



vFoglight™ 5.2.4

Managing Operating Systems
User Guide



© 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

email: 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, vFoglight, 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, 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.

User Guide
March 2009
Version 5.2.4

Table of Contents

Introduction to this Guide	9
About vFoglight	10
About this Guide.....	10
vFoglight Documentation Suite	11
Core Documentation Set	12
Cartridge Documentation Sets	13
Feedback on the Documentation.....	13
Text Conventions	14
About Vizioncore Inc.	14
Contacting Dell	16
Operating System Dashboard.....	29
Overview	30
The Host Monitor Dashboard	30
Viewing the Host Monitor Dashboard	30
Portlets and Elements	31
Time Range and Data Display.....	34
Alerts	35
Viewing the Host Browser Drill Down	35
Viewing Source Data for the Host Monitor	37
Locating Data Bindings.....	37
Viewing Data for a Host	37
Creating a Custom Host Monitor Dashboard	42
About the ApacheSvr Agent	43
Overview	44
Supported Platforms.....	44

Agent Properties	45
Collection Rate.....	46
Access Log	47
Transaction List.....	47
About the AppMonitor Agent	49
Overview	50
Supported Platforms	50
Agent Properties	51
Collection Rate.....	52
Process List	53
About the DiskIO Agent	57
Overview	58
Supported Platforms	58
Agent Properties	58
Collection Rate.....	60
Collection Policy.....	60
Exclusion Lists	60
About the FileSystem Agent	63
Overview	64
Supported Platforms	64
Agent Properties	65
Collection Rate.....	67
FileSystem Types	67
FileSystem List.....	68
Directory List	69
Regular Expressions.....	70
About the LogFilter Agent	73
Overview	74
Supported Platforms	74
Agent Properties	75
Collection Rate.....	77
Log File List.....	77

Match List	78
About the NetMonitor Agent	81
Overview	82
Supported Platforms	82
Agent Properties	83
Collection Rate	84
Database	85
Host List	85
About the Network Interface Card (NIC) Agent	87
Overview	88
Supported Platforms	88
Agent Properties	88
Collection Rate	90
Override Options	90
About the Process Agent	93
Overview	94
Supported Platforms	94
Agent Properties	94
Collection Rate	96
Collection Policy	96
About the SNMP Agent	97
Overview	98
Supported Platforms	98
Agent Properties	99
Collection Rate	100
Monitored Device List	101
About the Sun_TCP Agent	103
Overview	104
Supported Platforms	104
Agent Properties	104
Collection Rate	105

About the Operating System Agents.....	107
Overview.....	108
Agent Properties	109
AIX Agents	109
Overview	110
Supported Platforms	110
Views	110
Rules.....	111
Data	111
HP-UX Agents	111
Overview	111
Supported Platforms	111
Views	112
Rules.....	112
Data	112
Linux Agents	112
Overview	112
Supported Platforms	113
Views	113
Rules.....	113
Data	113
Sun Agents	113
Overview	114
Supported Platforms	114
Views	114
Rules.....	115
Data	115
Agent Properties	115
About the TerminalServer Agent	119
Overview.....	120
Supported Platforms	120
Agent Properties	120
Collection Rate.....	121
Top Sessions	122

About the User Agent	123
Overview	124
Supported Platforms	124
Agent Properties	124
Collection Rate	126
Collection Policy	126
About the WebMonitor Agent	127
Overview	128
Supported Platforms	128
Agent Properties	129
Collection Rate	130
URL List	131
About the Windows_System Agent	133
Overview	134
Supported Platforms	135
Agent Properties	135
Collection Rate	137
Collection Policy	138
Event Log	138
Services	140
Exclude Drives	141
Index	143

Introduction to this Guide

This chapter provides information about what is contained in the *vFoglight Cartridge for Operating Systems*. It also provides information about the vFoglight documentation suite and Vizioncore.

This chapter contains the following sections:

About vFoglight	10
About this Guide	10
vFoglight Documentation Suite	11
Text Conventions	14
About Vizioncore Inc.	14

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 Operating Systems Cartridge Guide contains information about agent properties for each OS Cartridge agent.

This guide is intended for any user who wants to configure agent properties for each OS Cartridge agent.

The Guide is organized as follows:

Chapter 1, Operating System Dashboard—Describes the Operating System dashboard that is used to help monitor, analyze, and investigate overall operating system performance.

Chapter 2, About the ApacheSvr Agent—This section provides an overview of the ApacheSvr agent. It also describes the supported platforms and properties for the agent.

Chapter 3, About the AppMonitor Agent—This section provides an overview of the AppMonitor agent. It also describes the supported platforms and properties for the agent.

Chapter 4, About the DiskIO Agent—This section provides an overview of the DiskIO agent. It also describes the supported platforms and properties for the agent.

Chapter 5, About the FileSystem Agent—This section provides an overview of the FileSystem agent. It also describes the supported platforms and properties for the agent.

Chapter 6, About the LogFilter Agent—This section provides an overview of the LogFilter agent. It also describes the supported platforms and properties for the agent.

Chapter 7, About the NetMonitor Agent—This section provides an overview of the NetMonitor agent. It also describes the supported platforms and properties for the agent.

Chapter 8, About the NIC (Network Interface Card) Agent—This section provides an overview of the NetMonitor agent. It also describes the supported platforms and properties for the agent.

Chapter 9, About the Process Agent—This section provides an overview of the Process agent. It also describes the supported platforms and properties for the agent.

Chapter 10, About the SNMP Agent—This section provides an overview of the SNMP agent. It also describes the supported platforms and properties for the agent.

Chapter 11, About the Sun_TCP Agent—This section provides an overview of the Sun_TCP agent. It also describes the supported platforms and properties for the agent.

Chapter 12, About the Operating System Agents—Describes the agents that are available for the AIX, HP-UX, Linux, and Sun operating systems. It also describes the supported platforms and properties for the agents.

Chapter 13, About the TerminalServer Agent—The section provides an overview of the TerminalServer agent. It also describes the supported platforms, and properties for the agent.

Chapter 14, About the User Agent—This section provides an overview of the User agent. It also describes the supported platforms, and properties for the agent.

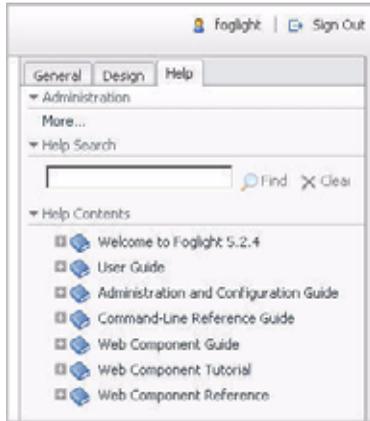
Chapter 15, About the WebMonitor Agent—This section provides an overview of the WebMonitor agent. It also describes the supported platforms, and properties for the agent.

Chapter 16, About the Windows_System Agent—This section provides an overview of the Windows_System agent. It also describes the supported platforms, and properties for the agent.

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

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"> • Java language source code and examples of file contents • Classes, objects, methods, properties, constants, and events • HTML documents, tags, and attributes
<i>Variables</i>	Monospace-plus-italic text represents variable code or command-line objects that are replaced by an actual value or parameter.
Interface	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"> • Pathnames, file names, and programs • The names of other documents referenced in this guide

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.

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	www.Dell.com/ai la-techsupport@dell.com toll-free: 800-335-0031
Antigua and Barbuda	Web Address E-Mail Address Technical Support., Customer Service, Sales	www.Dell.com.ag la-techsupport@dell.com 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	www.dell.com.ar la-techsupport@dell.com la_enterprise@dell.com 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	www.Dell.com/aw la-techsupport@dell.com 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	support.ap.dell.com support.ap.dell.com/contactus 13DELL-133355

Austria (Vienna)	Web Address	Support.euro.dell.com
International Access Code: 900	E-Mail Address	Tech_support_central_europe@dell.com
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	www.dell.com/bs
	E-Mail Address	la-techsupport@dell.com
	Technical Support., Customer Service, Sales	toll-free: 1-866-874-3038
Barbados	Web Address	www.dell.com/bb
	E-Mail Address	la-techsupport@dell.com
	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	www.dell.com/bo
	E-Mail Address	la_techsupport@dell.com
	Technical Support., Customer Service, Sales	toll-free: 800-10-0238
Brazil	Web Address	www.dell.com/br
International Access Code: 00	E-Mail Address	BR_TechSupport@dell.com
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	www.dell.ca/ostatus
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	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-877-262-5415

Chile (Santiago)	Web Address	www.dell.com/cl
Country Code: 56	E-Mail Address	la-techsupport@dell.com
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	customer_cn@dell.com
	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	www.dell.com/co
	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	01-800-915-4755
Costa Rica	Web Address	www.dell.com/cr
	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	0800-012-0231
Czech Republic (Prague)	Web Address	support.euro.dell.com
International Access	E-Mail Address	czech_dell@dell.com
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	www.dell.com/dm
	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-866-278-6821

Dominican Republic	Web Address	www.dell.com/do
	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-800-156-1588
Ecuador	Web Address	www.dell.com/ec
	E-Mail Address	la-techsupport@dell.com
	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	www.dell.com/sv
	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	800-6132
Finland (Helsinki)	Web Address	support@euro.dell.com
International Access Code: 990 Country Code: 358 City Code: 9	E-Mail Address	fi_support@dell.com
	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	tech_support_central_europe@dell.com
	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
Grenada	Fax	2108129812
	Web Address	www.dell.com/gd
	E-Mail Address	la-techsuppo@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-866-540-3355

Guatemala	Web Address	www.dell.com/gt
	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-800-999-0136
Guyana	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-877-270-4609
Hong Kong	Web Address	support.ap.dell.com
International Access Code: 001 Country Code: 852	Technical Support E-mail Address	support.dell.com.cn/email
	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	support.ap.dell.com
Portable and Desktop Support		
	Desktop Support E-mail Address	india_support_desktop@dell.com
	Portable Support E-mail Address	india_support_notebook@dell.com
	Phone Numbers	080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-free: 1-800-425-8045
Server Support		
	E-mail Address	india_support_Server@dell.com
	Phone Numbers	080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-free: 1-800-425-8045
Gold Support Only		
	E-mail Address	eec_ap@dell.com
	Phone Numbers	080-25068033 or your city STD code + 60003355 or toll-free: 1-800-425-9045
Customer Service		
	Home and Small Business	India_care_HSB@dell.com toll-free : 1800-4254051
	Large Corporate Accounts	India_care_REL@dell.com toll free : 1800-4252067
Sales		
	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	Technical Support	
Country Code: 353	E-mail Address	dell_direct_support@dell.com
City Code: 1	Business computers	1850 543 543
	Home computers	1850 543 543
	At Home Support	1850 200 889
	Sales	
	Home	1850 333 200
	Small Business	1850 664 656
	Medium Business	1850 200 646
	Large Business	1850 200 646
	E-mail Address	Dell_IRL_Outlet@dell.com
	Customer Service	
	Home and Small Business	204 4014
	Business (greater than 200 employees)	1850 200 982
	General	
	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	Home and Small Business	
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
	Corporate	
	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	ja-techsupport@dell.com
	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	www.dell.com/mx
International Access Code: 00	E-mail Address	la-techsupport@dell.com
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	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	Toll-free: 1-866-278-6822
Netherlands	E-mail Address	la-techsupport@dell.com
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	www.dell.com/ni
	E-mail Address	la-techsupport@dell.com
	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	www.dell.com/pa
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	011-800-507-1264
Peru	Web Address	www.dell.com/pe
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	0800-50-669

Poland (Warsaw)	Web Address	support.euro.dell.com
International Access Code: 011	E-mail Address	pl_support_tech@dell.com
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	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-877-537-3355
St. Kitts and Nevis	Web Address	www.dell.com/kn
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-866-540-3355
St. Lucia	Web Address	www.dell.com/lc
	E-mail Address	la-techsupport@dell.com
	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	la-techsupport@dell.com
	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	support.euro.dell.com
International Access Code: 00	E-mail Address	czech_dell@dell.com
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	dell_za_suppor@dell.com
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	Tech_support_central_Europe@dell.com
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	www.dell.com/ff
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-888-799-5908
Turks and Caicos Islands	Web Address	www.dell.com/tc
	E-mail Address	la-techsupport@dell.com
	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	dell_direct_support@dell.com
Country Code: 44	Customer Service Website	support.euro.dell.com/uk/en/ECare/form/home.asp
City Code: 1344	Sales	
	Home and Small Business Sales	0870 907 4000
	Corporate/Public Sector Sales	01344 860 456
	Customer Service	
	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
	Technical Support	
	Corporate/Preferred Accounts/PCA (1000+ employees)	0870 908 0500
	Other Dell Products	0870 353 0800
	General	
	Home and Small Business Fax	0870 907 4006
Uruguay	Web Address	www.dell.com/uy
	E-mail Address	la-techsupport@dell.com
	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
	Business	
	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
	Public (government, education, and healthcare)	
	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	www.dell.com/vi
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-877-702-4360
Venezuela	Web Address	www.dell.com/ve
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	0800-100-4752

Operating System Dashboard

A dashboard aids in the monitoring, analysis, and investigation of overall operating system performance. vFoglight provides a common system dashboard across all platforms.

This chapter contains the following sections:

Overview	30
The Host Monitor Dashboard	30
Viewing Source Data for the Host Monitor	37
Creating a Custom Host Monitor Dashboard	42

Overview

When you deploy the Cartridge for Operating Systems, a monitoring dashboard is available from which you can view your operating system performance. This dashboard is a visual representation of the status of the major components of the selected host. It allows you to determine at a glance any potential bottlenecks with system performance.

For ease of use, one common dashboard for all platforms is available under the Dashboards node in the vFoglight. For more information on the Dashboards node, refer to the *vFoglight User Guide*.

Within the monitoring dashboard window, related server statistics are grouped together on portlets that are connected by a series of graphical flows and icons. The information is updated in real time so that you can see how quickly data is moving through the system.

The Host Monitor Dashboard

The Host Monitor dashboard provides a quick and intuitive view of the activity of a single host instance for an operating system type. For example, selecting a Windows host from the host list displays a monitoring dashboard with CPU, memory, disk usage, and alarm information.

In the Host Monitor dashboard, you can display the metrics for each host that you monitor. The action panel on the right includes the Host Selector command that lets you choose from existing hosts.

Within the monitoring dashboard window, related server statistics are grouped together on portlets that are connected by a series of graphical flows and icons. The information is updated in real time so that you can see how quickly data is moving through the system.

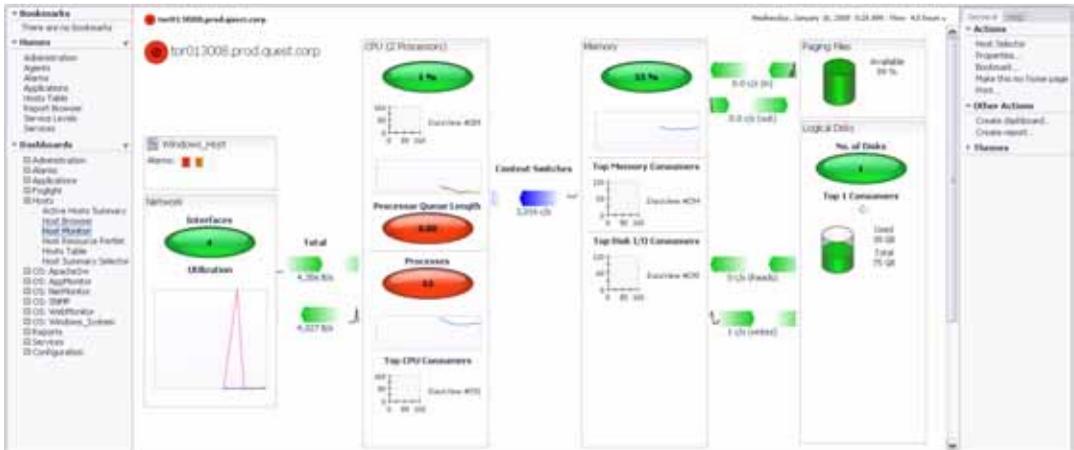
Viewing the Host Monitor Dashboard

You can view host data from the default system dashboard.

To open the Host Monitor dashboard:

- 1 Ensure that the navigation panel on the left is open.
To open the navigation panel, click the right-facing arrow  on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Hosts > Host Monitor**.

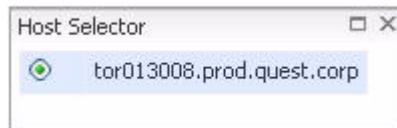
The Host Monitor dashboard opens.



3 Optional. Choose a different host. To do that, complete the following steps:

- a Ensure that the action panel on the right is open.
- b In the action panel, on the **General** tab, under **Actions**, click **Host Selector**.

The **Host Selector** dialog box appears.



- c In the **Host Selector** dialog box, select the host.

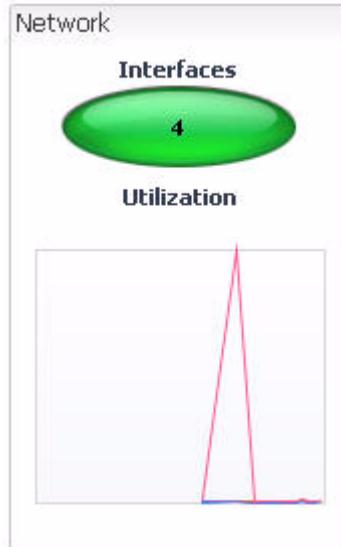
The **Host Selector** dialog box closes and the Host Monitor dashboard shows the metrics for the newly selected host.

Portlets and Elements

The Host Monitor dashboard contains portlets and elements.

Portlets

Portlets are groupings of related components. They display elements or information related to the portlet. For example, the Network portlet displays network interfaces and utilizations that are related to the network.



There are six portlets in the Host Monitor dashboard.

Portlet Name	Description
System	Information about the host. Includes a drill down to the Host Browser.
Network	Displays information about the number of interfaces used and network utilization.
CPU	Displays the aggregate processor utilization percentage and the number of engines configured. Displays information about number of processors, processor queue length, the number of processes and top CPU consumers.
Memory	Displays the total amount of memory usage for the host, the top memory consumers and the top I/O consumers.
Paging Files	Provides the percentage of paging space available in pages.
Disks	Displays the number of disks in use, and for these disks displays the top consumers (percentage used).

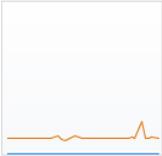
Elements

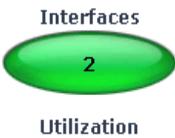
The Host Monitor dashboard contains visual elements that provide information about each portlet.

Elements can change color and their values can change as alarms are raised for the metrics they contain. For more information see “[Alerts](#)” on page 35.

Tip By placing your cursor over any element, a tooltip displays the metric value for that element.

The following elements are displayed in the Host Monitor dashboard:

Element	Description
<p>Line Graph</p> 	<p>Line graphs compare data for multiple elements.</p> <p>vFoglight gives you a sense of the historical performance of the host server and its components by plotting certain key metrics over time in line graphs.</p>
<p>Horizontal Bar Chart</p> 	<p>Displays data for multiple elements in a horizontal arrangement.</p>
<p>Vertical Bar Chart</p> 	<p>Displays data for multiple elements in a vertical arrangement.</p>
<p>Container</p> 	<p>A cylindrical component that fills up as the value it measures increases. Normally used to indicate file size or disk usage.</p>

Element	Description
<p>Pulse Gauges</p>  <p>The image shows a pulse gauge for 'Context Switches'. It features a green bar with a white line graph on top, indicating historical data. Below the bar, the text 'Context Switches' is written in bold, and '3,211 c/s' is displayed in a smaller font.</p>	<p>Most portlets are connected to other portlets by data flows that show the rate at which data is moving through a host system.</p> <p>Communications between host server components are represented by animated data flow that indicate the direction of the communication, and are labeled with the current metric values. In addition, the data flows display a mini line graph of historical metric data so that you get a quick sense of how this communication has been performing over time. Pulse Gauges are anchored between the portlets representing the components transferring the data.</p>
<p>Button</p>  <p>The image shows a button for 'Interfaces Utilization'. It is a green oval with a white border and the number '2' in the center. The text 'Interfaces' is above the oval and 'Utilization' is below it.</p>	<p>A button containing a single value that represents the state or existence of a process.</p>

Time Range and Data Display

When you open the Host Monitor dashboard you view data in real time. You can also investigate data during a specific time period by using the Custom Time Range feature. When you change the time period, data is rendered using the end point of the data window as the reference point.

To set the Custom Time Range:

- From the **Time Range** menu, select **Custom**.

The **Custom Time Range** dialog box appears. Use the zonar to change the time periods. Slide the zonar from side to side or click on either end of the zonar bar to shorten or lengthen the time period. Initially, only the zonar is displayed. You can expand the dialog box by clicking the arrow at the left side of the dialog box, which displays the **Precision Control** section. Clicking the Calendar button  to the right of the date fields displays the calendars.

Alerts

One of the keys to working with monitored hosts is understanding Alerts. Alerts are fired when a particular metric exceeds a threshold defined in vFoglight. The Host Monitor dashboard indicates alerts in the graphical displays by using a specific color. Buttons, Containers, and Pulse Gauges, are displayed in the alert color.

Alert Level	Alert Color	Alert Description
Normal	Green	The component is operating within normal thresholds.
Warning	Yellow	Represents a possible performance problem, based on calculations on current server metrics against best-practices thresholds.
Critical	Orange	Indicates that the current metric values point strongly towards performance-related problems with the specified component.
Fatal	Red	There is a very strong indication that the server is experiencing conditions which will degrade performance.

For more information about states, see the Cartridge for Operating Systems *Reference Guide*.

Viewing the Host Browser Drill Down

You can select a host and drill down for more information about the agents installed on that host. The list of agents for a host includes a summary page that shows the date of the last agent update and any alerts. For more information about alerts, see “[Alerts](#)” on page 35 or the Cartridge for Operating Systems *Reference Guide*.

Each agent contains a list of data tables that is used to collect data for that agent. Each data table displays an alert status. This alert status is determined by the status of rules that monitor the health of the operating system. Each agent node summarizes the total number of alarms fired by rules monitoring the data tables of the agent.

By selecting a data table you can have access to all the views that are built for the selected data table as well as the data collected for that table. For more information about views, see the Cartridge for Operating Systems *Reference Guide*.

To display Host Browser data:

- 1 Ensure that the navigation panel on the left is open.
To open the navigation panel, click the right-facing arrow ► on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Hosts > Host Browser**.
- 3 Select a host whose data you want to view.
 - a Ensure that the action panel on the right is open.
 - b In the action panel, on the **General** tab, under **Actions**, click **Host Selector**.
The **Host Selector** dialog box appears.



- c In the **Host Selector** dialog box, select the host.
The **Host Selector** dialog box closes and the Host Browser dashboard shows the metrics for the selected host.
- 4 Expand the tree view for an agent component.
The tree expands to show the list of tables that are collecting data for the agent. For each table the status appears.
- 5 To review the data details for a table, click a data table link.
A popup appears, listing information about the selected table such as the agent and host names, any alarms that are generated for the selected table, a list of views that contain the table information, along with a link to the Data Browser. The list of views and the link to the agent's data browser appears under **Related** in the popup.
- 6 In the popup, under **Related**, click a view.
A dialog box appears, showing graphical data for the selected view.

Viewing Source Data for the Host Monitor

Data from existing views and tables is displayed in the Host Monitor dashboard. You can navigate to the location of data used in the portlets and elements of the Host Monitor dashboard.

Tip Most of the data that is displayed on the Host Monitor dashboard is aggregated data.

Locating Data Bindings

A data binding displays a relationship between a data source and the object displayed. You can determine to which data source the view is bound.

To locate data bindings:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow  on the left.

- 2 On the navigation panel, under **Dashboards**, choose **Configuration > Definitions**.
- 3 In the display area, in the **Definitions** pane, click **Hosts**.

The Module Contents pane immediately below the **Definitions** pane lists the views for the Hosts module on the **Views** tab.

- 4 In the Module Contents pane, on the **Views** tab, click **Host Monitor**.

The **Host Monitor** tab appears to the right of the **Definitions** and **Module Contents** panes in the display area, showing context details and data bindings for the Host Monitor dashboard.

In the **Module Contents** pane, on the **Views** tab, click any other views and review their data bindings.

Viewing Data for a Host

For any element on the Host Monitor dashboard you can navigate to the related data located in the *Data* tab.

To view data for a host:

- 1 Identify the data source used in the binding. For further information, refer to “Locating Data Bindings” on page 37.
- 2 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow  on the left.

- 3 On the navigation panel, under **Dashboards**, choose **Configuration > Data**.
- 4 In the display area, in the left pane, expand **Hosts > All Hosts**, and select the host for the data that you want to view.
- 5 In the display area, in the **Property Viewer** pane, review the properties of the selected host object.
- 6 Locate a data type that corresponds to the bindings in the Host Monitor dashboard definitions (see “[Locating Data Bindings](#)” on page 37).

The value that appears in the data source matches the same element presented in the Host Monitor dashboard.

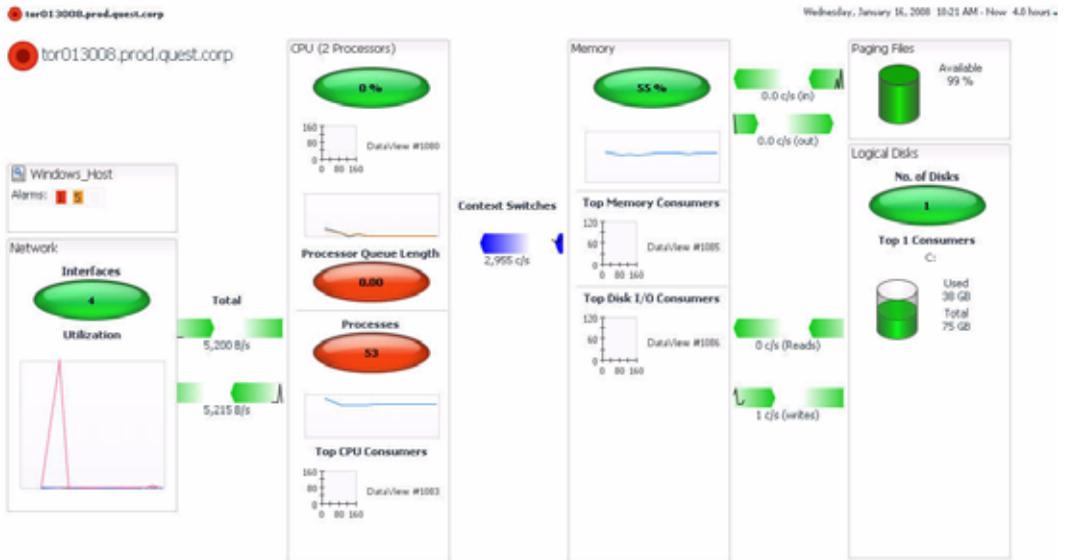
Example: Viewing the Memory Element and Related Data

The Memory portlet contains several elements, such as memory, utilization, top memory consumption, and top disk I/O consumers, that provide you with information about a host’s memory consumption.

To view memory elements in the Memory portlet:

- 1 Ensure that the navigation panel on the left is open.
To open the navigation panel, click the right-facing arrow  on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Hosts > Host Monitor**.

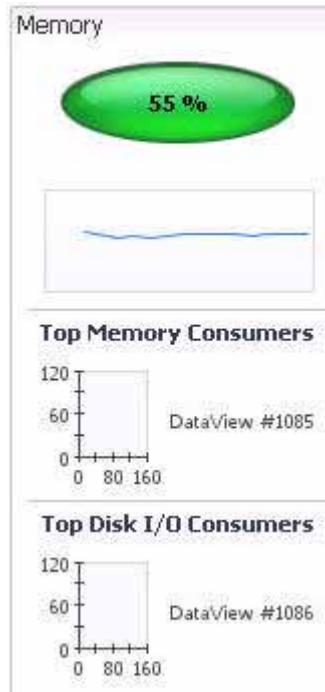
The Host Monitor dashboard opens.



- 3 **Optional.** Choose a different host. To do that, complete the following steps:
 - a Ensure that the action panel on the right is open.
 - b In the action panel, on the **General** tab, under **Actions**, click **Host Selector**.
The **Host Selector** dialog box appears.



- c In the **Host Selector** dialog box, select the host.
The **Host Selector** dialog box closes and the Host Monitor dashboard shows the metrics for the newly selected host.
- 4 In the **Memory** portlet, observe the values for each memory element.



In this instance, the Memory element is at 55% capacity. Notice that the button's color is green indicating that the state is normal.

Next you will identify the view used to provide data to the element.

To locate the view for the Memory element:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow  on the left.

- 2 On the navigation panel, under **Dashboards**, choose **Configuration > Definitions**.
- 3 In the display area, in the **Definitions** pane, click **Hosts**.

The Module Contents pane immediately below the **Definitions** pane lists the views for the Hosts module on the **Views** tab.

- 4 In the Module Contents pane, on the **Views** tab, click **Host Monitor**.

The **Host Monitor** tab appears to the right of the **Definitions** and Module Contents panes in the display area, showing context details, data bindings and views that appear on the Host Monitor dashboard.

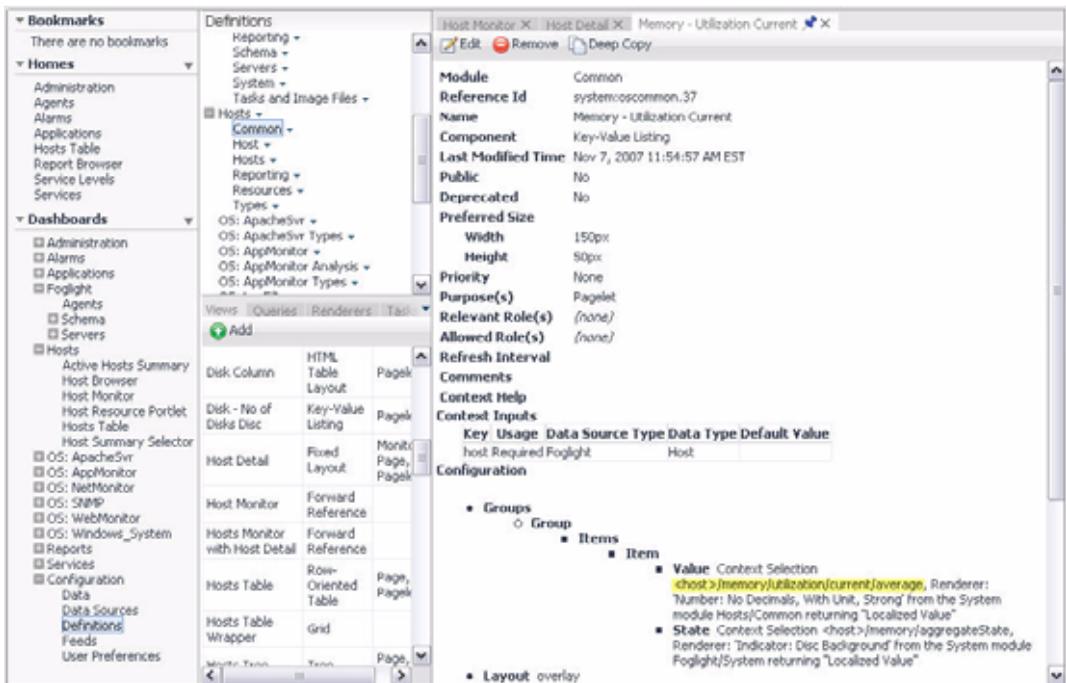
- 5 In the **Definitions** pane, choose **Hosts > Common**.

The Module Contents pane immediately below the **Definitions** pane lists the views for the Common module on the **Views** tab.

- 6 In the Module Contents pane, on the **Views** tab, click **Memory - Utilization Current**.

The **Memory - Utilization Current** tab appears to the right of the **Definitions** and Module Contents panes in the display area, showing context details, data bindings and views that appear on the Memory - Utilization Current view.

Review the data bindings for the Memory - Utilization Current view. Under **Context Inputs**, one of the values is bound to <host>/memory/utilization/current/average.



Next, navigate to the Data node to find the data source for the Memory - Utilization Current view.

To view the data for the Memory Utilization Current view:

- 1 In vFoglight, ensure that the navigation pane on the left is open.

- 2 In the navigation pane, choose **Configuration > Data**.
- 3 In the display area, in the left pane, expand **Hosts > All Hosts**, and select a host.
- 4 From there, in the left pane choose **memory > utilization**.
- 5 In the **Property Viewer** on the right, in the **latest (MetricValue)** table, in the **average** column, observe the percentage that appears. The value matches the one that appears in the Memory portal of the Host Monitor dashboard.

Notice that the percentage `utilization/current/average` shown on the right pane matches the percentage displayed in the Host Monitor dashboard (see [step 4](#) in “[To view memory elements in the Memory portlet:](#)” on page 38).

Creating a Custom Host Monitor Dashboard

The Host Monitor is the default host monitor dashboard. This dashboard is comprised of a list of hosts and the metrics by which the host is monitored.

Before you can create a Host Monitor dashboard you need to have access to data. You query data using View Component Framework queries. View Component Framework queries are similar in concept to SQL queries but they function differently. They are used to select a subset of the information in a data source.

When you collect data, you need to configure views and tables and use them to create a dashboard. For more information about creating dashboards, see *View Component Framework Tutorial*.

About the ApacheSvr Agent

This chapter provides an overview of the ApacheSvr agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the ApacheSvr agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	44
Supported Platforms	44
Agent Properties	45

Overview

The ApacheSvr agent monitors web sites and collects data on the web site's traffic, such as hit rates, transactions, throughput, and request types.

Use the ApacheSvr agent to identify and track web site requests and transactions and to produce a detailed breakdown of how a website is being used. The ApacheSvr agent monitors Apache server traffic and transaction information by analyzing the access log produced by the HTTP daemon.

The ApacheSvr agent can handle a configuration using the Apache rotatlogs utility. For further information on rotatlogs, see your ApacheSvr documentation.

Note The Apache Svr agent works to your best benefit when you categorize your web site transactions by type. In this way, you can most efficiently investigate web server traffic.

Supported Platforms

The following platforms are supported for the ApacheSvr agent:

Platform	Version
AIX [®]	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1
HP-UX [®]	<ul style="list-style-type: none">• HP-UXB.11
Linux [®]	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6
Sun [™] Solaris [®]	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Windows [®]	<ul style="list-style-type: none">• Windows 2000[®]• Windows 2003[®]• Windows XP[®] <p>Note Since Windows XP[®] (64-bit) is closer to Windows 2003 Server[®] internally than it is to Windows XP[®], the correct OS Cartridge package to install for Windows XP[®] 64-bit for vFoglight Client is Windows2003[®].</p>
----------------------	--

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The Apache Server agent is shipped with default properties that can be modified to suit your system requirements. The agent properties described in this section include:

- [Collection Rate](#)
- [Access Log](#)
- [Transaction List](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.
- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:
 - On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **ApacheSvr**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the ApacheSvr agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **ApacheSvr** pane.

ApacheSvr

Collection Rate

Sample Frequency (seconds)

Database

Average Previous Week's Data To Minutes

Purge All Data After Days

Access Log

Default File Name

Path of Access Log File

Apache Format String

Transaction List

Transaction List

The position of the **ApacheSvr** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **ApacheSvr** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **ApacheSvr** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

Access Log

Use the Access Log pane to set the path of the access log file and the file name as well as the default access log file name.

To define the directory list to use:

- 1 In the **Default File Name** box, type the list that you want to use. The default is `access_log`.
- 2 In the **Path of Access Log File** box, type the path to the Apache server access log in the **Access Log** box. This path tells vFoglight where the Apache log is located.
- 3 In the **Apache Format String** box, type the Apache Format String. You should use the same value that appears in the Log Format Parameters in the Apache `httpd.conf` file. Do not include the quotation marks.
- 4 Click **Save**.

Tip: Specifying the Log Format

The formats for the Apache log file are one of the following. Choose the one that is right for your system.

- *CLF with Virtual Host*: `%v %h %l %u %t \"%r\" %>s %b`
- *NCSA extended/combined*: `%h %v %h %l %u %t \"%r\" %>s %b \%{Referer}i\ \%{User-agent}i\`
- *Referer*: `\%{Referer}i -> %U`
- *Agent (Browser)*: `\%{User-agent}i`

If you are using the standard Apache format, then set the format string to its default “.” setting.

Transaction List

The ApacheSvr agent works best for you when website transactions are categorized by type. For example, you might create an Info Request category for tracking how many requests for information the web site receives.

Creating transaction types make it easier to identify problems. Transaction lists group transactions by type under tags. A tag is a name for a transaction category. The transaction list is stored on the vFoglight Management Server and is available to all the networks on your system.

Use the Transaction List area in the ApacheSvr pane to create a Transaction list, and to create the format string of the Apache configuration file.

To set the sample frequency:

- 1 In the **Transaction List** drop-down list, select the list that you want to use. The default is `Trans_Name List`.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
 - a If you want to add to or modify a transaction list, click **Edit**.

The list appears in the right pane.

Continue with the following procedures:

 - [To add a transaction tag and URL to the list:](#)
 - [To modify an application group:](#)
- 3 Click **Save**.

To add a transaction tag and URL to the list:

- 1 Click **Add new row**.
- 2 In the **Transaction Tag** box, enter a unique name for the tag.
- 3 In the **Transaction URL** box, enter the URL of the page you want to monitor.

Note The Transaction URL must be in a specified format. For example, if the page you wish to monitor is `http://localhost/index.html`, you must enter `/index.html`. The monitor will not work if you do not include the backslash.
- 4 Click **Save**.

To modify an application group:

- 1 Double-click the application row containing the tag and URL that you want to modify.

The line is highlighted.
- 2 Modify the parameters that you want to change.
- 3 Click **Save**.

About the AppMonitor Agent

This chapter provides an overview of the AppMonitor agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the AppMonitor agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	50
Supported Platforms	50
Agent Properties	51

Overview

The AppMonitor agent monitors the availability and performance of applications and their processes on a host. Use the AppMonitor agent to:

- Monitor applications against service level agreements.
- Check for the presence of processes that are critical to your operating environment.

Note vFoglight recommends that you divide your applications into groups. Grouping your applications makes identifying problems easier. You group applications in an application process list. For further information, refer to “Process List” on page 53.

Supported Platforms

The following platforms are supported for the AppMonitor agent:

Platform	Version
AIX®	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1
HP-UX®	<ul style="list-style-type: none">• HP-UXB.11
Linux®	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6
Sun™Solaris®	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Windows [®]	<ul style="list-style-type: none">• Windows 2000[®]• Windows 2003[®]• Windows XP[®] <p>Note Since Windows XP[®] (64-bit) is closer to Windows 2003 Server[®] internally than it is to Windows XP[®], the correct OS Cartridge package to install for Windows XP[®] 64-bit for vFoglight Client is Windows2003[®].</p>
----------------------	--

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The AppMonitor agent is shipped with default properties that can be modified to suit your system requirements. The agent properties described in this section include:

- [Collection Rate](#)
- [Process List](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:
 - On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **AppMonitor**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the AppMonitor agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **AppMonitor** pane.

AppMonitor	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="300"/>
Use Quick Check	<input type="radio"/> True <input checked="" type="radio"/> False
Quick Check Time	<input type="text" value="60"/>
Database	
Average Previous Week's Data To	<input type="text" value="0"/> <input type="button" value="Minutes"/> ▾
Purge Data after	<input type="button" value="AppMonitor_PurgeDays_List"/> ▾ <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Process List	
Application/Process List	<input type="button" value="AppListFile"/> ▾ <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Detail Process Info	<input checked="" type="radio"/> True <input type="radio"/> False

The position of the **AppMonitor** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **AppMonitor** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **AppMonitor** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To verify whether devices are up and running, use the Quick Check utility. Quick Check verifies whether a device is alive; it does not instruct the agent to collect data unless it fails to detect the devices you have told it to monitor.

If Quick Check detects the devices in the currently-monitored list, vFoglight continues to collect data according to the sample frequency. However, if it fails to detect the devices, it immediately initiates a data collection cycle and triggers the Process_Availability rule. For more information, see the *Cartridge for Operating Systems Reference Guide*.

To set the sample frequency and use Quick Check:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. For example, enter **300** to indicate five minutes between collections.

- 2 To use the Quick Check utility, select the **True** option.
- 3 In the **Quick Check Time** box, enter the number of seconds that should elapse between quick checks. For example, enter **30** to check the system every 30 seconds.
Note If the Quick Check time interval is greater than the sample frequency, the AppMonitor agent will go into a broken state.
- 4 Click **Save**.

Process List

You should divide your applications into groups. Grouping your applications makes it easier to identify latency problems, long response times, and to efficiently report service level statistics. You can group applications by using process lists.

When you create an application/process list, the vFoglight Management Server stores the list and makes it available to all networks on your system. While you can create multiple application/process lists, only one list can be monitored at a time.

Note A minimum of one process must be specified in the process list before you can start the agent.

The AppMonitor agent gathers data for the application group as a whole. Sometimes you may need more information about the individual processes in the application/process list to diagnose the problem. If you choose to collect detailed process information, vFoglight will collect data for all instances of each process in the application/process list and track multiple instances of processes with the same name.

If you create multiple filters in the process list that match a single process, vFoglight collects data for same process multiple times. For example, if you are monitoring the `OUTLOOK.exe` process and use `OUT`, `LOOK`, and `OUTLOOK.exe` as process names, where the first two entries have the Specify exact process name property set to `False`, and the third one set to `True`, the AppMonitor agent metrics shows three processes with the same name, `OUTLOOK.exe`, and the same process ID.

To set the application/process list:

- 1 From the **Application/Process List**, select the application/process list that you want to use to monitor the application group. The default is `AppListFile`.
 - a If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
 - b If you want to add to or modify a process list, click **Edit**.

The list appears in the right pane.

Continue with the following procedures:

- [To add an application group to the list:](#)
 - [To modify an application group:](#)
- 2 To collect detailed information on the processes when necessary, select the **True** option for the **Detail Process Info** property.

Note Since the size of the vFoglight database can expand quickly with the additional detailed information, it is important that you set the **Detail Process Info property** to False when you have completed the collection process.

- 3 Click **Save**.

To add an application group to the list:

- 1 Click **Add new row**.
- 2 In the **Application Group** box, enter a unique name for the group.
- 3 In the **Process Name** box, enter the name of the process to be monitored.
- 4 In the **Number of Instances** box, enter the number of instances of the process that are configured for the host.

vFoglight uses the number of process instances that is configured here, and the actual number of process of instances to evaluate the AppMonitor Process_Availability rule and generate any alarms as applicable. For example, if you configure the number of process instances in the process list to one '1', and there are no instances of that process running on the monitored machine, vFoglight will continuously generate the Process_Availability alarms until it finds at least one instance of that process. For more information about the Process_Availability rule, see the Cartridge for Operating Systems *Reference Guide*.

- 5 Select one of the **Monitor Process** options to indicate whether you want the process to be monitored.
- 6 Select one of the **Specify exact process name** options to indicate how you want the process name to appear when application monitoring starts.
- 7 Click **Save**.

To modify an application group:

- 1 Double-click the application group that you want to modify.
The line appears highlighted.
- 2 Modify the parameters that you want to change.

3 Click **Save**.

About the DiskIO Agent

This chapter provides an overview of the DiskIO agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the Disk IO agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	58
Supported Platforms	58
Agent Properties	58

Overview

The DiskIO agent monitors physical disks, volumes, and controllers. Use the data collected by the DiskIO agent to investigate performance degradation which you suspect may be related to the physical disks.

Supported Platforms

The following platforms are supported for the DiskIO agent:

Platform	Version
AIX®	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1
HP-UX®	<ul style="list-style-type: none">• HP-UXB.11
Linux®	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6
Sun™Solaris®	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The DiskIO agent is shipped with default properties that can be modified to suit your system requirements. The agent properties described in this section include:

- [Collection Rate](#)

- [Collection Policy](#)
- [Exclusion Lists](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left  .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **DiskIO**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the DiskIO agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **DiskIO** pane.

DiskIO
Collection Rate
Sample Frequency (seconds) <input type="text" value="300"/>
Collection Policy
Collection Mode <input type="text" value="Hot Disks"/> 
Collection Length <input type="text" value="5"/>
Database
Average Previous Week's Data To <input type="text" value="0"/> <input type="text" value="Minutes"/> 
Purge All Data After <input type="text" value="60"/> <input type="text" value="Days"/> 
Exclusion Lists
File Systems to Exclude <input type="text" value="iso9660,proc,devpts,nfs"/>
Disks to Exclude <input type="text" value="^\nfs.*,^fd.*,^st.*,^atapid.*,^*,[0-9].*"/>

The position of the **DiskIO** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **DiskIO** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **DiskIO** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To modify the sample frequency:

- 1 In the **Sample Frequency (seconds)** box, enter the sample frequency in seconds. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

Collection Policy

You can set the type and number of disks that the agent will monitor by specifying the collection mode and collection length parameters.

To set the collection policy:

- 1 From the **Collection Mode** list, select one of the following:
 - **Hot Disks** - collects performance data for Disk List Size disks with the highest utilization.
 - **Cold Disks** - collects performance data for Disk List Size disks with the lowest utilization.
 - **Hot and Cold Disks** - collects performance data for Disk List Size disks with the highest and lowest utilization.
 - **All Disks** - collects performance data for all disks.
- 2 In the **Collection Length** box, specify how many of the disks with the highest utilization you want to include in the agent views. The default is the top five disks.
- 3 Click **Save**.

Exclusion Lists

You can specify a list of file system types for which performance data should not be collected.

To add a file system type to the list of excluded types:

- 1 In the **File Systems to Exclude** box, enter a list of file system types for which performance data should not be collected. Separate file types with commas.
- 2 In the **Disks to Exclude** box, enter the list of disk types to exclude.

The exclude line must be specified as a comma-separated list of regular expressions. If one of the expressions contains a comma it should be prefixed with a backslash (\) to indicate that it does not separate items in the list but is part of the expression. For more information see, [“Regular Expressions”](#) on page 70.

- 3 Click **Save**.

About the FileSystem Agent

This chapter provides an overview of the FileSystem agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the FileSystem agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	64
Supported Platforms	64
Agent Properties	65
Regular Expressions	70

Overview

You can use this agent to track file system capacity and inodes. An inode is a data structure that describes a file. The number of inodes allocated when a file system is created determines the maximum number of files the file system can contain.

By default, the FileSystem agent monitors local file systems, however, you can configure it to monitor remote file systems. You can also configure it to monitor specific file systems on a host. The FileSystem agent includes the following default file system lists:

- **FSTypesMonitoredList** - designates the local and remote file system types the agent should monitor.
- **FileSystemsList** - designates specific file systems to monitor.
- **DirectoriesMonitoredList** - designates specific directories to monitor.

You can modify these lists as well as create others to suit your needs. Although any file system can work, the FileSystem agent itself has only been tested with the defaults listed in the FSTypesMonitoredList.

Note You are limited to the file system types that are in the default list. You cannot add new types to the list to monitor them.

To perform monitoring, the FileSystem agent retrieves a list of all available file systems and then filters that list based on the following criteria:

- File systems that you define in the FSTypesMonitored list.
- Include or exclude list that you select in the FileSystemsList.

Supported Platforms

The following platforms are supported for the FileSystem agent:

Platform	Version
AIX®	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1

HP-UX [®]	<ul style="list-style-type: none">• HP-UXB.11
Linux [®]	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6
Sun [™] Solaris [®]	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The FileSystem agent is shipped with default properties that can be modified to suit your system requirements. The agent properties described in this section include:

- [Collection Rate](#)
- [FileSystem Types](#)
- [FileSystem List](#)
- [Directory List](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left 

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:
 - On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **FileSystem**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the FileSystem agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **FileSystem** pane.

FileSystem	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="1800"/>
Database	
Average Previous Week's Data To	<input type="text" value="0"/> <input type="button" value="Hours"/> ▾
Purge All Data After	<input type="text" value="30"/> <input type="button" value="Days"/> ▾
FileSystem Types	
FileSystem Types	<input type="button" value="FSTypesMonitoredList"/> ▾ <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
FileSystem List	
Exclude/Include FileSystems	<input type="button" value="Exclude"/> ▾
FileSystems	<input type="button" value="FileSystemsList"/> ▾ <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Fatal Threshold Value	<input type="text" value="98"/>
Critical Threshold Value	<input type="text" value="95"/>
Warning Threshold Value	<input type="text" value="90"/>
Directory List	
Monitor Directory	<input type="button" value="DirectoriesMonitoredList"/> ▾ <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>

The position of the **FileSystem** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **FileSystem** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **FileSystem** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

FileSystem Types

FSTypesMonitoredList is the default list of file system types that is included with the FileSystem agent. This list designates the local and remote file system types the agent should monitor. By default, the following file types are monitored:

- ext2 (Linux Extended File System Version 2)
- ext3 (Linux Journaling File System)
- hfs (Hierarchical File System)
- hsfs (High Sierra File System)
- jfs (Journaled File System)
- mvfs (Multi-Version File System)
- nfs (Network File System)
- nfs3 (Network File System Version 3)
- reiserfs
- smbfs (Server Message Block File System)
- ufs (UNIX File System)
- vsfs
- vxfs (Veritas File System)
- zfs

FSTypesMonitoredList is always an Include list. The FileSystem agent retrieves a list of all available file systems and then filters that list based on the available criteria. You can use this list or create a new one.

The vFoglight Management Server stores these lists and makes them available to all the monitored hosts on your server.

To change the monitored file system types list that is used:

- 1 In the **FileSystem Types** list, select the list you want to use. The default is `FSTypesMonitoredList`.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to add to the default list, click **Edit**.

The list is displayed in the right pane.

Continue with the following steps:

- a Click **Add new row**.
 - b In the **FileSystem_Type** box, enter the file system type.
 - c Select whether you want the file system to be monitored by choosing one of the **Monitor** options.
 - d Click **Save**.
- 4 Click **Save**.

FileSystem List

You can define multiple file system lists and choose which one you want to use for all FileSystem agents. If an entry in the file system list matches a “discovered” file system, that file system will be included or excluded for system monitoring.

By default, the FileSystem agent monitors local file systems, however, you can instruct the agent to monitor remote file systems as well. You can also instruct the agent to monitor specific file systems on a host.

Note The following file systems are specifically checked for and not monitored regardless of your configuration settings: hdfs, iso9660, binfmt_misc, usbdevfs, tmpfs, autofs, proc, devpts, and fd. In addition, no read-only file systems are monitored.

To define the list to use:

- 1 From the **Exclude/Include File Systems** list, select the type of list you want to create.
 - **Exclude** is the default and indicates that the file systems listed in the FileSystems list should be excluded from monitoring.

- **Include** performs system monitoring on the file system that you are defining.
- 2 From the **FileSystems List**, select the list that you want to use. The default is `FileSystemsList`.
- 3 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 4 If you want to add to the file systems list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Click **Add new row**.
- b In the **Remote_HostName** box, enter a name for the remote host. You can use a regular expression to define this value. For more information, see “[Regular Expressions](#)” on page 70.
- c In the **Mount_Point** box, enter the location of the mount point. You can use a regular expression to define this value.

For example, you want to exclude a file system that is mounted at `/`, which is a regular expression that will match just `/` or `/` with anything. Enter `/$` in this field to anchor the regular expression and match only `/`. Otherwise, the agent will not collect data and all file systems will be excluded compared to using `/$`.

- d In the **Local_Host** box, enter a name for the host. This parameter allows you to have one file system list instead of multiple lists with different thresholds at different mount points on different disks. You can use a regular expression to define this value. For more information, see “[Regular Expressions](#)” on page 70.
- e In the **Warning**, **Critical**, and **Fatal_Threshold** boxes enter values for these items. These values apply as defaults to anything introduced into the file system. You can change thresholds depending on the size of the file system that you are currently monitoring.
- f Click **Save**.

Directory List

`DirectoriesMonitoredList` is the default directory list that is included with the FileSystem agent. This list specifies the directories that the FileSystem agent is to monitor. The vFoglight Management Server stores these lists and makes them available to all monitored hosts on your server.

You cannot monitor mount points, but you can monitor any directory independent of the mount point. For each directory that is a mount point the value reported is a zero (the zero indicates that the mount

point is not being monitored). Filtering on mount points and file systems has no effect on directory space measuring.

When the FileSystem agent determines the space that is available for a directory it does not follow symbolic links. It only adds the size of the link to the total directory space count. For example, if a symbolic link points to a 5MB tar file, the agent does not include that 5MB in the space for monitoring.

The DirectoriesMonitoredList has a 4 GB limit per entry but there is no limit to the number of directories that one can monitor.

To define the directory list to use:

- 1 From the **Monitor Directory List**, select the list that you want to use. The default is `DirectoriesMonitoredList`.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to add to the directories list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Click **Add new row**.
 - b In the **MonitorDirectory** box, enter the name of the directory you want the agent to monitor.
 - c Click **Save**.
- 4 Click **Save**.

Regular Expressions

Regular expressions are sets of symbols and syntactic elements used to match patterns of text. The FileSystem agent supports true regular expressions, which is not the same as wildcard syntax.

Note A backward slash and single bracket precedes the Standard RegEX syntax. A single bracket precedes the Extended RegEx syntax.

The following special characters or groups are supported:

.	Matches any one character
---	---------------------------

[...]	Matches any character listed between the brackets
[^...]	Matches any character <i>except</i> those listed between the brackets
^	Matches at the start of the line
\$	Matches at the end of the line
?	Matches any character zero or one times
*	Matches the preceding element zero or more times
+	Matches the preceding element one or more times
{ <i>min, max</i> }	Matches the preceding element at least <i>min</i> times, but not more than <i>max</i> times

Examples

^CALM\$	Literal expression that matches CALM and only CALM because it is anchored by ^ and \$
^CALM	Match anything that starts with the first four characters of CALM (for example, CALMer is a valid match)
CALM\$	Match anything where the last four characters are CALM
CALM	Match CALM anywhere (for example, beCALMed is a valid match)

About the LogFilter Agent

This chapter provides an overview of the LogFilter agent. It also describes the supported platforms and properties for the agent.

There are rules and data associated with the LogFilter agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	74
Supported Platforms	74
Agent Properties	75

Overview

The LogFilter agent monitors the log files on your system and singles out critical system messages you should know about without having to read through the entire log. The agent performs this monitoring by searching for literal strings and other regular expressions that are defined in the agent properties. The LogFilter agent traps critical messages and writes them to an event log that you can check periodically.

Supported Platforms

The following platforms are supported for the LogFilter agent:

Platform	Version
AIX [®]	<ul style="list-style-type: none"> • AIX 5.2 • AIX 5.3 • AIX 6.1
HP-UX [®]	<ul style="list-style-type: none"> • HP-UXB.11
Linux [®]	<ul style="list-style-type: none"> • Linux 2.4 • Linux 2.6
Sun [™] Solaris [®]	<ul style="list-style-type: none"> • SUNOS 5.8 on SPARC • SUNOS 5.9 on SPARC • SUNOS 5.10 on SPARC • SUNOS 5.10 on x86
Windows [®]	<ul style="list-style-type: none"> • Windows 2000[®] • Windows 2003[®] • Windows XP[®] <p>Note Since Windows XP[®] (64-bit) is closer to Windows 2003 Server[®] internally than it is to Windows XP[®], the correct OS Cartridge package to install for Windows XP[®] 64-bit for vFoglight Client is Windows2003[®].</p>

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The LogFilter agent is shipped with default properties that can be modified to suit your system requirements. Agent properties described in this section include:

- [Collection Rate](#)
- [Log File List](#)
- [Match List](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **LogFilter**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the LogFilter agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **LogFilter** pane.

LogFilter	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="5"/>
Consecutive Messages to Log	<input type="text" value="1"/>
Recycle Messages After (seconds)	<input type="text" value="3600"/>
Database	
Purge All Data After	<input type="text" value="7"/> <input type="button" value="Days"/>
Log File list	
Log-1 Path	<input type="text"/>
Log-1 File Name	<input type="text"/>
Log-1 Rolling Enabled?	<input type="button" value="No"/> <input type="button" value="v"/>
Log-2 Path	<input type="text"/>
Log-2 File Name	<input type="text"/>
Log-2 Rolling Enabled?	<input type="button" value="No"/> <input type="button" value="v"/>
Log-3 Path	<input type="text"/>
Log-3 File Name	<input type="text"/>
Log-3 Rolling Enabled?	<input type="button" value="No"/> <input type="button" value="v"/>
Log-4 Path	<input type="text"/>
Log-4 File Name	<input type="text"/>
Log-4 Rolling Enabled?	<input type="button" value="No"/> <input type="button" value="v"/>
Match List	
Message Trap List	<input type="button" value="FilterTrapFile"/> <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>

The position of the **LogFilter** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **LogFilter** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **LogFilter** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. You can set the sample frequency as well as the number of seconds for recycling messages and the number of consecutive messages to trap.

To set the sample frequency and other log settings:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. For example, enter **300** to set the interval between collections to five minutes.
- 2 In the **Consecutive Messages to Log** box, enter the number of messages that should be logged. You can configure multiple alerts for the same message encountered n times based on the value that you enter in this box. For example, if you enter **3** and the Match List string is encountered three times within the monitored file, the alert will be raised three times. If the string is encountered a fourth time, the alert is not be raised.
Note The number of consecutive messages posted and the recycle time are recorded and calculated separately for each log file.
- 3 In the **Recycle Messages After** box, enter the number of seconds after which the messages are cleared from the alarm.
- 4 Click **Save**.

Log File List

Use the Log File list to set the path of the logs the LogFilter agent monitors, and to indicate whether log rolling is enabled for the log file.

Note The number of consecutive messages posted and the recycle time are recorded and calculated separately for each log file.

To set the log paths:

- 1 In the **Log-<number> Path** box, enter the path to the log file.
Note This path is relative to the SPID executable. For example: `../logs/` is relative to `<drive>:\Vizioncore\wFoglight_SPID\OSCartridge\5.x.x\bin`.
- 2 In the **Log-<number> File Name** box, enter the file name.
Note When entering the file name, it is recommended that you use regular expressions. For example, to monitor an absolute file name such as `test`, you must enter `^test$`. For more information, see [“Regular Expressions”](#) on page 70.

- 3 If the log file that the LogFilter agent is monitoring rolls with time to a new file, select **Yes** from the **Log-<number> Rolling Enabled** list.

If you do not use log rolling at your site, select **No**.

Log rolling keeps log files from growing to excessive lengths because you move log files to another location with a unique name and continue to save log entries to a new file. You can keep old and new log files in the same directory with different file names only if they follow the same regular expression.

For example, to monitor a log that changes from `test20061119.log` to `test20061120.log`, type `test.*\.log` in the **Log-<number> File Name** box and select **Yes** to enable the log rolling option.

The log rolling option finds all logs that match the regular expression.

Additionally, using the `test.*\.log` regular expression to specify the log file name has the same effect as the following command:

```
ls -l | grep test.*\.log
```

The expression finds all files whose name contains the substring defined by that regular expression. For example, it matches both `test20061120.log` and `test.log100`. If you want to narrow down your search to match full file name rather than portions of it, use the caret '^' and dollar '\$' signs to anchor regular expressions. For example, `^test.*\.log$` matches `test20061120.log`, but does not match `test.log100`.

For more information, see “[Regular Expressions](#)” on page 70.

- 4 Click **Save**.

Match List

FilterTrapFile list is the default list of literal strings or other expressions that is included with the LogFilter agent. The agent uses the list to find matches in the monitored logs. When a match is found, the message is trapped and written to an event log that you can check periodically.

You can create multiple match lists and indicate which one you want the LogFilter agent to use based on the conditions set in each list.

Note For each new filter search, data searching is started from the end of the log file. LogFilter triggers on a message entered in the FilterTrapFile list. When the same exact message is encountered again in the monitored file, LogFilter does not send another alert within the recycle time. For more information on the recycle time, see “[Collection Rate](#)” on page 77.

To set the match list:

- 1 From the **Message Trap List**, select the list that you want to use to monitor the messages. The default is `FilterTrapFile`.
 - a If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
 - b If you want to add to or modify a message trap list, click **Edit**.
The list appears in the right pane.
Continue with the following procedures:
 - [To create a match list](#)
 - [To modify a match list](#)

- 2 Click **Save**.

To create a match list

- 1 Click **Add new row**.
- 2 In the **Match String** box, enter a literal string or regular expression for which the LogFilter agent should search. For more information, see “[Regular Expressions](#)” on page 70.
Note Literal strings are case-sensitive for UNIX and case-insensitive for Windows.
- 3 From the **Error Severity** list, select the status you want to attach to the message. The status is colour-coded in the console.
Note The agent sorts a message trap list by severity in the following order: Fatal, Critical, Warning. Within each severity level, the agent sorts log messages according to the length of the match string (the longest match string has priority).
- 4 In the **User Message** box, enter the message that the LogFilter agent should send when it encounters the message you specified with the match string.
- 5 Click **Save**.

To modify a match list

- 1 Double-click the entry that you want to modify.
The line appears highlighted.
- 2 Modify the parameters that you want to change.
- 3 Click **Save**.

About the NetMonitor Agent

This chapter provides an overview of the NetMonitor agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the NetMonitor agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	82
Supported Platforms	82
Agent Properties	83

Overview

The NetMonitor agent monitors device availability, response time, and packet loss between the vFoglight monitoring station and network devices.

Use the NetMonitor agent to:

- Monitor the network against service level agreements.
- Check for the presence of devices that are critical to your operating environment.

Supported Platforms

The following platforms are supported for the NetMonitor agent:

Platform	Version
AIX [®]	<ul style="list-style-type: none"> • AIX 5.2 • AIX 5.3 • AIX 6.1
HP-UX [®]	<ul style="list-style-type: none"> • HP-UXB.11
Linux [®]	<ul style="list-style-type: none"> • Linux 2.4 • Linux 2.6
Sun [™] Solaris [®]	<ul style="list-style-type: none"> • SUNOS 5.8 on SPARC • SUNOS 5.9 on SPARC • SUNOS 5.10 on SPARC • SUNOS 5.10 on x86
Windows [®]	<ul style="list-style-type: none"> • Windows 2000[®] • Windows 2003[®] <p>Note Since Windows XP[®] (64-bit) is closer to Windows 2003 Server[®] internally than it is to Windows XP[®], the correct OS Cartridge package to install for Windows XP[®] 64-bit for vFoglight Client is Windows2003[®].</p>

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The NetMonitor agent is shipped with default properties that can be modified to suit your system requirements. Agent properties described in this section include:

- [Collection Rate](#)
- [Host List](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left  .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:
 - On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **NetMonitor**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the NetMonitor agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **NetMonitor** pane.

This agent is currently using properties for NetMonitor agents.

[Modify these properties for this agent only.](#)

[Modify the properties for all NetMonitor agents.](#)

Collection Rate

Sample Frequency (seconds)

Use Quick Check True False

Quick Check Time (seconds)

Database

NetMonitor Agent PurgeDays List

Host list

Network Device List

The position of the **NetMonitor** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **NetMonitor** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **NetMonitor** pane appears across the display area.

Collection Rate

The collection rate (or sample frequency) is the number of seconds between the end of one collection period and the start of the next.

Quick Check is the default frequency list included with the NetMonitor agent. This utility verifies whether a device is alive; it does not instruct the agent to collect data unless it fails to detect the devices you have told it to monitor. Use Quick Check when you want to frequently verify that devices are up and running.

If Quick Check detects the devices in the currently monitored list, vFoglight continues to collect data according to the sample frequency. However, if it fails to detect the devices, it immediately initiates a data collection cycle and triggers the NetMonitor Device_Unavailable rule which sends a message to the Alert Console and an e-mail to the system administrator. For more information about this rule, see the Cartridge for Operating Systems *Reference Guide*.

To set the collection rate:

- 1 In the **Sample Frequency** box, enter the number of seconds between the end of one collection period and the start of the next.

- 2 To use the Quick Check utility, select the **True** option.
- 3 In the Quick Check Time box, enter the number of seconds that should elapse between quick checks. For example, enter 30 to check the system every 30 seconds.
Note If the Quick Check time interval is greater than the sample frequency, the NetMonitor agent will go into a broken state.
- 4 Click **Save**.

Database

To control the growth of the vFoglight database, you can purge data from tables in the vFoglight database. The **Database** property in the **NetMonitor** pane allows you to set purge days by each table associated with a Purge Days list.

To set up purging parameters:

- 1 From the **NetMonitor Agent PurgeDays** list, select the frequency list that you want to use to control the NetMonitor table purge. The default is `NetMonitor_PurgeDays_list`.
- 2 Click **Save**.

Host List

A Host Device list contains the devices the agent will monitor. Once you create a device list, the vFoglight Management Server stores it and makes it available to all the networks on your system. You can then edit the list or delete entries from it.

Use the **Host List** in the NetMonitor pane to create a network device list or to monitor vFoglight hosts.

To set the device list parameters:

- 1 From the **Network Device List**, use the default list, `MonitoredDeviceList`, or enter a name for the list in the **Network Device List** drop-down and click **Edit**.
- 2 Select a device list to edit and then click **Add New Row**.
- 3 Specify the following information in the **Device List** dialog box:
 - a Enter a name in the **Server Group** box or click **Select** to choose from values previously entered. The NetMonitor agent works best when you parcel network devices into groups of servers. This way you can identify latency problems, questionable response times, and efficiently report service level statistics.

- b Enter the device in the **Device Name** box or click **Select** to choose from previously entered values.
 - c Enter the number of ICMP (Internet Control Message Protocol) or UDP (Universal Datagram Protocol) packets to send to the device in the **Number of Packets** box or click **Select** to choose from previously entered values.
Note These packets establish communications connections along a network.
 - d Enter the number of seconds to wait between sending packets in the **Timeout** box or click **Select** to choose from values previously entered.
 - e Enter the size of the data portion of the packet in bytes in the **Data Size** box or click **Select** to choose from values previously entered. The actual packet size sent will be the data size plus an 8-byte header for both ICMP and UDP protocols.
 - f Select **Monitor Device** to begin monitoring the device.
 - g Select **Trace Route** to trace the route from the monitor station to the device. Data is collected in the RouteDetails table and the ServiceLevels table.
Note This is useful if you want to monitor bottlenecks or response times along the route.
 - h Select the protocol used to contact the host from the **Select Protocol** drop-down list. We recommend using ICMP because it is faster and less intrusive. Using UDP is slower, and the Timeout must be at least 100 seconds.
 - i Select **Resolve Host Name** to retrieve the device's IP address and name. To use this feature, also select **Trace Route**.
Note Bottlenecks may occur along the network. Select the **Resolve Host Name** option to add significant overhead to agent data processing.
 - j Select **Quick Check** to verify that this particular device is up and running. If you choose this feature, data will not be collected on the device.
Note Selecting Quick Check here only invokes this feature on the device in the **Device Name** box. For more information on invoking Quick Check for all devices in all server groups, see "[Collection Rate](#)" on page 84.
- 4 Click **Save** to add the entry to the list and close the dialog box.

About the Network Interface Card (NIC) Agent

This chapter provides an overview of the Network Interface Card (NIC) agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the NIC agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	88
Supported Platforms	88
Agent Properties	88

Overview

The NIC agent monitors one or more network interface cards on your system for network traffic data, such as number of packets, throughput, errors, utilization, and collisions. This agent gathers statistics on local cards active on the server the agent is monitoring.

Use the NIC agent to analyze network utilization and reorganize the traffic on your network.

Supported Platforms

The following platforms are supported for the NIC agent:

Platform	Version
AIX®	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1
HP-UX®	<ul style="list-style-type: none">• HP-UXB.11
Linux®	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6
Sun™Solaris®	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The NIC agent is shipped with startup parameters that dictate how the agent will perform. You can change these parameters to suit your system requirements. Agent properties described in this section include:

- [Collection Rate](#)
- [Override Options](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left  .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

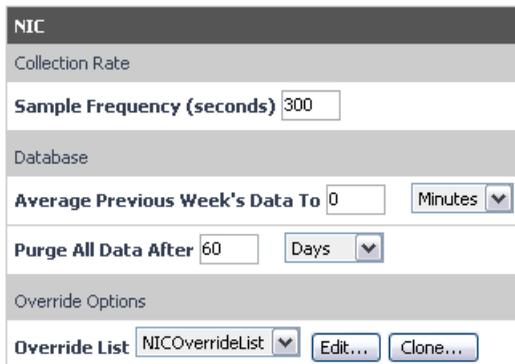
In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **NIC**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the NIC agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **NIC** pane.



NIC	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="300"/>
Database	
Average Previous Week's Data To	<input type="text" value="0"/> Minutes <input type="button" value="v"/>
Purge All Data After	<input type="text" value="60"/> Days <input type="button" value="v"/>
Override Options	
Override List	<input type="button" value="NICOverrideList"/> <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>

The position of the **NIC** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **NIC** pane appears to the right of the **Types** pane

in the display area. If you used the Agent Status dashboard, the **NIC** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

Override Options

You can override settings that are not otherwise available by the NIC agent. Use the Override Options section to set these overrides. Override Options contains the Override List, with a default value of `NICOverrideList`. This name should be changed to `hostOverrideList`, where `host` is the host name, to create a unique table for each host that is being monitored.

To set the override options:

- 1 Choose the override list that you want to update. To do that, click **Override List** and select a list.
- 2 Click **Edit**.
The **NICOverrideList** dialog box appears.
- 3 Add an entry to the list by clicking **Add new row**.
- 4 In the dialog box that appears, in the **NIC Name** box, type the name of the NIC interface. For example, `hme0`. There is no default value.
- 5 Specify the duplex mode option by clicking **Duplex Mode** and selecting **Full** or **Half**. For example, if the interface is in full duplex mode, select **Full**. The default value is **Half**.
- 6 Enable or disable monitoring as desired using the **Monitor NIC** options. To enable monitoring, select **True**; to disable it, select **False**. The default is **True**.
- 7 In the **Override Bandwidth (Mb/s)** box, type the override bandwidth in Megabits per second. For hosts that cannot determine the bandwidth of the interface, or if the value reported by the operating system is wrong, you can enter the correct bandwidth here. For example, if the

interface is a gigabit interface and it needs to be overridden, the correct value to enter would be 1000.

Note The default is zero. Leaving the value at zero means that either the agent is reporting the bandwidth correctly, or the user does not know the bandwidth value.

8 Click **Save**.

About the Process Agent

This chapter provides an overview of the Process agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the Process agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	94
Supported Platforms	94
Agent Properties	94

Overview

The Process Agent monitors the processes that run or wait to run on a vFoglight host. It also identifies processes that monopolize CPU time and memory and tracks general process statistics such as the number of sleeping, waiting, and running processes in each state. Use the Process agent when you want to monitor a UNIX kernel process table to detect processes that monopolize CPU and memory resources.

Supported Platforms

The following platforms are supported for the Process agent:

Platform	Version
AIX®	<ul style="list-style-type: none"> • AIX 5.2 • AIX 5.3 • AIX 6.1
HP-UX®	<ul style="list-style-type: none"> • HP-UXB.11
Linux®	<ul style="list-style-type: none"> • Linux 2.4 • Linux 2.6
Sun™Solaris®	<ul style="list-style-type: none"> • SUNOS 5.8 on SPARC • SUNOS 5.9 on SPARC • SUNOS 5.10 on SPARC • SUNOS 5.10 on x86

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The Process agent is shipped with default properties that can be modified to suit your system requirements. Agent properties described in this section include:

- [Collection Rate](#)
- [Collection Policy](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **Process**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the Process agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **Process** pane.

Process	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="300"/>
Collection Policy	
Size of List to Collect	<input type="text" value="5"/>
Database	
Average Previous Week's Data To	<input type="text" value="0"/> <input type="button" value="Minutes"/> ▾
Purge Data After	<input type="text" value="Process_PurgeDays_List"/> ▾ <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>

The position of the **Process** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **Process** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **Process** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

Collection Policy

To specify the type and number of disks that the Process agent will monitor, you can set parameters that allow you to specify the collection mode and collection length.

To set the collection policy:

- 1 In the **Size of List to Collect** box, specify the number of processes for which you want performance data collected.
- 2 Click **Save**.

About the SNMP Agent

This chapter provides an overview of the SNMP agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the SNMP agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	98
Supported Platforms	98
Agent Properties	99

Overview

Simple Network Management Protocol (SNMP) is a network monitoring and control protocol. Data is transferred from an SNMP agent to the workstation console used to oversee the network. The SNMP agent returns information contained in a Management Information Base (MIB), which is a data structure that defines what can be extracted and controlled. The SNMP agent supports SNMP v2 and v3, TCP and IP object collections, and System object collections, as well as returning MIB information.

The vFoglight SNMP agent monitors the performance of multiple SNMP devices on your network. This agent acts as the SNMP Manager and collects RFC 1213 statistics from the SNMP agent running on the device for you to use in vFoglight analysis. This agent uses the *snmpget* utility to collect a subset of the SNMP performance statistics including system up time, network interface throughput and utilization, and IP statistics.

The SNMP agent includes a set of text files that can be referenced when using SNMP commands. These files are located in the vFoglight Config folder.

Supported Platforms

The following platforms are supported for the SNMP agent:

Platform	Version
AIX®	<ul style="list-style-type: none"> • AIX 5.2 • AIX 5.3 • AIX 6.1
HP-UX®	<ul style="list-style-type: none"> • HP-UXB.11
Linux®	<ul style="list-style-type: none"> • Linux 2.4 • Linux 2.6
Sun™Solaris®	<ul style="list-style-type: none"> • SUNOS 5.8 on SPARC • SUNOS 5.9 on SPARC • SUNOS 5.10 on SPARC • SUNOS 5.10 on x86

Windows [®]	<ul style="list-style-type: none">• Windows 2000[®]• Windows 2003[®]• Windows XP[®] <p>Note Since Windows XP[®] (64-bit) is closer to Windows 2003 Server[®] internally than it is to Windows XP[®], the correct OS Cartridge package to install for Windows XP[®] 64-bit for vFoglight Client is Windows2003[®].</p>
----------------------	--

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The SNMP agent is shipped with default properties that can be modified to suit your system requirements. The agent properties described in this section include:

- [Collection Rate](#)
- [Monitored Device List](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:
 - On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **SNMP**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the SNMP agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **SNMP** pane.

SNMP

Collection Rate

Sample Frequency (seconds)

Database

Average Previous Week's Data To **Minutes** ▾

Purge All Data After **Days** ▾

SNMPv2 Device List

SNMPv2 Device List ▾ [Edit...](#) [Clone...](#)

SNMPv3 Device List

SNMPv3 Device List ▾ [Edit...](#) [Clone...](#)

The position of the **SNMP** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **SNMP** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **SNMP** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

Monitored Device List

The monitored device list specifies the devices that the SNMP agent monitors. The vFoglight Management Server stores the list and makes it available to all the networks on your system. You can edit and delete entries from the list as well.

Note The SNMP agent must be restarted (or recycled) any time a monitored device is disconnected and subsequently reconnected to the network. This assures data will continue to be written to the agent tables.

To create monitored device list:

- 1 From the **SNMPv2 Device List**, select the list that you want to use. The default is `v2DefaultDeviceList`.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.

The list is displayed in the right pane.

Continue with the following steps:

- a Select a device list tab.
- b Click **Add New Row**.
- c Complete the **Monitored Device List** dialog box.
Enter a name for the SNMP device in the **Device Name** box.

Enter the SNMP read-only Community string in the **Read-Only Community Name** box.

Set **Monitor Device** to **True** to instruct the agent to begin monitoring the device.

Set **Use SNMPv1** to **True**.

Set **Collect IP Table** to **True**.

Set **Collect Interface Table** to **True**.

Set **Collect System Table** to **True**.

Set **Collect TCP Table** to **True**.

- d Click **Save** to save the entry and close the dialog box.

About the Sun_TCP Agent

This chapter provides an overview of the Sun_TCP agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the Sun_TCP agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	104
Supported Platforms	104
Agent Properties	104

Overview

The Sun_TCP agent monitors devices and processes that use the TCP/IP layer on Sun systems.

Supported Platforms

The following platforms are supported for the Sun_TCP agent:

Platform	Version
Sun™ Solaris®	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Caution The Sun TCP agent works only on non-zone Solaris 10. Sun_TCP relies on /dev/ip for data, but that device is not available in a non-global zone. For more information about Zones, see http://www.sun.com/bigadmin/features/articles/basics_containers.html#parameter

Caution Due to Solaris security restrictions and because Sun_TCP agent requires root-level access to network devices, the user can select one of the two options to run the Sun_TCP agent.

- On the device file pointed to by /dev/ip, change the permission so that it can be read by the user account under which SPID is running.
- Run SPID as root.

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The Sun_TCP agent is shipped with default properties that can be modified to suit your system requirements. Agent properties described in this section include:

- [Collection Rate](#)

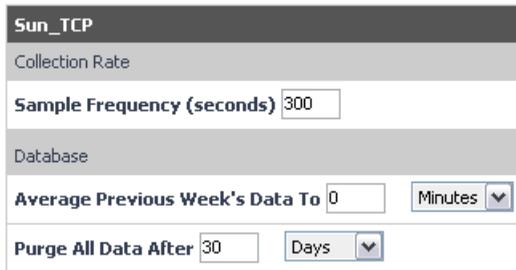
To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.
To open the navigation panel, click the right-facing arrow on the left .
- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:
 - On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.
In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **Sun_TCP**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.
In the Agent Status dashboard, select the instance of the Sun_TCP agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **Sun_TCP** pane.



Sun_TCP	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="300"/>
Database	
Average Previous Week's Data To	<input type="text" value="0"/> <input type="button" value="Minutes"/>
Purge All Data After	<input type="text" value="30"/> <input type="button" value="Days"/>

The position of the **Sun_TCP** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **Sun_TCP** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **Sun_TCP** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

About the Operating System Agents

This chapter describes the agents that are available for the AIX, HP-UX, Linux, and Sun operating systems. It also describes the supported platforms and properties for the agents. Cross-references are made to the relevant sections in the appendices for quick retrieval of rules, views, and data information.

This chapter contains the following sections:

Overview	108
AIX Agents	109
HP-UX Agents	111
Linux Agents	112
Sun Agents	113
Agent Properties	115

Overview

vFoglight supports the following system agents:

Platform	Agent
AIX®	<ul style="list-style-type: none">• AIX_Console• AIX_MPStat• AIX_System
HP-UX®	<ul style="list-style-type: none">• HPUX_Console• HPUX_MPStat• HPUX_System
Linux®	<ul style="list-style-type: none">• Linux_MPStat• Linux_System
Sun™Solaris®	<ul style="list-style-type: none">• Sun_Console• Sun_MPStat• Sun_System

The Console agent for each of the operating systems monitors specific logs to collect system error messages. The agent traps these messages and then writes them to specific tables.

The MPStat agent for each of the operating systems collects information about every CPU in the system, gathering the same data as the UNIX MPSTAT command. The agent also archives the data and displays it in graphical format for easier analysis. This functionality is the same for each of the operating systems.

Note The deployment of the MPStat agent is mandatory. The MPStat agent generates the topology for the vFoglight Host object on Unix systems. Failing to deploy the MPStat agent on Unix platforms results in vFoglight being unable to populate the views that need the data whose topology is defined by the MPStat agent.

The System agent monitors the system at an overview level. This agent collects CPU, memory, swap, and network data. vFoglight uses the data collected by the System agent in most of its system analysis. This makes the collected data useful in a variety of system performance investigations. Use the collected data as your first step in surveying your system. This functionality is the same for each of the operating systems.

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The Process agent is shipped with default properties that can be modified to suit your system requirements.

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click the operating system agent whose properties you want to edit.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the operating system agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the display area.

The position of the pane listing the agent properties depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the property pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the property pane appears across the display area.

AIX Agents

There are three AIX agents that are available with the Cartridge for Operating Systems:

- AIX_Console
- AIX_MPStat
- AIX_System

For more information see “[Agent Properties](#)” on page 115.

Overview

The AIX_Console agent monitors the *var/adm/sulog* and *dev/error* logs to collect system error messages by using the AIX utility *errpt* and by reading the log file directly. The agent traps these messages and writes them to the ErrorLog and SULog tables. For more information about these tables, see the Cartridge for Operating Systems *Reference Guide*.

For information on the AIX_MPStat agent, refer to “[Overview](#)” on page 108.

For information on the AIX_System agent, refer to “[Overview](#)” on page 108.

Supported Platforms

The following platforms are supported for the AIX agents:

Agent	Supported Platforms
AIX_Console	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1
AIX_MPStat	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1
AIX_System	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1

Views

For details on AIX_MPStat and AIX_System views, see the Cartridge for Operating Systems *Reference Guide*.

Rules

For details on AIX_Console and AIX_System rules, see the *Cartridge for Operating Systems Reference Guide*.

Data

For details on AIX_Console, AIX_MPStat, and AIX_System data, see the *Cartridge for Operating Systems Reference Guide*.

HP-UX Agents

There are three HP-UX agents that are available with the Cartridge for Operating Systems:

- HPUX_Console
- HPUX_MPStat
- HPUX_System

For more information see [“Agent Properties”](#) on page 115.

Overview

The HPUX_Console agent monitors the /var/adm/syslog/syslog.log (or another log of your choice) and traps the types of messages you indicate, writing them to the ErrorVerbose table.

For information on the HPUX_MPStat agent, refer to [“Overview”](#) on page 108.

For information on the HPUX_System agent, refer to [“Overview”](#) on page 108.

Supported Platforms

The following platforms are supported for the HP-UX agents:

Agent	Supported Platforms
HPUX_Console	HP-UXB.11

Agent	Supported Platforms
HPUX_MPStat	HP-UXB.11
HPUX_System	HP-UXB.11

Views

For details on HPUX_MPStat and HPUX_System views, see the Cartridge for Operating Systems *Reference Guide*.

Rules

For details on HPUX_Console and HPUX_System rules, see the Cartridge for Operating Systems *Reference Guide*.

Data

For details on HPUX_Console, HPUX_MPStat, and HPUX_System data, see the Cartridge for Operating Systems *Reference Guide*.

Linux Agents

There are two Linux agents that are available with the Cartridge for Operating Systems:

- Linux_MPStat
- Linux_System

Both agents are described in this section.

Overview

For information on the Linux_MPStat agent, refer to “[Overview](#)” on page 108.

For information on the Linux_System agent, refer to “[Overview](#)” on page 108.

Supported Platforms

The following platforms are supported for the Linux agents:

Agent	Supported Platforms
Linux_MPStat	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6
Linux_System	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6

Views

- For details on Linux_MPStat and Linux_System views, see the Cartridge for Operating Systems *Reference Guide*.

Rules

- For details on Linux_System rules, see the Cartridge for Operating Systems *Reference Guide*.

Data

- For details on Linux_MPStat and Linux_System data, see the Cartridge for Operating Systems *Reference Guide*.

Sun Agents

- There are three Sun agents that are available with the Cartridge for Operating Systems:
 - Sun_Console
 - Sun_MPStat
 - Sun_System

For more information see “[Agent Properties](#)” on page 115.

Overview

The Sun_Console agent monitors the /var/adm/messages log and writes the messages you want trapped to the ErrorVerbose table.

For information on the Sun_MPStat agent, refer to “[Overview](#)” on page 108.

For information on the Sun_System agent, refer to “[Overview](#)” on page 108.

Supported Platforms

The following platforms are supported for the Sun agents:

Agent	Supported Platforms
Sun_Console	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86
Sun_MPStat	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86
Sun_System	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Views

For details on Sun_MPStat and Sun_System views, see the Cartridge for Operating Systems *Reference Guide*.

Rules

For details on Sun_Console, Sun_MPStat, and Sun_System rules, see the Cartridge for Operating Systems *Reference Guide*.

Data

For details on Sun_Console, Sun_MPStat, and Sun_System data, see the Cartridge for Operating Systems *Reference Guide*.

Agent Properties

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. Use this procedure for all system agents except the HPUX_Console and Sun_Console system agents. For more information see, the procedure below.

To modify the sample frequency:

- 1 In the **Sample Frequency (seconds)** box, enter the sample frequency in seconds. For example, enter **300** to indicate five minutes between collections.
- 2 Click **Save**.

Collection Rate for HPUX_Console and Sun_Console

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 For details on the **Sample Frequency (seconds)** box, see “[Collection Rate](#)” on page 115.
- 2 From the **Consecutive Messages to Log** box, enter the number of consecutive messages you want logged by the agent.
- 3 Click **Save**.

SU Log for AIX_Console

The AIX_Console agent monitors the `/var/adm/sulog` and writes messages to the SuLog table. For more information about this table, see the Cartridge for Operating Systems *Reference Guide*.

To modify the SULog parameters:

- 1 In the **Sulog path and name** box, enter the path and name of the SULog. The agent reads the log file directly.
- 2 Indicate what kind of attempts you want the agent to monitor (succeeded and/or failed) by selecting the appropriate options. The attempts will be written to the SULog table.
- 3 From the **Statistical Period** list, select the period for monitoring the log.
- 4 Click **Save**.

ErrorLog for AIX_Console

The AIX_Console agent monitors the `/dev/error` log and writes messages to the ErrorLog table. For more information about this table, see the Cartridge for Operating Systems *Reference Guide*.

To modify the ErrorLog parameters:

- 1 In the **AIX errpt Command Path** box, enter the path of the errpt command. The agent uses this utility to monitor the log file.
- 2 Select the options that will provide you with the types of errors you want the agent to monitor and write to the ErrorLog table.
- 3 Click **Save**.

Log File for HPUX_Console and Sun_Console

The HPUX_Console agent monitors the `/var/adm/syslog/syslog.log` and writes the messages you want trapped to the ErrorVerbose table. The Sun_Console agent monitors the `/var/adm/messages.log` and writes the messages you want trapped to the ErrorVerbose table. You can modify the log that is monitored to suit your system requirements.

To set the log file parameter:

- 1 In the **Name of Log to Monitor** box, enter the name of the log file you want to monitor. The default log file is `/var/adm/messages`.
- 2 Click **Save**.

Filter File for HPUX_Console and Sun_Console

The HPUX_Console agent monitors the `/var/adm/syslog/syslog.log` (or another log of your choice) trapping messages indicated to the ErrorVerbose table. The Sun_Console agent monitors the `/var/adm/messages.log` and writes the messages you want trapped to the ErrorVerbose table.

The Filter File parameter allows you to specify what the agent should trap:

- Error strings that you want to monitor
- Error severity level of the message
- Message text.

HPUX_Console_FF is the default filter that is included with the HPUX_Console agent.

Sun_Console_FF is the default filter that is included with the Sun_Console agent. You can modify this filter as well as create others to suit your needs.

To set the filter file to use:

- 1 From the **Message Trap List**, select the list you want to use. The default is HPUX_Console_FF/Sun_Console_FF.
 - a If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
 - b If you want to add to or modify the default list, click **Edit**.
The list appears in the right pane.
Continue with the following procedures:
 - [To add to the Filter File list:](#)
 - [To modify the Filter File list](#)
- 2 Click **Save**.

To add to the Filter File list:

- 1 Click **Add new row**.
- 2 In the **Match String** box, enter a literal string or regular expression for which the agent should search.
Note Literal strings are case-sensitive for UNIX.
- 3 From the **Error Severity** list, select the status you want to attach to the message. The status will be color-coded in the console.
Note The agent sorts a message trap list by severity in the following order: Fatal, Critical, Warning. Within each severity level, the agent sorts log messages according to the length of the match string (the longest match string has priority).
- 4 In the **User Message** box, enter the message that the agent should send when it encounters the message you specified with the match string.
- 5 Click **Save**.

To modify the Filter File list

- 1 Double-click the item that you want to modify.
The line appears highlighted.
- 2 Modify the parameters that you want to change.
- 3 Click **Save**.

About the TerminalServer Agent

This chapter provides an overview of the TerminalServer agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the TerminalServer agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	120
Supported Platforms	120
Agent Properties	120

Overview

The TerminalServer agent monitors the availability of underlying TerminalServer services and can be used in Citrix environments.

Supported Platforms

The following platforms are supported for the TerminalServer agent:

Platform	Version
Windows [®]	<ul style="list-style-type: none">• Windows 2000[®]• Windows 2003[®] <p>Note The TerminalServer agent does not run on Windows XP 64-bit vFoglight Clients even though this agent is a part of the Windows 2003 OS Cartridge package.</p>

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The Terminal Server agent monitors the availability of underlying Terminal Server services and can be used in Citrix environments. Agent properties described in this section include:

- [Collection Rate](#)
- [Top Sessions](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **TerminalServer**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the TerminalServer agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **TerminalServer** pane.

TerminalServer	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="300"/>
Database	
Average Previous Week's Data To	<input type="text" value="0"/> <input type="button" value="Minutes"/> ▼
Purge All Data After	<input type="text" value="30"/> <input type="button" value="Days"/> ▼
Top Sessions	
Top Sessions to Log	<input type="text" value="5"/>

The position of the **TerminalServer** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **TerminalServer** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **TerminalServer** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next.

To set the sample frequency:

- 1 In the **Sample Frequency** box, enter the sample frequency in seconds. The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

Top Sessions

The TerminalServer agent will collect information on any number of sessions, but you may wish to set a certain number of top sessions it will log.

Use the **Top Sessions** area in the **TerminalServer** pane to set the top sessions to log.

To set the Top Sessions to log:

- 1 In the **Top Sessions** box, enter the number of top sessions to log.
- 2 Click **Save** to save the entry and close the pane.

About the User Agent

This chapter provides an overview of the User agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the User agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	124
Supported Platforms	124
Agent Properties	124

Overview

Each user who logs into a system typically executes multiple applications and processes. The User agent monitors CPU utilization, memory consumption, and number of processes.

Supported Platforms

The following platforms are supported for the User agent:

Platform	Version
AIX®	<ul style="list-style-type: none">• AIX 5.2• AIX 5.3• AIX 6.1
HP-UX®	<ul style="list-style-type: none">• HP-UXB.11
Linux®	<ul style="list-style-type: none">• Linux 2.4• Linux 2.6
Sun™Solaris®	<ul style="list-style-type: none">• SUNOS 5.8 on SPARC• SUNOS 5.9 on SPARC• SUNOS 5.10 on SPARC• SUNOS 5.10 on x86

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

Each user who logs into a system typically executes multiple applications and processes. The User agent monitors CPU utilization, memory consumption, and number of processes. Agent properties described in this section include:

- [Collection Rate](#)

- **Collection Policy**

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.
To open the navigation panel, click the right-facing arrow on the left  .
- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:
 - On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.
In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **User**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.
In the Agent Status dashboard, select the instance of the User agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **User** pane.

User	
Collection Rate	
Sample Frequency (seconds)	<input type="text" value="300"/>
Collection Policy	
Size of List to Collect	<input type="text" value="5"/>
Database	
Average Previous Week's Data To	<input type="text" value="0"/> <input type="button" value="Minutes"/> ▾
Purge Data After	<input type="text" value="User_PurgeDays_List"/> ▾ <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>

The position of the **User** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **User** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **User** pane appears across the display area.

Collection Rate

The collection rate, or sample frequency, is the number of seconds between the end of one collection period and the start of the next. You can set the sample frequency as well as the number of seconds for recycling messages and the number of consecutive messages to trap.

To set the sample frequency and other log settings:

- 1 In the **Sample Frequency (seconds)** box, enter the sample frequency in seconds. For example, enter **300** to set the interval between collections to five minutes.
- 2 Click **Save**.

Collection Policy

To specify the type and number of disks that the User agent will monitor, you can set parameters that allow you to specify the collection mode and collection length.

To set the collection policy:

- 1 In the **Size of List to Collect** box, specify the number of processes for which you want performance data collected.
- 2 Click **Save**.

About the WebMonitor Agent

This chapter provides an overview of the WebMonitor agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the WebMonitor agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	128
Supported Platforms	128
Agent Properties	129

Overview

The WebMonitor agent monitors Web server availability and response time. You can use this agent to monitor the availability and performance of your Web servers against service level agreements.

Supported Platforms

The following platforms are supported for the WebMonitor agent:

Platform	Version
AIX [®]	<ul style="list-style-type: none"> • AIX 5.2 • AIX 5.3 • AIX 6.1
HP-UX [®]	<ul style="list-style-type: none"> • HP-UXB.11
Linux [®]	<ul style="list-style-type: none"> • Linux 2.4 • Linux 2.6
Sun [™] Solaris [®]	<ul style="list-style-type: none"> • SUNOS 5.8 on SPARC • SUNOS 5.9 on SPARC • SUNOS 5.10 on SPARC • SUNOS 5.10 on x86
Windows [®]	<ul style="list-style-type: none"> • Windows 2000[®] • Windows 2003[®] • Windows XP[®] <p>Note Since Windows XP[®] (64-bit) is closer to Windows 2003 Server[®] internally than it is to Windows XP[®], the correct OS Cartridge package to install for Windows XP[®] 64-bit for vFoglight Client is Windows2003[®].</p>

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The WebMonitor agent is shipped with default properties that can be modified to suit your system requirements. Agent properties described in this section include:

- [Collection Rate](#)
- [URL List](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left  .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **WebMonitor**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the WebMonitor agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **WebMonitor** pane.

The screenshot shows the **WebMonitor** configuration pane with the following sections and controls:

- Collection Rate**: A section header.
- Sample Frequency List**: A dropdown menu showing "WebMonitor_SampleFreq_List" with "Edit..." and "Clone..." buttons.
- Database**: A section header.
- Average Previous Week's Data To**: A text input field with "0" and a dropdown menu showing "Minutes".
- Purge All Data After**: A text input field with "180" and a dropdown menu showing "Days".
- URL List**: A section header.
- Server/URL List File**: A dropdown menu showing "WebServerListFile" with "Edit..." and "Clone..." buttons.

The position of the **WebMonitor** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **WebMonitor** pane appears to the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **WebMonitor** pane appears across the display area.

Collection Rate

To set the collection rate:

- 1 Click **Sample Frequency List** and select the frequency list that you want to use to control the WebMonitor table purge. The default is `WebMonitor_SampleFreq_list`.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to add to a frequencies list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Click **Add new row**.
 - b In the **vFoglight Table** box, enter the name of the table from which you want the agent to collect data. For further information on WebMonitor data tables, refer to the Cartridge for Operating Systems *Reference Guide*.
 - c In the **Sample Frequency** box, enter the sample frequency in seconds. For example, enter **300** to indicate five minutes between collections.
 - d Click **Save**.
- 4 Click **Save**.

URL List

You can create multiple server file lists and indicate which one you want the agent to use.

To select the list:

- 1 From the **Server/URL List File**, select the list that you want to use to control the Web pages that are monitored. The default is `WebServerListFile`.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to add to a list file, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Click **Add new row**.
 - b In the **Server to Monitor** box, enter the name of the Web server to monitor.
 - c In the **Page to Monitor** box, enter the URL (`http://` not needed) of the Web page on the server to monitor.
 - d From the **Page Fetch Policy** drop-down list, select the method you want to use to obtain the Web page.

GET fetches the entire page, while **HEAD** fetches only the page status (for example, timestamp and size), which the Web browser uses to compare against a cached copy of the page.
 - e Select one of the **Monitor Page** options to start or stop the monitoring of the web server and its Web page (specified in [step c](#)) by the WebMonitor agent.
 - f In the **Timeout (msec)** box, enter the time out parameter in milliseconds. If the server times out, a string `Timeout` will be shown in the `Message` field of the `PageStats` table. For further information, refer to the Cartridge for Operating Systems *Reference Guide*.
 - g If you want the agent to use a secure socket layer, select the **True** option.
 - h If you want the agent to use a different port for monitoring, select the **True** option.
The HTTP default is port 80; the HTTPS default is port 443.
 - i If you selected **Use different Port** as **True** in the above step, enter the port number in the **Enter Port Number** box.
 - j Click **Save**.
- 4 Click **Save**.

About the Windows_System Agent

This chapter provides an overview of the Windows_System agent. It also describes the supported platforms and properties for the agent.

There are views, rules, and data associated with the Windows_System agent. Refer to the *Cartridge for Operating Systems Reference Guide* for information on these items.

This chapter contains the following sections:

Overview	134
Supported Platforms	135
Agent Properties	135

Overview

The `Windows_System` agent monitors Windows systems at an overview level. The agent collects data from the Microsoft Windows performance counters (also known as the performance registry) and monitors:

- CPU utilization, memory, paging file (swap space), and network performance.
- Physical disk devices on a system.
- Processes running or waiting to run on a monitored host.
- One or more network interface cards for network traffic data (such as the number of packets, throughput, errors, utilization, and collisions).

vFoglight uses the data that the `Windows_System` agent collects in most of its system analysis. This system agent will be useful during many of your system performance investigations.

The `Windows_System` agent produces views similar to those produced by the `DiskIO`, `FileSystem`, and `Process` agents. Reading the profiles of these agents can help you better understand the views that are produced by the `Windows_System` agent.

Note `Windows_System` needs the performance counters enabled to track system performance. You must manually turn on the performance counters on the Windows OS to enable the vFoglight Client (SPID agents) to work. Otherwise, if the performance counter is turned off, you may see an error message such as the following:

```
FATAL [Windows_System_winxp Socket Listener]
com.quest.spi.jfogbank.AgentWrapper - Agent log:
RegistryObject::RegistryObject: Unknown object: Cache
```

Supported Platforms

The following platforms are supported for the Windows_System agent:

Platform	Version
Windows®	<ul style="list-style-type: none">• Windows 2000®• Windows 2003®• Windows XP® <p>Note Since Windows XP® (64-bit) is closer to Windows 2003 Server® internally than it is to Windows XP®, the correct OS Cartridge package to install for Windows XP® 64-bit for vFoglight Client is Windows2003 .</p>

Agent Properties

When an agent connects to the vFoglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. For more information about working with agent properties, see the *vFoglight Administration and Configuration Guide*.

The Windows_System agent is shipped with default properties that can be modified to suit your system requirements. Agent properties described in this section include:

- [Collection Rate](#)
- [Collection Policy](#)
- [Event Log](#)
- [Services](#)
- [Exclude Drives](#)

To modify agent properties:

- 1 Ensure that the navigation panel on the left is open.

To open the navigation panel, click the right-facing arrow on the left .

- 2 Open the dashboard that lets you navigate to the agent properties by completing one of the following steps:

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Properties**.

In the Agent Properties dashboard, in the **Adapter** pane, click **SPI**. In the **Types** pane that appears, click **Windows_System**.

or

- On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.

In the Agent Status dashboard, select the instance of the Windows_System agent whose properties you want to modify and click **Edit Properties**.

A list of agent properties appears in the **Windows_System** pane.

Windows_System	
Collection Rate	
Foglight Sample Frequency List	NT_SampleFreq_List <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Collection Policy	
List Size	NT_Top_List <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Database	
Average Previous Week's Data To	0 <input type="button" value="Minutes"/>
Purge All Data After	180 <input type="button" value="Days"/>
Event Log	
Event Logs to Monitor	NT_EventLogs <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Event Log Filter	NT_EventLogFilter <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Event Log Severity	NT_EventSeverityMap <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Enter time to monitor events before start	600
Consecutive Messages to Log	1
Recycle Messages After (seconds)	3600
Services	
Services List	NT_Services_List <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>
Exclude Drives	
Exclude Drive List	NT_Drive_List <input type="button" value="Edit..."/> <input type="button" value="Clone..."/>

The position of the **Windows_System** pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the **Windows_System** pane appears to

the right of the **Types** pane in the display area. If you used the Agent Status dashboard, the **Windows_System** pane appears across the display area.

Collection Rate

The collection rate (or sample frequency) is the number of seconds between the end of one collection period and the start of the next.

SampleFreq is the default frequency list included with the Windows_System agent. This list contains sample frequencies for every data table that the agent produces. You can modify this list as well as create other lists (clone) to suit your needs. For example, vFoglight samples the data for the TopMEM table every five minutes. However, if a system is logging memory alert messages, you could change the sample frequency to 1 minute to better determine the memory load.

Note The default sample frequency list contains all of the tables for the agent. Do not add new rows or delete a selected row. Sample frequencies are tied to the agent executable and should not be modified.

To set the collection rate:

- 1 Click **vFoglight Sample Frequency List** and select the frequency list that you want to use to control the Windows_System table purge. The default is NT_SampleFreq_List.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the vFoglight *Administration and Configuration Guide*.
- 3 If you want to modify a sample frequency list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Double-click the entry that you want to modify.
The line appears highlighted.
 - b In the **vFoglight Table** box, enter the name of the Windows_System agent table that you want to purge.
 - c In the **Sample Frequency** box, enter the number of seconds between the end of one collection period and the start of the next.
- 4 Click **Save**.

Collection Policy

The processes that have the highest CPU, memory, and I/O are displayed in various Windows_System agent views. You can define the number of processes that are displayed in the view by modifying the default parameters.

To define the list to use:

- 1 From the **List Size** list, select the list that you want to use. The default is NT_Top_List.

Caution It is important that you do not delete any entries from the NT_Top_List.

- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to modify an agent top list, click **Edit**.
The list appears in the right pane.
Continue with the following steps:
 - a In the **List Size** box, enter the number of processes that you want to display in the view.
 - b Modify the name of the **vFoglight Table** if required.
- 4 Click **Save**.

Event Log

The Event Log property allows you to:

- monitor the system, application, and security event logs with a event log list. Messages are trapped and stored in an event log that you can review periodically. The event log for the Windows_System agent is equivalent to the default FilterTrapFile that all other agents use. For more information, see “[Match List](#)” on page 78.
- map the severity levels that are defined in vFoglight to the severity levels (or **Type**) that are defined in the Windows event log.

To define event log parameters:

- 1 From the **Event Logs to Monitor** list, select the list that you want to use. The default is NT_EventLogs.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to add to the default list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Click **Add new row**.
 - b In the **Event Log Name** box, enter the name of the event log.
 - c Choose whether you want to monitor the event log by selecting either the **True** or **False** option.
 - d Click **Save**.
- 4 From the **Event Logs Filter** list, select the list you want to use. The default is `NT_EventLogFilter`.
 - 5 If you want to clone the list, click **Clone**. For more information, refer to step #2.
 - 6 If you want to add to a event logs filter list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Click **Add new row**.
 - b From the **Include/Exclude** list, select whether you want to include or exclude event log messages.
 - c From the **Type** list, select the error severity that will be assigned when the string is captured.
 - d In the **User** box, enter the name of the user for whom you want to filter the event log.
 - e In the **Source** box, enter the name of the application for which you want to filter.
- Note** If you select **Information** for the user severity be aware that this severity is not displayed in the Operations Console.
- f In the **Category** box, enter the category type. This property maps to **Event Log Name** in the Windows event log.
 - g In the **EventID** box, enter the number that identifies the particular event type.
 - h In the **Event Description** box, enter a short description of the event.
 - i Click **Save**.
- 7 From the **Event Log Severity** list, select the list you want to use. The default is `NT_EventSeverityMap`.
 - 8 If you want to clone the list, click **Clone**. For more information, refer to step #2.
 - 9 If you want to add to an event log severity list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a From the **Event Log Severity** list, select the Windows severity level that you want to map to a vFoglight event log severity.
 - b From the **vFoglight Severity** list, select the vFoglight severity level that you want to map to the Windows severity level you chose in step #2.
 - c Click **Save**.
- 10 In the **Enter time to monitor events before start** box, enter the time (in seconds) to monitor previous events in the event log after agent startup.
 - 11 In the **Consecutive Messages to Log** box, enter the number of messages that should be logged. You can configure multiple alerts for the same message encountered n times based on the value that you enter in this box. For example, if you enter **3** and if the Match List string is encountered three times within the monitored file, the alert will be raised three times. If the string is encountered a fourth time, the alert will not be raised.
Note The number of consecutive messages posted and the recycle time are recorded and calculated separately for each log file.
 - 12 In the **Recycle Messages After** box, enter the number of seconds after which the messages are cleared from the alarm.
 - 13 Click **Save**.

Services

You can monitor network type services and device drivers such as the task scheduler, TCP/IP connection, and spooler. These services are monitored in regards to their current state: stopped, start_pending, stop_pending, running, continue_pending, pause_pending, and paused.

The Windows_System agent is shipped with one default services list that contains the services that the agent can monitor. You can modify or add to this list as required.

To define the list to use:

- 1 From the **Services List**, select the list you want to use. The default is `NT_Services_List`.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to modify a services list, click **Edit**.

The list appears in the right pane.

Continue with the following steps:

- a Click **Add new row**.
 - b In the **Service Name** box, enter the name of the service.
 - c If you want the service monitored, select the **True** option.
 - d If you want the service restarted, select the **True** option.
- 4 Click **Save**.

Exclude Drives

You can choose to exclude the drives that you do not want the Windows_System agent to monitor on a specific host.

To define the list to use:

- 1 From the **Exclude Drive List**, select the list you want to use.
This is the list that is defined by the DriveList property.
- 2 If you want to clone the list, click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *vFoglight Administration and Configuration Guide*.
- 3 If you want to modify an exclude drive list, click **Edit**.
The list appears in the right pane.
Continue with the following steps:
 - a Click **Add new row**.
 - b In the **Drive Letter** box, enter the drive that you want to exclude.
 - c In the **Host Name** box, enter the name of the host. The host name can take the form of a regular expression. For more information, see “[Regular Expressions](#)” on page 70.
- 4 Click **Save**.

Index

A

about vFoglight 10

AIX_Console

agent properties 115

supported platforms 110

AIX_MPStat

supported platforms 110

AIX_System

supported platforms 110

ApacheSrv

agent properties 45

ApacheSvr

supported platforms 44

AppMonitor

agent properties 51, 101

supported platforms 50

C

contacting

Vizioncore 14

D

Dashboards

Host Monitor 30

overview 30

DiskIO

agent properties 58

supported platforms 58

documentation 11

cartridge 13

core 12

feedback 13

suite 11

F

FileSystem

agent properties 65

supported platforms 64

H

Hosts Monitor

creating a custom dashboard 42

view source data 37

HPUX_Console

supported platforms 111

HPUX_MPStat

supported platforms 111

HPUX_System

supported platforms 111

L

Linux_MPStat

supported platforms 113

Linux_System

supported platforms 113

LogFilter

agent properties 75

supported platforms 74

M

monitoring dashboards

alerts 35

host browser, viewing 35

portlets and elements 31

time range 34

viewing 30

monitoring hosts

data collection 30

N**NetMonitor**

- agent properties 83
- supported platforms 82

NIC

- agent properties 88
- supported platforms 88

O

operating system dashboards 29

P**Process**

- agent properties 94
- supported platforms 94

R

regular expressions 70

S**SNMP**

- agent properties 99
- supported platforms 98

suite 11

Sun_Console

- supported platforms 114

Sun_MPStat

- supported platforms 114

Sun_TCP

- agent properties 104
- supported platforms 104

SysAgent

- agent properties 109

T**TerminalServer**

- agent properties 120
 - supported platforms 120
- text conventions 14

U**User**

- agent properties 124
- supported platforms 124

W**WebMonitor**

- agent properties 129
- supported platforms 128

Windows_System

- agent properties 135
- supported platforms 135