your installation, click **Install**.

To make changes to the installation parameters click **Previous**.

**Note** As shown below, the installation type (New Install) is displayed on this screen. If you wanted to upgrade an existing installation of the vFoglight Management Server to version 5.2.4, click **Previous** until you return to the Choose Install Folder screen. Detailed upgrade instructions are available in the *vFoglight 5.2.4 Upgrade Field Guide*.



## Step 6: Installing vFoglight 5.2.4

vFoglight installs files into the specified directory.





## Step 7: vFoglight Administrator Password

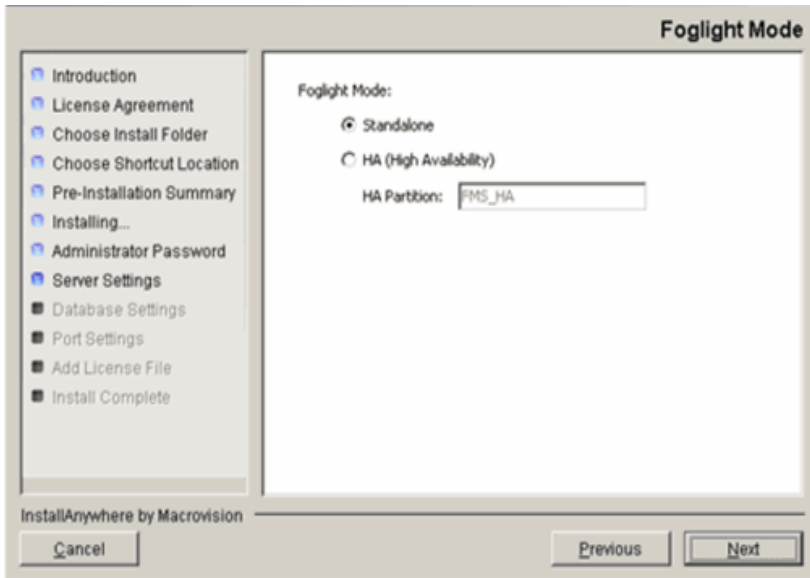
- 1 In the **vFoglight Administrator Password** field accept the default password (*foglight*) or enter an alternate one.
- 2 In the **Retype Administrator Password** field, accept the default (*foglight*) or, if you have provided an alternate password in [step 1](#), retype the password for verification.
- 3 To run vFoglight in secure mode (HTTPS) only, check the **Secure Server** box.
- 4 Click **Next**.

The screenshot shows the 'vFoglight Administrator Password' installation window. On the left is a navigation pane with the following steps: Introduction, License Agreement, Choose Install Folder, Choose Shortcut Location, Pre-Installation Summary, Installing..., Administrator Password (highlighted), Server Settings, Database Settings, Port Settings, Add License File, and Install Complete. The main area contains the following text: 'Please enter the password for the administrator account 'foglight' (default: 'foglight').' Below this are two password input fields: 'vFoglight Administrator Password:' and 'Retype Administrator Password:'. A checkbox labeled 'Secure Server (HTTPS Only)' is present and unchecked. At the bottom, there are three buttons: 'Cancel', 'Previous', and 'Next'. The text 'InstallAnywhere by Macrovision' is visible at the bottom left of the window.

## Step 8: vFoglight Mode

- 1 Choose the server startup mode. The options are **Standalone** or **HA (High Availability)**. Servers running in High Availability mode can only use an external database.
- 2 If you chose **HA (High Availability)**:
  - a In the **HA Partition** field, enter the partition name. All servers set up in **HA (High Availability)** mode that you want to act as either primary or secondary servers for failover have to be configured with the same partition name.

**Caution** All servers that you want to include in the cluster for high availability must use the same partition name. Servers with different partition names will not participate in the high availability setup.



- 3 Click **Next**.

**Note** A server running in HA mode can only use an external database.

## Step 9: vFoglight Database Configuration

- 1 In the vFoglight Database Account **User ID** field accept the default user ID (*foglight*) or enter an alternate one. This is the name for the vFoglight user that you are creating. The vFoglight Management Server uses this account to store data in the database.
- 2 In the vFoglight Database Account **Password** field accept the default password (*foglight*) or enter an alternate one.
- 3 In the vFoglight Database Account **Retype Password** field, accept the default (*foglight*) or, if you have provided an alternate password in [step 2](#), retype the password for verification.
- 4 From the **vFoglight Database** drop-down list, choose **External**. See [External Database](#) below for instructions.

**Note** The **vFoglight Database** drop-down list is disabled if you selected HA as the server startup mode in [Step 8: vFoglight Mode](#).

### External Database

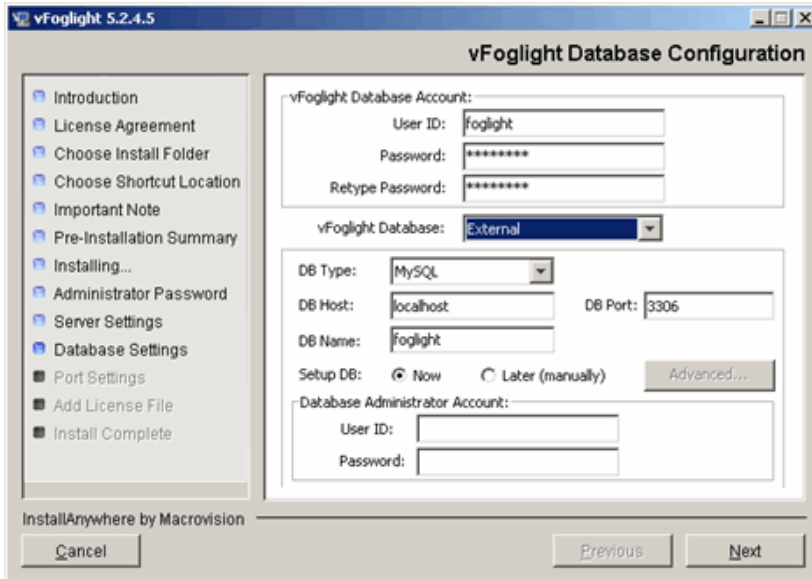
---

**Note** For information about granting remote users access to the database, see “[External MySQL Database Access for Remote Users](#)” on page 56.

---

- 1 From the **DB Type** drop-down list, choose **MySQL**.  
If you install and configure a MySQL database instance as an external database and this instance is to run on a different machine than the one hosting the server, choose the MySQL option to make the database accessible remotely.
- 2 In the **DB Host** field, enter the database hostname or IP address (*localhost* is the default name).
- 3 In the **DB Port** field, enter the database port number or accept the default (3306). This is the TCP/IP port on which the database communicates with the vFoglight Management Server. The external database needs to be configured to communicate on this port.

- 4 In the **User ID** field, enter the database name (foglight is the default name).



- 5 Select one of the following **Setup DB** options:

- **Now**
- **Later (manually).**

**Note** If you select the option Later (manually), you must manually configure the database after the installation is complete and prior to starting the Management Server. See [“Manual Database Configuration”](#) on page 56 for information.

- 6 On the Setup server administration password screen:

- Type the **server administrator password** (default is vFoglight).
- Retype the password for verification.

**Note** This is only used to set up the database initially.

- 7 Click **Next**.

- 8 On the In the Database Set Up Option screen:

- 9 Click **Next**.

- 10** On the External Database Administrator Login screen: If you selected **Now** in step 5, enter the **Database Administrator Account User ID** and **Password**.

**Caution** The Database Administrator Account User ID cannot be the same as the vFoglight Database Account User ID.

- 11** Click **Next**.

**Note** If a database schema already exists, the vFoglight Database Found screen appears. This screen allows you to keep your existing data, create a new database, or select a different database.

## Step 10: vFoglight Ports Configuration

- 1 Configure the server ports. The **vFoglight Ports Configuration** screen displays default ports which you can assign.

If you want to revert to the default values, click **Defaults**.

- 2 Click **Next**.

**Note** If there are any port assignment conflicts, an error message dialog box appears. You can either click **Review Ports** if you want to return to the vFoglight Ports Configuration screen to configure the conflicting port(s), or choose **Ignore and Continue** to continue with the installation without resolving the port conflicts. Choose one of these options to continue.

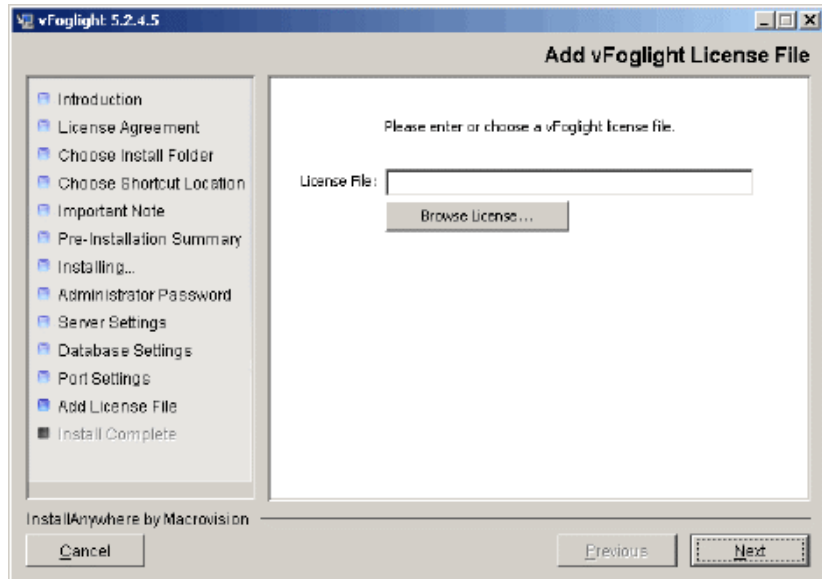
The screenshot shows the 'vFoglight Ports Configuration' window. On the left is a navigation pane with the following items: Introduction, License Agreement, Choose Install Folder, Choose Shortcut Location, Important Note, Pre-Installation Summary, Installing..., Administrator Password, Server Settings, Database Settings, Port Settings (selected), Add License File, and Install Complete. The main area contains the text 'Please enter the vFoglight port assignments.' and a table of port assignments:

Cluster Multi-cast Port:	45566
HTTP Port:	8080
HTTPS Port:	8443
JNDI RMI Port:	1098
JNDI JNP Port:	1099
JRMPI Invoker Port:	4444
Corba ORB Port:	3529
Corba ORB SSL Port:	3529
HA JNDI RMI Port:	1101

Below the table is a 'Defaults' button. At the bottom of the window are 'Cancel', 'Previous', and 'Next' buttons. The 'Next' button is highlighted with a dashed border.

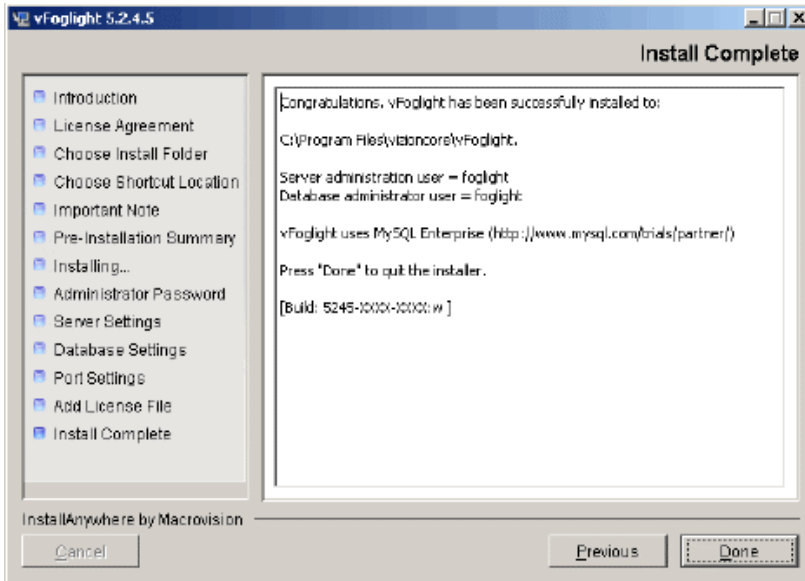
## Step 11: Add vFoglight License File

- 1 Specify the path to the vFoglight license file in the **License File** field, or browse to a license file by clicking **Browse License**.  
Alternatively, you can provide a license file to the vFoglight Management Server after the installation is complete. To do so, leave the **License File** field blank and proceed to [step 2](#).
- 2 Click **Next**.



## Step 12: Install Complete

Click **Done** to complete the installation process.

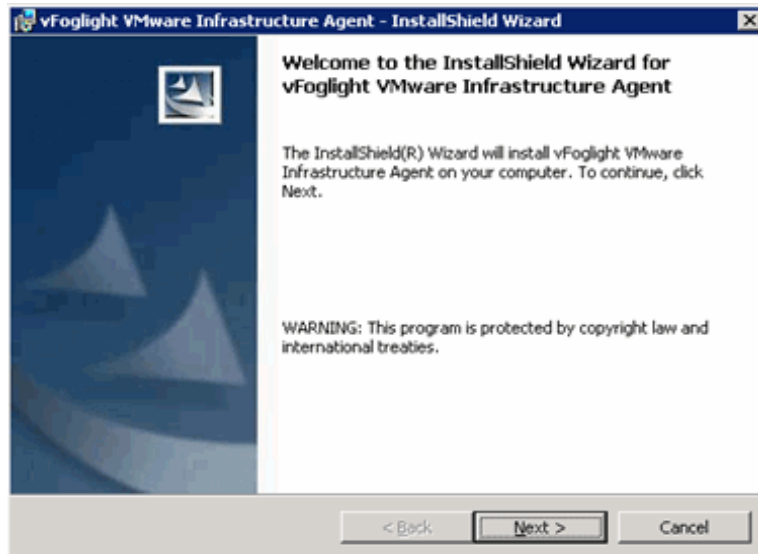


The Typical Installation procedure now takes you through the installation of the vCharter Pro VMware Infrastructure Agent components.

## Step 11: InstallShield Wizard Welcome Screen

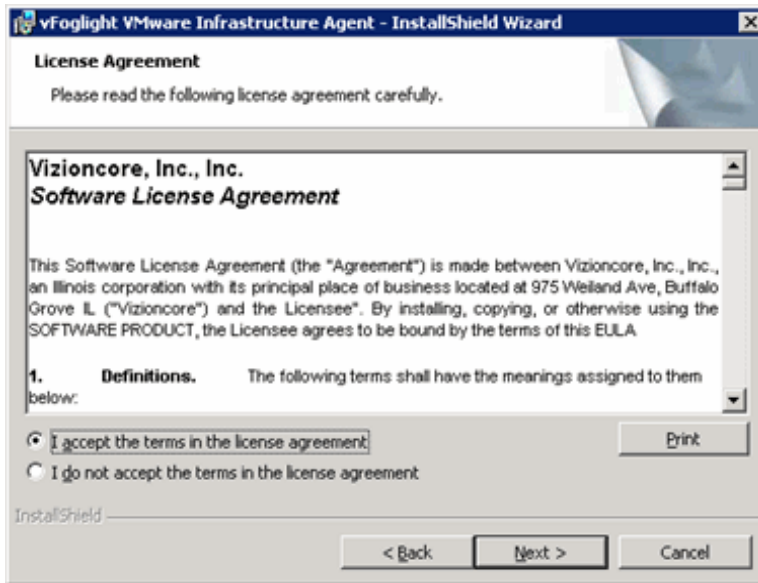
The Welcome screen for the VMware Infrastructure Agent InstallShield Wizard explains the purpose of the InstallShield Wizard. Click **Next** after reading the contents of this screen.





### Step 13: License Agreement

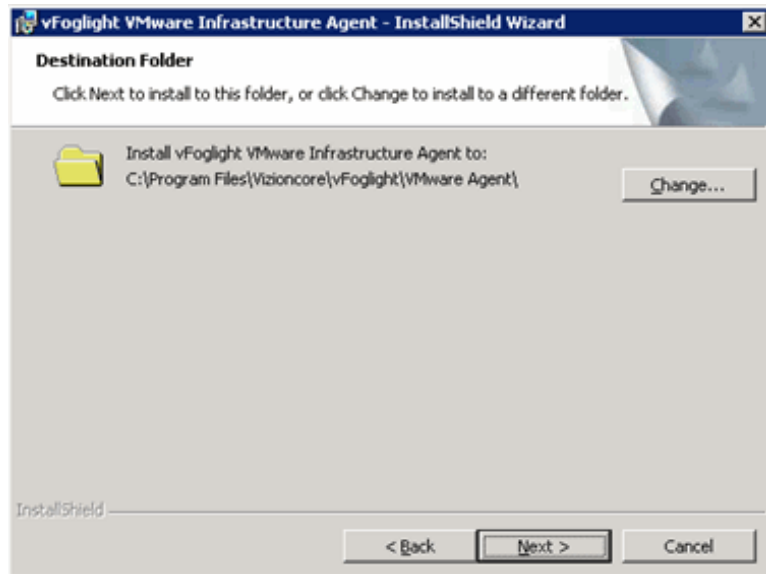
- 1 Read through the VMware Infrastructure Agent License Agreement statement, and accept or decline the terms.



- 2 If you selected **I accept the terms in the License Agreement**, click **Next**.

## Step 14: Destination Folder

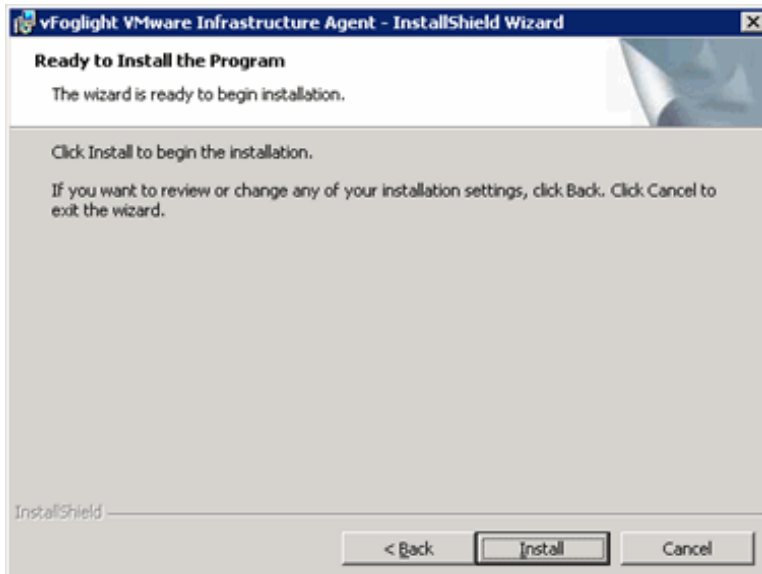
- 1 Choose the location where you want to install the VMware Infrastructure Agent components. You can accept the default location *C:\Program Files\Vizioncore\vFoglight\Vmware Agent\* or click on the **Change** button to navigate to another location.



2 Click **Next**.

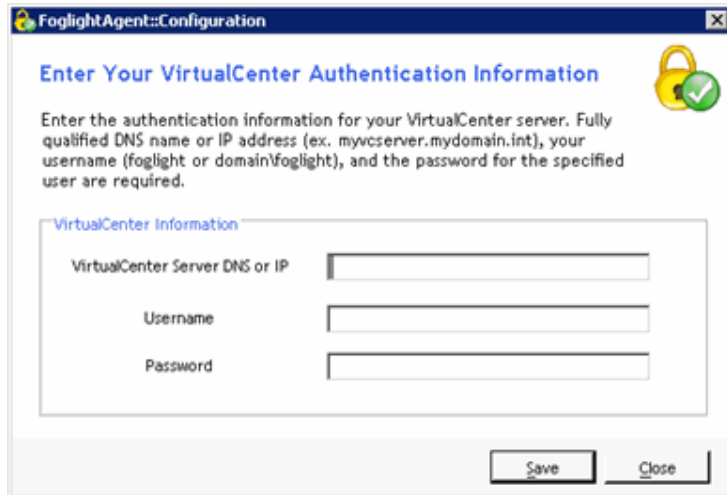
## Step 15: VMware Infrastructure Agent Install Screen

The Agent Install screen is displayed. Click **Install**.



## Step 16: VirtualCenter Authentication

- 1 On the VirtualCenter Authentication Information screen, enter the VirtualCenter Server name or IP Address.
- 2 Enter VirtualCenter Server Username and Password credentials that will provide you with access to the VMware Virtual Infrastructure Client.



**Enter Your VirtualCenter Authentication Information**

Enter the authentication information for your VirtualCenter server. Fully qualified DNS name or IP address (ex. myvcserver.mydomain.int), your username (foglight or domain/foglight), and the password for the specified user are required.

**VirtualCenter Information**

VirtualCenter Server DNS or IP

Username

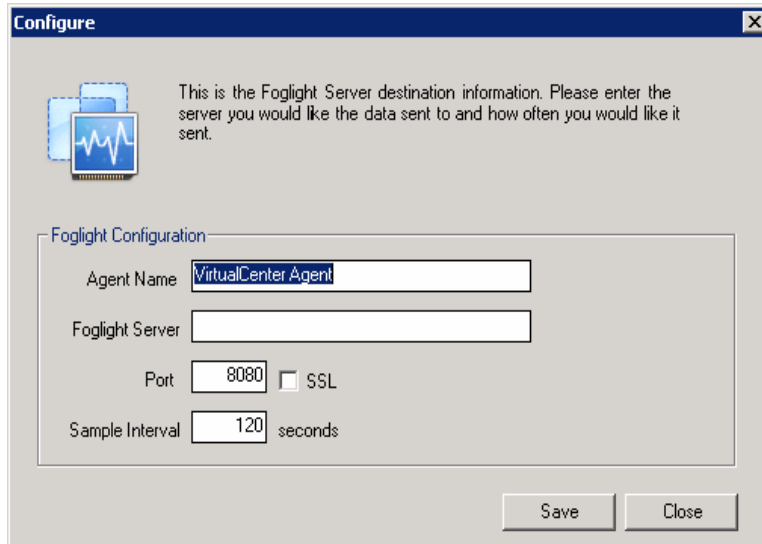
Password

Save Close

- 3 Click Save to have your entries validated.
- 4 On the **Credentials Entered are Valid!** dialog, click **OK**.

## Step 17: vFoglight Server Destination

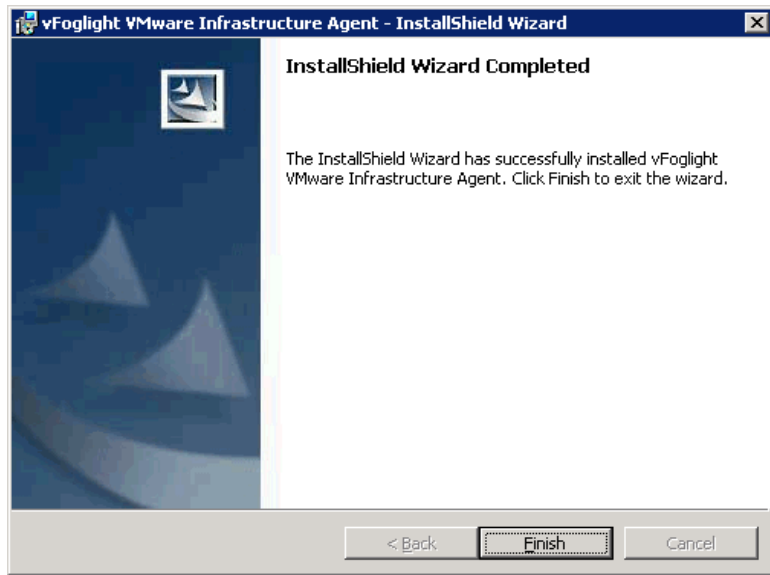
- 1 On the vFoglight Server Destination Information screen, enter the agent name as you want it to be displayed in vFoglight.
- 2 Enter the vFoglight Server name or IP address. This is the name or IP of the vFoglight Management Server.
- 3 Enter the port number of the port that the vFoglight Server uses for HTTP traffic. The default is 8080.
- 4 If this port requires SSL, check the SSL check box.
- 5 Enter a Sample Interval time in seconds. If you enter a lower interval, you could encounter performance problems while gaining little or nothing in terms of the quality of your data. If you enter an interval that is too high, you may not receive data often enough for it to be of much value.



- 6 Click **Save** to have your entries validated.

## Step 18: InstallShield Wizard Completed

Click Finished to complete the VMware Infrastructure Agent components installation.



The vFoglight Agent Manager, Guest Process Investigation components, and required services will be installed automatically. The services will start after the installation is complete.

If you did not install a license in [Step 11: Add vFoglight License File](#), follow the instructions in “[Managing a License After Installation](#)” on page 29 to provide a license file to the vFoglight Management Server after installation.

## Next Steps

If you need to import and initialize your database, refer to the procedures in “[Migrating Data from an Existing Database](#)” on page 72.

Start the vFoglight Management Server by following the instructions in “[Starting and Stopping the vFoglight Management Server](#)” on page 75.

To log in to vFoglight, refer to “[Logging in to vFoglight](#)” on page 79.

## External MySQL Database Access for Remote Users

When running vFoglight with an external MySQL database, the **Grant All On** query needs to be executed once in order to give users remote access to the database.

*To provide users with remote access to the database:*

- 1 From the **MySQL Server Instance Configuration** dialog, check the **Modify Security Settings** check box.
- 2 Enter a **new root password** (this password is used when executing the Grant All On Query executed below).
- 3 Check the **Enable root access from remote machines** check box.

*To execute the Grant All On Query script:*

- 1 From the mysql prompt, type

```
GRANT ALL ON *.* TO 'root'@'%' IDENTIFIED BY "password";
```

where \*.\* is the user defined database name specified during installation.

This gives root user (with username *root* and password *password*) remote access with all privileges.

## Manual Database Configuration

If you chose the option **Setup DB Later (manually)** while installing the vFoglight Management Server for use with an external database, you must manually configure the database prior to starting the Management Server.

To manually configure the database, run the scripts in the `<vfoglight_home>\scripts\sql` directory in the order shown below.

- `mysql_drop_db.sql`

If you are using an Oracle database, this script must be run under an account with administrator privileges (for example, *sys*) since you will require system access to execute it.

- `mysql_create_db.sql`

This script must be run under an account with administrator privileges (for example, *sys*) since you will require system access to execute it.

- `mysql_create_schema.sql`



This script must be run as the vFoglight Database Account User ID that you set in [step 1](#) of “[A server running in HA mode can only use an external database.](#)” on page 42. The default vFoglight Database Account User ID is *foglight*.

- `mysql_populate_db.sql`

This script must be run as the vFoglight Database Account User ID that you set in [step 1](#) of “[A server running in HA mode can only use an external database.](#)” on page 42. The default vFoglight Database Account User ID is *foglight*.

### Examples:

```
mysql -uroot -ppassword < mysql_drop_db.sql
mysql -uroot -ppassword < mysql_create_db.sql
mysql -ufoglight -pfoglight < mysql_create_schema.sql
mysql -ufoglight -pfoglight < mysql_populate_db.sql
```

## Installation Modes

Although the installer follows the same general steps on all platforms (license agreement, shortcut creation), additional steps may be required for some platforms.

The default mode for the installer is the graphical user interface mode. However, the vFoglight installer can be started in command-line mode in cases where a graphics display is not available by using the silent mode.

### Silent Mode

In silent mode, a properties file is used to feed in the properties. The file consists of a list of key-value pairs, which are described in the table below. To execute the silent mode:

#### Windows

```
vFoglight-5_2_4-install_windows-ia32.exe -i silent
```

Use the properties file in silent mode to execute a specific property. Type `-f fms_silent_install.properties`. The installer loads the properties file specified.

---

**Note** The installer uses the properties automatically when the filename and installer prefix are the same. For example, `vFoglight-5_2_4-install_windows-ia32.exe` picks up `vFoglight-5_2_4-install_windows-ia32.properties` automatically.

---

Property	Description	Default
INSTALLER_UI	The property is set to SILENT for silent mode. This is the default setting and is mandatory.	SILENT
USER_INSTALL_DIR	The vFoglight installation directory. If you want to upgrade an existing installation, specify the path to the existing installation directory here (and ensure that FMS_UPGRADE is set to 1).	<i>C:\Program Files\Vizioncore\vFoglight</i>
USER_SHORTCUTS	Sets the shortcut location.	<i>C:\Documents and Settings\All Users\Start Menu\Programs\Vizioncore\vFoglight 5.2.4</i>
FMS_LICENSE_AGREEMENT	License agreement acknowledgment.	yes
FMS_LICENSE_FILE	Allows you to add a license file by specifying the path to the license.	None (the license file you specify is validated).
FMS_SERVICE	For enabling vFoglight as a Windows service.	false

Property	Description	Default
FMS_UPGRADE	Only required to update an existing installation, in which case it must be set to 1.	1
FMS_ADMIN_PASSWORD	Administrator password for vFoglight.	foglight
FMS_DB	Allows you to specify the database type (embedded or external). Must be external if FMS_HA_MODE=1	embedded
FMS_DB_USER	Default database user.	foglight
FMS_DB_USER_PASSWORD	Default database password.	foglight
FMS_DB_SETUPNOW	1 = Set up database as part of installation. 0 = Set up database after installation is complete.	1
FMS_DB_PORT	User-defined port for database.	13306
FMS_HA_MODE	0 = Standalone mode 1 = HA mode	0
FMS_HA_PARTITION	Partition name. Only required if FMS_HA_MODE=1	FMS_HA
FMS_JNDI_JNP_PORT	Bootstrap JNP service.	1099

Property	Description	Default
FMS_JNDI_RMI_PORT	Port of RMI naming service.	1098
FMS_HTTP_PORT	HTTP/1.1 Connector.	8080
FMS_HTTPS_PORT	HTTP/1.1 Connector.	8443
FMS_AJP13_PORT	AJP 1.3 Connector.	8009
FMS_HA_JNDI_RMI_PORT	Port of RMI naming service in HA mode.	1101
FMS_HA_JNDI_JNP_PORT	Bootstrap JNP service in HA mode.	1100
FMS_HA_JRMP_INVOKER_PORT	RMI/JRMP invoker in HA mode.	4447
FMS_HA_POOLED_INVOKER	Pooled invoker port in HA mode.	4446
FMS_HA_JNDI_UDPGROUP_PORT		1102
FMS_CLUSTER_MCAST_PORT	Cluster Multicast post.	45566

## Upgrading vFoglight

Please consult the *vFoglight 5.2.4 Upgrade Field Guide* for detailed upgrade instructions.

## Installed Directories

The following table describes the directories that are installed under your target installation folder. They may vary, depending on the product features that you select and the components installed for your platform.

Directory	Contents
<i>bin</i>	vFoglight executables for running the server and utilities.
<i>client</i>	Files used by client programs (such as the command line client) for remote access to vFoglight.
<i>config</i>	Configuration files and subdirectories. The files in the <i>config</i> directory contain settings that are most likely to require editing. Files at the next level are less likely to need changing. Files at the lowest level contain settings that are unlikely to need changing except in special circumstances.
<i>docs</i>	HTML and PDF versions of the product documentation.
<i>dtd</i>	Descriptors for configuration files that can be imported into vFoglight (for example, by installing a cartridge).
<i>jre</i>	Version of the JRE (1.5.0_11-b03) used by vFoglight.
<i>lib</i>	The vFoglight JARs.
<i>logs</i>	Default location of the log files generated by vFoglight when it runs. Generated at runtime.
<i>mysql</i>	The current embedded database version is 5.0.51a. If the embedded database is selected during installation, then the database is created, populated, and used for vFoglight runtime. To startup the embedded database individually without running vFoglight, use these parameters: <code>[run shutdown]Db.[bat sh] in &lt;install-dir&gt;\bin.</code>

Directory	Contents
<i>perl</i>	Libraries needed to interpret the PERL scripts, version 5.8.8.
<i>scripts</i>	Supported and unsupported utility scripts to extend the scripting engine. <i>scripts/sql</i> contains SQL scripts to drop, create-schema or create/populate the database.
<i>server</i>	JARs and data files used by a particular vFoglight server variant (such as default).
<i>tools</i>	Various utilities such as the <i>foglight-federation-support.sar</i> file.

**Additional directories created after the vFoglight Management Server is started:**

Directory	Contents
<i>cartridge</i>	Installed cartridge files in their original form.
<i>support</i>	Where support bundled archive information is stored.
<i>tmp\cartridge.exploded</i>	Unzipped contents of installed cartridges. Unzipped at runtime.

## vFoglight Settings

vFoglight can be run with the default settings. However, you can edit these settings if you need to change runtime parameters such as settings for running the vFoglight Management Server in HA mode or ports used by the Management Server. To do so, you can edit the file `<vfoglight_home>\config\foglight.config`, which contains central settings.

## Editing the foglight.config File

The `foglight.config` file contains parameters for port settings, virtual memory, command line options, and server federation. You can edit the file using a text editor. Values within quotation marks can be edited.

## Setting Memory Parameters for the Server

If you are running vFoglight Management Server by running `fms.exe`, you can configure the JVM's minimum and maximum parameters for the server in the `<vfoglight_home>\config\foglight.config` file.

If you are starting vFoglight using the `run.[bat|sh]` command, the JVM heap memory parameters set in the `<vfoglight_home>\config\foglight.config` file do not take effect. Use `-x` options to pass the memory parameters straight to the VM.

If your installation supports a large number (100s) of agents, you can assign Java heap memory sizes using the minimum (`-Xms`) and maximum (`-Xmx`) options. For example, assigning 2 GB of memory can be set in the `foglight.config` file as follows:

```
foglight.vm.option0 = "-Xms2048M";  
foglight.vm.option1 = "-Xmx2048M";
```

Ensure that you uncomment these lines in the file.

You can set up to 100 VM options.

---

**Note** The `-Xms` and `-Xmx` options are different for 32-bit and 64-bit JVMs.

---

---

**Note** On a 32-bit JVM, the `-Xms` and `-Xmx` options do not necessarily have to be the same size. However, the `-Xmx` option should not exceed certain limits as determined by the System Administrator.

---

## Process Heap Use

If the VM generates errors relating to a failure to allocate native resources or to exhaustion of process address space, you must increase the native process heap size. Errors appear as a Java VM internal error message or a detail message associated with an out-of-memory error. Messages with the relevant errors will indicate that the problem is process heap exhaustion.

You cannot directly set the size of the process heap. The process heap uses memory within the 32-bit address space not used by the garbage-collected heap. To increase the size of the process heap, decrease the maximum Java heap size using the `-Xmx` option in the `foglight.config` file

## Default Stack Size

The default stack size can be adjusted with the `-Xss` option.

## Adding Command Line Options

The `foglight.config` file allows you to add up to ten additional command line options for `fms.exe`.

Each command line argument corresponds to a space-delimited argument passed to the vFoglight process.

For example, the following lines in the `foglight.config` file:

```
foglight.cmdline.option0 = "-b";  
foglight.cmdline.option1 = "hostname";
```

correspond to this direct argument on the command line:

```
fms.exe -b hostname
```

Please note that some arguments may be assembled as single non-separated text. For example, using the long name for the parameter in the example above results in a single `foglight.cmdline.option` entry:

```
foglight.cmdline.option0 = "--host=hostname";
```

which corresponds to the following command line argument:

```
fms.exe --host=hostname
```

## Changing External Database Credentials

Use the following method to reconfigure vFoglight to start up with a new database password. The password can be updated in the `foglight.config` file.

*To encrypt your database password using the keyman command:*

- 1 Enter the following from the command line:  

```
> bin\keyman -d [FGLHOME\config] encpwd "<new password>" foglight.defaultkey
```



The encrypted password appears.

- 2 Open the `foglight.config` file.
- 3 Replace the existing database password with the new encrypted database password on the following line:  

```
foglight.database.password = "q4056753111e8a24c9a722048fc6df1f0"
```
- 4 Restart the vFoglight Management Server.

## Setting the SQL Parser Properties

The following default system properties appear in the `foglight.config` file. The port setting can be changed during the install process, or by editing the `foglight.config` file.

```
# qp5app port and info
foglight.qp5app.max.connections = "10";
foglight.qp5app.port = "8448";
```

## Setting Up vFoglight Server Federation

Federation is useful for customers who monitor large scale environments that are naturally partitioned into logical units. Each of these partitions is normally served by one vFoglight Management Server instance and its distributed clients/agents. These Management Server instances together can act as a single logical Management Server by making each instance a Federated Management Server with one central Federation Management Server.

For more detailed background information on vFoglight Federation, please refer to the *vFoglight Federation Field Guide*.

To create a Federated environment, you must make changes to both the `foglight.config` and the `federation.config` files after installation.

---

**Caution** A Federated server must always be started with the federation parameter set to true.

---

*To set up a Federated environment:*

- 1 Identify the vFoglight Management Server you wish to define as the Federated manager or master server.

- 2 Copy the `...\\vFoglight\\tools\\foglight-federation-support.sar` file into the `...\\vFoglight\\server\\default\\deploy-foglight` directory.
- 3 Edit the following line in the `foglight.config` file by changing the variable from `false` to `true`:

```
# foglight.federation is a boolean parameter that indicates
whether the
# server should start in the "federation" mode. The default value
is false.
#
foglight.federation = true;
```

- 4 Start your master server.
- 5 Open the `...\\vFoglight\\config\\federation.config` file.
- 6 Add the port number of each vFoglight Management Server in the federation to the `federation.config` file. The following example is provided in the `federation.config` file:

```
# *** JndiURLs ***
# This list contains JNDI provider URLs for federated servers.
# Example:
#   JndiURLs = (
#       "jnp://example.com:1100",
#   );
# The default value is JndiURLs = ();
#
JndiURLs = (
);
```

- 7 Edit the topology auto refresh period. The default provided is 1800 seconds (30 minutes):

```
# *** TopologyRefreshPeriod ***
# This property specifies the period in seconds for major topology
refresh #operations. A major topology refresh involves re-
fetching all relevant #topology objects from all federated
servers and merging them into the local #topology model.
# The default value is 1800, that is 30 minutes.
TopologyRefreshPeriod = 1800;
```

- 8 Edit the list of topology queries:

```
# *** TopologyQueries ***
# This list contains topology queries that identify topology
objects to be #merged into the federated topology model. These
```

```
queries are executed on remote servers within the federation. All
attributes are merged for topology #objects that are returned by
the queries, plus identity attributes are #fetched (recursively)
for topology objects referenced from query results.
# The default value is
# TopologyQueries = (
#     "!TopologyObject",
# );
TopologyQueries = (
    "!TopologyObject",
);
```

## Configuring vFoglight to Access the Server Only Through the HTTPS Port

If you do not choose to install vFoglight in Secure Server mode, you can manually configure the vFoglight Management Server to restrict the server to use only the https port by editing the `<foglight_home>\config\foglight.config` file. Set the parameter:

```
foglight.console.httpsonly = "true";
```

You must reboot the server after setting the parameter.

---

**Note** You must have a signed, valid certificate if you want to use the https-only configuration. Vizioncore recommends that you obtain a valid certificate from a third party as outlined in the following procedure.

---

## Importing a Network Security Certificate

Once you have set the vFoglight Management Server to use only https, you must generate a key pair (security certificate) into vFoglight's keystore. This allows the server to communicate through the https protocol. You need to delete the existing certificate shipped with vFoglight before generating a new key pair. Use the `keytool` utility shipped with vFoglight to create, import, and export certificates. This utility can be found in:

- `$FMS_HOME\jre\bin\keytool`

There are two keystores used by vFoglight:

- The built-in Tomcat keystore located at:  
`$FMS_HOME\server\default\conf\tomcat.keystore` (default password: nitrogen)

- The vFoglight Management Server keystore located at:  
\$FMS\_HOME\jre\lib\security\cacerts (default password: changeit)

*To import a certificate:*

- 1 Delete the existing tomcat key from the tomcat.keystore directory using the following command:

```
$FMS_HOME\jre\bin\keytool -keystore
FMS_HOME\server\default\conf\tomcat.keystore -storepass nitrogen -delete
-alias tomcat
```

- 2 Create a new key under the tomcat alias using the following command:

```
$FMS_HOME\jre\bin\keytool -keystore
FMS_HOME\server\default\conf\tomcat.keystore -storepass nitrogen -genkey
-alias tomcat
```

- 3 Generate a Certificate Signing Request (CSR) using the following command:

```
$FMS_HOME\jre\bin\keytool -keystore
FMS_HOME\server\default\conf\tomcat.keystore -storepass nitrogen -certreq
-alias tomcat -file <your_request_file.csr>
```

This file must be signed by Certification Authority (CA).

- 4 Once you have the certificate signed, import it back to the tomcat.keystore using the following command:

```
$FMS_HOME\jre\bin\keytool -keystore
FMS_HOME\server\default\conf\tomcat.keystore -storepass nitrogen -import
-trustcacerts -alias tomcat -file <your_converted_certificate>
```

You are prompted to enter the keystore password.

- 5 Type nitrogen.

## Setting Up an Encrypted Database Connection with SSL

The following procedure outlines how to set up a secure external MySQL database connection.

---

**Note** This procedure must be performed after installation but before you have started the vFoglight Management Server.

---

*To set up an encrypted database connection with SSL:*

- 1 Import a CA certificate into the vFoglight Management Server keystore (cacerts) as outlined in “[Importing a Network Security Certificate](#)” on page 67.
- 2 Update the MySQL configuration file (*my.ini*) with the new security certificate and key information by adding the following properties:
  - `ssl-ca=<cacert.pem>`
  - `ssl-cert=<server-cert.pem>`
  - `ssl-key=<server-key.pem>`
- 3 Uncomment and set the `foglight.database.secureconn` attribute in the *foglight.config* file to true, as shown below.

```
#
# For Oracle, this option can be enabled once the database server is properly
# configured.
# However, for MySQL, DO NOT enable this option until the database server's CA
# certificate is properly imported into $fms_dir\jre\lib\security\cacerts.
foglight.database.secureconn = "true";
```

- 4 Start the database.
- 5 Start the vFoglight Management Server.

## Setting Up an Encrypted LDAP Connection with SSL

Follow the directions below if you need to encrypt communication between the vFoglight Management Server and the LDAP server.

*To encrypt communication between vFoglight Management Server and LDAP:*

- 1 Acquire the LDAP server certificate in *.pem* format from the administrator.
- 2 Import the certificate into the vFoglight Management Server keystore (`$FMS_HOME\jre\lib\security\cacerts` (default password: `changeit`)) with the following command:

```
$FMS_HOME\jre\bin\keytool -import -file <path_to_cert_file> -alias
ldapsvrcert -keystore <path_to_cacerts>
```

- 3 Go to **Administration > Users & Security > Configure Directory Services**.
- 4 Click **Edit**.
- 5 Enter the LDAP server URL in the following format:

```
ldaps://ldap_server_host_name:636
```

---

**Note** The port number for LDAP over SSL is usually 636. Confirm the correct port number with your LDAP server administrator.

---

## Uninstalling vFoglight

You can uninstall vFoglight using the uninstaller utility for your platform. The uninstaller can be found in `<vfoglight_home>\UninstallerData`.

# Running the vFoglight Management Server

This chapter contains the following sections:

<a href="#">Before You Begin</a> .....	72
<a href="#">Migrating Data from an Existing Database</a> .....	72
<a href="#">Initializing and Tuning the Database</a> .....	73
<a href="#">Starting and Stopping the vFoglight Management Server</a> .....	75
<a href="#">Logging in to vFoglight</a> .....	79
<a href="#">Running the vFoglight Management Server FAQ</a> .....	80

## Before You Begin

The instructions in this chapter assume that you have already installed vFoglight. If you have not, see “[Installing vFoglight](#)” on page 33 for installation instructions.

## Migrating Data from an Existing Database

The contents of the MySQL database can be copied to another MySQL instance via an export/import cycle. The following procedure performs a full export of the database. This procedure can be run against a database currently in use by a server.

*To export and import a MySQL database:*

- 1 Run the following command from the MySQL command shell:

```
mysqldump -u<username> -p<password> -h<hostname> -P<port> --  
databases <database name> > backup.sql
```

The `-h` parameter can be omitted if the database is on the same host.

- 2 Import the database using the following syntax:

```
mysql -u<username> -p<password> -P<port> < backup.sql
```

The import process recreates the tables in the database. Therefore, any data that was in the destination environment prior to the import is lost.

---

**Caution** The vFoglight servers must be stopped during the import process.

---

---

**Note** When moving a database between environments, care should be taken to ensure that the vFoglight schema version is lower or equal to the vFoglight server in the destination environment as an upgrade to a new schema is possible (run `foglight_db_upgrade.bat|sh` or start server with `-Dfoglight.database.upgrade=true`).

---



# Initializing and Tuning the Database

The following sections describe how to initialize and tune your database.

## Initializing the Database

For external databases, once the database has been successfully initialized, you can run vFoglight.

## Tuning an External MySQL Database for vFoglight

If you are running the vFoglight Management Server with an external MySQL database in a production environment, you may want to tune your database to ensure that it is not under-resourced. Please refer to the table below for the tunable settings in the `<mysql_install_path>\my.ini` file.

---

**Caution** Database tuning is an advanced-user activity. Changing settings for your MySQL database incorrectly can result in problems with your vFoglight installation, such as serious performance problems with the vFoglight Management Server.

---

my.ini setting	Recommended Value	Comments
max_connections	341	The maximum amount of concurrent sessions the MySQL server will allow.
innodb_flush_log_at_trx_commit	2	Value 2 means that the transaction log is only flushed to the OS cache rather than to disk at each commit. The log file is still flushed to disk approximately once per second.
query_cache_size	16M	Query cache is used to cache SELECT results and later return them without executing the same query again.

my.ini setting	Recommended Value	Comments
tmp_table_size	32M	Maximum size for internal (in-memory) temporary tables.
sort_buffer_size	256K	This buffer is allocated when MySQL needs to rebuild the index in REPAIR, OPTIMIZE, ALTER table statements as well as in LOAD DATA INFILE into an empty table.
innodb_additional_mem_pool_size	20M	Additional memory pool used by InnoDB to store metadata information.
innodb_log_buffer_size	8M	The size of the buffer InnoDB uses for buffering log data.
innodb_buffer_pool_size	512M	InnoDB uses a buffer pool to cache both indexes and row data. The larger you set this the less disk I/O is needed to access data in tables. Note that on 32-bit systems you might be limited to 2 to 3.5G of user level memory per process, so do not set it too high. Also, ensure that the host has enough real memory free for specified buffer pool size. Performance will degrade substantially if the buffer pool uses virtual memory.
innodb_log_file_size	128M	Size of each log file in a log group. You should set the combined size of log files to about 25 to 100% of your buffer pool size to avoid unneeded buffer pool flush activity on log file overwrite. Note that a larger log file size will increase the time needed for the recovery process.

# Starting and Stopping the vFoglight Management Server

The following sections describe how to start and stop the vFoglight Management Server.

To start the Management Server from the command line:

- Execute the following command:

```
<vfoglight_home>\bin\fms.exe
```

To start the Management Server on Windows:

- Depending on where you installed the startup icon, choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > Start vFoglight** or double-click the **Start vFoglight** icon on the desktop.

When the server successfully starts, the following message appears in the command window:

```
vFoglight Management Server startup completed.
```

## Starting the vFoglight Management Server as a Windows Service

After the installation is completed, you can install the vFoglight Management Server as a Windows service either from the **Start** menu or the command line.

---

**Note** The procedures below assume that you have installed the program shortcuts in the default location.

---

## Using the Start Menu Options

To install or remove the Management Server service from the Start menu:

- Choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > Windows Service > Install Service for vFoglight** (or **Remove Service for vFoglight**).

To start or stop the Management Server service from the Start menu:

- Choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > Windows Service > Start Service for vFoglight** (or **Stop Service for vFoglight**).

## Using the Command Line

From the command line, type the following to install the vFoglight Management Server as a Windows service:

```
fms.exe -i
```

### Additional Commands:

Command	Represents	Description
-s	start	Start the vFoglight Management Server (this is assumed if no command is specified)
-q	stop	Stop the vFoglight Management Server
-b	start-service	Start the vFoglight Management Server Windows service
-r	remove-service	Stop and remove the vFoglight Management Server Windows service
-n	name	Provide a unique name for this instance of the vFoglight Management Server service
-j	jvm-argument	Set an option to be passed directly to the Java™ VM (can be used to set more than one VM option)
-v	version	Display the version number for this program and exit
-h	help	Show this information and exit

## Stopping the Server

*To stop the vFoglight Management Server:*

Do one of the following:

- Type **Ctrl-C** in the command window from which the Management Server started.

- On the command line, type:  
`fms.exe -q`
- Depending on where you installed the startup icon, choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > Stop vFoglight** or double-click the **Stop vFoglight** icon on the desktop.

When the server has stopped successfully, the **Start vFoglight** command window closes.

## Starting and Stopping the Server in High Availability Mode

Configuring your server in High Availability (HA) mode allows you to run multiple servers in a JBoss partition offering HA.

---

**Note** To run the HA server, you must use an external database. The database has to be running before you start vFoglight HA server.

---

*To start the High Availability Server:*

Do one of the following:

- Choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > High Availability > Start vFoglight In HA Mode.**
- Enter the following from the command line:  
`fmsha.exe`

When the server has started successfully, the following message appears in the command window:

High Availability Server startup completed.

*To stop the High Availability Server:*

Do one of the following:

- Choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > High Availability > Stop vFoglight In HA Server.**
- Enter **Ctrl-C** from the command window in which the vFoglight HA server started.
- Open a second command window and enter the following command:  
`fmsha.exe -q`

When the server has stopped successfully, the command window closes.

## Remote Monitor

The Remote Monitor is a Java program that regularly communicates with a set of High Availability Servers. If there is no reply after it attempts to contact the server, then it logs the event and can optionally send out e-mail notifications to an administrator.

The Remote Monitor takes a list of hostnames or hostname/port pairs as parameters. When invoked without parameters, Remote Monitor takes the list of hostnames or hostname/port pairs from the file `<vfoglight_home>\config\remote_monitor.config` under the entry `server.urls`.

Each parameter in the entry `server.urls` points to a specific HA server. If a port is not specified as part of this entry, the default port 51231 is used. The default port can be configured in `<vfoglight_home>\config\remote_monitor.config`, under the entry `health.monitor.port`. This entry should match the `health.monitor.port` entry in the file `<vfoglight_home>\config\restart_monitor.config` on your servers.

---

**Note** To use the Remote Monitor, JRE 1.5 must be installed on the machine hosting the Remote Monitor and the `JAVA_HOME` environment variable must be set to point to the installation directory.

---

*To install the Remote Monitor:*

- Copy the `<vfoglight_home>\tools\remote_monitor.zip` file to your target machine and unzip the contents to a directory.

*To start the Remote Monitor:*

---

**Note** The vFoglight Management Server must be running before you can start the Remote Monitor.

---

Do one of the following:

- Enter the command  
`<vfoglight_home>\bin\remotemonitor <hostname[:port]>`
- Choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > High Availability > Start Remote Monitor**.

*To stop the Remote Monitor:*

Do one of the following:

- Enter **Ctrl-C** from the command window where the Remote Monitor started.

- Choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > High Availability > Stop Remote Monitor**.

## Enabling Email Notification

Servers running in HA mode can send out email notifications in various situations, such as when servers stop responding or on failure to restart a server. The files `<vfoglight_home>\config\restart_monitor.config` and `<vfoglight_home>\config\remote_monitor.config` control how email notification functions, such as email protocols, email server information, and the message and recipients for each situation. Emails can be sent out from the HA server or from the Remote Monitor. See the comments in these files for more information about email notification.

## Logging in to vFoglight

---

**Note** The vFoglight Management Server must be running before you can log in to vFoglight.

---

*To log in to vFoglight:*

- 1 Depending on where you installed the program icons, choose **Start > Programs > Vizioncore > vFoglight 5.2.4 > vFoglightConsole**.
- 2 Enter a valid username and password and click **Login**.

*To log in to vFoglight using a web browser:*

- Open a web browser and type the following:

```
http://<hostname>:<port>/console/admin/main.action
```

where `<hostname>` is the name of the machine where the vFoglight Management Server is installed and `<port>` is the http port specified during installation (the default is 8080).

## Next Steps

To install cartridges, refer to the chapter “Installing and Upgrading Cartridges”.

## Running the vFoglight Management Server FAQ

*When I try to start the vFoglight Management Server using Remote Desktop, an error appears. How can I resolve this error?*

There are two options to resolve this problem.

- Use VMWARE Console to start the server.
- Change the JVM options by reducing the memory requirements of the vFoglight Management Server so you can start it using Remote Desktop. To do so, use one of the following methods:

- On the command line, enter the following:

```
fms.exe -j -XX:MaxPermSize=96m
```

- Edit the *foglight.config* file found in *<vfoglight\_home>\config* and modify the following parameter:

```
foglight.vm.option0 = "-XX:MaxPermSize=96m";
```

After you have used one of these methods, restart the server.

*If I close the vFoglight Management Server by clicking the X button on the command window, an error appears when I start up the server again. How do I restart the server?*

It is recommended that you do not use this method to stop the vFoglight Management Server. However, if you do use this method, follow the workaround listed below.

- 1 If you are using a managed database (for example, a copy of MySQL that is started by vFoglight), stop the database manually before restarting the vFoglight Management Server.
- 2 Remove the stale *.pid* file that is located in the *\state* directory. The logs or the console output inform you which *.pid* file to remove when you restart the server.



# Installing and Upgrading Cartridges

Using the vFoglight Administration Module, you can install cartridges on the machine hosting the vFoglight Management Server, enable and manage cartridges, and download agent installers.

The following topics are covered in this chapter:

<a href="#">Accessing the Cartridge Inventory Page</a> .....	82
<a href="#">Installing Cartridges</a> .....	82
<a href="#">Upgrading Cartridges</a> .....	83

## Accessing the Cartridge Inventory Page

The *Cartridge Inventory* page of the vFoglight Administration Module contains controls for installing, enabling, disabling, and uninstalling cartridges, as well as for viewing information about the installed cartridges.

To access the *Cartridge Inventory* page:

- In the navigation panel, select **Administration > Cartridges > Cartridge Inventory**.

The *Cartridge Inventory* page appears.

## Installing Cartridges

Installation is the first step in adding a cartridge to the vFoglight Management Server. A cartridge file has the extension *.car*. Installing the *.car* file causes the Management Server to be aware of all cartridges in the *.car* file.

---

**Note** You can install a *.car* file that is in a local directory on the machine hosting the Management Server or upload a *.car* file from your local machine to the Management Server through the Administration Module.

---

A cartridge must also be enabled before it is added to the vFoglight Management Server. You can cause a cartridge to be enabled upon installation, or you can enable it after installation. See the *vFoglight Administration and Configuration Guide* for instructions on enabling and disabling cartridges after installation.

To install a cartridge:

- 1 Navigate to the Cartridge Inventory page.
- 2 In the *Install Cartridge* area, type the path to the *.car* file for the cartridge you want to install.
  - Type the path in **File on Local Machine** field if you want to upload a *.car* file from your local machine to the Management Server.
  - Type the path in the **File on Server** field if you want to install a *.car* file that is in a local directory on the machine hosting the Management Server.

Alternatively, you can click **Browse** to navigate to a *.car* file on your local machine using a file chooser. Click **OK** in the file chooser when you have selected the *.car* file you want to install.

- 3 The check box **Enable on install** is selected by default.
  - If you would like the cartridge to be enabled when it is installed, leave this check box selected.
  - If you would like to enable the cartridge after installation, deselect this check box.
- 4 Click **Install Cartridge**.

If the installation is successful, the message “Cartridge has been installed successfully” appears in the *Install Cartridge* area and the cartridge is listed in the *Cartridge Inventory*.

If **Enable on install** was not selected (see [step 3](#)), a caution symbol (⚠) appears in the row for that cartridge in the table in the *Cartridge Inventory*.

For more information about cartridge installation and configuration see the *vFoglight Administration and Configuration Guide*.

## Upgrading Cartridges

For complete cartridge upgrade instructions, refer to the *vFoglight Upgrade Field Guide*.

### Next Steps

To install the vFoglight Agent Manager, refer to the chapter “Installing and Running the vFoglight Agent Manager (FglAM)”.

---

**Note** The vFoglight Agent Manager is automatically installed during the vFoglight installation. These instructions are for reference only.

---



# Installing and Running the vFoglight Agent Manager (FglAM)

This chapter contains the following sections:

<a href="#">Installing the vFoglight Agent Manager</a>	86
<a href="#">Upgrading the vFoglight Agent Manager</a>	98
<a href="#">Configuring the vFoglight Agent Manager</a>	98
<a href="#">Running the vFoglight Agent Manager</a>	100
<a href="#">Next Steps</a>	101
<a href="#">Uninstalling the vFoglight Agent Manager</a>	101
<a href="#">vFoglight Agent Manager Platform Support Matrix</a>	102

---

**Note** The vFoglight Agent Manager (FglAM) is installed automatically during the vFoglight installation. These instructions are for reference only.

---

## Installing the vFoglight Agent Manager

The vFoglight Agent Manager manages agents installed on monitored hosts, providing a centralized communications link between the vFoglight Management Server and the agents. The vFoglight Agent Manager also provides a number of support services such as installation, upgrade, and the ability to configure agents.

---

**Note** Throughout this chapter, the convention [*option1*|*option2*] is used in file names at points where you must type, select, or otherwise specify one of multiple options.

---

### Deploying the vFoglight Agent Manager Cartridge

vFoglight Agent Manager installer is delivered in the cartridge *FglAM-windows-ia32-5\_2\_4.car*. This cartridge is available in Cartridge folder of the vFoglight installation directory.

The following procedure outlines how to deploy the *FglAM-windows-ia32-5\_2\_4.car* file on your vFoglight Management Server.

*To deploy the vFoglight Agent Manager cartridge:*

- 1 Log in to vFoglight.
- 2 Navigate to the Cartridge Inventory dashboard (**Dashboards > Administration > Cartridges > Cartridge Inventory**).
- 3 Click the **Browse** button beside the **File on Local Server** field. The *Choose File* window appears.
- 4 Navigate to your *FglAM-windows-ia32-5\_2\_4.car* file, and click on the **Open** button. The **File on Local Server** field is now populated with the path to the vFoglight Agent Manager installer *.car* file.
- 5 Ensure that the **Enable on Install** box is checked.
- 6 Click the **Install Cartridge** button.

Once you have deployed the applicable cartridge for the vFoglight Agent Manager, you can then download the installer for your platform and install the vFoglight Agent Manager. See “[Downloading the vFoglight Agent Manager Installer](#)” on page 87 and “[Installing the vFoglight Agent Manager](#)” on page 88.

## Downloading the vFoglight Agent Manager Installer

The sections below outline how to download the installer for the vFoglight Agent Manager once you have deployed the *FglAM-windows-ia32-5\_2\_4.car* file as described in “[Deploying the vFoglight Agent Manager Cartridge](#)” on page 86.

### Using the Components for Download Dashboard

After deploying the *FglAM-windows-ia32-5\_2\_4.car* file, you can download the appropriate platform-specific installer from the Components for Download dashboard.

*To download the installer for the vFoglight Agent Manager:*

- 1 Log in to vFoglight.
- 2 Navigate to the Components for Download dashboard (**Dashboards > Administration > Cartridges > Components for Download**).
- 3 Click the vFoglight Agent Manager installer for your platform. Consult the “[vFoglight Agent Manager Platform Support Matrix](#)” on page 102 for the appropriate installer name for your platform.
- 4 **Optional:** save the installer.
- 5 Run the installer. See “[Installing the vFoglight Agent Manager](#)” on page 88 for details.

### Using the vFoglight Agent Manager Installer Servlet

In situations where unauthenticated or headless access to the installers is required, you can download the appropriate platform-specific vFoglight Agent Manager installer from a servlet (after deploying the *FglAM-windows-ia32-5\_2\_4.car* file).

*To access the vFoglight Agent Manager installer servlet using a browser:*

- 1 Open a web browser and navigate to the following page:

```
[http|https]://<hostname>:<port>/catalyst-glue-service/installers/
```

where <hostname> is the name of the machine where the vFoglight Management Server is installed and <port> is the HTTP port specified during installation (the default is 8080).

If the vFoglight Management Server has been configured to use HTTPS, then you can specify `https` as the protocol.

**Note** No login is required to access this page.

- 2 Click the appropriate vFoglight Agent Manager installer for Windows. Please consult the “[vFoglight Agent Manager Platform Support Matrix](#)” on page 102 for the installer name for your platform.
- 3 **Optional:** save the installer.
- 4 Run the installer. See “[Installing the vFoglight Agent Manager](#)” on page 88.

To access the vFoglight Agent Manager installer servlet using a file-retrieval tool:

- 1 Use a file-retrieval tool to obtain the appropriate vFoglight Agent Manager installer for Windows by specifying a path formatted as

```
[http|https]://<hostname>:<port>/catalyst-glue-service/installers/fglam-windows-[ia32|x64].exe
```

where <hostname> is the name of the machine where the vFoglight Management Server is installed and <port> is the HTTP port specified during installation (the default port is 8080). Consult the “[vFoglight Agent Manager Platform Support Matrix](#)” on page 102 for the appropriate installer name for your platform.

If the vFoglight Management Server has been configured to use HTTPS, then you can specify https as the protocol.

For example, if you were to retrieve the file `fglam-windows-ia32.exe` from a machine called `server1` (that uses the default port 8080) using Wget, you would issue the command:

```
wget http://server1:8080/catalyst-glue-service/installers/fglam-windows-ia32.exe
```

- 2 Run the installer. See “[Installing the vFoglight Agent Manager](#)” on page 88 for instructions.

## Installing the vFoglight Agent Manager

After downloading the installer to the machine on which you want to install the vFoglight Agent Manager (as described in “[Downloading the vFoglight Agent Manager Installer](#)” on page 87), you can run the installer from the command line, use the silent (non-interactive) installer, or use the installer GUI.

The installer includes steps that allow you, for example, to install the vFoglight Agent Manager as a service and to configure multiple ways of connecting the vFoglight Agent Manager to the vFoglight Management Server.

---

**Note** No Windows shortcuts are created when the vFoglight Agent Manager is installed.

---



## Using the vFoglight Agent Manager Installation and Configuration GUI

The following procedure outlines how to run the installer GUI for the vFoglight Agent Manager.

*To install the vFoglight Agent Manager using the installer GUI:*

- 1 Run the installer executable on the target machine. This program prompts you for information, and informs you of the progress of your installation.

A console window appears while the installer is loading and installer files are being extracted to a temporary location on your machine.

- 2 The FglAM Installation and Configuration program window appears. Review the information on the Introduction screen and click **Next**.

The License Agreement screen appears.

- 3 Accept the terms of the license agreement and click **Next**.

**Note** You need to accept the license agreement before you can install the product.

The Installation Directory screen appears.

- 4 Choose the directory where you want to install the vFoglight Agent Manager and click **Next**.

The Configure vFoglight Server URLs screen appears:



- 5 From the Configure vFoglight Server URLs screen—and the Edit vFoglight Server URL dialog that is accessible from this screen—you can configure multiple ways of connecting the vFoglight Agent Manager to the vFoglight Management Server.

For example, you can specify a single URL or configure multiple Management Server URLs for failover purposes.

**Note** You can also configure Management Server URLs at a later time using the vFoglight Agent Manager configuration interface. See [“Configuring the vFoglight Agent Manager”](#) on page 98 for information about launching this interface post-installation.

- 6 Click **Add** to launch the Edit vFoglight Server URL dialog:



- a Specify the URL used by the vFoglight Agent Manager to connect to the vFoglight Management Server (the Management Server hostname and port).  
  
In addition, you can configure the following vFoglight Agent Manager connection options in this dialog: **Connect using HTTPS**, **Connect using a proxy**, and **Bind to a local address**. See [“Configuring vFoglight Management Server URLs from the Installer GUI”](#) on page 91 for information about these options.
  - b Once you have specified the desired connection options, click **OK**.
- 7 Repeat [step 6](#) and its sub-steps for each Management Server URL you want to add.

The URLs you add are listed on the Configure vFoglight Server URLs screen.

A URL for which the connection has not been tested appears with an orange exclamation-point icon (■) next to it.

- 8 You can test each vFoglight Agent Manager-vFoglight Management Server connection by selecting the Management Server URL and clicking **Test**. A URL that failed the connectivity test appears with a red x icon (■) next to it.
- 9 Once you have specified one vFoglight Management Server to which the vFoglight Agent Manager connects, you can search for other Management Servers that have been configured to be part of the same HA (High Availability) partition by selecting the Management Server URL and clicking **Find HA Peers**.
- 10 When you have finished adding Management Server URLs, click **Next**.

**Note** If you did not configure any Management Server URLs, if there are URLs listed that have not been tested, or if there are URLs listed that failed the connectivity test, a Warning dialog appears asking you to confirm whether or not you would like to continue.

The Install Windows Service screen appears.

- 11 Leave the check box selected (the default setting) if you want to install the vFoglight Agent Manager as a Windows service and have it start automatically when Windows starts.

Deselect the check box if you do not want to install the vFoglight Agent Manager as a Windows service.

- 12 Click **Next**.

The Summary screen appears.

- 13 Click **Finish** to complete the installation.

The vFoglight Agent Manager installer copies files to the machine. The vFoglight Agent Manager Installer dialog and the console window close automatically when the installation is complete.

---

**Note** Install the vFoglight Agent Manager on each host that you would like to monitor.

---

## Configuring vFoglight Management Server URLs from the Installer GUI

As described in [step 6](#) of “[Using the vFoglight Agent Manager Installation and Configuration GUI](#)” on page 89, you can configure the vFoglight Agent Manager connection parameters described below in the Edit vFoglight Server URL dialog available from the installer GUI.

### *Connect using HTTPS*

If the vFoglight Management Server has been configured to use HTTPS, then HTTPS can be used by the vFoglight Agent Manager to connect to the Management Server.

Selecting the **Connect using HTTPS** check box causes the following additional options to become available:

- **Allow self-signed certificates:** Selecting this check box causes self-signed certificates to be accepted from the Management Server.
- **Allow a certificate with an unexpected common name:** Selecting this check box causes a certificate with a common name (host name) different than the one reported by the Management Server to be accepted. You specify the name in the field **Certificate Common Name:**.

### *Connect using a proxy*

You can specify whether the vFoglight Agent Manager should connect to the Management Server using a proxy.

Selecting the **Connect using a proxy** check box causes the following additional fields to become available:

- **Proxy URL:** Specify the URL of the proxy used to connect to the Management Server in this field.
- **Username:** Specify the username provided to the proxy in this field.
- **Password:** Specify the password provided to the proxy in this field.
- **NTLM Domain:** Specify the domain provided to the proxy in this field.

### *Bind to a local address*

You can specify a local network address on the vFoglight Agent Manager machine from which connections to the Management Server are made.

- **Local Address:** Specify the IP address of a NIC (network interface card) on the machine hosting the vFoglight Agent Manager that is used to establish outbound connections to the Management Server.

## Installing the vFoglight Agent Manager from the Command Line

The following procedure outlines how to run the command-line installer for the vFoglight Agent Manager.

The command-line installer prompts you for information and informs you of the progress of your installation.

*To install the vFoglight Agent Manager from the command line:*

- 1 Launch a command window on the target machine and navigate to the directory to which you downloaded the installer.

- 2 Run the installer executable by specifying the following:

```
fglam-windows-[ia32|x64].exe --headless
```

Messages appear in the command window while the installer starts and installer files are being extracted to a temporary location on your machine.

The Introduction step appears in the command window when the installer has finished loading.

- 3 Review the information in the Introduction and press `Enter` to move to the next step.

The first part of the License Agreement step appears.

- 4 Press **Enter** to cause subsequent portions of the license agreement to appear.

- 5 At the prompt, type `Y` and press `Enter` to accept the terms of the license agreement.

**Note** You need to accept the license agreement before you can install the product.

The Installation Directory step appears.

- 6 At the `Install` directory prompt, type the path to the directory where you want to install the vFoglight Agent Manager and press `Enter` or simply press `Enter` to accept the default installation directory.

**Note** If the specified directory does not exist, the installer prompts you regarding whether or not you would like it to be created. To create a directory, press `Enter`. To return to the `Install` directory prompt, type `N` and then press `Enter`.

The Configure vFMS URLs step appears.

- 7 The Configure vFMS URLs step and its sub-steps allow you to configure multiple ways of connecting the vFoglight Agent Manager to the vFoglight Management Server.

For example, you can specify a single URL or configure multiple Management Server URLs for failover purposes.

**Note** You can also configure Management Server URLs at a later time using the vFoglight Agent Manager configuration interface. See [“Configuring the vFoglight Agent Manager”](#) on page 98 for information about launching this interface post-installation.

- 8 Type `4` and press `Enter` to select the `Add a new URL` option.

A new step (named `Enter the URL data to add`) appears. In addition, the `URL` prompt appears.

The step Enter the URL data to add provides information about the parameters available for adding a new URL. See also “[Configuring vFoglight Management Server URLs from the Command Line](#)” on page 95 for information about these parameters.

- a At the URL prompt, type the URL parameters as a comma-separated list of name-value pairs starting with the required `url` parameter. For example:

```
url=http://localhost:8080,address=127.0.0.1,proxy=http://proxy.server
```

- b Once you have typed the desired parameters, press Enter.

A message appears when the URL is added. You then return to the Configure vFMS URLs menu and prompt.

- 9 Repeat [step 8](#) and its sub-steps for each Management Server URL you want to add.

- 10 To list the URLs you have added, type `1` and press Enter.

A numbered list of configured Management Server URLs appears.

A URL for which the connection has not been tested appears with an exclamation point (!) next to it.

You then return to the Configure vFMS URLs menu and prompt.

- 11 Once you have specified one vFoglight Management Server, you can test the vFoglight Agent Manager-vFoglight Management Server connection(s):

- a Type `2` and press Enter.

The installer tests the connection(s). A message appears informing you of the test progress.

When the test is complete, you return to the Configure vFMS URLs menu and prompt.

- b To see whether the URL(s) passed the connectivity test, type `1` and press Enter. A URL that failed the connectivity test appears with an `x` next to it.

You then return to the Configure vFMS URLs menu and prompt.

- 12 Once you have specified one vFoglight Management Server to which the vFoglight Agent Manager connects, you can search for other Management Servers that have been configured to be part of the same HA (High Availability) partition:

- a Type `3` and press Enter.

The installer searches for HA peers and tests the connection(s). A message appears informing you of the search and test progress.

When the search and test are complete, you return to the Configure vFMS URLs menu and prompt.

- b** To see whether HA peers were found and added to the list, type `1` and press `Enter`. A URL that failed the connectivity test appears with an `x` next to it.

You then return to the Configure vFMS URLs menu and prompt.

- 13** When you have finished adding Management Server URLs, type `0` and press `Enter`.

**Note** If you did not configure any Management Server URLs, if there are URLs listed that have not been tested, or if there are URLs listed that failed the connectivity test, a message appears asking you to confirm whether or not you would like to continue.

The Install as a Windows Service step appears.

- 14** If you want to install the vFoglight Agent Manager as a Windows service (the default setting) and have it start automatically when Windows starts, simply press `Enter`.

If you do not want to install the vFoglight Agent Manager as a Windows service, type `N` and press `Enter`.

The Summary step appears.

- 15** Press `Enter` to exit the installer and complete the installation.

The vFoglight Agent Manager installer calculates the installation size and copies files to the machine.

---

**Note** Install the vFoglight Agent Manager on each host that you would like to monitor.

---

## Configuring vFoglight Management Server URLs from the Command Line

As described in [step 8](#) of “[Installing the vFoglight Agent Manager from the Command Line](#)” on page 92 and [step 3](#) of “[Using the Silent vFoglight Agent Manager Installer](#)” on page 97, you can configure the vFoglight Agent Manager connection parameters described below as part of the command-line installation processes.

The required and optional parameters for specifying a vFoglight Management Server URL are described below. Parameters must be specified as a list of comma-separated name-value pairs, starting with the required `url` parameter. For example:

```
url=http://localhost:8080,address=127.0.0.1,proxy=http://proxy.server
```

---

**Important** When specifying these parameters as part of the silent installation process, you must specify the option `--fms` prior to the list of comma-separated name-value pairs. For example:

```
--fms url=http://localhost:8080,address=127.0.0.1
```

---

- `url`: This parameter is required. Type the URL used by the vFoglight Agent Manager to connect to the vFoglight Management Server using the format

```
url=[http|https]://<hostname>:<port>
```

where `<hostname>` is the name of the machine where the vFoglight Management Server is installed and `<port>` is the HTTP port specified during installation (the default port is 8080).

If the vFoglight Management Server has been configured to use HTTPS, then you can specify `https` as the protocol used by the vFoglight Agent Manager to connect to the Management Server.

- `proxy`: This parameter is optional. Type the URL of the proxy used to connect to the Management Server as the `proxy` value.
- `proxyUser`: This parameter is optional. Type the username provided to the proxy as the `proxyUser` value.
- `proxyPass`: This parameter is optional. Type the password provided to the proxy as the `proxyPass` value.
- `proxyNtlmDomain`: This parameter is optional. Type the NTLM domain provided to the proxy as the `proxyNtlm` value.
- `address`: This parameter is optional. Type the IP address of a NIC (network interface card) on the machine hosting the vFoglight Agent Manager that is used to establish outbound connections to the Management Server as the `address` value.
- `sslAllowSelfSigned`: This parameter is optional.
  - Type `true` as the `sslAllowSelfSigned` value to allow self-signed certificates to be accepted.
  - Type `false` as the `sslAllowSelfSigned` value if you do not want self-signed certificates to be accepted.



- `certCommonName`: This parameter is optional. Including this parameter causes a certificate with a common name (host name) different than the one reported by the Management Server to be accepted. Type the common name contained in the Management Server's certificate as the `certCommonName` value.

## Using the Silent vFoglight Agent Manager Installer

You can use the silent installer in situations where you want to install the vFoglight Agent Manager non-interactively—for example, to install the vFoglight Agent Manager from the command line onto a remote, headless machine.

*To install the vFoglight Agent Manager using the silent installer:*

- 1 If you are installing onto a remote machine, log in to the target machine (for example, using SSH).
- 2 Launch a command window on the target machine and navigate to the directory to which you downloaded the installer.
- 3 Run the installer executable with the `--silent` option. All desired installation parameters must be included in the command with the `--silent` option, using the format

```
fglam-windows-[ia32|x64].exe --silent --fms <url_and_other_parameters> --  
installmdir <install_dirirectory_path>
```

where `<url_and_other_parameters>` is a comma-separated list of parameters for configuring the connection to a vFoglight Management Server and `<install_dirirectory_path>` is the full path to the directory where you want to install the vFoglight Agent Manager. See “[Configuring vFoglight Management Server URLs from the Command Line](#)” on page 95 for a description of the required `url` parameter and the other optional parameters for the `--fms` option.

You can provide the `--fms` option multiple times to configure the connection to more than one Management Server at once.

**Note** The `--installmdir` option is required, but the `--fms` option is not.

Messages appear in the command window while the installer starts. Installer files are extracted to the location you specified in the `--installmdir` parameter and the installer runs.

---

**Note** Install the vFoglight Agent Manager on each host that you would like to monitor.

---

## Upgrading the vFoglight Agent Manager

Consult the *vFoglight 5.2.4 Upgrade Field Guide* for detailed upgrade instructions.

## Configuring the vFoglight Agent Manager

This section contains information about configuring the vFoglight Agent Manager after installation.

### Configuring the vFoglight Agent Manager

You can change many of the settings available in the vFoglight Agent Manager installer at a later time using the vFoglight Agent Manager configuration interface.

---

**Note** All of the command-line options that you can specify when starting the vFoglight Agent Manager installer also work with the `--configure` option that is used to launch the vFoglight Agent Manager configuration interface.

---

*To launch the vFoglight Agent Manager configuration GUI:*

- 1 Run the vFoglight Agent Manager from the command line with the `--configure` option:  

```
<fglam_home>\bin\fglam.exe --configure
```

The FglAM Installation and Configuration program window appears.
- 2 Review the information on the Introduction screen and click **Next**.  
The Update Client ID screen appears.
- 3 The second screen—Update Client ID—allows you to reset the unique identifier assigned to this vFoglight Agent Manager if you have discovered that this vFoglight Agent Manager is using the same identifier as another vFoglight Agent Manager:
  - If you would like to reset the unique identifier assigned to this vFoglight Agent Manager instance: select the **Yes, reset this client's ID** check box.
  - If you do not want to reset the unique identifier assigned to this vFoglight Agent Manager instance: leave the **Yes, reset this client's ID** check box de-selected (the default setting).

**4 Click Next.**

The Configure vFoglight Server URLs screen appears.

- 5** Using the **Next** and **Previous** buttons, navigate through the remaining screens and set the desired options. The Configure vFoglight Server URLs and Install Windows Service screens are the same as in the vFoglight Agent Manager installer GUI. See “[Using the vFoglight Agent Manager Installation and Configuration GUI](#)” on page 89 for instructions.
- 6** When you are finished configuring the vFoglight Agent Manager, navigate to the Summary screen and click **Finish**.

*To launch the vFoglight Agent Manager configuration command-line interface:*

- 1** Launch a command window on the vFoglight Agent Manager machine and navigate to the `<fglam_home>\bin` directory.
- 2** Run the vFoglight Agent Manager from the command line with the following options:

```
fglam.exe --headless --configure
```

A message appears in the command shell while the configuration interface starts.

The Introduction step appears when the configuration interface has finished loading.

- 3** Review the information in the Introduction and press `Enter` to move to the next step.
- 4** The second step—Update Client ID—allows you to reset the unique identifier assigned to this vFoglight Agent Manager if you have discovered that this vFoglight Agent Manager is using the same identifier as another vFoglight Agent Manager:
  - If you would like to reset the unique identifier assigned to this vFoglight Agent Manager instance: type `Y` at the prompt and press `Enter`.
  - If you do not want to reset the unique identifier assigned to this vFoglight Agent Manager instance: press `Enter` (`N` is the default option).

The Configure vFMS URLs screen appears.

- 5** The subsequent steps—Configure vFMS URLs and Install as a Windows Service—are the same as in the vFoglight Agent Manager command-line installer. See “[Installing the vFoglight Agent Manager from the Command Line](#)” on page 92 for instructions.

Navigate through the remaining steps and set the desired options.

- 6 When you have finished configuring the vFoglight Agent Manager, press Enter at the Summary step.

## Installing the vFoglight Agent Manager as a Windows Service

If you did not install the vFoglight Agent Manager as a Windows service using the installer, you can do so from the command line after installing the vFoglight Agent Manager.

*To install the vFoglight Agent Manager Windows service:*

- 1 Launch a command window on the vFoglight Agent Manager machine and navigate to the `<fglam_home>\bin` directory.
- 2 Run the vFoglight Agent Manager from the command line with the `--install-service` option:  

```
fglam.exe --install-service
```
- 3 To start or stop the vFoglight Agent Manager service manually, follow the instructions in [“To run the vFoglight Agent Manager as a Windows service:”](#) on page 100.

*To remove the vFoglight Agent Manager Windows service:*

- 1 Launch a command window on the vFoglight Agent Manager machine and navigate to the `<fglam_home>\bin` directory.
- 2 Run the vFoglight Agent Manager from the command line with the `--remove-service` option:  

```
fglam.exe --remove-service
```

## Running the vFoglight Agent Manager

*To start the vFoglight Agent Manager:*

- Navigate to the `\bin` directory of your vFoglight Agent Manager installation and run the `fglam.exe` executable.

*To run the vFoglight Agent Manager as a Windows service:*

- 1 If you have not already done so, follow the instructions in [“To install the vFoglight Agent Manager Windows service:”](#) on page 100.

- 2 Launch a command window on the vFoglight Agent Manager machine and navigate to the `<fglam_home>\bin` directory.
- 3 Run the vFoglight Agent Manager from the command line with the desired option:
  - **To start the vFoglight Agent Manager service:** Run `fglam.exe` with the `--start-service` option:  
`fglam.exe --start-service`
  - **To stop the vFoglight Agent Manager service:** Run `fglam.exe` with the `--stop` option:  
`fglam.exe --stop`

## Next Steps

To install vFoglight Agents, refer to the chapter “Installing Agents”.

## Uninstalling the vFoglight Agent Manager

To uninstall version 5.2.4 of the vFoglight Agent Manager, delete the installation directory (referred to as `<fglam_home>` in this chapter).

## vFoglight Agent Manager Platform Support Matrix

The following table outlines the vFoglight Agent Manager installer appropriate for your platform.

Operating System	Version	Architecture	FglAM Installer
Microsoft Windows	2000	ia32	<i>fglam-windows-ia32</i>
	XP		
	2003 Server		
	2003 Server ia64	ia64	<i>fglam-windows-ia32 (emulated)</i>
	XP x64	x86_64	<i>fglam-windows-x86_64</i>

# Installing Agents

This chapter contains the following sections:

<a href="#">vFoglight Agents</a> .....	104
<a href="#">Agent Installers</a> .....	104
<a href="#">Remote Agent Installation</a> .....	105

## vFoglight Agents

A cartridge may include one or more executable vFoglight agent installers. These agent installers included in a cartridge are listed on the *Components for Download* page of the *Cartridges* area in the vFoglight Administration Module (select **Administration > Cartridges > Components for Download** from the navigation panel on the left side of the vFoglight interface). Agents must be installed on all of the machines you want to monitor. For agents that are installed on the monitored host you need to install and configure the vFoglight Agent Manager.

---

**Note** vFoglight 4-converted agents create two processes of themselves when activated by the vFoglight Agent Manager

---

---

**Caution** If there is a difference between the time on the machine hosting the vFoglight Management Server and the machine on which an agent is running, then the Management Server discards all of the observed values for that agent.

---

---

**Note** The following are examples of problems that may arise as a result of time differences:

- If the Daylight Savings Time patch has not been applied on the agent machine, but the time was moved ahead manually, the vFoglight Management Server discards the data sent to it by the agent.
- If the Daylight Savings Time patch is applied after the agent is installed, the vFoglight Management Server discards the data sent to it by the agent.

---

## Agent Installers

Agents that depend on the vFoglight Agent Manager are installed using the remote installation procedure. See “[Remote Agent Installation](#)” on page 105 and the *Administration and Configuration Guide*.

Some cartridges include one or more executable agent installers. The agent installers that are available for download are listed on the *Components for Download* page of the *Cartridges* area. You can use the controls on this page to download agent installers from the vFoglight Management Server to a remote machine.



To download an agent installer:

- 1 Select **Administration > Cartridges > Components for Download** from the navigation panel on the left side of the vFoglight interface. The *Components for Download* page appears.
- 2 Click the name of the installer that you want to download.
- 3 Follow the on-screen instructions for each step of the installation process and specify the appropriate installation options.

---

**Note** For agents that are installed individually, you have to run the agent installer executable and setup the agent on each machine you want to monitor with that type of agent.

The vFoglight Agent Manager defines agents with their Agent Package name. When displayed in the Create Agent dialog, the agent names are prepended with the cartridge name.

---

Depending on the type of agent that you installed, you may need to edit its properties to configure it for the part of your environment that you want to monitor. For information about agent properties, see the *Administration and Configuration Guide* and the *User Guide* for the cartridge with which the agent was included.

## Remote Agent Installation

You can install vFoglight agents on any remote host on which vFoglight Agent Manager has been installed. See the chapter “Installing and Running the vFoglight Agent Manager (FglAM)”.

For more information about remote agent installation, see the *Administration and Configuration Guide*.



# Index

## A

about vFoglight 8

administration

administrator default account 34

default user name and password 34

Agents 28

embedded 28

installing 104

## B

bin directory 61

## C

cartridge directory 62

cartridges

installing 82

client directory 61

Components for Download dashboard 87

config directory 61

configuring

vFoglight Agent Manager 98

contacting

Vizioncore 11

## D

database

external MySQL database access for remote

users 56

initializing 73

deploying

vFoglight Agent Manager cartridge 86

directories

installed directories 61

documentation

cartridge 10

core 9

feedback 10

suite 9

documentation directory 61

downloading

vFoglight Agent Manager installer 87

dtd directory 61

## H

High Availability Server 77

how to

access

*the Cartridge Manager* 82

install

*a cartridge* 82

**I****installation**

- modes 57
- recommendations 31
- requirements 34

**installed directories** 61

- bin 61
- cartridge 62
- client 61
- config 61
- docs 61
- dtd 61
- jre 61
- lib 61, 62
- logs 61
- mysql 61
- scripts 62
- server 62
- support 62

**installers**

- downloading the vFoglight Agent Manager installer 87

**installing**

- vFoglight Agent Manager 85, 86, 88

**installing cartridges** 82**J****JAR files directory** 61**JRE directory** 61**L****lib directory** 61, 62**licensing** 29**log files directory** 61**logging in**

- to the Administration Console 79

**M****Management Server** 27**mysql files directory** 61**P****password, administrator** 34**perl files directory** 62**platform support**

- vFoglight Agent Manager 102

**properties file** 57**R****recommendations**

- for installing vFoglight 31

**remote agent installation** 105**remote monitor**

- installing 78
- starting 78

**running**

- vFoglight Agent Manager 85

**running Foglight** 71**S****scripts directory** 62**server**

- starting 75
- stopping 76

**server directory** 62**silent installation mode** 57**starting the server** 75**stopping the server** 76**support directory** 62**T****text conventions** 11

## U

### uninstalling

- vFoglight 70

- vFoglight Agent Manager 101

### upgrading

- vFoglight Agent Manager 98

### user account

- administrator 34

### using

- Components for Download dashboard 87

- vFoglight Agent Manager installer servlet 87

## V

### vFoglight

- uninstalling 70

### vFoglight Agent Manager

- configuring 98

- deploying the cartridge 86

- downloading the installer 87

- installer 88

- installing 85, 86

- installing Windows service 100

- platform support 102

- removing Windows service 100

- running 85, 100

- uninstalling 101

- upgrading 98

- vFoglight Agent Manager installer servlet 87

## W

### Windows

- service, from the command line 76

- service, installing vFoglight as a 75