

vFoglight[™] 5.2.4

User Guide





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Introduction to this Guide

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

This chapter contains the following sections:

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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 User Guide provides configuration instructions, conceptual information and instructions on how to use the browser interface.

This guide is intended for any user who wants to configure vFoglight using the browser interface.

The User Guide is organized as follows:

Chapter 1, Getting Started with vFoglight—This section focuses on identifying the key screen elements in vFoglight as well as customizing vFoglight according to User Preferences, setting home pages and themes.

Chapter 2, Navigation in vFoglight—This section introduces the navigation tools used in vFoglight and understanding the concept of roles in vFoglight.

Chapter 3, Working with Dashboards—This section identifies the tools and techniques to work with dashboards as well as work with tables and charts.

Chapter 4, Working with Services and Alarms—This walkthrough instructs you on how to monitor services, examine service levels, and create a service. Details on viewing system-wide alarms for all monitored services is also provided.

Chapter 5, Monitoring Agents and Hosts—This section overviews the dashboards to monitor agents and hosts such as view active host details, browse and monitor hosts, and obtain host resource information.

Chapter 6, Monitoring the vFoglight Management Server—This section overviews monitoring vFoglight performance, such as cleaning up data objects, viewing server metrics and server details, viewing SQL database details, and viewing persistence handler details.

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Chapter 7, Working with Applications—This chapter describes how to monitor and create an application.

Chapter 8, Working with Reports—This chapter introduces the Reports dashboard and Report Manager dashboard. Reports can be created based on the supplied report templates or your own custom report. It also describes working with scheduled and generated reports, and the functions that are available to work with reports such as run a report, schedule a report, test a report template, and add a new schedule to the default report schedules list.

Chapter 9, Working with Data and Data Sources—This chapter introduces the Data dashboard and Data Sources dashboard that are primarily used by dashboard designers to examine data objects as well as choose a data source in vFoglight.

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.

General	Design Help
 Adminis 	tration
More	
	arch
	Dirind 🗙 Clea
≠ Help Co	ontents
0	Welcome to Foglight 5.2.4
_	User Guide
- I Q	
	Administration and Configuration Guide
	Administration and Configuration Guide Command-Line Reference Guide
	Command-Line Reference Guide

• **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

Convention	Description
Code	 Monospace text represents code, code objects, and command-line input. This includes: Java language source code and examples of file contents Classes, objects, methods, properties, constants, and events HTML documents, tags, and attributes
Variables	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.
Files, components, and documents	Italic text is used to highlight the following items:Pathnames, file names, and programsThe names of other documents referenced in this guide

The following table summarizes how text styles are used 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.

Introduction to this Guide About Vizioncore Inc.

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

Austria (Vienna)	Web Address	Support.euro.dell.com
International Access	E-Mail Address	<u>Tech support central europe@dell.com</u>
Code: 900	Home/Small Business Sales	0820 240 530 00
	Home/Small Business Fax	0820 240 530 49
Country Code: 43	Home/Small Business Customer Service	0820 240 530 14
City Code: 1	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 17
Bahamas	Web Address	<u>www.dell.com/bs</u>
Danamas	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
Darbauus	E-Mail Address	la-techsupport@dell.com
	Technical Support., Customer Service, Sales	1-800-534-3142
Belgium (Brussels)	Web Address	Support.euro.dell.com
Deigium (Drusseis)	General Support	02 481 92 88
	General Support Fax	02 481 92 95
	Customer Service	02 481 92 95
	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	<u>la_techsupport@dell.com</u>
· · · · · ·	Technical Support., Customer Service, Sales	toll-free: 800-10-0238
Brazil	Web Address	www.dell.com/br
International Access	E-Mail Address	BR_TechSupport@dell.com
Code: 00	Customer Service and Tech Support	0800 970 3355
Country Code: 55	Technical Support Fax	51 2104 5470
City Code: 51	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,	Online Order Status Web Address	www.dell.ca/ostatus
Ontario)	AutoTech (automated Hardware and Warranty	
International Access	Support)	support.ca.dell.com
Code: 011	Customer Service	toll-free:1-800-247-9362
Coue. 011	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	
		toll-free:1-800-847-4096
	Computers for Home/Home Office	toll-free:1-800-387-5757
	Computers for Small/Medium/Large Business	
	Government	1-877-335-5767
	Printers, Projectors, Televisions, Handheld,	1-077-355-5707
	Digital	tall frage 1 800 000 2255
	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
	E-Mail Address	la-techsupport@dell.com
Country Code: 56 City Code: 2	Sales and Customer Support	toll-free: 1230-020-4823
China (Xiamen)	Technical Support Web Address	support.dell.com.cn
	Technical Support E-Mail Address	support.dell.com.cn/email
Country Code: 86	Customer Service E-Mail Address	customer cn@dell.com
City Code: 592	Technical Support Fax	592 818 14350
	Technical Support – Dimension and Inspiron	toll-free: 800 858 2969
	Technical Support – OptiPlex, Lattitude and Dell	toll-free: 800 858 0950
	Precision	
	Technical Support – Servers and Storage	toll-free: 800 858 0960
	Technical Support – Projectors, PDAs, Switches,	toll-free: 800 858 2920
	Routers, etc	
	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	toll-free: 800 858 2955
	Education	
	Large Corporate Accounts East	toll-free: 800 858 2020
	Large Corporate Accounts East Government and	toll-free: 800 858 2669
	Education	
	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
Casta Disa	Technical Support, Customer Service, Sales Web Address	01-800-915-4755 www.dell.com/cr
Costa Rica	E-Mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	0800-012-0231
Czech Republic (Prague)		support.euro.dell.com
	E-Mail Address	czech dell@dell.com
International Access	Technical Support	22537 2727
Code: 00	Customer Service	22537 2707
Country Code: 420	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
Country Code. 45	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	<u>la-techsupport@dell.com</u>
	Technical Support, Customer Service, Sales	toll-free: 1-866-278-6821

Dominican Republic	Web Address	www.dell.com/do
Bommedin Republic	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	<u>la-techsupport@dell.com</u>
	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	<u>www.dell.com/sv</u>
	E-Mail Address	<u>la-techsupport@dell.com</u>
	Technical Support, Customer Service, Sales	800-6132
Finland (Helsinki)	Web Address	support@euro.dell.com
International Access	E-Mail Address	<u>fi_support@dell.com</u>
Code: 990	Technical Support	0207 533 555
Country Code: 358	Customer Service	0207 533 538
City Code: 9	Switchboard	0207 533 533
City Code.)	Sales under 500 employees	0207 533 540
	Fax	0207 533 530
	Sales over 500 employees	0207 533 533
	Fax	0207 533 530
France (Paris)	Web Address	Support.euro.dell.com
(Montpellier)	Home and Small Business	
International Access	Technical Support	0825 387 270
Code: 00	Customer Service	0825 832 833
Country Code: 33	Switchboard	0825 004 700
City Codes: (1) (4)	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	
	•	0825 004 719
	Technical Support	0825 338 339
	Customer Service	55 94 71 00
	Switchboard	01 55 94 71 00
· · · · · ·	Sales	
Germany (Frankfurt)	Web Address	support.euro.dell.com
International Access	E-mail Address	tech support central europe@dell.com
Code: 00	Technical Support	069 9792-7200
Country Code: 49	Home/Small Business Customer Service	0180-5-224400
2	Global Segment Customer Service	069 9792-7320
City Code: 69	Preferred Accounts Customer Service	069 9792-7320
	Large Accounts Customer Service	069 9792-7320
	Public Accounts Customer Service	069 9792-7320
	Switchboard	069 9792-7000
Greece	Web Address	Support.euro.dell.com
International Access	Technical Support	00800-44 14 95 18
Code: 00	Gold Service Technical Support	00800-44 14 00 83
Country Code: 49	Switchboard	2108129810
550mm y 560c. 47	Gold Service Switchboard	2108129811
	Sales	2108129800
	Fax	2108129812
Grenada	Web Address	www.dell.com/gd
	E-Mail Address	<u>la-techsuppo@dell.com</u>
	Technical Support, Customer Service, Sales	toll-free: 1-866-540-3355

Guatemala	Web Address	www.dell.com/gt
Oudternata	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	Technical Support E-mail Address	support.dell.com.cn/email
Code: 001	Technical Support - Dimension and Inspiron	00852-2969 3188
Country Code: 852	Technical Support - OptiPlex, Latitude, and Dell	00852-2969 3191
•	Precision	
	Technical Support - Servers and Storage	00852-2969 3196
	Technical Support - Projectors, PDAs, Switches,	00852-3416 0906
	Routers, etc.	
	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
	Thome Trainbers	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	- 1.11
	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
	Home and Sman Dusiness	
		$toll_{free} \cdot 1800 A254051$
		toll-free : 1800-4254051
	Large Corporate Accounts	toll-free : 1800-4254051 India care REL@dell.com
	Large Corporate Accounts	
	Large Corporate Accounts Sales	India_care_REL@dell.com
		India_care_REL@dell.com

Ireland (Cherrywood)	Web Address	Support.euro.dell.com
International Access		
Code: 00	Technical Support	
Country Code: 353	E-mail Address	<u>dell direct support@dell.com</u>
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.	0870 907 4499
	only)	
	U.K. Sales (dial within U.K. only)	0870 907 4000
Italy (Milan)	Web Address	Support.euro.dell.com
International Access	Home and Small Business	
Code: 00	Technical Support	02 577 826 90
Country Code: 39	Customer Service	02 696 821 14
City Code: 02	Fax	02 696 821 13
City Code. 02	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	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-800-440-920
	(dial from within Jamaica only)	

International Access Code: 001Technical Support - Dimension and Inspirontoll-free: 0120-198-26Country Code: 81 City Code: 44Technical Support outside of Japan - Dimensiontoll-free: 0120-198-433City Code: 44Technical Support outside of Japan - Dell81-44-556-3894Precision, OptiPlex, and LatitudeTechnical Support outside of Japan - Dell81-44-556-3894Precision, OptiPlex, and LatitudeTechnical Support outside of Japan - Polltoll-free: 0120-198-498PowerEdge?, DeuterConnect, and PowerVaultTechnical Support outside of Japan - PowerApp.81-44-556-4162PowerEdge?, PowerConnect, and PowerVaultTechnical Support outside of Japan - Projectors,81-44-556-4162PowerEdge, PowerConnect, and PowerVaultTechnical Support outside of Japan - Projectors,81-44-556-4162PowerEdge, PowerConnect, and PowerVaultTechnical Support outside of Japan - Projectors,81-44-556-3468PDAs, Printers, Routers044-556-340024-Hour Automated Order Status Service044-556-3430Customer Service044-556-3430044-556-3433employeesPublic Sales - government agencies, educational044-556-3430Other Status Service044-556-1657Individual UserIndividual User Online Sales044-556-456-1657Individual User Online Sales044-556-456-1657Individual User Online Sales044-556-400Outry Code: 82Sales101-free: 080-200-3800Coutry Code: 82Sales101-free: 080-200-3800Coutry Code: 82Sales12/28-4600Customer Fervice	Japan (Kawasaki)	Web Address	support.jp.dell.com
International Access Technical Support outside of Japan - Dimension 81-44-520-1435 Contry Code: 81 Technical Support - Dell Precision, OptiPlex, and Latitude toll-free: 0120-198-433 City Code: 44 Technical Support outside of Japan - Dell 81-44-556-3894 Precision, OptiPlex, and Latitude toll-free: 0120-198-493 Precision, OptiPlex, and Latitude toll-free: 0120-198-498 PowerEdget*M, Dell PowerConnect*N, and Dell PowerEdget*Option touside of Japan - PowerApp Rechnical Support outside of Japan - PowerApp 81-44-556-4462 PowerEdget*M, Dell PowerConnect*N, and Dell PowerEdget*Option touside of Japan - Projectors, Phas, Printers, Routers Technical Support outside of Japan - Projectors, Pabox Service 044-556-3468 PDAS, Printers, Routers Faxbox Service Public Sales Division - up to 400 employees 044-556-4363 Out Automated Order Status Service 044-556-3468 Public Sales - government agencies, educational 044-556-3463 Out Automated Site Sales 044-556-3463 Code: 001 Calkerss 044-556-3463 Public Sales - government agencies, educational 044-556-3463 Indiv	• • •		
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employeesPublic Sales - government agencies, educational044-556-5963institutions, and medical institutions044-556-3093Global Segment Japan044-556-1657Individual User044-556-2033Individual User Online Sales044-556-4649Switchboard044-556-4649Switchboard044-556-4649Korea (Seoul)Web AddressInternational AccessTechnical Support, Customer ServiceCode: 001and AccessoriesCountry Code: 82SalesCity Code: 2SalesFax2194-6020Switchboard2194-6020Switchboard2194-6020Switchboard2194-6020Switchboard2194-6020Latin AmericaCustomer Technical Support (Austin, Texas, U.S.A.)512 728-3093Latin AmericaCustomer Technical Support and Customer Service)512 728-3383 (Austin, Texas, U.S.A.)Sales (Austin, Texas, U.S.A.)512 728-3377Sales (Austin, Texas, U.S.A.)512 728-3377Sales (Austin, Texas, U.S.A.)512 728-3377Sales Fax (Austin, Texas, U.S.A.)512 728-4000 or 512 728-3772LuxemborgWeb AddressSupportInternational Access3uport3420808075Home/Small Business Sales+32 (0)2 713 15 96Code: 00Corporate Sales26 25 77 81Customer Service+32 (0)2 481 91 19FaxTechnical Support420 25 77 82MacaoIechnical Supporttoll-free: 0800 105		Business Sales Division - up to 400 employees	044-556-1465
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$\begin{array}{c c} \mbox{Country Code: 82} \\ \mbox{City Code: 2} \\ \mbox{Fax} \\ \mbox{Switchboard} \\ \mbox{Latin America} \\ \mbox{Latin America} \\ \mbox{Customer Technical Support (Austin, Texas, U.S.A.)} \\ \mbox{Latin America} \\ \mbox{Customer Service (Austin, Texas, U.S.A.)} \\ \mbox{Customer Service (Austin, Texas, U.S.A.)} \\ \mbox{Fax (Technical Support and Customer Service)} \\ \mbox{Fax (Technical Support and Customer Service)} \\ \mbox{Sales (Austin, Texas, U.S.A.)} \\ \mbox{Sales Fax (Austin, Texas, U.S.A.)} \\ $	Code: 001	**	toll-free: 080-200-3801
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Transaction Sales (Xiamen, China) 29 693 115		Transaction Sales (Xiamen, China)	29 693 115

Malaysia (Penang)	Web Address	Support.ap.dell.com
International Access	Technical Support - Dell Precision, OptiPlex, and	
Code: 00	Latitude	
	Technical Support - Dimension, Inspiron, and	toll-free: 1800 881 306
Country Code: 60	Electronics and Accessories	
City Code: 4	Technical Support - PowerApp, PowerEdge,	toll-free: 1800 881 386
	PowerConnect, and PowerVault	
	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	E-mail Address	<u>la-techsupport@dell.com</u>
Code: 00	Customer Technical Support	001-877-384-8979 or 001-877-269-3383
	Sales	50-81-8800 or 01-800-888-3355
Country Code: 52	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	Technical Support	020 674 45 00
(Amsterdam)	Technical Support Fax	020 674 47 66
International Access	Home/Small Business Customer Service	020 674 42 00
Code: 00	Relational Customer Service	020 674 43 25
Country Code: 31	Home/Small Business Sales	020 674 55 00
City Code: 20	Relational Sales	020 674 50 00
City Code. 20	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	E-mail Address	Support.ap.dell.com/contactus
Code: 00	Technical Support, Customer Service, Sales	0800 441 567
Country Code: 64		
Nicaragua	Web Address	www.dell.com/ni
Nicalayua	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	001-800-220-1377
Norway (Lysaker)	Web Address	Support.euro.dell.com
5.5	Technical Support	671 16882
International Access	Relational Customer Service	671 17575
Code: 00	Home/Small Business Customer Service	231 62298
Country Code: 47	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
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Poland (Warsaw)	Web Address	support.euro.dell.com
	E-mail Address	pl_support_tech@dell.com
International Access	Customer Service Phone	57 95 700
Code: 011	Customer Service	57 95 999
Country Code: 48	Sales	57 95 999
City Code: 22	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	Technical Support	707200149
	Customer Service	800 300 413
Code: 00	Sales	800-300-410 or 800-300 -411 or
Country Code: 351		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	<u>la-techsupport@dell.com</u>
	Technical Support, Customer Service, Sales	toll-free: 1-866-540-3355
St. Lucia	Web Address	www.dell.com/lc
	E-mail Address	<u>la-techsupport@dell.com</u>
	Technical Support, Customer Service, Sales	toll-free: 1-866-464-4352
St. Vincent and the	Web Address	www.dell.com/vc
Grenadines	E-mail Address	<u>la-techsupport@dell.com</u>
	Technical Support, Customer Service, Sales	toll-free: 1-866-464-4353
Singapore	NOTE: The phone numbers in this section should	
International Access	be called from within Singapore or Malaysia only.	
Code: 005		1.11
Country Code: 65	Web Address	support.ap.dell.com
	Technical Support - Dimension, Inspiron, and	toll-free: 1 800 394 7430
	Electronics and Accessories	
	Technical Support - OptiPlex, Latitude,	toll-free: 1 800 394 7488
	and Dell Precision	
	Technical Support - PowerApp, PowerEdge,	toll-free: 1 800 394 7478
	PowerConnect, and PowerVault	
	Customer Service	toll-free: 1 800 394 7430 (option 6)
	Transaction Sales	toll-free: 1 800 394 7412
	Corporate Sales Web Address	toll-free: 1 800 394 7419
Slovakia (Prague)		support.euro.dell.com
International Access	E-mail Address	czech_dell@dell.com
Code: 00	Technical Support	02 5441 5727
Country Code: 421	Customer Service	420 22537 2707
-	Fax	02 5441 8328
	Tech Fax	02 5441 8328
	Switchboard (Sales)	02 5441 8328
0 11 461	Wah Address	02 5441 7585
South Africa	Web Address	support.euro.dell.com
(Johannesburg)	E-mail Address	dell_za_suppor@dell.com
International Access	Gold Queue	011 709 7713
Code: 09/091	Technical Support	011 709 7710
Country Code: 27	Customer Service	011 709 7707
City Code: 11	Sales	011 709 7700

Spain (Madrid)	Web Address	Support.euro.com
• • •	Home and Small Business	
International Access	Technical Support	902 100 130
Code: 00	Customer Service	902 118 540
Country Code: 34	Sales	902 118 541
City Code: 91	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	Web Address	support.euro.dell.com
Vasby)	Technical Support	08 590 05 199
•	Relational Customer Service	08 590 05 642
International Access	Home/Small Business Customer Service	08 587 70 527
Code: 00	Employee Purchase Program (EPP) Support	020 140 14 44
Country Code: 46	Technical Support Fax	08 590 05 594
City Code: 8	**	
Switzerland (Geneva)	Web Address	Support.euro.dell.com
International Access	E-mail Address	Tech_support_central_Europe@dell.com
Code: 00		0944 911 411
Country Code: 41	Technical Support – Home and Small Business	0844 811 411
City Code: 22	Technical Support – Corporate	0844 822 844
	Customer Service – Home and Small Business	0848 802 202
	Customer Service – Corporate	0848 821 721
	Fax	022 799 01 90
	Switchboard Web Address	022 799 01 01
Taiwan	E-mail Address	support.ap.dell.com
International Access		support.dell.com.cn/email toll-free: 0080 186 1011
Code: 002	Technical Support - OptiPlex, Latitude, Inspiron, Dimension, and Electronics and Accessories	1011-1166: 0080 186 1011
Country Code: 886	· · · · · · · · · · · · · · · · · · ·	tall free 0000 100 1250
	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
Thailand	Corporate Sales Web Address	toll-free: 0080 165 1227 Support.ap.dell.com
Inaliano	Technical Support (OptiPlex, Latitude, and Dell	toll-free: 1800 0060 07
International Access	Precision)	1011-1166. 1800 0000 07
Code: 001	Technical Support (PowerApp, PowerEdge,	toll-free: 1800 0600 09
Country Code: 66	PowerConnect, and PowerVault)	1011-1122. 1800 0000 09
	Customer Service	tall frage 1800 006 007 (artica 7)
		toll-free: 1800 006 007 (option 7) toll-free: 1800 006 009
	Corporate Sales Transaction Sales	toll-free: 1800 006 009
Tripidad/Tobaga	Web Address	www.dell.com/tt
Trinidad/Tobago	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-888-799-5908
Turks and Caicos Islands	s Web Address	www.dell.com/tc
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-877-441-4735
	reennear support, customer service, saies	ton nee. 1 0// ++1-+/55

U.K.(Bracknell)	Web Address	upport.euro.dell.com
International Access	E-mail Address	dell_direct_support@dell.com
Code: 00	Customer Service Website	support.euro.dell.com/uk/en/ECare/
Country Code: 44		form/home.asp
City Code: 1344	Sales	
City Coue. 1544	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+	0870 908 0500
	employees)	
	Other Dell Products	0870 353 0800
	General	
	Home and Small Business Fax	0870 907 4006
Uruguay	Web Address	<u>www.dell.com/uy</u>
	E-mail Address	<u>la-techsupport@dell.com</u>
	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	AutoTech (portable and desktop computers)	toll-free: 1-800-247-9362
Code: 011	Hardware and Warranty Support (Dell TV,	toll-free: 1-877-459-7298
Country Code: 1	Printers, and Projectors) for Relationship	
5	customers	
	Consumer (Home and Home Office) Support for	toll-free: 1-800-624-9896
	Dell products	
	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	toll-free: 1-800-283-2210
	[DPA])	
	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	toll-free: 1-877-DELLTTY
	Speech-Impaired	(1-877-335-5889)
	- r · · · · · · · · · · · · · · · · · ·	

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	<u>la-techsupport@dell.com</u>
	Technical Support, Customer Service, Sales	0800-100-4752

1

Getting Started with vFoglight

This chapter gives an introduction to the main dashboards and views in the vFoglight browser interface. It also describes the icons and other screen elements that you will see in most cartridges.

Note	vFoglight displays dynamic data that is updated regularly. For this re- recommended that you use your browser's Back and Forward button cached views to be displayed or result in an error message.	
This o	chapter contains the following sections:	
Loggir	ng in to vFoglight	
Introd	ucing the Browser Interface	
Custo	mizing vFoglight	

Logging in to vFoglight

vFoglight runs in Internet Explorer 6 and 7 and Mozilla Firefox 2.0x and 3.0x. Your administrator will provide you with a link to the login page, where you enter your user name and password.



Introducing the Browser Interface

The following sections describe the main pages that you will see in a default installation.

Note Your administrator may have configured vFoglight so that the actual displays are different from those in this section. The following information is intended only as a general guide.

Welcome Page

The first time that you log in to vFoglight, the Welcome page is displayed.

≠ Bookmerks	Welcome to vFeqlight 5ep 5, 2008 12 25: (4 PM EDT	General Design Hab
There are no bookmarks	vFoalight Resources	* Actions
Hones Administration Administration Agents Average Av		Propries Boolaark Print * Cher Astions Croste doeboard Croste report > Thosas
	Release Notes - Lisk Jonon and residentiaces, walkraunds, and bits breaking rows about this release of Volgit. Walk the Guide - ExtraGuide - Introduces you'to violatify concepts and components. It provides a high-level own two of the installation and satus procedures and suggests sharing points. External Resources whoncree Support - Available deviced to supporting all Monorary products. You can create and manage cases, deviced software and documentation, and sooth the intelligibility of the intelligity of	

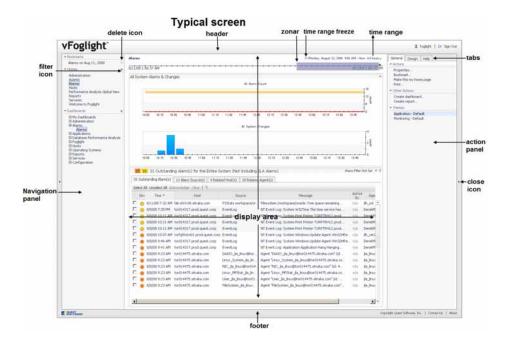
The Welcome page contains helpful links to vFoglight Getting Started documentation and tips, vFoglight demonstrations, online help, and support links.

The Welcome to vFoglight page will remain your default home page unless you set a different home page. For instructions on changing your home page to a dashboard of your choice, see "Home Page" on page 39. The instructions are also on the Welcome to vFoglight page.

Screen Elements

This section describes the screen elements in vFoglight that you will see, regardless of which cartridges have been installed.

In addition to the display area and the two panels, a typical screen in vFoglight includes other elements, which are indicated in the graphic below.



Navigation Panel

The navigation panel contains all the dashboards that are available for viewing by the current user. You can expand a module and select a dashboard to view it in the display area. This panel also provides access to the administration and configuration pages.

Note If you do not see any dashboards in the navigation panel, the user you signed in as may not have been assigned to a group. For details, see "Understanding Roles in vFoglight" on page 46.

Action Panel

The action panel contains the various actions that you can perform on the current dashboard. It also contains views and data that you can add to a dashboard or report that you are creating and provides access to the online help files.

Subsequent logins display either:

- A home page that you have selected (for details, see "Screen Elements" on page 31).
- The first bookmark listed under Bookmarks; the default bookmark is the Welcome page (for details about creating bookmarks, see "Creating a Bookmark" on page 43).

Filter Icon

Select the Filter icon **v** to filter by role to control which group role can access different parts of vFoglight. By using the Filter by role feature you can enable users to access a particular dashboard or homepage through role assignments.

To control user access according to role:

- 1 Click the Filter icon for the Homes or Dashboards.
- 2 In the Filter dialog, select the checkbox next to each role you want to assign access to the particular Dashboard or Home page.

123	Administrator	Advanced Operator
Cartridge Developer	🗖 Dashboard Designer	Dashboard User
General Access	Operator	Security
		Apply Cancel

3 Click Apply.

Note For more information on managing roles, see the vFoglight Administration and Configuration Guide.

Close Arrow

The Close arrow is used to conserve space on the display area. Click the arrows to:

expand I the display area and collapse I the navigation and action panels.

Header

The header contains the following icons:

Function	Description
<u>Foglight</u>	Click the product name to take you back to the Home page.
8 username	The user name of the current user.
E Sign Out	Logs out the current user and reclaims all resources that it used in the current session. This is the recommended way to exit vFoglight, rather than just closing the browser.

Tabs

The following tabs are available in the action panel:

- General tab—contains a number of actions that you can perform on the current dashboard or report.
- Help tab—provides access to the online help files and a search field for the help.
- **Design** tab—available on any non-portal page to properly-authenticated users such as those with the dashboard designer role. The Design tab shows a hierarchical list of all views of a dashboard, definition details, and a context editor that is useful for debugging.

When you select a particular view you can:

- See the definition of the current view
- Click **Inspect** to analyze the view in the definitions editor.
- View the current run-time values that are available in the context for that view.
- **Note** Inspecting existing object types is accessible from the WCF designer. For more details on the dashboard definitions, see the Web Component Guide.

When you select Create Dashboard or Create Report, two more tabs appear:

• Views tab—contains a list of views that can be added to a dashboard or report that you are creating.

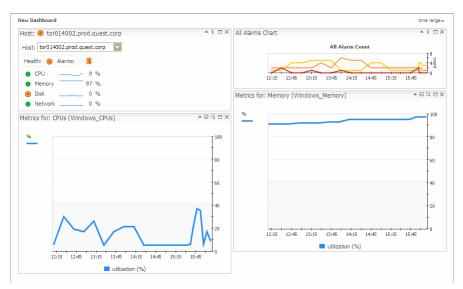
• **Data** tab—contains a list of data objects that can be displayed in chart or table format by dragging them into the display area.

Display Area

In the display area you can view current dashboards and reports, as well as create new or custom dashboards and reports. See "Creating a Custom Dashboard" on page 76 and "Creating a Custom Report Template" on page 213 for more information.

Note You can maximize the size of the display area by closing the navigation and action panels.

The example below shows two views and two metrics charts, which were dragged into the display from the Views and Data tabs in the action panel.



Footer

The footer contains the following links:

Copyright Vizioncore Inc. Links to the copyright page on the Vizioncor web site.	
---	--

Contact Us	Links to local contact information on the Vizioncore web site.
About	Displays product, contact, and support information.

Delete Icon

A bookmarked page provides easy access to navigation items. Click the Delete icon beside the bookmark to remove it. See Chapter 2, "Deleting a Bookmark in the Bookmarks view".

Zonar and Time Range

vFoglight uses a bar chart to indicate the average of all collected metrics within the range of the zonar. See Time Range and Zonar in Chapter 3.

Time Range Freeze Control

The Time range function enables you to freeze the vFoglight interface data at a specified time range. See "Freezing a time range" on page 52.

Customizing vFoglight

This section describes the areas where you can customize vFoglight according to user preference settings, home pages, and themes.

User Preferences

The User Preferences dashboard is under Configuration in the navigation panel. The options in this page enable you to change a number of settings in vFoglight. The choices you make here are saved with your user profile.

Gave X Cancel
▼ General
Language (Browser Language)
Refresh Interval 300 second(s)
Time Zone Server Time (Eastern Standard Time) America/New_York – 11:01 AM
O User Time
Time Range (Default) - Last 4 Hours 💟
▼ Themes
Print Report (Monochrome) 💽
▼ PDF Defaults
Page Size (Default)
Orientation (Default)
- Advanced
* Page Flow Overrides
Map to
* Data Sources
Foglight (Default)
Schema (Default)
Disable User Interaction Persistence

The following table describes the User Preferences settings.

Setting	Description or Options
Language	This setting controls the language that is used in the vFoglight browser interface. The default is the language set in the browser.
Refresh Interval	To ensure that the views display current data, vFoglight automatically refreshes the pages. This setting enables you to choose the length of the interval. The default is 300 seconds.
Time Zone	The time zone used in a vFoglight session is determined when you log in and is the local time zone for your server. You can use the User Time setting to choose another time zone.
Time Range	This setting controls the default time range for the views. The default setting is Last 4 Hours.

vFoglight **User Guide**

Description or Options
Themes are format settings that affect the look of dashboards and reports. You can override this setting for individual dashboard and reports using the Themes options in the action panel. For details, see "Themes" on page 39. You can only change the look of your PDF reports (Create PDF) in User Preferences. To change the theme used in generating (printing) reports to color, choose Report (Color) for the Print theme. Themes Print Report (Monochrome) Remote (Default) Application - Default * PDF Default Monitoring - Default * PDF Default Report (Color)
These settings enable you to set the page size and orientation of PDFs.
Page Flow Overrides: These settings override the pre- defined links between System views. For more information, see "Page Flow Overrides" on page 38. Data Sources: These settings determine the data source that vFoglight uses for data and schemas. Disable User Interaction Persistence: If you select this option, changes that you make in the vFoglight browser

Page Flow Overrides

System views are linked to each other through pre-defined configurations. In some cases, you may want to link a System view to a User view instead. The Page Flow Override option enables you to make this change. Every link on the page or view

indicated in the **Map** field that points to a target view will be redirected instead to the view indicated in the **To** field.

Caution This requires knowledge of how views are created, and should only be set by a view or dashboard designer. For more information, see the *Web Component Guide*.

Home Page

You can choose any dashboard to be your personal home page. Other dashboards can also be designated as home pages by a dashboard developer. These are listed under Homes in the navigation panel.

To set your personal home page:

- 1 Select a dashboard under **Homes** in the navigation panel on the left. Choose the dashboard that is most appropriate for your needs.
- 2 Click Make this my home page in the actions panel.

The dashboard is listed under **Homes** in the navigation panel and will be the first page that is displayed every time you log in to vFoglight.

If you later choose another dashboard as your home page, it replaces the previous one.

Note You can have multiple homes. When you mark something as a home page, it becomes the default home and it is added to the list of possible homes. For example, if you add vFoglight Data Management as your home page, it is added to the default set of homes for your user role, and becomes your "current" home. If you log out and log back in, you will access vFoglight Data Management.

Themes

The Themes options allow you to control the look-and-feel for your UI such as the appearance of vFoglight dashboards and reports. You set these options in the User Preferences page, but you can override them by using the same options under Themes in the action panel.

vFoglight **User Guid**e

The following table describes the options.

Option	Result
Application - Default	White background in all dashboards and views
Monitoring - Default	Dark blue background in all dashboards and views
Report (Monochrome)	Reports are printed in black and white
Report (Color)	Reports are printed in color

Note To print PDF reports in color, the theme must be changed in the User Preferences dashboard. Go to **Configuration > User Preferences** and choose **Report (Color)** for the Print theme. See "User Preferences" on page 36.

Navigation in vFoglight

This chapter provides an introduction to the navigation tools used in the vFoglight browser interface and also an introduction to roles.

This chapter contains the following sections:	
Introduction to Navigation	42
Understanding Roles in vFoglight	46

Introduction to Navigation

In addition to the navigation panel, other navigational aids are located in dashboards and views. These include:

- Data views (charts, tables, cylinders) provide links to more detail about the data that is selected (service > service detail) or to diagnose a problem (alarm > alarm detail).
- Selector views (trees, drop-down lists) allow you to change the context (domain, host, etc.) of what you are viewing.
- Navigation views (links box, labels) allow you to navigate from one part of the interface to another.
- **Note** In addition to these types of links, vFoglight also displays additional information from within a view. For more information, see "Tooltips, Dwells, and Popups" on page 50.

Breadcrumb Trail

The name of the current view is displayed in bold letters at the top of the view:

```
Agents on All Hosts > Property Viewer
```

If you move directly from one view to another, the names of the previous views are displayed in a breadcrumb trail. The names are links back to the previous views and are displayed as non-bolded text.

Caching

vFoglight displays dynamic data that is regularly updated. For this reason it is preferable not to use your browser's navigation buttons, as this may display cached views or result in an error message. Use the links in the display area instead.

vFoglight remembers where you have been by display area. If you leave a dashboard and then return to it, you see the last view that was displayed.

Note This tracking is based on your user ID and is saved on the server.

Table Links

Content in tables can be links to views. For example, in a table that contains a list of hosts, each host name may be a link to a page with more information about that host.

Tables also have icons and functions for sorting, paging, and filtering. These are discussed in "Working With Tables" on page 91.

Icon Links

Icons may be links to other views or dashboards. Linked icons and non-linked icons look the same. When you move your mouse over a linked icon, the pointer changes to a hand. For more information, see "Icons" on page 94.

Bookmarks

Bookmarks are useful for keeping track of dashboards and views that you intend to revisit or access quickly, without having to drill down several levels. A bookmark can be a snapshot of data that is "frozen" at a specific point in time, or it can be updated with current data when you access it. For example, you can create a bookmark to quickly access a specific drilldown or view to be saved for viewing later such as the System Overview on a particular host last Wednesday.

The Bookmarks section of the navigation panel lists all the bookmarks that you have created. When you select a bookmark, it appears in the display area. You can then do the following:

- email a link to this dashboard
- make it your home page
- print it

Creating a Bookmark

To bookmark a dashboard:

- 1 Locate and display the dashboard that you want to bookmark.
- 2 In the action panel, select **Bookmark**.

The Bookmark dialog appears.

Bookmark		×
Name	Alarms	
Keep for	Forever	
	○days	
Send a	n email with a link to this bookmark	
Preser	ve state	
Pre	serve time range	
Descriptio	on	
		~
		~
	0	Cancel Help

- 3 Type a unique name in the Name field.
- 4 Select one of the **Keep for** options to indicate whether you want to keep the bookmark indefinitely or for a specified number of days. If you choose the latter, type the number of days in the text field.
- 5 Select **Send an email with a link to this bookmark** if you want to send someone a link to the new bookmark.
- 6 Select **Preserve state** if you want to keep the context input of the dashboard.

For example: At the time when you bookmark a dashboard, it has a drop-down in which HostX is selected. When you later view the bookmarked dashboard, HostX will still be selected.

- 7 If you have selected Preserve state, the **Preserve time range** check box becomes available. Select this check box if you want to keep the bookmark's current start and end times. Otherwise, if the time range is relative (e.g. Last 24 Hours), the bookmarked view will show metrics for the default time period when you display it.
- 8 Type a description; this is optional.
- 9 Click **OK** to save the bookmark.
- 10 If you selected the email option in step 5 above, an email window opens, containing a link to this bookmark. Complete the required fields and click **Send**.

The new bookmark is now listed under Bookmarks at the top of the navigation panel.

Viewing a Bookmark

To display a bookmarked dashboard, expand the Bookmarks area in the navigation panel and select the bookmark you want to display.

Emailing a Link to a Bookmark

This option is also available when you create a bookmark.

To email a link to a bookmark:

- 1 In the Bookmarks area of the navigation panel, select a bookmark to display it.
- 2 Select **Email** from the action panel.

An email window opens, containing a link to the bookmark.

3 Fill in the required information and click **Send**.

Changing Bookmark Properties

You can change the expiry time and the description of an existing bookmark.

To change the properties of a bookmark:

- 1 In the navigation panel, select the name of a bookmark you want to edit.
- 2 In the action panel, click **Properties** to open a drop-down menu.
- 3 Select Edit bookmark properties under Actions.

The Bookmark dialog appears.

Bookmark		×
Name Keep for	Alarms © Forever	
Descriptio	days	
Description		~
		*
	OK	Cancel Help

4 Make your changes and click **OK**.

Deleting a Bookmark in the Bookmarks view

You can remove a bookmark in the navigation panel.

To delete a bookmark in the navigation panel:

- Place the cursor over the delete icon beside the name of the bookmark. The icon turns red.
- 2 Click the delete icon \square .

3 On the confirmation dialog, click **Delete** to delete the bookmark.

Understanding Roles in vFoglight

vFoglight controls access to dashboards and views by means of roles. A vFoglight administrator assigns users to groups and then assigns roles to those groups. When you try to access a dashboard or view, the roles of the groups to which you belong are matched against the relevant roles and the allowed roles that were set for that dashboard or view.

Relevant roles control which dashboards and views are listed in the navigation and action panels. Allowed roles control which dashboards and views a group can access, whether or not they are listed in the panels. If a view has no relevant roles marked, vFoglight assumes it is relevant to all roles. If a view has no allowed roles marked, vFoglight assumes that all roles are allowed to see it.

To illustrate how roles work, suppose you belong to a group that has been assigned the roles of Advanced Operator and Dashboard User. When you log in to vFoglight, the navigation panel lists only the dashboards for which those roles are relevant roles. In some dashboards, one or more views may not be available because your roles have not been set as allowed roles for them.

You can filter the dashboards that are listed in the navigation panel by clicking the filter icon to the right of Dashboards or Homes to display a list of relevant roles, de-selecting one or more roles, and clicking **Apply**.

Role	Permissions
Dashboard User	Access to basic dashboards.
Operator	Access to basic dashboards. Operators can also access dashboards like Services, Agents, and Host Table.
Advanced Operator	Extends Operator to include administrative dashboards like the Service Builder and the Application Builder.
Dashboard Designer	Access to the dashboard design options available under Configuration > Definitions .

The roles that are built in to vFoglight are designed to have the following permissions:

Role	Permissions
Cartridge Developer	Ability to load cartridges, create rules and derived metrics, and perform other tasks related to creating a cartridge.
Administrator	Access to all administrative functions, particularly the ability to deploy, create, and control agents.

See the *vFoglight Administration and Configuration Guide* for additional information on users, groups and roles.

vFoglight **User Guide**

Working with Dashboards

This section describes how to work with vFoglight dashboards, and provides a description of the common elements that are found on most dashboards.

Note	For information about the options in the Administration module, see the A Configuration Guide.	dministration and
	For information about the Definitions dashboard, see the Web Component	t Guide.
	For information about cartridge dashboards, such as the dashboards for the Operating Systems, see the User Guides for those cartridges.	he Cartridge for
This o	chapter contains the following sections:	
Introd	uction to Dashboards	
Comm	non Views	
Creati	ing a Custom Dashboard	76
Viewir	ng Dashboard Properties	
Worki	ng With Tables	
Printin	ng Views	

vFoglight User Guide

Introduction to Dashboards

vFoglight displays monitoring data in views that group, format, and display it.

Dashboards are top-level views that do not need to receive data from other views. Dashboards usually contain a number of lower-level views. The dashboards supplied with vFoglight, as well as those created by users, are available in the navigation panel.

Lower-level views in vFoglight can be added to dashboards or can be accessed by drilling down from a dashboard. They receive and display data directly from the vFoglight Management Server or from other views. Some views filter or select data that appears in other views in the same dashboard. Some are tree views with expandable nodes for selecting servers, applications, or data.

Display Functions

vFoglight provides various ways in which you can modify a view or display the data in a different format. For example, you can select metrics, select a data object to update a view, or change the time range. These functions are available as drop-down lists or table filters, in dialogs, or through menus.

This section describes the following functions that you can use to modify a view:

- "Tooltips, Dwells, and Popups" on page 50
- "Time Range" on page 51
- "Splitter" on page 56
- "Columns" on page 56
- "Drop-Down Lists and Trees" on page 56

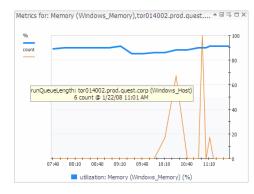
Tooltips, Dwells, and Popups

Different types of smaller views provide additional detail about an element in a view. Examples of these views are:

- A tooltip element describes what it represents when you hold the cursor over a status icon. Tooltips also appear when you hold the cursor over a line in a chart.
- A dwell displays additional information about the item when you hold your cursor over a line in a table.
- A popup displays additional information and options if you click a line in a table.

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Tooltips and dwells disappear when you move the mouse, but a popup remains open until you close it by clicking outside it or clicking the close icon \times in the corner. You can also maximize some popups by clicking the maximize icon \square in the upper right corner.



Time Range

The time range at the top of a dashboard indicates the current time range for all the views on the page. If some of the views have independent time ranges, the time range is not displayed.

By default, the time range in a dashboard is displayed in real time. You can "freeze" the time range so that the views are fixed at a certain range. This is helpful for diagnostic purposes when you do not want to receive new data. For further details, refer to "Freezing a time range" on page 52.

Changing the time range in a dashboard affects all the views in the dashboard. If an individual view in a dashboard has a different time range, that takes precedence over the time range for the dashboard.

Clicking the time range opens a menu where you can select another time range or select Custom to specify a range.

Standard Time Ranges

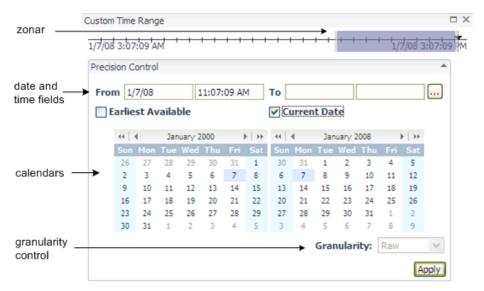
The time range menu lists the standard ranges. When you select one of these options, all the views in the dashboard are automatically updated, unless they were created with a time range other than the global one.

Custom Time Ranges

To set a specific time range, you select Custom from the time range menu to open the Custom Time Range dialog. Initially, only the Zonar is displayed. Clicking the down-

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arrow beside Precision Control expands the dialog to display the Precision Control options. Clicking the browse button ... to the right of the date fields displays the calendars.



The Precision Control section contains the following settings:

- From and To date and time fields (see page 55)
- Earliest Available and Current Date check boxes (see page 55)
- Calendars (see page 55)
- Granularity options (see page 55)

Except for granularity, changing any of these settings automatically updates the views.

The time range for a summary view is likely to be different from the time range for a detail view. Therefore, the time range that you select affects only the current view and drill-downs from it; it does not affect higher-level views.

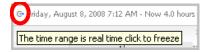
Freezing a time range

By default, the time range on a dashboard is displayed in real time. You can tell this ata-glance if the word *Now* is shown in the time range display. You can disconnect from real time and "freeze" a dashboard at a specified time range. When this occurs, the views on the dashboard will not receive any new data.

To freeze a time range:

- 1 Select the dashboard for which you want to freeze the time range.
- 2 Click the 🕞 icon to the left of the displayed time range at the top right of the dashboard.

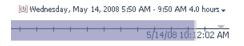
Tip When you hover over the icon a popup indicates if the time range is real time or frozen:



The time range is set and the icon changes to [19].

Hover over the icon to display the message: *Time range is in the past, click to switch to real time.*

3 If you later refresh a dashboard, you may notice that the time range remains fixed even though the time that is displayed in the Zonar changes. For example, in the screen shot below, the time range ends at 9:50 while the current time is 10:12.



To unfreeze a time range:

• Click the 🕑 icon.

The time range changes to end at the last monitoring time range that you used (for example, the last four hours).

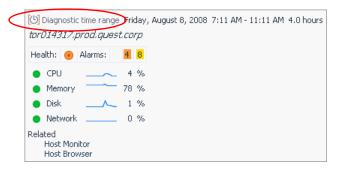
Diagnostic Time Range

In vFoglight versions 3.0, if you drilled down the path for an old alarm, all of the drilldowns applied to the current time, not the time that the alarm occurred. In versions 3.0.1 (or later), the time-sync function called the diagnostic time range was added to drill-downs.

The diagnostic time range shows a 4 hour window, where the alarm time range is placed 3 hours into the window (e.g. 3 hours prior and one hour past the alarm). The diagnostic time range stays frozen until you unfreeze (toggle) the time range.

The diagnostic time range function works as follows:

- For any alarm that is not in the current time range, if you click on a drill down, places you into a diagnostic time range.
- Some drill-downs indicate that you are in diagnostic time range as shown in the dialog box below.





Zonar

At the top of the dialog is a sliding bar called the Zonar. When you place your mouse over the bar, a popup displays the current date, time, and time range.



Click in the middle of the range to drag the Zonar to the left or the right. The start and end times of the range changes, but keeps the same time period. You can increase or decrease the time period by dragging the sides of the range. As you drag, the popup displays the new range.

As you drag the edges of the range, the Zonar scale automatically adjusts, increasing or decreasing the units of time. For example, in the above screen shot, the time range is four hours. If you drag the left edge of the range as far as you can, the range increases by about eight hours. When you stop dragging, the scale automatically adjusts and you can then drag the edge further.

If you drag the right edge of the range when the time range is in real time (the word *Now* is shown in the time range display), the range will persist for the duration (for example, 4.5 hours) and not to the specific date/time to which it was set.

Precision Control

The Precision Control section is collapsed when the dialog opens. To display it, click the down arrow to the right of **Precision Control**.

Date and Time Fields

Type specific dates and times for the range. If you enter an incorrect date or time, a red exclamation mark is displayed at the right of the field and you cannot apply the changes. You can also use the Earliest Available or Current Date check box to set the time range.

Calendars

If you prefer to use a calendar to select dates, click the browse button . to the right of the date and time fields to display start-date and end-date calendars.

Granularity

Granularity controls the size of the metric intervals. The default option is Raw, which displays the actual collected data points. The Auto option uses intervals that are sized according to the time range. For example, a one-hour range has five-minute intervals, while a one-week range has one-hour intervals. If you choose an option other than the default, click **Apply** to update the views.

Caution If you set too large an interval, there may not be enough points to plot on a chart. For example, if you only have one day of data, an interval of six months will result in a single point. If an interval is too small, there may be too many data points to display if the chart is small.

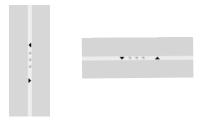
The maximum and minimum values of a metric are actual numbers, while data points inside an interval are averaged. Agents may report their data at uneven intervals. vFoglight sets the data to be plotted in evenly-spaced intervals using data collected from any number of agents.

To do this, the data points inside the interval are averaged. This has the effect of evening out the maximum and minimum values if an interval contains more than one real data point. The maximum and minimum values of a metric are based on real data and not an averaged value. These values are often plotted as markers on the chart. Therefore the averaged values on the plotted curve or bar may not match the real values of the markers.

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Splitter

Composite views may have a moveable bar, or splitter, between the two views. It can be either horizontal or vertical. You can move it back and forth to resize the views on either side.



The splitter has two arrows facing in opposite directions. When you click an arrow, the view it is facing collapses, the splitter moves to the edge of the remaining view, and only the other arrow is visible. You can restore the hidden view by clicking the other arrow.

Columns

When you are creating a custom dashboard or report, you can choose one of the options under Columns under the General tab in the action panel to divide the display area into one, two, or three columns.



Drop-Down Lists and Trees

Drop-down lists are views that change the context of other views, such as those in the same container view. When you select an item from a drop-down list, the view is refreshed with new data. For example, a view may contain a drop-down list of metrics, a chart, and a table. Selecting a different metric changes the context of the page, and the chart and table are updated accordingly.

A drop-down list displays a list of single options. A tree expands to display a hierarchy of options. They have the same effect on the context.

Customizer

The Customizer icon is available for charts and tables.

Note To access the customizer it needs to be enabled. Customizers are not enabled by default.

If the Customizer icon 🗮 is enabled you can:

- Change the chart type dynamically. See "Changing the Chart Type" on page 81.
- Export charts and tables to PDF or CSV format. See Exporting Data from Charts and Tables.

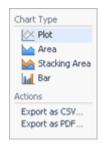
Exporting Data from Charts and Tables

The option to export data to CSV and PDF format is available for charts and tables.

For example, you can create new graphs using drag and drop metrics onto a dashboard, and then export the data to CSV output. Therefore, you can create multiple metrics, set a time range, export to CSV, and then open the data in Excel.

To export charts to CSV or PDF format:

- 1 Navigate to the chart or table you want to export.
- 1 Click the Customizer icon 🗄 in the top right hand corner of the table or chart.
- 2 Choose either Export as CSV or Export as PDF.



3 If you chose **Export as CSV**, choose if you want to open or save the file.

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Common Views

vFoglight makes use of common views in most of the standard dashboards. Using common views in pre-declared dashboards is an effective way to enable and create easy workflows. Examples of views used in most of the dashboards include the Alarm list display and the Host summary display.

Alarm List

When a list of alarms is shown, the same alarm list view appears as a popup or fixed path depending on the navigation path.

				ntre System (Not Including	SLA Alams)				Alarm Filter Not Si
12 Ali	etti(s) 4 Error Instar	ce(s) 1	Related H	iost(s) 3 Related Agent(s)					
elect a	All Unselect All Acient	nledge C	her.] /4.						
54	r. True *	Acked	Cleared	Host	Instance	Message	Orign	Agent	Agent Type
	10/24/08 8:02 AM	N	N.	tor014004.prod.guest.corp	TopMemoryConsumerSes.	tor014004.prod.quest.corp Terminal Session: Consol	SessionMemory	Instance1	TerminalServer
1 0	10/25/08 3-45 PM	Ν.	- Y.	toi014004,prod.qumit.corp	TopMenoryConsumerSes	tori014004 grod-quest-corp Terraral Session: Consol.	Session/Memory	Instances!	TerrinalServer
1.0	10/23/08 3:16 PM	Ν.	N.	tor014004.prod.guest.corp	EveniLog	NT Event Logi System Print Printer TORPTRHOS on TO	EventLog	Instancel	Windows_System
1.0	10/23/08 3:16 PM	N	14	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRHO4 on to	Eventiog	linkarice1	Wadows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Logi System Print Printer TORPTRHO4 on to	Eventilog	Instance1	Windows_System
1 0	10/23/08 3:16 PM	Ν.	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTPHO4 on to	EventLog	Instance1	Windows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Logi System Print Printer TORPTRH05 on TO_	Eventilog	Instances	Windows_System
1 0	10/23/08 3:16 PM	Ν.	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRHOS on TO	EventLog	Instance1	Windows_System
	10/23/08 3:10 PM	N	N.	tor014004.prod.quest.corp	EventLog	NT Event Log: Application beasv: The description f	EventLog	Instance!	Windows_System
1 0	10/23/00 3:10 PM	Ν.	N:	tor014004.prod.quest.corp	EventLog	NT Event Log: Application beasive The description F	Eventiog	Instancei	Windows_System
	10/23/00 3:02 PM	N	Ν.	tor014004.prod.quest.corp	AppMonitor_Instance1	Agent "AppMonitor_Instance1@tor014004.prod.quest.c	Agent Health State	Instance!	AppMonitor
	10/23/08 3:00 PM	N	N:	tor014004.prod.guest.corp	AgentHsgs	Agent can not continue because there are no applic	AgentMsgs	Instancei	AppMonitor

The Alarm list view displays a summary of alarms by severity level at the top. The counts in the title are for outstanding alarms. The Outstanding Alarms view shows Ack'ed and Cleared columns containing a Y (Yes) or N (No) to indicate the Acknowledgement status. While the Alarms list also shows cleared alarms, the cleared alarms are not included in the count for outstanding alarms. Cleared alarms appears dimmed out. Cleared alarms can be filtered out. You can also apply a filter to the alarm list using other criteria, as described in "Filtering the Alarms View" on page 62.

Managing Alarms

You can select an individual alarm and once selected, choose to take action on the alarm that has been fired such as **Acknowledge** or **Clear**. For further information, refer to either "Acknowledging an Alarm" on page 63 or "Clearing an Alarm" on page 65.

The Alarm list view allows you to choose from four different perspectives on alarms:

- Current Alarm(s)
- Error Instance(s)
- Related Host(s)

• Related Agent(s)

Current Alarm(s)

By default, you see the list of alarms with the ability to sort the alarms by different elements (Severity, Time, Ack'ed, Cleared, Host, Instance, Message, Origin, Agent, Agent Type).

Error Instance(s)

The Error Instances option lists the agents containing data that triggered an alarm in the Outstanding Alarms table. For each error instance triggered, it indicates its state of health, number of each type of alarm, and its health history.

In the example shown below, the alarms are grouped according to their source (Long Name).

10 Alarm(s) 5 Error Instance(s) 1 Related Host(s) 1 P	elated Agent(s)			
Long Name	Health	Alarms	Health History	
FileSys_Table C:			No enumeration values found to display	
EventLog		2 4	No enumeration values found to display	
System_Table		1	No enumeration values found to display	
Physical_Disk_Table 0.C:	•	1	No enumeration values found to display	
Top_CPU_Table			No enumeration values found to display	

Drilldowns

The following drilldowns are available from the Alarm Source(s) table.

Select	То
Long Name	see the "Instance" on page 66. If you select an agent, you also are notified if the agent is running and the overall health state of the agent (Broken or OK).
Health icon	 see links to: health of all alarm sources health of current alarm source all outstanding alarms for that alarm source
Alarms	see a list of alarms for that alarm source

Select	То
Health History	Hover over the Health History bar to see the percentage and duration of time that the alarm source was at a certain severity level.

Related Host(s)

A convenient way to isolate issues related to systems is to show the alarms organized by the originating host. You can expand each host to see the source of the alarm. In the example below, all alarms are coming from a single host instance.

	utstanding Alarm(s)	101 101041100-010	in desired as				Alarm Filter Hot Se
10 Alarm(s)	S Error Instance(s)	1 Related Host(s)	1 Related Agent(s)				
		Long Name		Health	Alarms	Health History	
tor014400.p	rod.guest.corp (Host)				3 6	No enumeration values found to display	

Drilldowns

The following drilldowns are available from the Related Host(s) table.

Select	То
Long Name	see the "Instance" on page 66.If you select a host, the Host Summary as described on page 74 is displayed.If you select an agent, you also see if the agent is running and the overall health state of the agent (Broken or OK).
Health icon	 see links to: health of all alarm sources health of current alarm source all outstanding alarms for that alarm source
Alarms	see a list of alarms for that alarm source

Hover over the Health History bar to see the percentage and duration of time that the alarm source was at a certain severity level.

Related Agent(s)

A useful way to understand which agent is causing an alarm to fire is to show alarms organized by the agent that collected the data. You can expand each agent node to see where the agent is gathering data.

The example below shows that the Application Monitor agent is firing fatal alarms and critical alarms are coming from the Windows System agent.

h History

Drilldowns

The following drilldowns are available from the Related Agent(s) table.

Select	То
Long Name	see the "Instance" on page 66. If you select an agent, you also are notified if the agent is running and the overall health state of the agent (Broken or OK).
Health icon	 see links to: health of all alarm sources health of current alarm source all outstanding alarms for that alarm source
Alarms	see a list of alarms for that alarm source

Hover over the Health History bar to see the percentage and duration of time that the alarm source was at a certain severity level.

Filtering the Alarms View

You can filter the list in the Outstanding Alarms view using one or more of the following criteria:

- Severity (Undefined, Normal, Fire, Warning, Critical, Fatal)
- Time (range, earliest available, current date)
- Is Acknowledged (true or false)
- Is Cleared (true or false)
- Host name
- Instance
- Message
- Origin (source of an alarm)
- Whether or not the alarm has been acknowledged (True or False)
- Agent name
- Agent type

To filter the alarm list:

1 Click **Alarm Filter Not Set** in the title bar of the view. (If a filter has already been set, the link will say **Alarm Filter Applied**.). The Alarm Filter Not Set/ Applied dialog opens.

Alarm Filter Not Set	
Severity: 🔲 Undefined 🦳 Normal 💭 Fire 💭 Warning 🦳 Critical 💭 Fatal	
Created Time:	
From To	
🗖 Earliest Available 📃 Current Date	
Is Acknowledged: 🔲 True 🔲 False	
Is Cleared: 🔲 True 🔲 False	
Host Name: Use Regex	
Instance: 🗌 🗍 Use Regex	
Message: Use Regex	
Origin: 📃 Use Regex	
Agent Name: 🗌 Use Regex	
Agent Type: 🗌 Use Regex	
Find	Reset Clear

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- 2 Select or enter your filter criteria. If you want to use a calendar to choose a date or date range, click the browse button . to display two calendars. The dates that you choose in the calendars appear above in the **From** and **To** fields.
- 3 If applicable, select the Use Regex checkbox to search for a regular expression (regex). Regex is a special text string that describes a search pattern using wildcards. For example: .*\.txt\$
- 4 Click Find.

The table refreshes to display the filtered alarm data.

Hiding Columns in the Alarms View

You can hide any of the columns in the Outstanding Alarms view.

To hide columns:

1 Click the edit icon (\equiv) above the table.

A popup displays a list of the columns in the table.

2 De-select the columns that you want to hide and click **Apply**.

The de-selected columns are removed from the table.

Acknowledging an Alarm

The Ack'ed and Cleared columns in the Outstanding Alarms view indicates if an alarm has been acknowledged. If an alarm has not yet been acknowledged, the column displays N. When you acknowledge an alarm, the column appears with a Y. The name of the person who acknowledged it is also indicated. This information is also stored in an audit report. You also have the option of adding a note (see "Alarm Notes" on page 70) to indicate an alarm has been acknowledged.

To acknowledge an alarm:

- 1 In the Alarms view, select the alarm(s) in the alarm table that you want to acknowledge.
- **2** To acknowledge the alarm from the Outstanding Alarms list, click **Acknowledge** at the top of the table:

3	7: 11 Outstanding A	larm(s) fi	or the Er	tire System (Not Including	SLA Alarms)				Alarm Filter Not Se
12 Ak	em(s) 4 Error lost an	ce(c) 1	Related F	tost(s) 3 Related Agent(s)					
Select.	All Unselect II Advo	wiedge C	ear 15						
Se	v Time *	Auted	Cleared	Host	Instance	Message	Origin	Agent	Agent Type
	10/24/00 0:02 AM	N	N	tor014004.prod.quest.corp	TopMemoryConsumerSes	tor014004.prod.quest.corp Terminal Session: Consol	SessionMemory	Instance1	TerminalServer
	10/23/08 3:45 PM	N	¥.	tor014004.prod.quest.corp	TopMemoryConsumerSes	tor014004.prod.quest.corp Terminal Session: Consol	SessionMemory	Instance1	TerminalServer
	10/23/08 3:16 PM	N	N	tor014004.prod.guest.corp	EventLog	NT Event Log: System Print Printer TORPTRH05 on TO	EventLog	Instance1	Windows_System
	10/23/00 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH04 on to	EventLog	Instance1	Windows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH04 on to	EventLog	Instancel	Windows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.guest.corp	EventLog	NT Event Log: System Print Printer TORPTRH04 on to	EventLog	Instance1	Windows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH05 on TO	EventLog	Instance1	Windows_System
	10/23/00 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH05 on TO	EventLog	Instance1	Windows_System
	10/23/08 3:10 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: Application beasvc The description f	EventLog	Instance1	Windows_System
	10/23/08 3:10 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: Application beasvc The description F	EventLog	Instance1	Windows_System
5	10/23/00 3:02 PM	N	N	tor014004.prod.quest.corp	AppMonitor_Instance1	Agent "AppMontor_Instance1@tor014004.prod.guest.c	Agent Health State	Instance1	AppMonitor
2	10/23/08 3:00 PM	N	N	tor014004.prod.quest.corp	AgentMsgs	Agent can not continue because there are no applic	AgentMsgs	Instancel	AppMonitor

The Alarm status in the Ack'ed column changes to Y to indicate the alarm has been acknowledged. If you hover over the Y, your user name appears in the By user column for that alarm.

1 3	Z.	11 Outstanding A	larm(s) fo	or the Er	tire System (Not Including	SLA Alarms)				Alarm Filter Not Se
12	Alarr	m(s) 4 Error Instan	ce(s) 1	Related H	lost(s) 3 Related Agent(s)					
Sele	ct Al	Unselect All Admos	wledge C	ear 15						
	Sev	Time 🖛	Ad/ed	Cleared	Host	Instance	Message	Origin	Agent	Agent Type
	۰	10/24/08 8:02 AM	N	N	tor014004.prod.quest.corp	TopMemoryConsumerSes	tor014004.prod.quest.corp Terminal Session: Consol	SessionMemory	Instance1	TerminalServer
	•	10/23/08 3:45 PM	N	Y	tor014004.prod.quest.corp	TopMemoryConsumerSes	tor014004.prod.guest.corp Terminal Session: Consol	SessionMemory	Instance1	TerminalServer
	•	10/23/08 3:16 PM	N	74	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH05 on TO	EventLog	Instance1	Windows_System
	•	10/23/08 3:16 PM	74	74	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH04 on to	EventLog	Instance1	Windows_System
	•	10/23/08 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH04 on to	EventLog	Instance1	Windows_System
	•	10/23/00 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH04 on to	EventLog	Instance1	Windows_System
	•	10/23/08 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH05 on TO	EventLog	Instance1	Windows_System
	•	10/23/08 3:16 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System Print Printer TORPTRH05 on TO	EventLog	Instance1	Windows_System
		10/23/08 3:10 PM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: Application beasvc The description f	EventLog	Instance1	Windows_System
	•	10/23/08 3:10 PM	74	74	tor014004.prod.quest.corp	EventLog	NT Event Log: Application beasvc The description f	EventLog	Instance1	Windows_System
	۲	10/23/08 3:02 PM	(N)	N	tor014004.prod.quest.corp	AppMonitor_Instance1	Agent "AppMonitor_Instance1@tor014004.prod.quest.c	Agent Health State	Instance1	AppMonitor
	٠	10/23/08 3:00 PM	Y	N	tor014004.prod.quest.corp	AgentMsgs	Agent can not continue because there are no applic	AgentMsgs	Instance1	AppMonitor
			\neg	Acknow	wedgment Status Advorde	dged				
				By Use	r frirae					
				Acknow	wiedged Time 10/24/08	10:23 AM				

Note Alternatively, you can acknowledge an alarm using the Alarm Details dialog box.

a In the Outstanding alarms view, click **N** beside the alarm that you want to acknowledge.

The Alarm Details dialog box appears.

arm Detail								
Created Time 10/23/08	3:10 PM			Origin		EventLog		
Message and Help			Host		tor014004.prod.quest.cor			
NT Event Log: Application		Instance1						
Source (beasvc) could not	; be found.	Agent	Туре	Windows_System				
				Create	d By	EventLog		
				Defaul	t Drilldown	n/a		
10/00/00 0:10 014	-	40 hr	Status	By User			By	
10/23/08 3:10 PM	۲	19 hr	Not Ack'ed	1	lot Cleared		0 🔒	

b Click Acknowledge.

Your user name appears in the Ack'ed column for that alarm. The Alarm status in the Ack'ed column changes to Y to indicate the alarm has been acknowledged.

Alarm Detail								
Created Time 10/23/08 3:1	IO PM				Origin	EventLog		
Message and Help					Host	tor014004.	prod.quest	.corp
NT Event Log: Application bea		description I	for Event ID (!	5) in	Agent	Instance1		
Source (beasvc) could not be	found.				Agent Type	Windows_S	ystem	
					Created By	EventLog		
					Default Drilldown	n/a		
10/23/08 3:10 PM		20 hr	Status Ack'ed	By Use ihirae	r Status Not Cleared	By	0 🗖	-
10/23/08 3:10 PM		20 hr	Ack'ed	jhirae	Not Cleared		0 🔒	

If you want to acknowledges the current alarm and all consecutive alarms fired by the same rule on the same instance, click **Acknowledge Until Normal**. This option is available to an outstanding (not-yet-cleared) alarm only.

You can also apply a note to alarm. See "Alarm Notes" on page 70.

Clearing an Alarm

The Alarms table list all alarms including cleared alarms in a given time range. Cleared alarms are shown by default. You can filter out cleared alarms using the alarm filter. See "Filtering the Alarms View" on page 62.

As a visual cue, cleared alarms appear dimmed out. This applies to all alarms that are cleared regardless of the time range. You can add a new note (see "Alarm Notes" on page 70) or acknowledge an alarm (see "Acknowledging an Alarm" on page 63), even though it is cleared. The Cleared column in the Outstanding Alarms view indicates the status on whether a cleared alarm was not acknowledged (N) or the cleared alarm has been acknowledged (Y).

If the same condition that caused the alarm to fire occurs again in the next sampling interval, the alarm will reappear in this table.

To clear an alarm:

1 In the Outstanding Alarms view, click the check box beside the alarm that you want to clear.

2 Click **Clear** above the table.

11	Alare	(c) A Energ Testance	-		st(s) 1 Related Agent(s)					
		A manufacture of the second second	1	designed to be a second	er(z) 1 kierenen Hilleuetz)					
Sele	ect Al	Unselect All Acknow	iedite	Ciew 1 +		terrester.	Mentana	Canan		Anart Tuma
P	0	10/23/08 11:40 PM	N	N	tor01++68.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent A	EventLog	win1	Windows System
0	0	10/23/08 1:57 PM	_N	N	tor014468.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent U	EventLog	evin1	Windows_System
	•	10/23/08 1:57 PM	N	N	tor014488.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent U	EventLog	i.win1	Windows_System
5	0	10/23/08 1:57 PM	н	N	tor014468.prod.guest.corp	EventLog	NT Event Log: Application PatchLink Update Agent P	EventLog	wint	Windows_System
		10/23/00 11:36 AM	Y	N	tor01+400.prod.quest.corp	Physical_Disk_Table	Disk 0 Cr's: utilization is \$.00% and the Queue le	Disk_Utilization	erin1	Windows_System
		10/23/00 11:32 AM	¥	N	tor014408.prod.quest.corp	FileSys_Table C:	FileSystem C:: free space remaining 1.00% (2234.00	Capacity	wint	Windows_System
		10/24/08 12:03 PM	N	Y	bir014488.prod.quest.corp	System, Table	CPU Utilization is at 5.00% and the number of proc.	CPU_Utilization	wind	Windows System
Ē.		10/24/08 11-45 AM	24	¥	tor014468.prod.quest.corp	System_Table	CPUS Utilization is at 9.00% and the number of proc.	CPU, Lhilzston	with.	Windows, System
		10/24/00 11:03 AM	N	¥.	tor014400.prod.quest.corp	System, Table	CPU Utilization is at 16.00% and the number of pro	CPU_Utilization	-	Windows System
3		10/24/08 10:59 64	.11	Υ	tor014468.prod.quest.corp	System_table	CPU Utilization is at 7.00% and the number of proc	CPU_Utilization	emi	Windows_System
Ċ,		10/23/05 8:44 #98	74	¥.	deno.temp.borg.05H1Drod	Everitlog	NT Everyt Log: System at 2xit ag mill	Eventing	weil	Windows System

The Alarm Status in the Cleared column changes to indicate the alarm has been cleared and the cleared alarm is dimmed out. The alarm is removed from the count for outstanding alarms.

	13	5 Outstanding Ala	rm(s) for	the Enti	re System (Not Including S	LA Alarns)				Alarm Filter Hot Se
11	Alar	(1) 4 Error Instanc	e(s) 1.9	telated Ho	tt(s) 1 Related Agent(s)					
Sele	ect Al	Unselect All Acimo	ledge O	Har 1 12						
	Sev	Title -	Ackled	Cleared +	Host	Instance.	Message	Origin	Agent	Agent Type
		10/23/08 1:57 PM	N	N	tor014488.prod.quest.corp	EventLog	NT Event Log: Application PatchEek Update Agent U	EventLog	wint	Windows_System
5	•	10/22/00 1:57 PM	N	N	tor014408.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent U	EventLog	vint	Windows_System
0	•	10/23/08 1:57 PM	N	N	tor014488.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent P	EventLog	win1	Windows System
5		10/23/08 11:36 AM	¥.	N	tor014488.prod.quest.corp	Physical_Disk_Table -	Disk 0 Cris: utilization is 1.00% and the Queue le	Disk_Utilization	wint	Windows_System
5		10/23/08 11:32 AM	Υ.	N	tor014488.prod.quest.corp	FileSys_Table C:	FileSystem C:: free space remaining 1.00% (2234.00	Capacity	Inter	Windows_System
Ū.	ē	10/24/08 12:03 PH	N.	Y	tor014488.prod.quest.corp-	System_Table	CFU Utilization is at 5.80% and the number of proc	CPU, Litikzation	wint	Windows System
-	÷.	10/24/08 11/45 AM	N.	× .	toril14988.print.dumit.corp	System_Table	CPU Utilization is at 9.00% and the number of proc	CPU_Utilization	unt.	Windows_Zystem
Ċ.		10/24/08 11:35 AM	N.	- ¥ 1	tor014406.prod.quest.corp	System_Table	CPU U6Ization is at 16.00% and the number of pro	CPU_UKRastion	witt	Windows_System
		1023405 10-59 AM	11	14	India 468 and mesh com	Suiten Table	CPUILISinglian to at 7.00% and the number of store	CPU URBRIDGO	uni	Windows System
		10/23/00 11:40 PM	11	¥.	tor014468.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent A.	Eventios	1000	Windows System
Γ.		10/23/08 8:44 PM	N.	¥.	tor014488.prod.quest.corp	Eventuog	NT Event Log: System at 2ntog null	EventLog	wet .	Windows System

Alternatively, you can clear an alarm from the Alarms Details dialog box.

Instance

When you select the instance of the alarm (e.g. in the Alarm list when looking at a list of Outstanding alarms, or when looking at alarms grouped by Alarm source), a common health summary for the data that triggered the alarm appears:

12 Al	arm(s) 4 Error Instance	e(s) 11	Related Hos	st(s) 1 Related Agent(s)						
Select	All Unselect All Acknow	vledge (lear 🗮							
Se	v Time	Ack'ed	Cleared 🔺	Host	Instance	Message	Or	igin /	Agent	Agent Type
	10/24/08 1:40 PM	N	N	tor014488.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent A	EventLo	g (win1	Windows_System
	10/23/08 1:57 PM	N	N	tor014488.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent U	EventLo	g (win1	Windows_System
	10/23/08 1:57 PM	N	N	tor014488.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent U	EventLo	g (win1	Windows_System
	10/23/08 1:57 PM	N	N	tor014488.prod.quest.corp	EventLog	NT Event Log: Application PatchLink Update Agent P	EventLo	g (win1	Windows_System
	10/23/08 11:36 AM	Y	N	tor014488.prod.quest.corp	Physical_Disk_Table	Disk 0 C:'s: utilization is 1.00% and the Queue le	Disk_Uti	lization v	win1	Windows_System
	10/23/08 11:32 AM	Y	N	tor014488.prod.quest.com	FileSys_Table C:	FileSystem C:: free space remaining 1.00% (2234.0	0 Capacity	/ \	win1	Windows_System
	10/24/08 12:03 PM	N	Y	tor014488.prod.quest.corp	System_ Rig	time range Thursday, October 23, 2008 8:32 AM - 12	-00.0M 4.0 haven	zation v	win1	Windows_Syster
	10/24/08 11:45 AM	N	Y	tor014488.prod.quest.corp	System - FileSys Tab		:52 PM 410 Hours	zation v	win1	Windows_System
	10/24/08 11:33 AM	Ν	Y	tor014488.prod.quest.corp	System			zation v	win1	Windows_System
	10/24/08 10:59 AM	N	Y	tor014488.prod.quest.corp	System_	Alarms:		zation v	win1	Windows_System
	10/23/08 11:40 PM	N	Y	tor014488.prod.quest.corp	EventLog Agent: win1			1 1	win1	Windows_System
	10/23/08 8:44 PM	N	Y	tor014488.prod.quest.corp	EventLog Host: tor01	4488.prod.quest.corp			win1	Windows_System
					Related NT FileSy	stem_Space_Overview				

The health summary:

- shows the number of alarms by severity and the overall health of the selected alarm source.
- provides links to the agents and host for the alarm source.
- provides a list of related views that show quick drilldowns to help identify the root cause. This list is based on the views that match the type of the alarm source. The related views are often provided by cartridges. If no related views are available, then the default views (e.g. Data Browser, Summary) are provided.

Alarm Details

The Alarm Details summary is shown when an alarm message, severity icon, alarm time, or agent type is selected.

You can check alarm details to view more information about an alarm in the alarms table. For example, if you are concerned about a particular alarm, click the alarm severity in the alarms table to view the alarm details. On the alarm details dialog box you can view the table that illustrates how the alarm has changed state in the current time range.

The Alarm Details dialog box shows alarms related to the current alarm in the given time range, acknowledgement information of these alarms (such as whether an alarm has been acknowledged or is not acknowledged), clearing information of these alarms, and any alarm notes added to these alarms. The alarm details view also shows the full alarm history. This includes all consecutive alarms fired by the same rule on the same instance regardless of the time range. The default for 'consecutive' is 5 seconds.

rm Detail	Time 10/24/6	0 0.01									
Created Time 10/24/08 8:02 AM						Orig		TopMemoryConsumerSession			
Message and Help tor014004.prod.quest.corp Terminal Session: Console run by user: corection of the session o							t	tor014004.prod.quest.corp Instance1			
							nt				
STOLEMIS	consuming of	nsuming 81% of system memory. Agent Type			TerminalServer						
						Cre	ated By	SessionMemory			
						Def	ault Drilldown	n/a			
Create	ed Time 🔻	Sev	Dur	Ack'ed Status	Info By User	Status	-	fo Bv		lotes	
Create	ed Time 🔻	Sev	Dur	Ack'ed		Status	Clearing In		- 1	lotes	
10/24/08 1	0:48 AM	0	2.8 hr	Not Ack'ed		Cleared	System: Sessi	onMemory	0		1
10/24/08 8	:02 AM	۲	2.8 hr	Not Ack'ed		Cleared	System: Sessi	onMemory	0		
10/23/08 3	:45 PM	0	16 hr	Not Ack'ed		Cleared	System: Sessi	onMemory	0		
					nowledge		knowledge Until I				nce

Drilldowns

The following drilldowns are available from the Alarm Details with Actions popup.

Select	То
Instance	The data that triggers an alarm. See "Instance" on page 66.
Host	see the Host Summary as described on page 74.
Agent	see the "Instance" on page 66, as well as an indication as to the status and state of the agent (Broken or OK).
Agent Type	see the "Instance" on page 66, as well as an indication as to the status and state of the agent (Broken or OK).

Select	То				
Origin (by rule)	 displays the origin of the alarm. You can access links to: Rule Details—to view a short synopsis about the rule Edit Rule—to edit the rule definition Rule Help—to display online help about the rule To edit a rule, select the rule name and then select Edit Rule Definition. The Rule Editor appears. For further information on editing rules, refer to the <i>vFoglight Administration and</i> <i>Configuration Guide</i>. 				
Default Drilldown	see the view associated with the rule that is listed in the by Rule field. From the view, you can then drill down to see additional details. If a view is not available for a rule, N/A is displayed.				
Severity and Message at	show the date and time when the alarm severity occurred along with a description.				
History tab	 view a history of alarms for the: Created Time (time when the alarm occurred) Sev (alarm severity when the alarm occurred) Dur: duration of length of time that the alarm was in the associated state. Acknowledgment Info (indicating the status if the alarm was acknowledged or not, and by whom). For further information, refer to "Acknowledging an Alarm" on page 63. Clearing Info (indicating the status if the alarm has been cleared or not, and message). For further information, refer to "Clearing an Alarm" on page 65. Notes. Click the Notes icon to display the notes that were added to the alarm. Clicking the Notes icon takes you to the Alarm Notes tab described below. For more information on notes, see "Alarm Notes" on page 70. 				

Select	То
Notes tab	Displays a list of all alarm notes added to the alarm. Alarm notes allow you to record information about an alarm for yourself and for others. For example, after acknowledging an alarm you can include a note and details as to the alarm. All users can view and create a note but only the author of the note can edit or delete an existing note. Notes can be added to any alarm at any time even after the alarm has cleared. Alarm notes display:
	 Created Time (time when the note was created) Description of the note User who created the note An Edit icon to enable the creator of the note to change the note description. For more information, see "Alarm Notes" on page 70.

Alarm Notes

Alarm notes provide you with a handy way to record information about an alarm for all other users to view. For example, if you are managing alarms during an installation of vFoglight and if an urgent alarm comes up, you can add a note to the alarm that you are checking if the back-up process may be causing the problem. The note, along with a username stamp and a timestamp, are attached to the alarm.

There are two ways you can add notes from the Alarm Details dialog box by using either the:

History tab. The Notes icon in the Alarm History table is for maintaining notes attached to a particular alarm in the history table. Clicking the Notes icon, takes you to the Alarm Notes dialog box.



• **Notes** tab. In the Notes tab, new notes are automatically attached to the most recent alarm in the alarm history.

Alarm Detail						
Created Time 10/30/0	d Time 10/30/08 10:00 PM EventLog					
Message and Help			Host	tor014488.prod.quest.corp		
NT Event Log: System a	ti2mtag null		Agent win1			
			Agent Type Windows_System			
			Origin (By Rule)	EventLog		
			Default Drilldown	n/a		
		;e		ne	Edit	
Created Time 🔻	No	.e	Usernan	ne	Edit	
11/3/08 9:21 AM	Investigating - JR		foglight		.	
		Acknowledge A	cknowledge Until No		Clear Cancel	

You can also search for a note by using the **Find** button or **Advanced** button. See "Filtering Notes" on page 73.

Creating an Alarm Note

Alarm notes consist of freeform non-localizable text, a user name and a timestamp.

To create an alarm note:

- 1 From the Alarm Details view you can either:
 - In the History tab, click on the Alarm note icon and then click Add.
 - In the Notes tab click New.
- 2 In the Add Note dialog box, type a description of the note.

Add Note	×
Checking backup process	A
	-
	Add Cancel

3 Click Add.

The description is added to the Alarm Notes dialog box.

You also have the option to:

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- Acknowledge the current alarm. See "Acknowledging an Alarm" on page 63.
- Acknowledge Until Normal. Selecting this option acknowledges the current alarm and all consecutive alarms fired by the same rule on the same instance. This option is available to an outstanding (not-yet-cleared) alarm only.
- Clear the selected alarm. See "Clearing an Alarm" on page 65.

Editing an Alarm Note

Only the creator of the note can edit the note.

To edit an alarm note:

- 1 From the Alarm Details view, you can either:
 - From the **History** tab click the **Notes** $\overline{\mathbf{s}}$ icon.
 - From the **Notes** tab, go to step 2.
- 2 Click the Edit 🔤 icon.
- 3 In the Edit Note dialog, change the description of the note.

Edit Note	×
Checking backup process - ok	A
	-
	Submit Cancel

4 Click Submit.

The description of the note changes to the modified text.

Deleting an Alarm Note

Only the creator of the note can delete the note.

To delete an alarm note:

- 1 From the Alarm Details view you can either:
 - Click the **History** tab, and then click on the Alarm note icon.
 - Click the Notes tab.
- 2 In the Alarm Notes dialog box, select the checkbox of the note(s) you want to delete.
- 3 Click Delete.

The selected notes are removed.

Filtering Notes

You can filter notes by clicking the **Find** button or the **Advanced** button in the Notes tab of the Alarm Details dialog box. Using the Regular Expressions option when filtering notes enables you to search substrings.

To filter a note using the Find button:

- 1 In the Alarm Details view, click the **Notes** tab for a particular alarm.
- 2 Click in the textbox and type a string. If desired, click the **Regular Expressions** checkbox to filter notes on substrings.

	Created Time 10/30)/08 1:59 PM	Instance	ProcessTotals browser iexp		
9	Message and Help		Host	tor014002.prod.quest.corp appmonitor2 AppMonitor		
		1.00 instances of the process "iexplore"	Agent			
	 have been found; The ieopardy. 	e availability of the application "browser" is in	Agent Type			
	Jeopardy.		Origin (By Rule)	Process_Availabilit	y .	
			D - C - dt D - dl -	App Overview with	h Zonar	
			Derault Drilldown	App Over view wid	T 20Hai	
	tory Notes New Select All Unsel	ect All 🔜 Delete 🍀 🛛 mike			anced	
	New Select All Unsel		tegular Expressions	ind Clear Adv	anced	

3 Click Find.

To filter a note using the Advanced button:

- 1 In the Alarm Details view, click the **Notes** tab for a particular alarm.
- 2 You can filter notes by using one or more of the following criteria:
 - Created Time (range, earliest available, current date)
 - Severity (Undefined, Normal, Fire, Warning, Critical, Fatal)
 - Note. Click the Use Regex checkbox to select the Regular Expressions option to filter notes on substrings.
 - User name. Click the Use Regex checkbox to select the Regular Expressions option to filter a user name on substrings.

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Created Time	то
Earliest Available	Current Date
Severity 🔲 Undefined 🔲 Normal 📄 Fire 🛄 1	Warning 🥅 Critical 🥅 Fatal
Created Time	
Earliest Available	Current Date
Note Use	Regex
Username	Use Regex
	Find Clear

3 Click Find.

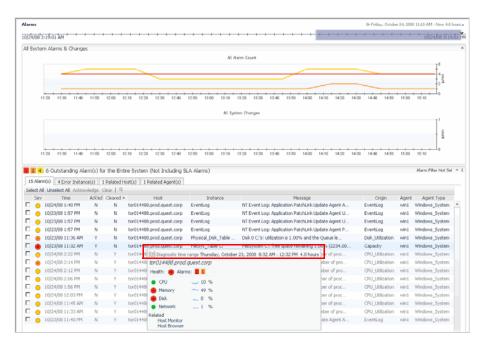
Host Summary

When a host summary or Host object is shown in the browser interface, you can view a host summary popup or dwell.

9.0	18 Outstanding Ala	rm(s) for	the Ent	tire System (Not Including SL	A Alarms)					Alarm Filter Not Se
19 Ala	rm(s) 4 Error Instano	(s) 1 P	elated Ho	st(s) 3 Related Agent(s)						
Select 4	All Unselect All Acknow	ledge Cle	ar 15							
Sev			Cleared	Host	Instance	Message		Origin	Agent	Agent Type
	10/24/08 10:53 AM	N	74	tor014004.prod.quest.corp	EventLog	NT Event Log: System TermServDevice	s Driver AdobeP	EventLog	Instance1	Windows_System
	10/24/08 10:53 AM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System TermServDevice	s Driver Canon	EventLog	Instance1	Windows_System
	10/24/08 10:53 AM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System TermServDevice	s Driver WebWor	EventLog	Instance1	Windows_System
	10/24/08 10:53 AM	N	N	tor014004.prod.quest.corp	EventLog	NT Event Log: System TermServDevice	s Driver AdobeP	EventLog	Instance1	Windows_System
	10/24/08 10:48 AM	N	N	tor014004.prod.quest.corp	TopMemoryConsumerSes	tor014004.prod.quest.corp Terminal Se	ission: Consol	SessionMemory	Instance1	TerminalServer
	10/24/08 8:02 AM	N	Y	tor014004.prod.q Rts Diagnost	ic time range Thursday, Ortobe	r 23, 2008 12:00 PM - 4:00 PM 4.0 hours	ssion: Consol	SessionMemory	Instancei	TerminalServer
	10/23/08 3:16 PM	N	N		prod.quest.corp		PTRH05 on TO	EventLog	Instance1	Windows_System
	10/23/00 3:16 PM	N	N	handland and a	Alarms: 2 0		PTRH04 on to	EventLog	Instancel	Windows_System
	10/23/08 3:16 PM	N	74	tor014004.prod.g			PTRH04 on to	EventLog	Instance1	Windows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.q • CPU	_ 7 %		PTRH04 on to	EventLog	Instance1	Windows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.q Memory			PTRH05 on TO	EventLog	Instance1	Windows_System
	10/23/08 3:16 PM	N	N	tor014004.prod.q Disk	0 %		PTRH05 on TO	EventLog	Instance1	Windows_System
	10/23/08 3:10 PM	¥	N	tor014004.prod.q • Networ	k _ 3 %		escription f	EventLog	Instance1	Windows_System
	10/23/08 3:10 PM	N	N	tor014004.prod.q Related	nàor		escription f	EventLog	Instance1	Windows_System
	10/23/08 3:02 PM	N	74	tor014004.prod.q Host Bro			04.prod.quest.c	Agent Health State	Instance1	AppMonitor
	10/23/08 3:00 PM	Y	N	tor014004.prod.guest.corp	AgentMsgs	Agent can not continue because there	are no applic	AgentMsqs	Instance1	AppMonitor

A diagnostic time range is displayed at the top of the popup summary. This time range indicates the period during which the alarm was fired. It is usually in the past and is sometimes different from the time range that appears on a dashboard. For example, the following alarm occurred on Thursday October 23rd at a particular time range, while the date displayed on the dashboard is Friday October 24th.

Working with Dashboards Common Views



Drilling down from here retains the time range during which the alarm occurred. To go back to the monitoring time range you last used, "unfreeze" the range by following the procedures in "Freezing a time range" on page 52.

Drilldowns

The following drilldowns are available from the Host Summary popup.

Select	То
Health icon	 see links to: health of all alarm sources health of current alarm source all outstanding alarms for that alarm source

Select	То
Alarms	 see a list of alarms according to alarm severity. Click on a particular alarm severity to view: number of alarms for the particular severity the alarm error instance on a particular agent or host summary table of the time, instance, rule name and ack'd by details.
CPU, memory, disk, and network	see a detailed drilldown of that part of the host's performance.
Host Monitor Host Browser	see a real-time monitoring view of the host.

Creating a Custom Dashboard

In addition to using the dashboards that are supplied with vFoglight or created by dashboard developers in your organization, you can create custom dashboards for your specific needs. These dashboards can contain any combination of tables and charts that you find useful. You can use the Columns options in the action panel to choose the number of columns for the dashboard.

The custom dashboards that you create are located under My Dashboards in the navigation panel.

To create a dashboard:

1 Click Create Dashboard in the action panel.

The Create Dashboard dialog box opens.

Create Dashboard		×
Name		:
Relevant Role(s)	!≡, (none)	
Allowed Role(s)	III, (none)	
Automatically	refresh page every	
	300 seconds (default refresh interval set in user preferences) second(s)	
Context Help		~ ~
		OK Cancel

- 2 Type a unique name for the dashboard in the **Name** field. This is the only information required to create a new dashboard.
- 3 By default, a dashboard you create is not available to any vFoglight roles. You can select the default roles to control how people gain access to different parts of the browser interface. To do this, click the edit icon
 ⇒ beside **Relevant Role(s)** and/or **Allowed Role(s)** and select the appropriate roles.
 - **Relevant Role**—Select the roles for allowing existing dashboard users to view a dashboard. The option to choose a relevant role is only valid for super users such as a Java administrator who also has an operator role. Selecting the **Cartridge Developer** role enables a filter to restrict certain user roles (e.g. Operator role) from accessing the dashboard. Selecting the **Operator** role allows anyone with this role to access the new dashboard.
 - Allowed Role—determines if a user role is allowed to see the dashboard. Selecting the **Operator** role allows anyone with this role to access the new dashboard.
- 4 If you want the views in your dashboard to be refreshed at regular intervals, click the **Automatically refresh page every** check box and choose one of the options. If you choose the second option, you need to enter a number of seconds in the text box to indicate the length of the refresh interval.
- **5** You can enter a description of the dashboard in the **Context Help** text box. This text will appear in a tooltip when you hover over the dashboard name in the navigation panel.
- 6 Click OK to save your dashboard.

Two additional tabs (Views and Data) appear at the top of the action panel.

- 7 In the action panel, select the **Views** or **Data** tab and locate the views or portlets that you want to add to your dashboard. You can add both types of information to the same dashboard. For information on editing charts, see "Metrics Chart Editor" on page 83.
 - **Note** When you have finished adding views to your dashboard, you do not need to save it. It is automatically available under My Dashboards in the navigation panel.
- 8 To divide the display area into one, two, or three columns, choose the number of columns in the action panel, under the General tab > Columns.

Deleting a Custom Dashboard

You can delete any custom dashboard that you have created. You may also be able to delete dashboards created by other users, although this is not recommended. You cannot delete any default dashboards or dashboards created by dashboard developers in your organization.

To delete a custom dashboard:

- 1 Select the dashboard that you want to delete from the list under My Dashboards.
- 2 Click **Delete this page** in the action panel.

A confirmation dialog appears.

3 Click **Delete** to confirm the deletion.

The dashboard is removed from the My Dashboards view.

Working with Charts

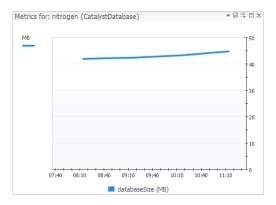
Data charting enables you to create pre-defined and customizable charts that let you access and analyze collected data.

This section describes the options available when you are adding charts to a dashboard or report that you have created.

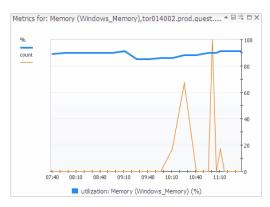
Creating a Metrics Chart

To create a metrics chart:

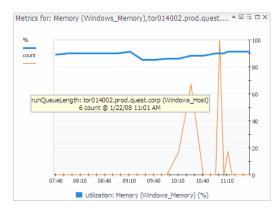
1 Drag each metric from the Data tab in the action panel into its own chart, as shown below.



2 You can also add one or more metrics to an existing chart.



- The metrics in the chart are indicated by different-colored lines at the left side of the chart under count and percentage (%).
- The line for the currently displayed metric (by default, the first one chosen) is bold. To highlight other metrics in the chart, click on the lines in the legend. The legend below the chart changes to indicate the name of the highlighted metric.
- When you hover over a line in the chart, a dwell indicates the name of the metric, as well as the count or percentage and the specific date and time when it was collected.



The Y axis shows the units for the metric. If there is more than one metric in the chart, the Y axis shows the units for the first metric that was charted, unless you have unchecked the Layout check box in the Metric Chart Default dialog (see "Setting Metric Chart Labels" on page 88 for details).

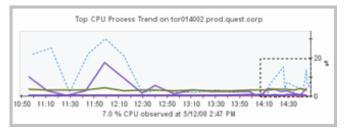
By using the Customizer function you have the option to export metric data for charts to CSV format. See "Exporting Data from Charts and Tables" on page 57.

Zooming Into Charts

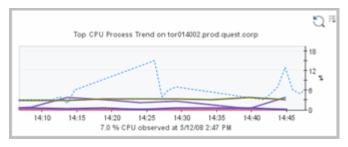
For plot or bar charts, you can zoom into an area to view data at different levels of detail by using CTRL + drag. You can also drag on an axis to specify the region you would like to zoom into (a zoom region).

To zoom into a chart:

- 1 In a line graph, zoom in to the area of the chart. Select one of the following methods to specify a zoom region:
 - press CTRL + drag on the area
 - drag on the axes of the chart



vFoglight User Guide 2 The chart will zoom into the range selected and will locally change the time range so vFoglight displays all data points. Now you can view the data for the selected metric at a more granular level.



3 To zoom out and return the line chart to its original view, click the Reset Zoom icon ^Q in the top right corner.

Changing the Chart Type

If the Customizer icon \exists is enabled for charts, you have the option to dynamically change the chart to a different chart type (bar, plot, area, stacking area). For example, choose the chart type to Area to emphasize the magnitude of change over time and illustrate the metric parts in relation to the whole graph.

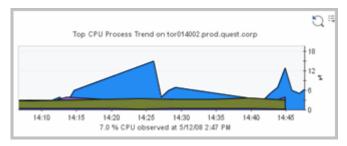
Note To access the customizer it needs to be enabled. By default, chart customizers are not enabled.

To change the chart type:

- 1 Click the Customizer icon 🗄 in the top right hand corner of the chart.
- 2 In the Chart Type dialog box, click the chart type to change.

Chart Type		
📉 Plot		
🕍 Area		
Mage Stacking Area		
📊 Bar		
Actions		
Export as CSV		
Export as PDF		

The chart dynamically changes to the selected chart type.



To export the chart to CSV or PDF format, see Exporting Data from Charts and Tables.

Chart Options

You can edit, save, maximize, restore, or close a chart by clicking the icons in the title bar. The editing options are described under "Metrics Chart Editor" on page 83.

Note All other charts are hidden when you maximize a chart.

To save a chart:

1 Click the save icon 🖬 in the title bar of the chart that you want to save.

The Save Individual View dialog box appears.

Save individual View			
Name	Data view (0)		
Por	tlet 🔲 Pagelet 📃 Reportlet		
		OK Cancel	

You can accept the default name, edit, or type another name for the chart.

- 2 Select the format in which you want to save the chart.
 - **Portlet**—this option appears in the Views tab when creating a dashboard. If you choose **Portlet**, the view will be available on the **Views** tab (under My Views) to be added to a dashboard that you create from the action panel.
 - **Pagelet**—this option appears as a view that is designed to be added to a page or dashboard.
 - **Reportlet**—the main purpose of reportlets is to appear in the Views tab when creating a report. If you choose **Reportlet**, the view will be available on the **Views** tab (under My Views) from where it can be added to a report that you create from the action panel.

Pagelets and Reportlets are listed under **Configuration** > **Definitions** in the navigation panel. If you have access to the Definitions area, you can use them when building a dashboard. For information about building dashboards, see the *Web Component Tutorial*.

3 Click OK.

Metrics Chart Editor

There are two editors that control how metrics are displayed in charts: one controls the settings for all the charts that you create; the other controls the settings for the current chart.

Editing a Chart

To edit a chart:

1 To apply changes to any new metrics chart that you created, click **Set metric chart defaults** in the action panel. The Metric Chart Defaults dialog opens.

Metric Chart Defaults ×					
Chart Plot I Height 300					
Layout					
Only show axis of selected metric (different charts will line up)					
* Advanced					
Line Thickness Automatic 🔽					
Metric Value Minimum/Maximum 🔽					
Show data at both start and end of intervals (plot and	d area charts only)				
Show Overall 🗌 Average 📃 Min	Max				
Show Min/Max As Envelope Marks	Lines				
Show Baseline Min/Max As 🗌 Envelope 📃 Marks	Lines				
Show Std Dev x 1 💟 As 🔲 Envelope 📃 Marks	Lines				
Show Thresholds For Selected Metric					
	OK Cancel				

2 Click the edit icon ≡ in the title bar of a chart to display an edit dialog where you can make changes that affect only that chart.

Title	0
Metrics	
Metric Label	Parent Label
cpuCount 💟	tor014004.prod.quest.corp 💟
Chart Plot Height 300	
Layout	
Only show axis of selected metric (different charts will line up)	
▼ Advanced	
Line Thickness Automatic 🔽	
Metric Value Minimum/Maximum 💟	
Show data at both start and end	of intervals (plot and area charts only)
Show Overall	verage 📃 Min 📃 Max
Show Min/Max As	velope 🗌 Marks 🔲 Lines
Show Baseline Min/Max As 🗌 Er	ivelope 🗌 Marks 📄 Lines
Show Std Dev x 1 🔽 As 🗌 Er	ivelope 🔲 Marks 📃 Lines
Show Thresholds	or Selected Metric
	Apply Cancel

The settings you can change are described in the following table. Note that not all the options are available in both dialogs.

Setting	Description	Options/Limits
Title	Allows you to rename the chart.	No specific limits, but keep display space in mind.
Metric Label	Allows you to choose another label for the metric.	Only available when editing a single chart.
Parent Label	Allows you to choose another label for the parent metric. This label appears in the title of a chart that contains metrics from a single parent. The parent label appears in the legend when the chart contains metrics from more than one parent. (For example, see "Grouping Metrics with Many Parent Hosts" on page 87.)	Only available when editing a single chart.

Setting	Description	Options/Limits
Chart	Lists the available types of chart.	 Plot (default) Area Stacking area Bar
Height	Sets the height for all charts or this chart.	The default chart height is 300 pixels.
Layout	Select "Only show metric of selected chart" to show only one axis is used in the chart, regardless of how many metrics are displayed. (For examples, see "Setting Metric Chart Labels" on page 88.) Clear the check box to display the label for all metrics in the legend.	Check box.
Line Thickness	Specifies the thickness of lines in all charts or this chart.	 Automatic Small Medium Large

Setting	Description	Options/Limits
Metric Value	Controls the type of value that is displayed for one metric or all metrics in a chart.	 None Average: The chart displays the average value for the metric per interval. Minimum: The chart displays the actual lowest value for the metric per interval. Maximum: The chart displays the actual highest value for the metric per interval. Minimum/Maximum: The chart displays the maximum and minimum value for the metric per interval. Sum
Show data at both start and end of intervals	Applies only to plot and area charts.	Check box
Show Overall	Displays the overall value for the set time range as a dashed line.	 Average displays the overall average. Min displays the overall minimum. Max displays the overall maximum.
Show Min/Max As	Displays the minimum and maximum per interval.	 Envelope (a filled-in area between the minimum and maximum) Marks Lines

Setting	Description	Options/Limits
Show Baseline Min/Max As	Displays the baseline minimum and maximum.	 Envelope (a filled-in area between the minimum and maximum) Marks Lines
Show Standard Deviation As	Similar to the Min/Max setting; lets you highlight a range per interval. You determine the high and low values by setting the deviation from the average.	 The default value is 1, but the unit of deviation depends on the metric. Envelope (a filled-in area between the minimum and maximum) Marks Lines
Show Thresholds	If a metric has a threshold, it is displayed.	You can choose to show thresholds only for the selected metric.

Grouping Metrics with Many Parent Hosts

When you have many metrics on a chart from different parent hosts, the parent label will appear in the legend when metrics are grouped. For example, in the chart on the left below, if you drag metrics from a Windows_Host and from a Windows_CPU, the parent label shows up in the metric labels themselves since the metrics are mixed. In the chart on the right below, if you drag metrics from the Windows_CPU host only, the legend does not refer to the parent.

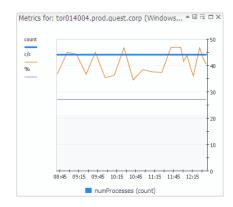
Many metrics	Or Friday, May 16, 2008 12:19 PM - 4:19 PM 4.0 hours -
Metrics for: tor014002,prod.quest.corp (Windows_H.,, $\wedge \boxtimes \boxtimes \boxtimes \times$	Metrics for: CPUs (Windows_CPUs)
้ษาแทกกาณฑ.กงณ	<u>×</u> 1 ¹⁰⁰
- JAA, MI OLM I I MAD AI	10
2 2	60
1	40
12.30 13.00 13.30 14.00 14.30 15.00 15.30 15.00	
interrupts: tor014002.prod.quest.corp (Windows_Host) (K/s)	percentUserTime (%)

Setting Metric Chart Labels

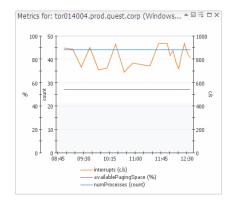
The Layout option enables you to choose the layout of the metric chart axes.

Title		
Metrics		
Metric Label		Parent Label
 numProcesses 	×.	tor014002.prod.quest.corp (Windows_Host) 💌
 contextSwitches 		tor014002.prod.quest.corp (Windows_Host) 💌
 availablePagingSpace 	2	 tor014002.prod.quest.corp (Windows_Host)
Chart Plot Height 300		
Layout		
Only show axis of selected metric (different charts will line up)		
Advanced		
		Apply Cancel
Actions		
Export as CSV Export as PDF		

• Select the **Layout** check box for a chart to indicate only one axis is used in the chart, regardless of how many metrics are displayed, as shown below.



• Clear the Layout check box to display all the axes in the chart, as shown below.



Viewing Dashboard Properties

When you are viewing a dashboard, you can edit some or all of its properties and definition if you have the appropriate role(s).

You can also use this procedure to publish a dashboard that you have created.

To view the properties of a dashboard:

- 1 Select the dashboard whose properties you want to view or change.
- 2 Click **Properties** in the action panel.

A popup appears.

Alarms Reference Id system:core_alarms.18 Actions Edit basic Properties... Go to full definition

3 Click Edit basic Properties.

The Edit View Properties dialog appears.

Edit View Properties		×
Name	Alarms	
Relevant Role(s)	i≕, (From module: Advanced Operator, Operator)	
Allowed Role(s)	l≡, (none)	
Automatically	refresh page every	
	 300 seconds (default refresh interval set in user preferences) 0 0 	
Context Help	This composite view displays a list of alarms provided by a query which retrieves alarm objects which have not been acknowledged through a user action. In addition, the view contains a summary of alarm and change activity	
	OK Can	:el

Depending on your role(s), you may be able to change some or all of the properties.

To make available a dashboard that you have created, it is recommended that you choose **Operator** for both the Relevant Role and Allowed Role.

4 Click **OK** to close the dialog and save any changes.

If you have access to the Definitions area (under Configuration in the navigation panel), you can view (and possibly make changes) to the definition of a dashboard. For details about creating dashboards, see the *Web Component Tutorial* and the *Web Component Guide*.

To view or change the definition of a dashboard:

- 1 Select the dashboard whose definition you want to view or change.
- 2 Click **Properties** in the action panel.
- 3 Click Go to full definition in the popup.

The definition page for this dashboard appears.

- 4 If you can make changes to the definition, click **Edit**.
- 5 If you have made changes to the definition, click **Save**.

vFoglight User Guide

Working With Tables

You can sort and filter data in a table, if these functions are enabled on the table.

Sorting Tables

If a table is sortable, you can sort it by clicking the column-header text. A down (\neg) or up (\triangleq) icon in the table header indicates the current sort order.

Filtering Tables

Some tables have a filter option in the title bar. When you click it, a dialog opens in which you select filtering criteria. You then click **Apply** to refresh the table and display only those rows in which the data meets the specified criteria. For an example of table filtering, see "Filtering the Alarms View" on page 62.

Hiding Columns

Another way you can filter tables is to hide some of the columns. If this option is available, there is an edit icon (\equiv) at the top of the table. Clicking the edit icon opens a popup list of all the columns, where you can de-select the columns you want to hide and click **Apply**. To display a hidden column, select it and click **Apply**. For an example, see "Hiding Columns in the Alarms View" on page 63.

Paging Icons

By default, most tables display only a set number of rows. If there are more rows, you can display the additional rows by using the paging buttons:

Button	Name
0	First page
0	Previous page
0	Next page
0	Last page

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Printing Views

You can print vFoglight views using the Print option in the actions panel. The view is displayed in a separate browser with a standard print dialog.

Note To generate a PDF file for a table that exceeds the number of rows to fit on a single page, the table should be specified as either a top level view with the Purpose = report in Configuration > Definitions, or it should be included in the Report Layout container.

The output is formatted using the Print theme specified in the User Preferences page. (see "User Preferences" on page 36 for details). You can override this setting by choosing a different option in the action panel under Themes.

4

Working with Services and Alarms

A service is a collection of objects that you want to monitor. Some services are created automatically (such as Hosts and Databases) as part of the vFoglight Management Server or as part of the cartridges you deployed. However, most services are created by users based on what they find interesting, and are typically organized around what a user needs to monitor. Different groups of users can define their own services. For example, a database administrator creates database services or a vFoglight administrator creates System services.

Alarms are triggered by performance problems on services. This chapter provides details on how to view system-wide alarms for all monitored services.

This chapter contains the following sections:

Overview	94
Monitoring Services	96
Viewing System-Wide Alarms and Service Details	104
Examining Details on a Single Service	105
Viewing Service Levels	106
Building a Service	108
Filtering Alarms	115
Monitoring System-Wide Alarms	118

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Overview

In vFoglight, a service is defined as a grouping of one or more monitored components. Typical examples of monitored components include a host, a database, a VirtualCenter server, etc.

Services can be nested within other services, each with their own monitored components. All vFoglight services are listed on the Services dashboard, which can be accessed from the navigation panel. From here you can perform the following tasks:

- Monitoring Services
- Viewing System-Wide Alarms and Service Details
- Examining Details on a Single Service
- Viewing Service Levels
- Building a Service
- Filtering Alarms
- Monitoring System-Wide Alarms

lcons

There are several different types of icons used to represent monitoring data in vFoglight. The types are:

- Severity Icons
- State Icons
- Availability Icons

The severity and state icons tell you about the condition of an application, server, or process. They are based on the values stored in the metrics. What they represent changes according to their context. For example, the same state icon can indicate that a server is down or that a process is down.

Many summary views show icons that represent an aggregation of the detailed objects of similar types. vFoglight prioritizes the data when determining the aggregation. For example, if three test servers are down, and one production server is active, then a summary view would show a critical icon, not a fatal icon.

Depending on where it is, you can hover over a severity or state icon or click it to get further information about the condition it represents.

94

Severity Icons

Severity icons indicate the severity level of alarms that have fired.

lcon	Description
•	Normal
	Warning
	Critical
۲	Fatal

The normal icon indicates that there have been no critical, warning, or fatal events fired. vFoglight does not record events that are successful; it can only determine that there are no events that had problems.

State Icons

State icons indicate the status of a domain, server, application, or process.

lcon	Description
•	Normal
0	Warning
	Critical
۲	Fatal

Availability Icons

Availability icons indicate the availability of an application, service, or process.

lcon	Description
1	Available
	Not available

Monitoring Services

You can monitor services using the Services dashboard. This dashboard shows the state of a selected set of services. From this dashboard you can see the alarms for all selected services, alarms for a specific service, the SLA state for a service, and the contents of a service. You can also navigate to dashboards where you can change service definitions. This dashboard is the best one to use for monitoring services.

To start monitoring services:

1 On the navigation panel under **Dashboards**, click **Services** > **Services**.

Tip The Services dashboard is one of the default home pages so you can also click Services under the Homes section in the left hand pane for quick access.

The Services dashboard appears.

Working with Services and Alarms Monitoring Services

© Monday, Nevember 3, 2001 Doil AM - H						8 10:40 AM - Now 4.0 I		
Categories and S	iervices							
Name					Service Level Compliance *		Alarns	
Hosts					•	0	8	17
Applications					•	1.1		
8 8 17:28	Outstanding Alarm	(c) for Sel	locted Categories					Alarm Filter Not
			iost(s) 11 Related Agent(s)					
	t All Acknowledge C							
Sev 1	Time * Ackle	d Cleared		Instance	Message	Origin	Agent	Agent Type
Sev 1	Time * Ackle 2:16 PM N	d Cleared Y	lab-sl10-08.sitraka.com	Data 26.0	Mutex contention on lab-sl10-08.sitraka.com is at	Mutex_Contention	jh_sol	Sun_MP9tat
Sev 11/3/08	Filme Ack/e 2:16 PM N 1:45 PM N	d Cleared Y Y	lab-sl10-08.sitraka.com lab-sl10-08.sitraka.com	Data 26.0 Client	Mutex contention on lab-sl10-08.straka.com is at Page in/out rates on lab-sl10-08.straka.com are a	Mutex_Contention Page_Rate	th_sol testAgent	Sun_MPStat Sun_System
Sev 1	Filme Ack/e 2:16 PM N 1:45 PM N	d Cleared Y	lab-sl10-08.sitraka.com	Data 26.0	Mutex contention on lab-sl10-08.sitraka.com is at	Mutex_Contention	jh_sol	Sun_MP9tat
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Sev 1 11/3/08 11/3/08 11/3/08 11/3/08 11/3/08 11/3/08 11/3/08	Time * Ackle 2:16 PM N 1:45 PM N 1:41 PM N 9:41 PM N 3:15 AM N	d Cleared Y Y N	lab-sl10-08.skraka.com lab-sl10-08.skraka.com lab-sl10-08.skraka.com lab-sl10-00.skraka.com	Data 26.0 Client Client ErrorVerbose	Mutex contention on lab-sl10-08, straila, com is at Page injout rates on lab-sl10 08, straila, com are a Page injout rates on lab-sl10-00, straila, com are a Nov 2 21:41:29 lab-sl10-00 ufs: [10 045546 ken n	Mutex_Contention Page_Rate Page_Rate Console	th_sol testAgent jh_sol jh_sol	Sun_MPStat Sun_System Sun_System Sun_Console Windows_System
Sev 1 11/3/08 11/3/08 11/3/08 11/3/08 11/3/08 11/3/08 11/2/00	Time * Ackie 2:16 PM N 1:45 PM N 1:41 PM N 9:64 PM N 3:13 AM N	d Cleared Y Y N N	lab-s10-06.straka.com lab-s10-06.straka.com lab-s10-06.straka.com lab-s10-00.straka.com tor105537.prod.quest.cop	Data 26.0 Client Client ErrorVerbose EventLog	Muter: contention on lab-silo-08.straila.com is at Page infout rates on lab-silo-08.straila.com are a Page infout rates on lab-silo-08.straila.com are a Nov 2 21:1:1:2:18.d=silo-00 vis: [10 945546 kem.n NT Event Log: System W32Time The time service has	Mutex_Contention Page_Rate Page_Rate Console EventLog	jh_sol testAgent jh_sol jh_sol testwinglue	Sun_MPStat Sun_System Sun_System Sun_Console Windows_System
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This dashboard contains two views:

- Categories and Services
- Outstanding Alarms for Selected Categories

Categories and Services

The Categories and Services view lists all the monitored services by category. For each category and service it displays the following information for the current time range.

Select	To display
A category or service	the view that is described in "Viewing Details about a Service" on page 99.

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Select	To display
A Service Level Compliance icon	further details about the related Service Level Agreement. A service can have one or more service level policies. The compliance icon of a given service shows the worst state of all the service level policies that are defined for the service. For example, in the above screen, the Windows service has a Fatal SLA state because one of its components has a Fatal state, even though the others are in a Critical state.
An alarm icon	a list of alarms for components that are being monitored. This is a common view in vFoglight. For further information, refer to "Alarm List" on page 58.

Filtering the Categories and Services List

You can filter the list of service categories that are displayed in the Categories and Services view.

To filter the Categories and Services list:

1 In the Action panel, click **Category Selector**.

The Category Selector dialog box displays all the available services.

Catego	ory Selector 🗆 🗙
Show	All Clear Apply
	Category
	Hosts
~	MyHosts
X	RickTest

2 Select the service or services that you want to display, or de-select the service or services that you do not want to display.

You can click **Show All** to select all the services or click **Clear** to de-select all the services.

Note If you click Clear, you must then select at least one service before you can proceed.

3 Click the Close button \times to close the dialog box.

The Categories and Services view displays only the services that you selected.

Viewing Details about a Service

The Categories and Services view provides a number of ways to see more detailed information.

• From the Services and Category list, select a category or service to see details by service and host. The popup also provides links to more detailed views, which are described in the table below.



Click this link	If you are interested in seeing
Service Breakdown	the structure of a specific service. For details, see "Drilling Down to Detail Views" on page 100.
Service Details	detailed information about a service. For further information, see "Examining Details on a Single Service" on page 105.
Impact List	a list of services impacted by the current service.
Service Level Agreement(s)	detailed information about the service level agreement(s) defined for a service. For more information, see "Viewing Service Levels" on page 106.

Click this link	If you are interested in seeing
Scan for a Root Cause	a diagram that shows the composition of a service and the state of each component in the service. It allows a user to quickly scan for the root cause of a problem reported on the service. For details, see "Root Cause Analyzer" on page 102.
Service Builder	the Service Builder for the selected service or all monitored services. For details, see "Building a Service" on page 108.

If you hover over a category, you see the same popup without the links.

Drilling Down to Detail Views

Clicking the **Service Breakdown** link in the popup shown on page 99 takes you to the Service Breakdown view for that service.

Services > Service Breakdown: etor014002.prod.quest.corp				G+ tin	ne range 🗸
View: Service Breakdown 1 Monitored Component(s) 1 Related I	Host(s)				
Component	Service Level Compliance 🔻	Health	Alarms	Last Updated	
tor014002.prod.quest.corp (FSMSystem)	-	۲	2 2 5	5/23/08 9:	51 AM

This view provides details about how a specific service is comprised. From here, you can drill down to more specific details, as outlined in the table below.

Select	To display
A component	a popup that provides a summary of the host, service, or application. This summary includes the number of alarms by severity, health status, and related links. For a description of the host summary popup, refer to "Host Summary" on page 74.

Select	To display
A Service Level Compliance icon	further details about the related Service Level Agreement. The Service Level Compliance for a category or service is determined by the component in the worst state.
A health icon	links to:health of all alarm sourceshealth of current alarm sourceall outstanding alarms for that alarm source
An alarm icon	a list of alarms for components that are being monitored. This is a common view in vFoglight. For further information, refer to "Alarm List" on page 58.

For example, if you click an icon in the Service Level Compliance column, you will see a popup like the one in the following screen shot.

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	re ervice Level Agreement(s) Il Monitored Component(s)				

Notice that this view contains links to the Service Level Agreements for this service. For details about this dashboard, see "Viewing Service Levels" on page 106.

The Service Breakdown view also summarizes the service's contents from a number of different perspectives, namely by Monitored Component(s) and Related Host(s). Refer to the table below for details.

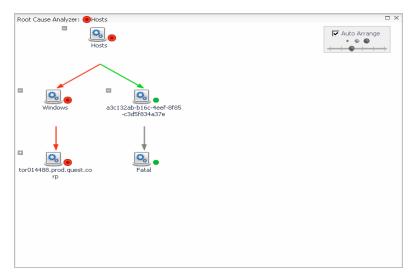
102

Click this link	To display
Monitored Component(s)	a list of the components that are being monitored by a specific service. To quickly find a component, enter the component name in the search text box at the bottom of the dashboard. For example, enter CPU in the text box to find all CPU components in the service.
Related Host(s)	a list of hosts that are being monitored by a specific service.

Root Cause Analyzer

Clicking the **Scan For A Root Cause** link in the popup shown on page 100 allows you to manually change the vFoglight-created /default, topology layout of the hosts and drill down to a diagram of the components to which this one is connected. Each component has a state icon, which helps you trace the critical path of performance issues across a domain. (For an explanation of the icons, see "Icons" on page 94.)

As shown below, the path to a child in a Fatal state is red, while the path to a child in a Normal state is green. The path to a child in a Warning state would be yellow.



You can move the depth control in the upper right corner back and forth to set the number of levels (1-6) in the diagram. The default setting is three levels.

The dots above the depth control determine the scale of the diagram.

- Click the smaller dot to reduce the scale for easier navigation of large diagrams.
- Click the medium dot to restore the diagram to its original scale.
- Click the largest dot to zoom to the highest zoom level.

Auto Arrange is selected by default. If you move a component, the Auto Arrange check box is deselected. From here you can manually layout the components as you wish. To return to the original layout, select the **Auto Arrange** check box.

Outstanding Alarms for Selected Categories

The Outstanding Alarms for Selected Categories view contains a table that lists the most recent alarms for the category selected in the Categories and Services view.

1: 1 Outstanding Alarm(s) for Selected Categories			Alarm Filter unset	-
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Network_Interface_Table MS TCP Loopback interface	•			E
Network_Interface_Table VMware Virtual Ethernet Adapter for VMnet8	•			E
Network_Interface_Table VMware Virtual Ethernet Adapter for VMnet1	•			E
Network_Interface_Table 3Com EtherLink XL 10_100 PCI For Complete PC Management NIC [3C905C-TX]	•			E
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Processor_Table 1	•			L
Processor_Table 0	•			L
TCPConnections_Table	•			ſ
Top MEM Table				C.

You can filter the list in the Outstanding Alarms view using several criteria. For details, see "Filtering the Alarms View" on page 62.

Viewing System-Wide Alarms and Service Details

The Services (All Alarms) dashboard is a summary dashboard that contains views with information from other dashboards such as service levels, alarms, and system changes.

To view system-wide alarms and service details:

• From the navigation panel under **Dashboards**, click **Services** > **Services** (All Alarms).

The Services (All Alarms) dashboard appears.

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ervices (All Alarms)							O• Monda	y, November 3, 20	00 10:50 AM - Now 44	0 ho
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The Categories and Services view is described under "Categories and Services" on page 97.

The All System Alarms and Changes and Outstanding Alarm(s) for the Entire System views are described under "Monitoring System-Wide Alarms" on page 118.

Examining Details on a Single Service

The Service Details dashboard contains views that provide detailed information about a service. It shows all the SLAs, the service impacts, a full definition viewer, monitored components, host perspectives, and an alarm list for the selected service.

This is the best dashboard to use to view a service in detail.

To examine details on a single service:

- From the navigation panel, under **Dashboards**, click **Services** > **Service Details**. The Service Details dashboard appears.
- **Note** You can access this dashboard from the Services dashboard by selecting a service and choosing **Service Details** in the popup.

O-Monday, November 3, 2001 33:60 AM - Now 4.0 hours-Service Details: 😑 Hosts 1 Service Level Agreement(s) i Service Impact List Name Service Level Compliance * Service Level Alarms Current Recent Health Parent Service None - this is a top level service. Hosts Service Breakdown: 😐 Hosts 1 Services 4 Monitored Component(s) 4 Related Host(s) Service Level Complance * Last Updated Component Hosts (PSMCategory) . 8 10/31/08 9:41 PM 8 17: 28 Outstanding Alarm(s) for Hosts Alarm Filter Not Set . * 1 45 Alarm(s) 25 Error Instance(s) 4 Related Host(s) 11 Related Agent(s) Select All Unselect All Acknowledge Clear | 3 Sev Time * Addred Choured Host Instance Message Origin Agent Agent Agent & Ag Agent Type 11/3/08 1:45 PM П Y lab-sl10-08.sitraka.com Page in/out rates on lab-sl10-08.straka.com are a... N Client Page_Rate testAgent Sun System ILIJUU 1:5:5797 N Y B0-310-00.strala.com Clerit Page injour rete on I80-310-00.strala.com are 8... ILIJUU 1:5:579 N Y Isb-310-00.strala.com Clerit Page injour rete on Isb-310-00.strala.com are 8... Page Rate th sol Sun System 11/2/08 9:41 PM I1/2[08:9:41 PM N N bb-d10.08.stroka.com ErrorVerbose Nav 2 21:41:29 bb-d10.08 ufsr [ID:845546 iem.n.. I1/2[08:315 AM N N tor105537 grad.quest.corp EventLog NT EventLog: System W32Time The time service has ... Console jh_sol Sun_Console EventLog testwinglue Windows_System 11/2/00 3:33 AM N N tor105537,prod.quest.corp 11/1/00 9:30 PM N N lab-s10-00.straka.com EventLog EventLog TestBug Windows_System П NT Event Log: System W32Time The time service has ... ErrorVerbose Nov 1 21:38:00 lab-sl10-00 ufs: [ID 845546 kem.n... П Console jh_sol Sun_Console E. 10/31/08 10:57 PM N tor105537.prod.quest.corp EventLog NT Event Log: Application PatchLink Update Agent A... N Eventiog testwinglue Windows_Syste Windows_System П 😑 10/31/08 10:55 PM N N tor105537.prod.quest.corp EventLog NT Event Log: Application PatchLink Update Agent A... EventLog TestBug 10/31/08 9:41 PM N N lab-sl10-08.sitraka.com ErrorVerbose Oct 31 21:41:00 lab-sl10-08 ufs: [ID 845546 kem.n... Sun_Console Console jh_sol.

To see data for another service, select **Service Selector** in the action panel to open the Service Selector dialog, where you can choose another service.

To choose another service:

1 From the action panel, select **Service Selector**.

The Service Selector popup appears.

2 Navigate to the service for which you want to see details.

The Service Details dashboard is refreshed with data about the chosen service.

3 Click \times to close the popup.

Viewing Service Levels

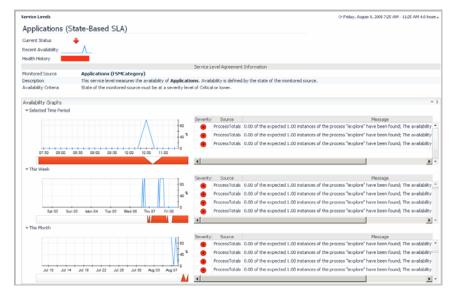
The Service Levels dashboard provides details about the service levels that are being monitored by vFoglight. Use this dashboard to measure the availability of a service.

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To examine service levels:

 From the navigation panel, under Dashboards, click Services > Service Levels. The Service Levels dashboard appears.



This dashboard lists the current status, recent availability (used to determine the status), and health history.

Other information that is displayed is listed under the following headings.

Service Level Agreement Information

The Service Level Agreement Information area includes the description, the monitored source, and the availability criteria that are used to determine the status of the SLA.

Availability Graphs

The availability graphs display data for the service level alarms. The three areas display data for the current time period, week, and month. The tables to the right of each graph summarize the severity level, source, and message for each alarm. Clicking an alarm in a table displays a popup with details about that alarm.

Choosing Another Service Level

To see service levels for another service, select **Service Level Selector** in the action panel.

To choose another service level:

1 From the action panel, select Service Level Selector.

The Service Level Selector popup appears.

By default, the Service Level Agreements for all the monitored services are listed.

- 2 Select the Service Level Agreement for which you want to view details.
- 3 If you do not want to see the list of all the Service Level Agreements, deselect the List All Service Level Agreements check box.

The Service Levels dashboard is refreshed with data about the chosen service.

Building a Service

A service is a grouping of one or more components. The Service Builder provides the functions needed to create a new service, tier, application, or category as well as edit existing services. When you create a service, a corresponding service level is automatically created.

To navigate to the Service Builder:

1 From the navigation panel, under **Dashboards**, click **Services** > **Service Builder**.

Service Builder					(G• Thursda	iy, Auç	just 7,	2008 9:41 AI	M - 1:41 PM 4.0 hours 🗸
💿 Add										
Component	Alarm Filters	Service Level Compliance 🔻	Health	Alarms	No Alarm Health		Add	Acti Edit	ons Remove	Last Updated :=
Hosts (FSMCategory)	÷.	•	-	1			0	1	0	8/1/08 2:27 PM
Applications (FSMCategory)	Siz .	•	-				\bigcirc	1	9	8/1/08 2:27 PM

The Service Builder dashboard appears.

Services are used as inputs on many other dashboards (Hosts Table, Agents) besides the Services dashboards, as well as in reports. Defining a good set of services can make other dashboards more useful and easier to understand.

Creating a New Category

Use the Service Builder dashboard to create categories that will be used as inputs on many other dashboards.

To create a new category:

1 In the Service Builder dashboard, click Add 💿 and then select Add Category.

The New Category dialog appears.

New Category		Π×
Name		
Short Description		
Description	×	
	Create	Cancel

- **2** Type a name for the category.
 - **Note** You can change the name of a service at a later date, without losing all history for a service. See "Editing a Service Name" on page 114.
- **3** You can enter text in the Short Description and Description fields, but these are optional. The text in the Description field appears in a popup when you hover over a service. You can modify the description later by following the procedures described in "Editing a Service Description" on page 115.
- 4 Click Create.

The new category is added to the list.

Creating a New Application

Applications that you create here will be added as a service in the Applications category.

To create a new application:

1 In the Service Builder dashboard, click Add 💿 and then select Add Application.

The Application Creator dialog appears.

New Applic	ation		×
Name 🗌			:
		Create	Cancel

2 Type a name that is unique to vFoglight for the application and click Create.

The new application is added as a service to the Applications service category. An application topology component is added below the service. For example in the screen shot below, *test app* has been added as a service to the Application service category. A corresponding application topology component has been added below the new application.

Service Builder G- Friday, May 23, 2008 10:30 AM - 2:30 PM 4.0 hours 🗸										
• Add										
Component	Alarm Filters	SLC 🔻	Health	Alarms		rm Filters Alarms	Add	Edit	Remove	Last Updated
Hosts (FSMCategory)	STA .	۲	-	2 3 5		2 3 5	\bigcirc	2	9	5/22/08 2:17 PM
Applications (FSMCategory)	Siz .	۲	-	2	1.1	2	\bigcirc	1	0	5/23/08 9:51 AM
outlook (AppMonitor) (FSMChildService)	ST2	۲	-	1		1	\bigcirc	2	9	5/23/08 9:51 AM
🗉 💁 browser (AppMonitor) (FSMChildService)	Siz .	۲	-	1	1.1	1	\bigcirc	1	0	5/22/08 1:41 PM
🖴 💁 My much longer application nam (FSMChildService)	Siz .	٠	-		-		\bigcirc	1	9	5/22/08 2:46 PM
test app (FSMChildService)	ŝ	•	-				\bigcirc	1	9	5/22/08 2:44 PM
test app (ApplicationTopology)		-	•		0		\bigcirc		9	n/a

From here you can add application tiers to the new ApplicationTopology component. Refer to "Adding an Application Tier" on page 113 for details.

Building a Service

Use the Service Builder dashboard to build a service or category as well as add a service to vFoglight.

To build a service:

- 1 Click Add 💿 for the service or category with which you want to work.
- 2 From the popup, select Add Components.

The Add to: dialog appears. From here you can choose the components that you want to add as well as create a new service.

3 Select the type of component that you want to add by navigating through the Services, Hosts, Foglight4Model, Applications, All Models, and Dynamic Managed Components tabs.

d to: tor014002.prod.quest.corp	t i i i i i i i i i i i i i i i i i i i
Services Hosts Foglight4Model Applications	All Models Dynamic Managed Components
New Service	
Find Clear Advar	nced
elect All Unselect All Add	
Service	Туре
browser (AppMonitor)	FSMChildService
tor014002.prod.quest.corp	FSMService
Windows	FSMService

Use **Find**, **Clear**, and **Advanced** to locate a component. **Select All** and **Unselect All** quickly chooses the listed components that you want to add. To locate a component by name and type, click **Advanced**. You can also use regular expressions.

- 4 When you have chosen the components, click Add.
- **5** To add a new service, click **New Service**, and then enter a name and description for the service.

The service is added to the component that you chose in step 1.

Adding Dynamic Managed Components

Using the Service Builder dashboard, you can dynamically manage components by specifying a rule for adding objects to a service so that the default service is created or updated when certain data arrives. Therefore, if a component is added or removed, the default service is automatically updated to handle addition or removal of the component from the service.

For example, if you are monitoring an application that runs four WebLogic servers, you can create a service and specify a rule to add WebLogic server instances for a particular domain so that the service is updated when more servers are added or deleted. After adding the rule, you can see that the new WebLogic servers appear automatically in the service after four more WebLogic servers were added. Likewise, if the original four WebLogic instances running on Windows are decommissioned, they automatically disappear from the service.

In another example, if you create a service called "FX" on the infrastructure that monitors a webservice, you can create a rule to include another infrastructure that is used for extra capacity during peak times. When the other infrastructure for high capacity is used, it shows up in the service.

To add a dynamic managed component:

- 1 From the navigation panel, under **Dashboards**, click **Services** > **Service Builder**.
- 2 Drill-down to the appropriate service or category and click Add 💿 in the Actions column.
- 3 In the Add to: dialog, click the **Dynamic Managed Components** tab.
- 4 Type a **Name** for the query.

Add to: My Service has changed			
Services Hosts Foglight4Model Applications	All Models	Dynamic Managed Components	
Name			
▼ Select a root query or a list node		Filter e.g.	
Name 🔺	Typ	pe 😳	<u>~</u>
E Foglight		*	
All Agents			
C All Data			
Servers			
Hosts			
Services			
		•	*
		Add Tes	t Cancel

- 5 Select a root node for the query. For example, click Hosts > All Hosts.
- 6 In the **Filter** box, type a query such as:

name like '%.prod.quest.corp'

7 Click **Test** and confirm that it comes up with one entry for the query result.

Query Result		
Name	Туре	
tor014004.prod.quest.corp	Host	

8 Click Add. At this point you should see a new dynamic managed component appear under the service that is associated with one host.

Adding an Application Tier

When you create an application using Application Builder or Service Builder, you specify the application tier that you want to use. In the Service Builder dashboard you can also do this when you build an application.

To add an application tier:

1 Click Add ③ for the application topology component for which you want to add a tier.

The Applications Tier dialog box appears.

d Application Tier(s) to: browser (AppMonitor)	
New Application Tier	
Advanced Filter On} Find Clear Advanced	
elect All Unselect All Add	
Application Tiers	Туре
rere Is No Data To Display	

- 2 From here you can create a new application tier or select from a list of application tiers that are already in use by other monitored applications.
- **3** From the Application Tiers list, click **Add** ③ beside the tiers you want to add to the selected application

or

If you want to create a new tier, click ONEW Application Tier

The Tier Creator dialog box appears.

New Applicati	on Tier		×
Tier Type	WebTier	•	
Tier Name			:
		Create	Cancel

4 Select the type of tier you want to create from the drop-down list.

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5 Type a name for the tier and click **Create**.

The name of the new tier is added to the Application Tiers list.

- 6 Use Find, Clear, and Advanced to locate an application tier. To locate a tier by name and type, click Advanced. You can also use regular expressions.
- 7 Continue to add tiers to the application.

After you have added all tiers, you can then add other components to the tier by following the steps outlined in "Building a Service" on page 110.

Removing a Service, Category, Monitored Component, or Tier

You can remove a service, category, tier, or a monitored component from its related service.

To remove a service, category, monitored component, or tier:

1 Click **Remov**e \bigcirc for the service, category, tier, or monitored component that you want to remove.

From the popup, choose whether you want to remove either the selected item, or the monitored components in the selected item.

- Note Depending on the component that you select, you may not receive a popup but instead are prompted to confirm the deletion. Click **Confirm** to remove the item.
- 2 If you want to remove monitored components, you are prompted to select the components that you want to remove. Use **Select All** and **Unselect All** to quickly choose the components.
- 3 After you have selected the components, click **Remove**.

You are prompted to confirm the deletion.

4 Click **Confirm** to continue.

Editing a Service Name

By clicking the Edit button on the Service Builder dashboard and Services dashboard, you can rename an existing service without having to delete and recreate the service. This means that all history for a service is retained, such as the performance of the systems to suit your needs. For example, if you create 50 services but then you need to change the name of the service due to a spelling error you can change the service name without losing service data information.

To edit a service name:

1 On the Service Builder dashboard, click **Edit** *i* for the service name you want to change.

The Edit Service Descriptions dialog box appears.

Edit Service Descriptions		□ ×
Name	browser (AppMonitor)	
Short Description	Measures availability of application browser (AppMonitor)	
Description	Measures availability of application browser (AppMonitor)	
		Update Cancel

2 Change the name and click **Update**. The service name is changed but the service state is not altered.

Editing a Service Description

You can change the service description that is displayed when you hover over a service that is listed on a dashboard.

To edit a service description:

1 Click **Edit** *i* for the service you want to edit.

The Edit Service Descriptions dialog box appears.

2 Modify the descriptions and then click Update.

Filtering Alarms

Alarm filters can be defined for any service or application tier instance in the Service Builder. You can use alarm filters to specify alarms that are relevant to a given service as a way to keep an irrelevant alarm from falsely causing a service outage, rather than have all alarms impact the state of a service.

For example, alarm filtering can be used to ignore a certain state for a component with a high CPU usage. vFoglight is monitoring an application that runs on a Weblogic server and you create a service called "Retail" that includes the server and the host. The "Retail" service is shown as being unavailable when the host has a CPU usage greater than 90%. However, generally this is not considered a true service outage for this

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service. If you look at the host alarms none of the alarms apply to the Retail service. As a result, you can use an alarm filter to filter out all host rules.

In another example, you can use an alarm filter to ignore the state of a service that appears as unavailable when the file system component for the D: drive fills up. vFoglight is monitoring an application that uses a host for the Siebel database and you want to filter out the Oracle database. The database is configured so that it uses only the C: drive, not the D: drive. A service was created to monitor the application that includes the Oracle agent and the host instance for the Oracle host. However, the service shows as unavailable if the D: drive fills up. Since the D: drive does not contribute to the availability of the application, you should add an alarm filter to exclude the monitoring of the D: drive. You can restrict the filter by choosing the FileSystem alarm, then specifying a Groovy script to refine the filter to apply only to the D: drive.

Adding an Alarm Filter

By specifying an alarm filter, you can decide what alarms impact the availability of a service.

To add an alarm filter:

- 1 From the navigation panel, under **Dashboards**, click **Services** > **Service Builder**.
- 2 Drill-down to the component and click the Alarm Filters th button.

The Alarm Filters dialog shows alarms inherited from parents of the current service.



- **Note** Alarm filters can be defined for two nested services. Alarm filters work the same way regardless they are nested or not. Even though a set of alarms is not filtered out by the alarms' immediate parents, the set of alarms are eventually filtered out by an alarm filter defined for one of the alarms' parents further up the hierarchy of nested services.
- You can select an existing filter from the list or click head to add a new filter. The Add Alarm Filter dialog appears.

Filter by:			5.1.11	D. L. C. IN	and the second
	0	Rule Scope A	Rule Name Agent Health State	Rule Conditions Critical, Warning	Filter Count
		-	2	critical, warning	
	0	AppMonitor_AgentMsgs	AgentMsgs	-	0
	0	AppMonitor_ProcessTotals	Process_Availability	Fatal, Critical, Warning	0
	0	Windows_System_EventLog	EventLog	-	0
	0	Windows_System_FileSys_Table	Capacity	Fatal, Critical, Warning	0
	0	Windows_System_Physical_Disk_Table	Disk_Utilization	Fatal, Critical, Warning	0
	0	Windows_System_Processor_Table	ProcessorUtilization	Fatal, Critical, Warning	0
	0	Windows_System_System_Table	CPU_Utilization	Fatal, Critical, Warning	1
	0		IO_Interrupts	Warning	0
	0		Memory Shortage	Fatal, Critical, Warning	0
Alarms: Groovy Script: e.g.		Exclude All O Exclude Critical And Warn Include All O Include Fatal and Critical	,	g	A
perty Lookup:	Sele	ct Property Path No path has been sele	cted		¥

- 4 Select one or more filtering options:
 - **By Rule**—select the By Rule check box and choose a rule to monitor one or more of the nested children added to the service. You can define more than one alarm filter for the same rule.
 - Alarms—select the state of alarms to include or exclude:

Include: all alarms are excluded except those specified in the include filters.
Exclude: all alarms are included except those specified in the exclude filters.
If both Include and Exclude filters are defined: include alarms that are specified in the Include filters as long as they are not excluded by the Exclude

- filters.
- Groovy Script—an optional script used to refine the filtering. An alarm is the only required input, meaning you can filter on anything that is referenced by the alarm. An example of a groovy script is:
 @alarm.get('topologyObject').getType().getName() ==
 'Windows_System_System_Table'
- 5 Click Save.

The filter is saved on the Alarm Filters list.

Deleting an Alarm Filter

To delete an alarm filter:

- Drill down to the component from the Service Builder dashboard and click the Alarm Filters is button.
- 2 In the Alarm Filters dialog, select the filter and click ^{Semove}.

Example: Filter fatal alarms fired by the Processor Utilization rule

For example, to include only alarms fired on Processor 0 by the CPU_Utilization rule, you select the following parameters in the Alarm Filters dialog box:

- By rule: CPU_Utilization
- Alarms: Include All
- Groovy script: @alarm.get('topologyObject').get('longName') == 'Processor_Table 0')

Monitoring System-Wide Alarms

Unlike the alarms displayed on the Services dashboard which show only those alarms for a selected service, the Alarms dashboard is useful for viewing the state of all alarms across the entire vFoglight installation and allows you to take immediate action on them. It also shows the alarm count by time, so that alarm storms or outage events can be identified.

To monitor system-wide alarms:

• From the navigation panel, under **Dashboards**, select **Alarms** > **Alarms**.

The Alarms dashboard appears.

larms							 Monday, 	November 3, 200	8 10:46 AM - Now 4.0	mós
13/08 2:4	6:2 AM							· · · ·	11/5/08 2:44	ļ
All System	n Alarms & Change	95								
	-					All Aarm Count				
									T40	
									1	
									20 ฐ	
									· · · · · ·	
	10:50 11:00	11:10	11.20	11:30 11:40 11:50 12:00	0 12:10 12:20 12:30	0 12:40 12:50 13:00 13:10 13:20 13:30 13:4	0 13:50 14:00 14:10 5	4:20 14:30	14.40	
						All System Changes				
									-1	
									2	
									2	
	10:50 11:00	11:10	11:20	11:00 11:40 11:50 12:0	0 12:10 12:20 12:3	0 12:40 12:50 13:00 13:10 13:20 13:30 13:	40 13:50 14:00 14:10	14:20 14:30	14:40	
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The Alarms dashboard has two views that display data for the time range indicated at the top right of the dashboard. For information about changing the time range, see "Time Range" on page 51.

- All System Alarms and Changes
- Outstanding Alarm(s) for the Entire System

All System Alarms and Changes

This view contains charts that summarize the alarm and change activity for the current time range. Hovering over a line or bar in a chart produces a tooltip with details about the alarm or change that occurred nearest to that time.

Outstanding Alarm(s) for the Entire System

This common view lists in a table all the alarms for the current time range, except SLA alarms. The current time range can be fixed as described in "Freezing a time range" on page 52.

The totals for each level of alarm, and the total number of alarms in the table, are in the upper left corner of the view. You can filter the list, sort it by column, and acknowledge and clear alarms in this view.

You can see more detailed information about an alarm by hovering over or clicking a column to display a dwell or a popup. The content of the dwells and popups varies according to the column you choose.

For information on working with the different alarm views, refer to "Alarm List" on page 58.

Monitoring Agents and Hosts

This section describes how to view monitor agents and hosts. Several dashboards are available in vFoglight to help you with this activity.

This chapter contains the following sections:

Overview	122
Viewing Agents	122
Viewing Host Performance	124
Viewing Host Details	128

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Overview

Agent and host dashboards are monitored by Operators (for example, Unix System Operators) whose primary responsibility is availability of those hosts. From these dashboards you can perform the following tasks:

- Viewing Agents
- Viewing Host Performance
- Viewing Host Details

Viewing Agents

The Agents dashboard lists the agents that are available for each host. It is useful for monitoring from the perspective of hosts and agents. If you want to look at agents and the hosts where they are running, you will find this the most helpful dashboard.

To get started monitoring agents:

• From the navigation panel, under **Dashboards**, click **vFoglight** > **Agents**.

The Agents on All Hosts dashboard appears.

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The Monitored Hosts and Agents and the Outstanding Alarms views are displayed. Drilldowns for each of the columns on this dashboard are explained below.

Drilldowns for the Agents on All Hosts View

Select	To display
Agent or a host	a popup that provides a summary of the host, service, or application. This summary includes the number of alarms by severity, health status, and related links.
	This is a common view in vFoglight. For a description of the host summary popup, refer to "Host Summary" on page 74.
Health icon	 links to: health of all alarm sources health of current alarm source all outstanding alarms for that alarm source
Alarm icon	a list of alarms for components that are being monitored. This is a common view in vFoglight. For further information, refer to "Alarm List" on page 58.
Health History	a popup that focuses on the state history of a host condition such as OK, warning, critical, or fatal.
State	a popup that allows you to activate or deactivate the agent as well as start and stop data collection.
Health State	alarms for the host or agent selected in the Monitored Hosts and Agents view. This is a common view in vFoglight. For further information, refer to "Alarm List" on page 58.

Tip Hovering over a column displays a dwell with more detailed information.

You can filter the hosts by clicking Service Selector in the action panel to open the Service Selector dialog. For more information on working with the Service Selector, refer to "Examining Details on a Single Service" on page 105.

Viewing Host Performance

You can view the performance of:

- a single host
- all monitored hosts
- hosts in real-time

Viewing Performance of a Single Host

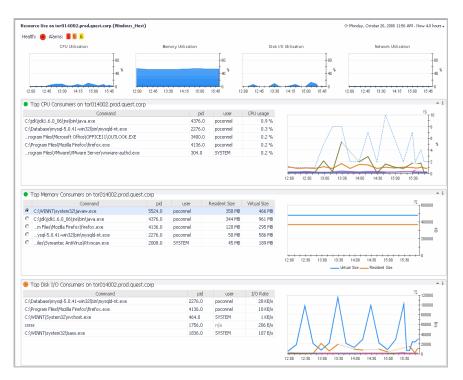
The Host Resource dashboard provides a detailed full-page view of the performance of a single host. It contains charts and tables that provide details about CPU, memory, disk I/O, and network utilization.

This dashboard shows more current and historical information than the Host Monitor dashboard, which is more like a real-time monitor.

To view the performance of a single host:

1 From the navigation panel, under **Dashboards**, click **Hosts** > **Host Resource**.

The Host Resource dashboard appears.



The name of the current host is at the top left of the dashboard. To see data for another host, click **Host Selector** in the action panel to open the Host Selector dialog, where you can choose another host.

Viewing Performance on All Monitored Hosts

The Hosts Table dashboard is the best high-level summary of host performance. It summarizes information on alarms and CPU, memory, disk, and network utilization for active hosts. This dashboard is useful for monitoring from a host perspective, especially where there is a large number of hosts.

To view the performance on all monitored hosts:

• From the navigation panel, under **Dashboards**, click **Hosts** > **Hosts**

The Hosts Table dashboard appears.

Hosts										G	• Monday, Oct	ober 20, 2008 12:02 PM -	Now 4.0 hours
		Host		Alarms		CPU		Memory		Disk		Network	
*	Туре	Name	F	C	W	Utilization	Current	Utilization	Current	Utilization	Current	Utilization	Current
۲		tor014002.prod.quest.corp	1	5	6		4 %		53 %		0 %		1 %

You can remove one or more of the columns in the table by clicking the edit icon \equiv at the right-hand end of the title bar to open a list of columns, where you can de-select the column(s) that you want to remove.

You can filter the list of hosts by clicking **Host Filter** in the action panel to open the Host Filter dialog.

Host Filter	
Filter By Activity:	
 Active Hosts Only (Hosts for which CPU or Memory metrics are collected) 	
O All Hosts	
Filter By Service	
Service	1
Hosts (FSMCategory)	-
Windows (FSMService)	
tor014002.prod.quest.corp (FSMService)	
petero-w2k3.prod.quest.corp (FSMService)	
windows service a (FSMService)	
winserive b (FSMService)	
winservice c (FSMService)	
Applications (FSMCategory)	
cat a (FSMCategory)	
cat b (FSMCategory)	
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You can choose to display all hosts or only active hosts and filter the information from each host by service.

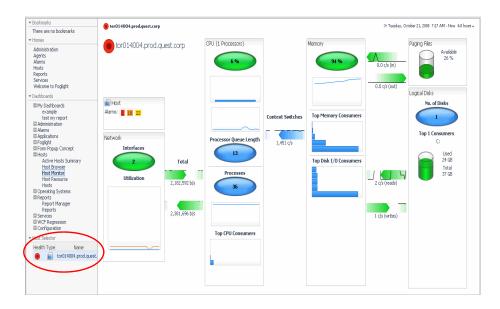
Viewing Real-Time Performance

The Host Monitor dashboard provides a real-time overview of how a host is functioning. The name of the current host is at the top left of the dashboard. The state of the various components is indicated by colors (see "State Icons" on page 95 for details). Discs with stateless metrics are displayed in blue.

To view real-time performance of hosts:

- 1 From the navigation panel, under **Dashboards**, click **Hosts** > **Host Monitor**.
- 2 To select a host to view in the host monitor, select the host from the Host Selector menu at the bottom of the navigation panel on the left.

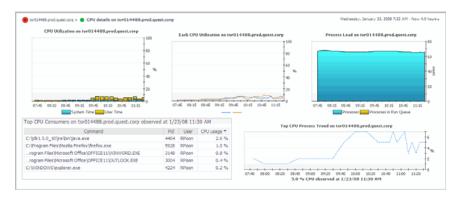
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Drilling Down to Detail Views

The dwells in this dashboard are mostly charts, such as the one in the Host Monitor dashboard. This dashboard also has a number of areas from which you can drill down to more detailed dashboards.

For example, clicking the Processes button in the CPU view takes you to a dashboard that displays detailed information about CPU utilization and processes for the current host, as shown below.



Hovering over a line or area in a chart displays a tooltip with data for the nearest time.

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Viewing Host Details

You can view details on:

- a single host
- a host (in portlet format)

Viewing Details on a Single Host

The Host Browser dashboard is similar to the Agents browser, except that it shows the agents for only one host at a time. It contains two views: Agents Running on *<host>* and Outstanding Alarm(s) for *<host>*.

To view details on a single host:

• From the navigation panel, under **Dashboards**, click **Hosts** > **Host Browser**.

The Host Browser dashboard appears.

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The name of the current host is at the top left of the dashboard. To see data for another host, click **Host Selector** in the action panel to open the Host Selector dialog, where you can choose another host.

The Outstanding Alarms view displayed at the bottom half of the dashboard is a common view in vFoglight. For further information, refer to "Alarm List" on page 58.

Viewing Host Details in Portlet Format

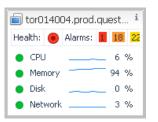
The Active Hosts Summary dashboard displays information about each active host in a separate view. This dashboard is useful when you have a small number of hosts and want to see a visual summary of them.

To view host details in portlet format:

1 From the navigation panel, under **Dashboards**, click **Hosts** > **Active Hosts Summary**.

The Active Hosts Summary dashboard appears.

Note A host becomes active when its memory usage is greater than 0%.



If you have a large number of hosts, you can use the Hosts Table dashboard, or use the Host Summary as a portlet in a custom dashboard and configure custom dashboards for each set of hosts.

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Monitoring the vFoglight Management Server

The vFoglight Management server is used to perform tasks such as host data sent from agents, run rules, and provides web-based UI access for monitoring servers. The vFoglight Management Server also contains various tools to monitor database schema and data objects and view diagnostic dashboards.

This chapter contains the following sections:

Overview	132
Viewing Logs	132
Viewing Performance-related Dashboards	134
Inspecting Object Types	141
Cleaning up Data Objects	143
Selecting Metrics to Compare	144
Viewing Server Metrics	147
Looking at Server Details	149
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Viewing Persistence Handler Details	151

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Overview

The vFoglight module contains various tools to monitor schema and data objects as well as to monitor the vFoglight Management Server.

The vFoglight module contains the following dashboards and group of dashboards:

- Agents
- Diagnostic (Log Analyzer dashboard and Performance-related dashboards)
- Schema Browser
- Servers (vFoglight Management Server, MySQL database, Persistence Handler)

Viewing Logs

You can display multiple log files in vFoglight to view and analyze known events and error conditions such as verbose or informational type of messages. The Log Analyzer dashboard enables you to navigate, view, and download logs. The time, level, source, and description of log messages is displayed for logs you view in this dashboard.

To view logs:

- 1 On the navigation panel under **Dashboards**, click **vFoglight** > **Diagnostic** > **Log Analyzer** > **Overview**.
 - **Note** You can also access the Log Analyzer dashboard through the Administration dashboard if you have access to the vFoglight Administration functions. On the navigation panel, under Dashboards, click **Administration > Administration**. In the Navigation view, under Tooling and Diagnostics, click **Server Log Overview**.

The vFoglight Log overview dashboard appears.

Monitoring the vFoglight Management Server Viewing Logs

Over	view Download Copen other L	001	Referents	In Monday, My 21, 2008 7 HL AM - 11 HL AM 4.8 he
Sum File 7	rnarγ	03/gkore) odhed on 2	build(disti)logs/phanagementServer_2008-07-18	_104007_001.log
	Time	Message	Source	Description
1	2008-07-18 10:40:07.238		[main] com.quest.common.util.QuestHome	No state directory was provided using the system property quest state .dir, the installation directory will be used to stor
2	2008-07-18 10:40:07.301	VERBOSE	[main] org. boss. system.server.Server	Starting 3Boss (HK Microkernel)
3	2008-07-18 10:40:07.301	VERBOSE	[main] org.(boss.system.server.Server	Release ID: 38oss [Zon] 4.0.5.GA (build: CVSTag=Branch_4_0 date=200610162339)
4	2008-07-18 10:40:07.301	VERBOSE	[main] org. (boss.system.server.Server	Home Dir 1 Crisendboxl/ oglight(H0G)/ glcore/build)dist
5	2008-07-18 10:40:07.201	VERDOSE	[main] org. boss.system.server.Server	Home URL: file:/C:/Kandba:/Foglight/HG/fglcore/build/dist/
6	2008-07-18 10:40:07.301	VERBOSE	[main] org.jboss.system.server.Server	Patch URL: null
2	2008-07-18 10:40:07.301	VERBOSE	[main] org.boss.system.server.Server	Server Name: default
8	2008-07-18 10:40:07.301	VERBOSE	(main) org. boss.system.server.Server	Server Home Dir: Crisandboxifoglight(HIG)/gicorejbuild(dist)server).default
9	2008-07-18 10:40:07.301	VERBOSE	[main] org. boss. system. server. Server	Server Home URL: Her/C:/sandbox/logight/HIG/rglcore/build/det/server/default/
01	2008-07-18 10:40:07.301	VERBOSE	[main] org. (boss.system.server.Server	Server Log Dir: Cijsandbox/foglight/H0G)/glcore/buildjdstjserver/default/jog
11	2008-07-18 10:40:07.301	VERBOSE	[main] org.tboss.system.server.Server	Server Temp Dir: C:\sandbov\foglight\HG\fglcore\build\dist\server\default\tmp
12	2008-07-10 10:40:07.301	VERDOSE	[main] org. boss. system server. Server	Root Deployment Filename: (boss-serviceml
13	2008-07-18 10:40:07.394	VERBOSE	[main] com.quest.common.config.Config	Loaded configuration "ManagementServer" from "C:(sandbox/foglight)#00/fglcore(buildulot).configUog.config":
20	2008-07-18 10:40:07.394	VERBOSE	[main] com.quest.common.config.Config	System property overrides for configuration "ManagementServer":
21	2008-07-18 10:40:07.457	INFO	(main) com.quest.nitro.startup.FoglightServer	Starting Foglight Management Server.
22	2008-07-10 10:40:07.473	VERBOSE	(main) com, quest.intro.startup.FoglightServer	Java vm arguments:
32	2008-07-18 10:40:07.473	VERBOSE	[man] com.quest.nitro.startup.FoglightServer	Java system properties:
106	2008-07-18 10:40:07.535	VERBOSE	[main] com.quest.nitro.startup.FoglightServer	System environment settings:
152	2008-07-18 10:40:07.566	VERBOSE	[msin] com.quest.common.config.Config	Loaded configuration "toglight.config" from "C:\sandbox/foglight)rtiG)fgicore\build(dist)config)toglight.config":
178	2008-07-18 10:40:07.566	VERBOSE	[main] com.quest.common.conFig.ConFig	System property overrides for configuration "fuglight.config":
179	2008-07-18 10:40:07.582	INFO	(main) com.quest.ntro.startup.FoglightServer	Foglight Management Server starting up using database host: localhost
180	2008-07-18 10:40:07.582	INFO	[main] com.quest.nitro.startup.FoglightServer	Foglight Management Server starting up using database port: 3306
181	2008-07-18 10:40:07.582	11470	[main] com.quest.nkro.startup.foglightServer	Foglight Management Server starting up using database name: foglight
182	2008-07-18 10:40:07.582	IMFO .	[main] com.quest.nitro.startup.FoglightServer	Foglight Management Server starting up using database user: nitragen
183	2008-07-18 10:40:07.582	TMP-0	[main] com.quest.nitro.startup.FoglightServer	Foglight Management Server starting up using database password: 30000000
184	2008-07-18 10:40:07.582	174FQ	[main] com.quest.nitro.startup.FoglightServer	Poglight Management Server starting up using database type: mysol
185	2000-07-18 10:40:07.582	114F-0	(main) com.quest.nitro.startup.FoglightServer	Foglight Management Server starting up using hibernate dialect: com.quest.nitro.hibernate.MySQLDialect
186	2008-07-18 10:40:07.582	INFO	[main] com.quest.nitro.startup.FoglightServer	Foglight Management Server starting up using cluster moast port: 45566
187	2008-07-16 10:40:07.582	INFO	[main] com.quest.nitro.startup.FoglightServer	Cluster bind port not configured, will use default: 0.
4				Contract Contract of the Contract of Contr

• To view the list of log messages in this dashboard, click <a>Open other Logs.... In the Log Selector dialog select the server.

Lo	og Selector		ΠX
1	Human Readable Text Logs Serialized Log Files Others		
	File Name	Size	=
1	C C:\sandbox\foglight\HIG\fglcore\build\dist\logs\ManagementServer_2008-07-18_10400 7_001.log	831,658	📄 Download

 To download a log, select the appropriate log from the Log Overview dashboard and click Download to open and view the log messages. 134 vFoglight User Guide

Viewing Performance-related Dashboards

vFoglight includes a set of diagnostic dashboards which are useful for analyzing the performance of a vFoglight Management Server as well as diagnosing problems relating to the Management Server, agents, database, etc.

The following performance-related dashboards are available:

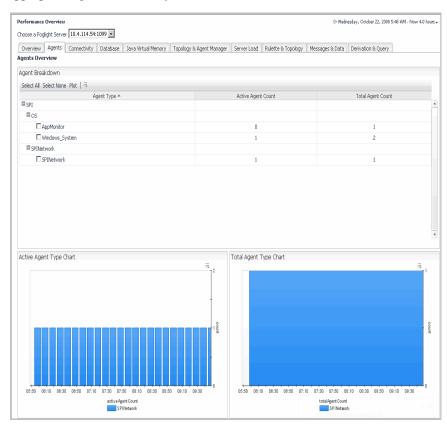
• Overview Tab

Displays database activity, data service performance, JVM performance and server load on one dashboard.



Agents Tab

Displays a list of agents by type. This dashboard is useful for understanding the agents connected to the management server. Select the Plot feature to view the appropriate agent connectivity.



To plot agent connectivity:

- 1 In the Plot tab, drill-down to the agent type.
- 2 Select the check box for the agent that you want to plot. Alternatively, click **Select All**, to view all agent types.
- 3 Click **Plot** from the menu.

The connectivity charts for the selected agent appears:

efermance Deerview scose a Foglight Server 10.4.114.54:1099		© Wednesday, October 22, 2008 & LT AM - New 4.8 he
Overview Agents Connectivity Database Java Virtual Mens	ory Topology & Agent Manager Server Load Rulette & Topology M	essages & Data Derivation & Query
gent Breskdown		
Select All Select None Plot 3		
Agent Type =	Active Agent Count	Total Agent Count
9 sp1		
H OS		
P AppMontor	0	1
Windows_System S5/Detwork	1	2
ctive Agent Type Chart	Total Agent Type Chart	
tive Agent Type Chart	Total Agent Type Chart	5
tive Agent Type Chart	Total Agent Type Chart	
the Agent Type Chart	Total Agent Type Chart	

• Connectivity Tab

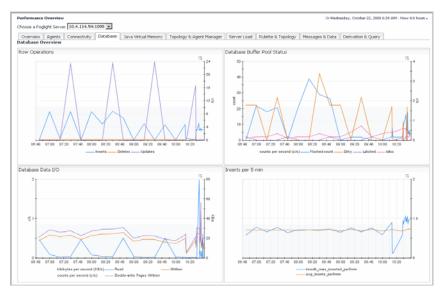
Shows the vFoglight connectivity for the JDBC Connection Pool and the User Session count.

Perfermance Overview Choose a Foglight Server 10.4.114.54:1099 🖃			⊙ Wedn	sday, October 22, 2008 5:58 AM - Now 4.0 hours -
Overview Agents Connectivity Database Java Virtual Memory Topology & Agent Manager Foglight Connectivity	Server Load	Rulette & Topology	Messages & Data	Derivation & Query
308C Connection Pool (10.4.114.54:1099)	User Session	Count on 10.4.114.		20 01-0 0100 00-20 00-40 0

vFoglight **User Guid**e

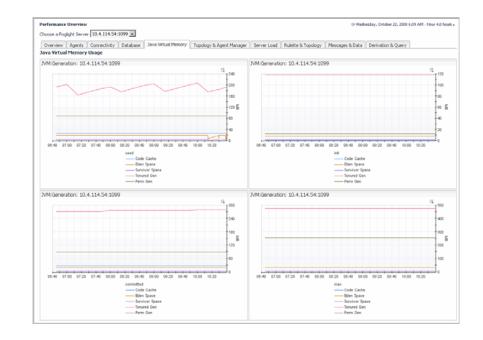
• Database Tab

Shows database activity such as data Input/Output, database buffer pool, and the number of inserts/deletes.



• Java Virtual Memory Tab

Contains information on Java Virtual Memory such as usage, initialization, committed, and maximized.



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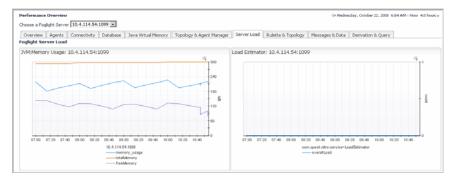
• Topology and Agent Manager Tab

Shows the number of topology changes, skipped messages, and total messages. This dashboard is useful for understanding the topology structure relating to agent activity.



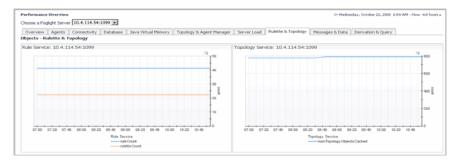
• Server Load Tab

Shows vFMS load metrics and JVM performance.



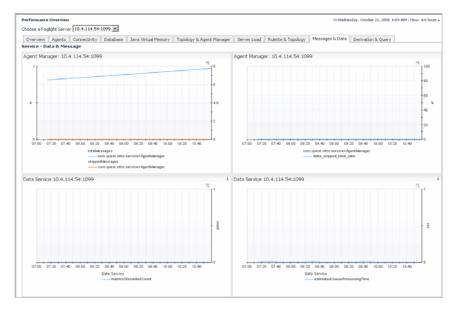
• Rulette and Topology Tab

Shows the number of rulettes and the number of topology objects in the vFoglight Management Server. This dashboard is useful for understanding model complexity.



• Messages and Data Tab

Highlights whether data and metrics are being processed in time or getting discarded.



• Derivation and Query Tab

Shows activity in the derivation and query service such as the number of evaluations, rulettes, errors, and cache performance.



Inspecting Object Types

Use the Schema Browser dashboard located in **vFoglight** > **Schema** to view information about data object types such as check which types are available, search for specific types, understand the relationship between types, and view instances of a particular type.

Schema Browser		Wednesday, February 6, 2008 12:52 P	M - 4:52 PM 4.0 hours -
Select a type to inspect.		Filter	
Abstract	Agent		~
AgentHealthState	AgentS	tate	
AgentStateObservation	AgentS	tateValue	
AggregateModelInstance	Aggreg	ateModelRoot	
AIX_Host	Alarm		
AlarmChangeType	AlarmSi	everity	
AlarmStateObservation	AlarmS	tateValue	
AlarmSystemEvent	AllType	Instances	✓
Details of Alarm	View by: Properties Ancestors Descen	dants Instances	
	Name	Type Name	
uniqueId		String	
sourceID		String	
sourceName		String	
ruleId		String	
ruleName		String	
severity		AlarmSeverity	
topologyObject		TopologyObject	
message		String	
isAcknowledged		Boolean	
createdTime		Date	
clearedTime		Date	
clearedBy		String	
acknowledgedTime		Date	
acknowledgedBy		String	
help		String	

Viewing a Data Object

The Schema Browser dashboard allows you to browse through the vFoglight Management Server connections and view the structure of the database and the schema objects to understand the structure and dependencies of the objects.

To view an object:

- 1 On the navigation panel, under Dashboards, click vFoglight > Schema > Schema Browser.
- 2 Find the data type in the list.
 - To apply a filter to narrow down the search criteria, type a character in the **Filter** box (for example, "Host") and press **Enter**.
 - To see the full list of data types, clear the **Filter** and press **Enter**.
- 3 When you select an object type, you can sort by various constituents of the object by using the **View by** options: **Properties**, **Ancestors**, **Decendants**, and **Instances**.

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Cleaning up Data Objects

The vFoglight Data Management dashboard is useful for inspecting and deleting data objects, and particularly for cleaning up objects that are no longer needed. For instance, if a set of agents is no longer required, the objects created by those agents will still be visible in the user interface. Removing these objects can have a positive impact on the performance of vFoglight and ensure that only necessary information is maintained in the database.

As an example, deleting agent instances from the Services dashboard removes the agent definitions. However, you can still view the agent entries in other dashboards such as the dashboard for Oracle. To remove the agent entries from these dashboards, you need to delete the agents using the vFoglight Data Management dashboard to remove the services and OracleModel Instances that was created for the Oracle dashboard.

Deleting a Data Object

The Delete option removes an object and all of its children. If you delete an object that is still active, it will be re-created.

Note Metrics are always preserved and deleted as part of this topology maintenance operation.

Data Management	G+ Wednesd
Object of Interest	Delete (object and all children)
E Host Model	
Foglight4Model	e
All Services	e

To delete a data object:

- 1 On the navigation panel, under **Dashboards**, click **vFoglight** > **Servers** > **Data Management**.
- 2 Drill-down to the data object you want to delete.
- 3 Click **Delete** leside the object to remove the object and all of its children.
- 4 Click **Yes** to the "Are you sure you want to delete this object" confirmation message.

Selecting Metrics to Compare

You can select host metrics in the chart on the vFoglight Data Management dashboard to compare metric data in chart form.

To select other metrics to compare:

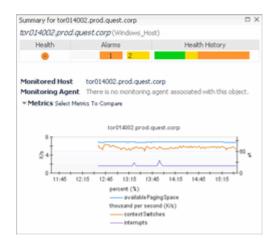
- 1 On the navigation panel, under **Dashboards**, click **vFoglight** > **Servers** > **vFoglight Data Management**.
- 2 Click a host object in the table to display a popup with additional information, such as the following:

Foglight Data Manageme	ent		
	Object of In	terest	(
Host Model			Delete
hosts			
tor014002.prod.quest.corp			Delete
tor014002.prod.quest.corp			Delete
Memory	Summary for tor01	4002.prod.quest.corp	• •
CPUs	tor014002.prod.	<i>quest.corp</i> (Windows_Hos	t)
Storage	Health	Alarms	Health History
Network		1 2	
🖽 detail			
agents	Monitored Host	tor014002.prod.quest.c	
petero-w2k3.pro	d.c • Metrics Select N		gent associated with this object.
Foglight4Model	* Metrics Select h	netrics To Compare	
All Services			
	tor014002.prod.quest.corp		
			60 % 40 20
	11:30 12	:00 12:30 13:00 13:30	14:00 14:30 15:00

- 3 Click Select Metrics to Compare.
- **4** If there is other data to display, select one or more metrics to display it in the chart.

Sele	ct Metrics To Compare	
	Metric A	
7	availablePagingSpace	
7	contextSwitches	
7	interrupts	
	numProcesses	
	runQueueLength	

5 The selected metrics are displayed in the chart.

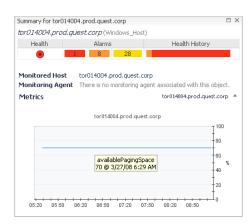


Adding Other Metrics to the Chart

Using the Metric Viewer you can add other metrics to view in a chart. This Viewer also contains a table that lists the start and end times when data was collected and the average for each collection period.

To add other metrics to the chart:

- 1 On the navigation panel, under **Dashboards**, click **vFoglight** > **Servers** > **vFoglight Data Management**.
- 2 Click a host object in the table to display a popup with additional information.
- 3 Click a line in the metrics chart to open the Metric Viewer.



4 To display another metric, select the metric from the drop-down list. For example, interrupts.

Foglight Data Management > Metric Viewer	
tor014004.prod.quest.corp: select metric to display	availablePagingSpace 🔹
	availablePagingSpace contextSwitches
tor014004.pro	interrupts modelAlarmCriticalCount
	modelAlarmFatalCount modelAlarmWarningCount
	modelChangeCountDelta numProcesses
	runQueueLength

5 The selected metrics (i.e. availablePagingSpace and interrupts) displays in the chart.

vFoglight User Guide

Monitoring the vFoglight Management Server Viewing Server Metrics

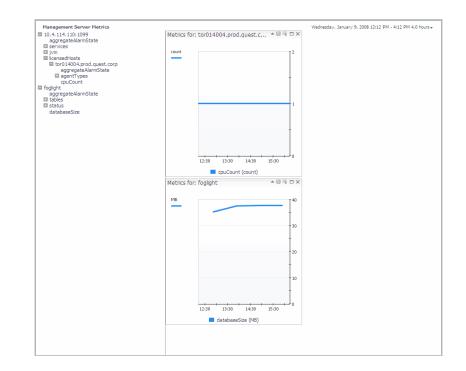
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Viewing Server Metrics

The Management Server Metrics dashboard consists of a tree view and a display area. You can select a server or data object from the tree view and view the metrics of particular objects by drag and drop.

To view the vFMS metrics:

- On the Navigation panel, under Dashboards, click vFoglight > Servers > Management Server Metrics.
- 2 Drill-down in the tree view to find the server or data object and drag it to the display area to view the data in the chart.
- **3** To choose the number of Columns to display the view, click 1, 2, or 3.
 - **Note** When displaying charts, it is not recommended to use 3 columns since this can skew the presentation of data.



For details on viewing charts, see "Tooltips, Dwells, and Popups" on page 50.

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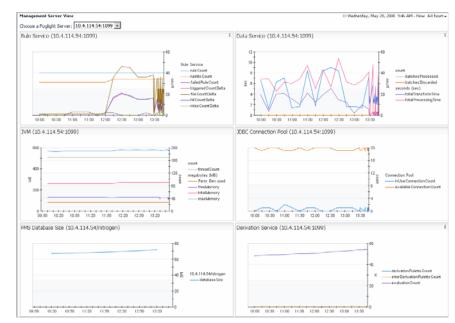
vFoglight User Guide

Looking at Server Details

The Management Server View dashboard is useful for examining the performance of vFMS (vFoglight Management Server). You can also use this dashboard to look for root causes of performance problems with vFoglight.

To view details of the vFMS:

1 On the Navigation panel, under Dashboards, click vFoglight > Servers > Management Server View.



2 Choose a vFoglight Server from the drop-down list to display the various views.

The views display the following information:

- **Rule Service view**—shows the number of bound rulettes for processing rules and derived metrics. (For information about rulettes, see the *Administration and Configuration Guide*.)
- **Data Service view**—shows the ability of the server to keep up with incoming data.
- JVM view—shows the memory performance of the JVM running vFoglight.

- **JDBC Connection Pool view**—shows how many connections are in use at any time.
- FSM Database Size view—shows the size of the database.

The combination of these five views gives a good overview of the performance of the vFoglight environment.

For details on viewing charts, see "Tooltips, Dwells, and Popups" on page 50.

Viewing MySQL Database Details

The MySQL Database Overview dashboard contains charts that display data about the embedded or external MySQL database.





To view the MySQL database details:

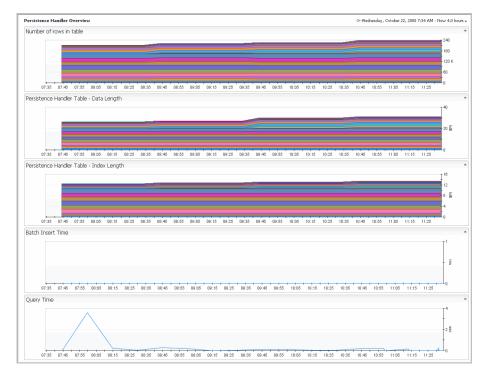
1 In the navigation panel, under **Dashboards**, click **vFoglight** > **Servers** > **MySQL Database Overview**.

- 2 Consult the views on this dashboard, which display the following information:
 - Row Operations
 - Database Buffer Pool Status
 - Database Data I/O
 - Database Pare I/O

For details on viewing charts, see "Tooltips, Dwells, and Popups" on page 50.

Viewing Persistence Handler Details

The Persistence Handler Overview dashboard contains charts that display information about the persistence handler such as the number of rows in the table, data length, index length, batch insert time, and query time.



To view details on the Persistence Handler Dashboard:

- 1 In the navigation panel, under Dashboards, click vFoglight > Servers > Persistence Handler.
- 2 Consult the views on this dashboard, which display the following information:
 - Number of rows in the table
 - Size of the table
 - Batch insert time
 - Query time

For details on viewing charts, see "Tooltips, Dwells, and Popups" on page 50.

Working with Applications

This section describes the Applications module dashboard.	
This chapter contains the following sections:	
Monitoring an Application	.154
Building an Application	.155

vFoglight User Guide

#

Monitoring an Application

You use the Application Details dashboard to monitor the details of a single application. It shows the structure of the application (tiers and flows), as well as the alarms for the application and its service impact.

Tier St			Long Name		Health	Alarms	Health History
Tier St			New Tier (EndUserTier)			1 1	History
			tor014488.prod.quest.corp (Windows	Host)		1 1	
			tor014488.prod.quest.corp (Window			1 1	
New	ummary		Windows System Windows-Jan 18@				
	Tier (EndUserTier)		rod.quest.corp		۲	1	
Healt	h: 📵 Alarms: 📘 📘		Storage (Windows_Storage)		۲	1	
			AppMonitor_AppMonitor-Jan 18@tor od.quest.corp	014488.pr	۲	1	
Relate	ents		System_Table		•		
Su	mmary		Top_IO_Table		•		
Pro	operty Viewer		Top_MEM_Table		•		
Edit Ti	er Flows		Top_CPU_Table		•		
	er Components Application Builder		Network (Windows_Network)		•		
60 10	Application builder		CPUs (Windows_CPUs)		•		
			Memory (Windows_Memory)		•		
View: 2 Outstanding	Alarm(s) 2 Alarm Source(s) 1	1 Related Host(s) 2 Relater	d Agent(s)	Health	P	arent Ser	vice
elect All Unselect All	Acknowledge Clear				New Ap	lingtion	
	Actionedge clear			-	NEW AD	Dication	
Sev Time 🔻	Host	Source	Message	-	New Ap	Dication	
			Message FileSystem C:: free space remaining 0.0 *		New Ap	Diication	

The following views appear on the Application Details dashboard:

- **Tier Overview** view contains an icon for each tier. Clicking an icon opens a view with details of that tier and links to related views.
- **Application Contents** view lists the components of the selected application. For each component it indicates the state of health, number of each type of alarm, and health history.

- **Outstanding Alarms** view lists alarm information for the selected application. For a description of this view, see "Alarm List" on page 58.
- Service Impact view lists services that may be affected by a problem with the selected application.

Building an Application

An application is a set of tiers in which each tier contains a set of monitored elements, such as hosts and servers. A tier has a defined flow that represents the data moving from the user to the back-end systems.

The Application Builder dashboard is where you create a new application from scratch. It contains all the functions needed to build an application model in three views — one for each step in the process.

	Jan 4. 2008 4:51	SS PM ES
i	Step Three: Application Preview (My New App)	
Add a Tier	My Web Ter	
Tier Add		
polofipadfipadfipadfipad noo'rw noo'rw		
NebTer)		*
	Currant Elouis	
444		
	Add a Tier Tier Add joloffpadoffpa	Ter Add jackfact/jac/fjac/fjac/fjac system:system.et/ webTer) WebTer

• In the Step One view, you add tiers to an application or edit the tiers in an existing application.

- In the Step Two view, you create tiers and define the flows and components for tiers.
- In the Step Three view, you inspect the application.

Note A new service is automatically created for a new application.

Step 1: Adding Tiers to an Application

Adding an application involves creating a set of application tiers that make up the different logical layers of the application. After the tiers are identified and created, they can be linked to show a logical flow of information. This makes it easier to understand the dependency between tiers. When you add vFoglight objects to the tiers, states begins to flow up to the tiers. The result is a model that shows which logical part of an application is causing a problem.

Note You can also add an application using the Service Builder Dashboard. See "Creating a New Application" on page 109.

To add tiers to an application:

1 In the navigation panel, expand the Applications node and select **Application Builder**.

The Application Builder is displayed.

2 In the Step One view, click Add ③ or select an existing application from the drop-down list.

The Application Creator dialog box appears.

New Application	×
Name	:
	Create Cancel

3 Type a name that is unique to vFoglight for the application and click Create.

The name of the new application is added to the drop-down list in the Step One view.

4 Choose the new application you just created from the drop-down list.

Running H/F 1 # Running H/F 2

Step 2: Creating Tiers, Defining Tier Flows and Tier Components

Creating Tiers

The following steps describe the procedure to create new tiers. If the tier already exists, you can add the tier to the application. See "Step 3: Adding Tiers to Preview the New Application and Tier Flows" on page 159.

To create a tier flow:

The Tier Creator dialog box appears.

New Applicat	on Tier		×
Tier Type	WebTier	•	
Tier Name			:
		Create	ancel

- 1 Select the Tier Type (e.g WebTier, DatabaseTier, etc.) from the drop-down list.
- 2 Type a name for the tier and click **Create**.

The name of the new tier is added to the drop-down list and appears under Add a Tier.

3 Continue to add new tiers to the application if required.

Defining Tier Flows

When you define tier flows you are specifying the workflow sequence from one tier to another.

To define a tier flow:

1 In the Step 2 view, choose the tier from the drop-down list in which the flow originates.

Step Two: Define or Choose a Tier		
Define Tier Flows Define Tier Components Flow from AppServer001 to:		Current Flows
Tiers	Add 🖛	Flow
MySQL Tier DatabaseTier	0	This tier does not connect to any others. Use the
EUL Tier EndUserTier	0	

- 2 Click the Add icon 💿 beside the tier which the flow.
- 3 The tier flow is added and appears under Current Flows.

Step Two: Define or Choose a Tier		
Add ORemove AppServer001 (AppServerTier)		
Define Tier Flows Define Tier Components Flow from AppServer001 to:		Current Flows
Tiers	Add 💌	Flow
EUL Tier EnduterTier	0	AppServer001 -> MySQL Tier DatabaseTier

4 Continue to add tier flows for the application if required.

Step Two: Define or Choose a Tier	(Tier) •	
Define Tier Flows Define Tier Component Flow from AppServer001 to:	ts	Current Flows
Tiers	Add 👻	Flow
There are no tiers left to add.	AppServer001 -> EUL Tier EndUterTier	
		AppServer001 -> MySQL Tier DatabaseTier

Defining Tier Components

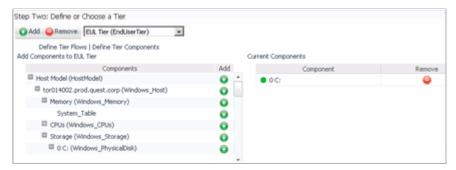
When defining tier components, you choose the components to add to the selected tier.

To define a tier component:

- 1 In the Step 2 view, choose the tier from the drop-down list.
- 2 Click Define Tier Components.
- 3 Drill-down to the component(s) you want to add and click Add 📀 beside the component.

Step Two: Define or Choose a Tier				
Add CRemove EUL Tier (EndUserTier)				
Define Tier Flows Define Tier Components Add Components to EUI, Tier		,	Current Components	
Components	Add		Component	Remove
Host Model (HostModel)	0		This tier does not contain any components. Us	Use the Add Component
tor014002.prod.quest.corp (Windows_Host)	0		control to add new ones.	
Memory (Windows_Memory)	0			
System_Table	0			
CPUs (Windows_CPUs)	0			
Storage (Windows_Storage)	0			
0 C: (Windows_PhysicalDisk)	0			

4 The component that you added appears under the Current Components list.



Step 3: Adding Tiers to Preview the New Application and Tier Flows

When you have finished adding tiers to the application, you can preview the new application in the Stepand tier flows in the Step 3 view.

To add Tiers to the Application:

1 Under Add a Tier, click Add 💿 for each tier(s) you want to add to the new application.

Application Builder			
Step One: Define or Choose an Ap	plication		i
Add CRemove MyTestApp			
Current Tiers for MyTestApp		Add a Tier	
Tier	Remove	Tier 🔶	Add
This application has no tiers.		AppServer001 AppServerTier	0
		EUL Tier EndUserTier	0
		MySQL Tier DatabaseTier	0

2 The tiers you added moves to the list under Current Tiers and you can preview the application tiers and flows in the step 3 view.

pplication Builder					May 15, 2008 5181-40 PM ED
itep One: Define or Choose an	Application		i	Step 3: Application Preview (MyTestApp)	
Add ORemove MyTestAp					
Current Tiers for MyTestApp		Add a Ter		EL Ter	
Ter	Renove	Tier =	Add	•	
AppServer001 AppServerTar	•	There are no tiers left to add.		AppServer0	
MySQL Ter DatabaseTer	•				
BJL Ter End.terTer					
	ũ			MySQL Ter	
izep Two: Define or Choose a				HySQL Ter	
itep Two: Define or Choose a Chat Contract AppGerve	Tier	2		HySQL Ter	-
	ior 201 (AppServerTier)]	2	Current Flows	HySQL Ter	
Add Premove RepServer Confine Ter Plovis Define Plove from AppServer000 tax Tiers	ior 201 (AppServerTier)]	x Add v		Piper	* Renove *
Cefine Ter Plovis Define Flow from AppServer0001 to:	ior 201 (AppServerTier)]	_			Passon *

3 Click the icon for each tier and choose one of the links to view its monitored hosts and agents, a summary of metrics by host and agent, or a list of its properties.

When you have finished building the application, you can check the Services dashboard to confirm that the service that was created for the application is listed in the Categories and Services view.

Removing an Application, Tier, Tier Flow, or Tier Component

Use the following procedure to remove an application, tier, tier flow, or tier component that is no longer required.

To remove an application, tier, or tier flow, or tier component:

- 1 In the Application Builder, click **Remove** if for the application, tier, tier flow, or tier component that you want to remove.
- 2 If you selected to remove an application or tier, a dialog prompts you to confirm the deletion. From the popup, click **Delete** to remove the selected item.

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Working with Reports

The Reports feature provides the ability to share data outside of vFoglight. In vFoglight, the tasks of report scheduling and report browsing/viewing are separated into the Report Manager dashboard and the Reports dashboard.

This chapter contains the following sections:

Introducing the Reports Module	
Supplied Report Templates	
Working with Reports	
Managing Scheduled Reports	
Managing Generated Reports	204
Working with Custom Reports	213

Introducing the Reports Module

Most users can use the Reports dashboard to run and schedule reports; however, the use of the Report Manager dashboard to work with scheduled reports as well as test (preview) report templates, and create a new schedule should be limited to those with advanced operator permissions.

You can create reports based on:

- Pre-defined, standard reports—out-of-the-box templates for a high-level, overview perspective of the data. For information on the list of supplied report templates, see "Supplied Report Templates" on page 164.
- Custom reports—created from any displayed dashboard. See "Working with Custom Reports" on page 213.

vFoglight divides the report-related functions into two separate dashboards:

- Report Manager dashboard—allows users with advanced operator permissions to perform the tasks of editing, copying, and managing scheduled reports, test (preview) report templates, create a new schedule (that is not part of the defined list of schedules), as well as delete scheduled and generated reports.
- Reports dashboard—available to all users who are assigned the Operator role. Enables operators to perform some common tasks as available in the Report Manager dashboard such as run or schedule a report as well as delete a report.

Report Manager Dashboard

The Report Manager Dashboard enables you to create, edit, copy, and schedule reports, test report templates, and delete scheduled and generated reports.

The Report Manager consists of four panes:

- The top pane runs across the top of the Report Manager dashboard contains the icons to **Run Report**, **Create** (custom) **Report**, **Schedule Report**.
- The left-hand pane contains a hierarchical list on the left to better organize the reports. The report templates are grouped accordingly:
 - **By Module**—reports are classified by the module in which the report template is created (for example, Services, Administration, or Host).
 - By Role—reports are grouped according to common use by a functional role.

- All—displays all available reports. The Module column indicates the module in which the report was defined.
- The upper right pane displays the **Scheduled Reports** view with the scheduled reports that have been created on the basis of the template.
 - The **Name**, **Template**, and **Schedule** columns for each scheduled report is listed. Click on a template or schedule to view details.
 - The User column lists who created the report.
 - The **Retain** column lists how many instances of a report are kept. For example, if the value is 3, then when a fourth report is generated, the oldest one will be deleted.
 - The **Disabled** column indicates whether the report is not currently being generated (true) or is being generated (false).
- The lower right pane displays the **Generated Reports** view containing the following columns:
 - Date and Time when each scheduled report was generated, Report name, Size, Template, and Schedule.
 - Message column displays any error messages associated with the report.
 - View column containing the PDF output of a generated report.

To show or hide columns in the generated reports view, click the \exists Show/Hide columns and select the checkboxes beside the columns to appear.

Report Manager								Oct.	7, 2000 11:0	201 AM
Generate a report fresulting report app	rom the report template list. The ears in the Generated Reports tab	le.	data for dis	port stom report using the reportal page to extr play. Drag views and data elements from th I, on the right, onto the custom report.	ract 🚺 Sche	edule Report idule a report from I ific date and time.	the report ter	nplate list to ru	n at a	
By Module By Role	All	Sche	duled Reports					Scheduled	Report Filt	er Not Se
🔂 Schedule Report 📆	Test New Schedule	Sele	et All Select None Manage 🗟							
Template	Module +		Name +	Template	Schedule	User	Retain	Enabled	Сору	Edit
< Show AI >			khk	Performance Report	Beginning of the day	foglight	5	brue	1	2
Performance Report	Foglight/Diagnostic/Performance	Π	test performance report	Performance Report	Frequent [Test]	foglight	5	true	1	1
Sample Report	Foglight/Reporting	-								
Hosts Summary Report	Foglight/Reporting									
	Fodiaht/Reporting									
System Resources	1 of advision of a									
	Foglight/Reporting	1								
System Resources System Performance Event Analysis Report - Topology Objects										
System Performance Event Analysis Report -	Foglight/Reporting									
System Performance Event Analysis Report - Topology Objects Event Analysis Report -	Foglight/Reporting Reports/Canned Reports									
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Hosts CPU Ublication (Rolling N Morth Summary) Memory Ublication (Rolling Memory Ublication (Rolling	Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports									
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Hosts CPU Ublication (Rolling N Month Summary) Network Ublication (Rolling N Morth Summary) Network Ublication (Rolling	Regoldki/Reporting Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports	Gen	valed Reports						Report Fib	er Nol S
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Hosts CPU Ublication (Rolling N Month Summary) Network Ublication (Rolling N Month Summary) Network Ublication (Rolling N Month Summary) System Ublication in Leit	Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports		inated Reports et All Select None 😜 Delete 🗟							er Not Se
System Performance Event Analysis Report Topology Objects Event Analysis Report - Hosts CPU Ublication (Rolling N Menth Summary) Memory Ublication (Rolling N Month Summary) Network Ublication (Rolling N Month Summary) System Ublication in Last 10 Days	Pogleht/Reporting Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports	Sele	act All Select None 😜 Delete 🕮 Date *	Nano		Sce		Template		er Nol Si
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Horats CPU Ublication (Rolling N Month Summary) Metwork Ublication (Rolling Month Summary) System Ublication in Last 10 Days Service Level Summary	Poglight/Reporting Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports	Sele	act All Select None 😜 Delete 🗄	Name test performance report	Ver PCF		Performance	Template		er Not Se
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Horats CPU Ublication (Rolling N Month Summary) Metwork Ublication (Rolling Month Summary) System Ublication in Last 10 Days Service Level Summary	Pogleht/Reporting Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports	Sele	act All Select None 😜 Delete 🕮 Date *			109 KB	Performano	Template e Report		er Nol S
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Horats CPU Ublication (Rolling N Month Summary) Metwork Ublication (Rolling Month Summary) System Ublication in Last 10 Days Service Level Summary	Pogleht/Reporting Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports	Sele	Al Select None Colete = Date * 10/7/08 11:00 AM 10/7/08 10:55 AM	test performance report	POF	109 KB		Template e Report e Report		er Not S
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Horats CPU Ublication (Rolling N Month Summary) Metwork Ublication (Rolling Month Summary) System Ublication in Last 10 Days Service Level Summary	Pogleht/Reporting Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports	Sek	nt Al Select Name Delete E Dele * 10(7)08 11:00 AM 10(7)08 10:55 AM 10(7)08 10:50 AM	test performance report test performance report	PDF	109 KB 109 KB 110 KB	Performance	Template e Report e Report e Report		er Nol Se
System Performance Event Analysis Report - Topology Objects Event Analysis Report - Hosts CPU Ublication (Rolling N Month Summary) Network Ublication (Rolling N Morth Summary) Network Ublication (Rolling	Pogleht/Reporting Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports Reports/Canned Reports		nt Al Select Name Delete E Dele * 10(7)08 11:00 AM 10(7)08 10:55 AM 10(7)08 10:50 AM	test performance report test performance report test performance report	POF POF POF	109 KB 109 KB 110 KB 110 KB	Performano Performano	Template e Report e Report e Report e Report e Report		er Hol Se

Reports Dashboard

vFoglight User Guide

The Reports dashboard is available to Operators and lists the reports which have been generated. You can sort the list according to date, scheduled report, size, template, schedule, or message. The Reports dashboard has the same view as the Generated Reports area that is in the Report Manager dashboard, except that the Reports dashboard shows all reports that were generated in the Generated Reports view. The Report Manager dashboard shows reports according to the type of scheduled report as well as generated reports.

You can also use the Reporting dashboard to run a report using a report template, create a custom a report, and schedule a report to run at a later date.

To navigate to the Report Manager dashboard from the Reports dashboard, click the **Manage Reports** icon. Note that you will need Advanced Operator permissions to do so.

To filter the shown reports based on search text see "Applying a Filter to Generated Reports" on page 206.

To show or hide columns in the Generated Reports view, click the $\stackrel{\text{leg}}{=}$ Show/Hide columns and select the checkboxes beside the columns you want to appear.

Rep	orts					Sep 29, 2008 11:43:34 AM EDT
Ξĥ	Generate a report from the report template list. The resulting report appears in the Generated Reports tabl	Schedule a report from the report template list to run at a specific date and time.				
	Create Report Create a custom report using the reportal page to extract data of display. Drag views and data elements from the Action Panel, on the right, onto the custom report.		hierarchica dashboard schedule r	eport Manager da ally by module or d allows you to cr	sshboard to organize reports role. The Report Manager pate, edit, copy, and rt templates, and delete aports.	ż
	elect All Select None 🤤 Delete 🗮					
	Date 🔻	Name	View	Size	Template	
	5/29/08 11:40 AM	Hosts on tpdc10	PDF	15 KB	Hosts Summary Report	

Supplied Report Templates

Reports are created based on existing templates. Before you can create a report, you must know the template's capabilities. Different reports use different parameters; these parameters define the content of the report

vFoglight contains a number of pre-defined, overview type reports based on default templates that you can use as they are or edit to meet your requirements. Each one serves a particular purpose however, there are multiple report templates that have the same expected inputs. The predefined report templates allow you to quickly generate reports with the option of setting and changing the values in the report inputs. The supplied templates are described on the following pages.

You can also create a custom report, which is similar to creating a dashboard. When you create a custom report, it is added to the report templates list. See "Creating a Custom Report Template" on page 213.

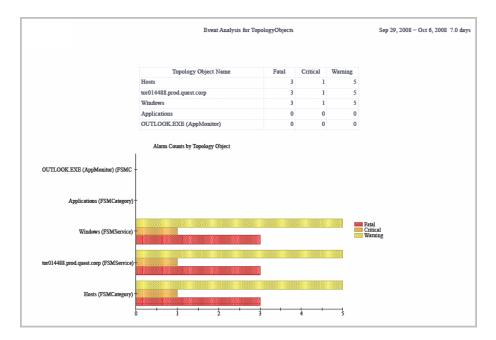
Note Most of the pre-defined reports have grid components that do not support CSV (Comma Separated Value) output.

This section also lists the possible report inputs that are available for each supplied report template. The contents of the report input dialogs vary depending on the type value you are editing. You can set your own specialized parameters by specifying values for the report inputs using the Web Component Framework which is used to build all the views in the vFoglight user interface. For more information on context input and values, see the *Web Component Guide* and *Web Component Reference*.

Event Analysis for Any Resources Report

Provides an overview of the events for the given topology objects grouped by severity.

vFoglight **User Guid**e



Fatal Events					
Hosts Fatal					
Count	Alarm Message	Last Issued	State History		
3	FileSystem C:: free space remaining 12.00% (14217.00 Mb).	n/a	Default Text		
tor014488.prod.quest.o	corp		Fatal Events		
Count	Alarm Message	Last Issued	State History		
3	FileSystem C:: free space remaining 12.00% (14217.00 Mb).	n/a	Default Text		
Windows					

Count		Alarm Message		Last Issued	State Hist	ory
	FileSystem C:::	free space remaining 12.00% (14217.00 Mb).		n/a	Default Text	
lications						Fatal Ev
Count		Alarm Message	Last Issu	ed.	State History	
re Is No Data To D	iculay					
	ыршу					
						Fatal Ev
FLOOK EXE (Appl		Alarm Message	Last Issue		State History	Fatal E

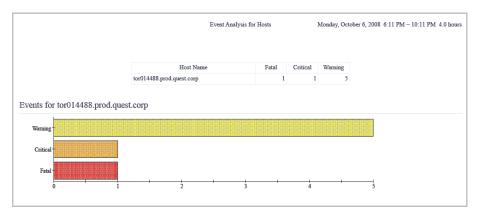
Report Inputs

Report Input	Description of Values
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> unit>) For example, last 2 months. Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) </number> Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute).

Report Input	Description of Values
topology objects	 Required. Use the Topology layout to define different views for up to four zoom levels of combinations to display a tree of objects descending from a defined Root Object, which is either: Data (for a single object of that data type) List (specifying a list of objects for that data type) Select an object by navigating to the data node to find the data source for the object. You can also use: Query Selection—to use WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—to invoke a function run-time value by specifying a null parameter.

Event Analysis for Hosts Report

Provides a summary of events for the given hosts grouped by severity. Also displays the count, alarm message, last issued, and state history for each event, if applicable.



Working with Reports Supplied Report Templates

	Event Analysis for Hosts	Monday, October 6, 200	8 6:11 PM - 10:11 PM 4.0 hours
Fatal Events			
tor014488.prod.quest.cor	p		Fatal Events
Count	Alarm Message	Last Issued	State History
1	FileSystem C:: free space remaining 12.00% (14217.00 Mb).	n/a	Default Text

	Event Analysis for Hosts M	fonday, October 6, 2008	6:11 PM - 10:11 PM 4.0 hous
Critical Eve			
tor014488.prod.q			Critical Even
101014488.prod.q	luest.corp		Chucai Even
Count	Alarm Message	Last Issued	State History
1	CPU Utilization is at 4.00% and the number of process in the run queue is 0.00. A CPU Bottleneck in being detected on tor014488 prod.quest.corp. Check the top processes (using the Top_CPU_Table) to determine which processes are the greatest contributors to CPU Loads, or follow the Foglight online help to find out if the system is CPU constrained.	, ,	Default Text

/arning Eve	unte		
r014488.prod.q			Warning Events
Count	Alarm Message	Last Issued	State History
	NT Event Log: Application PatchLink Update Agent Agent: Get TaskList Communications Failure. Open Request Error (1110) occurred opening request to http://patchlink.prod.quest. corp/update/gravitixISAPI.dll. The error string is: (An authentication HTTP error (401) occurred contacting patchlink prod.quest.	n/a	Default Text
	Disk 0 C.'s: utilization is 0.00% and the Queue lengths are greater than 2. This indicates a possible performance problem on this disk.	n/a	Default Text

The number of Critical and Warning events shown in the summary on the top of this report may not match the number of events shown under the Count column in the Event detail sections. The Counts shown in the Event detail sections do not include events that have escalated to higher severy levels. For example, a CPUWarning that escalates to a CPUCritical and then to a CPUE that event will show as 3 events in the summary to only as 1 event in the Fahal Event detail section.

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Report Inputs

Report Input	Description of Values
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> <unit>) For example, last 2 months.</unit></number> Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute).
fsmService	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.

Report Input	Description of Values
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Physical Host - CPU Utilization Monthly Summary Report

Provides a monthly summary of host CPU utilization.

					CPU Uti	lization Ro	lling 12 Mo	nth Summa	у					
							Rolling 12	Months (%)						
Host	Processor	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Summary
There Is No	Data To Display													

Report Inputs

Report Input	Description of Values
nMonths	Type an integer value to denote the number of months.
fsmService	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value. Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Physical Host - Memory Utilization Monthly Summary Report

Provides a monthly summary of a host's memory use.

					Memory	Utilization	Rolling 12 1	Month Sumr	nary					
							Rolling 121	Months (%)						
Host	Memory	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Summary
There Is No	Data To Display	7												

Report Inputs

Report Input	Description of Values
nMonths	Type an integer value to denote the number of months.
fsmService	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Physical Host - Network Utilization Monthly Summary Report

Provides a monthly summary of host network utilization.

			I	Rolling 121	Months (%))			Trend

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Report Inputs

Report Input	Description
nMonths	Type an integer value to denote the number of months.
fsmService	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Physical Host Utilization Summary - Last 10 Days Report

Lists the host CPU, Memory, Disk and Network data over the last 10 days.

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Report Inputs

Report Input	Description
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> (unit>) For example, last 2 months. Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) </number> Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute).
fsmservice	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.

Report Input	Description
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Management Server Performance Summary Report

Displays current vFoglight Server performance information, including DB metric, JVM, and agent connectivity.

80 STRE	performance over l	performance over last 2 months				
Foglight Server Configurations						
Federation						
Federation Mode		Child/Standalone				
Number of Children		0				
Server						
Version	5.2.4					
Build	developer-5.2.4					
Foglight Home	C:\sandbox\fogli	ight\LEP\fglcore\build\dist				
JBoss Server Directory	C:\sandbox\fogli	ight\LEP\fglcore\build\dist\server\default				
Federation Configuration						
Connection URLs	n/a					
Max Alarm Update Delay (millis)	50,000					
Max System Time Difference (millis)	60,000					
Topology Queries	!TopologyObjec	t				
Topology Refresh Period (millis)	1,800,000					

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807 1371WE	performance over last 2 months	Foglight Performance Repo
Database		
Host	localhost	
Port	3306	
Туре	mysql	
Hibernate Dialect	com.quest.nitro.hibernate.MySQLDialect	
Database Name	foglight	
User	nifrogen	
Location	External	
JVM		
Name	Java HotSpot(TM) Client VM	
Version	1.6.0_06 (10.0-b22)	
Vendor	Sun Microsystems Inc.	
Architecture (bit)	32-bit	
OS		
Туре	Windows XP x86 5.1, ia32	
Patch	Service Pack 2	
WCF		
Version	2.9.0	
Build	HEAD-20081005-2330	

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Report Inputs

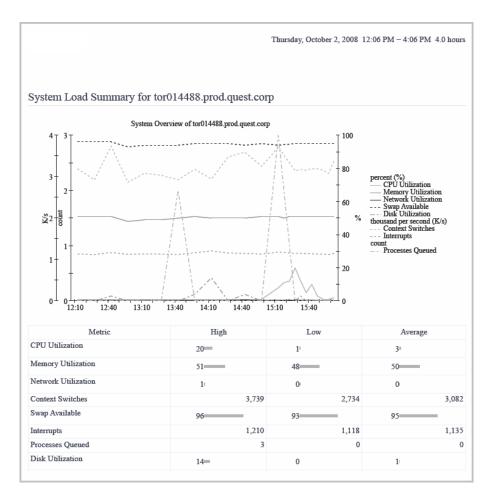
Report Input	Description
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> <unit>) For example, last 2 months.</unit></number> Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute).
description	Specify a string value describing the report.
FoglightServer	 Select a vFoglight server. Alternatively, click Show Advanced to returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.

Report Input	Description
currentTime	Use the calendar to specify the current time of the report.

Physical Host Load Summary Report

The Hosts Summary report provides a host summary for the CPU, memory, file system, and network usage.

					111413	day, October	2,2000 12	5.00 I IVI	1.001141	1.0 1001
Hosts – Utili	ization Sumr	narv Ta	ible							
Hosts — Utili Host Name	ization Summ	nary Ta		Летогу		File Syste	m		Network	



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Report Inputs

Report Input	Description of Values
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> (unit>) For example, last 2 months. Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) </number> Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute).
fsmService	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.

Report Input	Description of Values
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Physical Host Performance Details Report

Provides an overview of the host system data over a given time range including CPU, Memory, File System and Network metrics.

vFoglight **User Guid**e

								Sysu	em Resourc
ystem Resources									
At-A-Glance									
		CPU			Mem	ory	Disks	Ne	twork
Hosts	System	User	Total	Page s In		Swap Available	Capacity Used		Packets Received
tor014488.prod.quest.corp	\bullet	▼	▼	▼	▼	▼	•	▼	▼
			Normal						

								System	Resourc
etails									
or014499 pro	d quest corp (Host)							
01017700.pi0	d.quest.corp (nost)							
CPU									
Start Time	End Time	System Utilization (%)		User Utilization (%)		CPU Utilization (%)		Idle Time (%)	
		Max	Avg	Max	Avg	Max	Avg	Max	Avg
10/2/08 10:57 AM	10/2/08 11:12 AM	ŀ	0	2	ŀ	3-	2	99	*
10/2/08 11:12 AM	10/2/08 11:27 AM	0	0	Þ	3	Þ	1	»——	
10/2/08 11:27 AM	10/2/08 11:42 AM	ŀ	0	2	3	3	2	»——	*
10/2/08 11:42 AM	10/2/08 11:57 AM	ŀ	0	11-	4	12-	5	»——	93
10/2/08 11:57 AM	10/2/08 12:12 PM	ŀ	0	1:	Ъ	2	2	99	
10/2/08 12:12 PM	10/2/08 12:27 PM	0	0	Þ	ŀ	1	3	99	s
10/2/08 12:27 PM	10/2/08 12:42 PM	2	1	3	2	5-	3	»	97
10/2/08 12:42 PM	10/2/08 12:57 PM	0	0	ŀ	ŀ	ŀ	ŀ	99	*
10/2/08 12:57 PM	10/2/08 1:12 PM	b.	ŀ	3	2	4	2		-

						5	System Reso
lemory							
Start Time	End Time	Pages	In (1/sec)	Pages	Out (1/sec)	Swap Available (%)	
		Max	Avg	Max	Avg	Max	Avg
0/2/08 10:57 AM	10/2/08 11:12 AM	1	0	0	0	96	96
0/2/08 11:12 AM	10/2/08 11:27 AM	0	0	0	0	96	96
0/2/08 11:27 AM	10/2/08 11:42 AM	0	0	0	0	96	96
0/2/08 11:42 AM	10/2/08 11:57 AM	0	0	0	0	96	96
0/2/08 11:57 AM	10/2/08 12:12 PM	0	0	0	0	96	96
0/2/08 12:12 PM	10/2/08 12:27 PM	0	0	0	0	96	96
0/2/08 12:27 PM	10/2/08 12:42 PM	27	9	20	7	96	96
0/2/08 12:42 PM	10/2/08 12:57 PM	0	0	96	58	94	94
0/2/08 12:57 PM	10/2/08 1:12 PM	0	0	0	0	94	94

System Resources

Disks

Disk Name	Space Total	Space A	Capacity Used (%)		
		Max	Avg	Max	Avg
C :	114,469.00 MB	16,866.00 MB	16,866.00 MB	85	85

Network

Start Time	Time End Time Utili		cation Pa		ets Sent	Packet	Packets Received	
		Max	Avg	Max	Avg	Max	Avg	
10/2/08 10:57 AM	10/2/08 11:12 AM	0	0	36	33	41	38	
10/2/08 11:12 AM	10/2/08 11:27 AM	0	0	34	33	38	37	
10/2/08 11:27 AM	10/2/08 11:42 AM	0	0	40	35	44	40	
10/2/08 11:42 AM	10/2/08 11:57 AM	1	0	47	37	52	42	
10/2/08 11:57 AM	10/2/08 12:12 PM	0	0	32	29	37	35	
10/2/08 12:12 PM	10/2/08 12:27 PM	0	0	31	31	36	35	
10/2/08 12:27 PM	10/2/08 12:42 PM	0	0	40	36	45	41	
10/2/08 12:42 PM	10/2/08 12:57 PM	0	0	33	32	37	36	
10/2/08 12:57 PM	10/2/08 1:12 PM	0	0	37	35	41	39	

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Report Inputs

Report Input	Description of Values
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> <unit>) For example, last 2 months.</unit></number> Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute).
fsmService	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.

Report Input	Description of Values
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Physical Host Performance Summary Report

Provides an overview of the current host system data including CPU, memory, and file, and network.

				System Performance
System Performance				
At-A-Glance				
Hosts	CPU	Memory	Disk IO	Network
tor014488.prod.quest.corp	•	•	▼	▼
Under Ut	tilized	High Over Ut	lized	

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					System Performa	
etails						
or014488.prod.qu	est.corp (Ho	ost)				
	CPU			Memor	у	
Util (%)		Run Queue (#)		Pages Out (1/sec)		
5	0		0			
Disk Name		Util (%)		Service Time	(ms)	
C :		0	1 ms			
	Network Int	terface Name		Util (%)	Errors (#)	
3Com EtherLink XL 10_100	PCI TX NIC [3C	905B-TX] - Packet Schedule	er Miniport	0	0	
VMware Virtual Ethernet Ad		0	0			
VMware Virtual Ethernet Ad		0	0			
	MS TCP Loopback interface					

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Report Inputs

Report Input	Description of Values
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> <unit>) For example, last 2 months.</unit></number> Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute).
fsmService	 Returns a list of objects representing the FSM service by using one of the following: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and navigate to the data node to find the data source for the object. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value by specifying a null parameter.
longNameLike	Returns a list of values matching the string.

Report Input	Description of Values
maxHosts	 Returns a list of objects representing the maximum hosts. Choose either: Integer—enter an integer value Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Drill-down to the object and select a node. Query Selection—uses WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—invokes a function run-time value.

Service Level Summary Report

Provides service level summary information including alarm information and availability over a given time range.

Report Inputs

Report Input	Description of Values		
timeRange	 Specify a period of time to report from. TimeRange for a metric observation can be specified in various ways, but it is always composed of a range of date-time objects, and a granularity. Select: TimeRange Type: Choose one: Last N (to display the time range for the last <number> <unit>) For example, last 2 months.</unit></number> Calendar Aligned (enter a time range and offset number) Custom (choose the date range on the calendar) Unit: select the timeframe (e.g. Year, Month, etc) Number/Offset: enter a value for the timerange. Granularity: Choose one: RAW—data observations are shown in the metric history with the smallest available granularity, or a number of milliseconds, for example, 300,000 for 5 minutes. AUTO—the system will pick the best granularity based on the time range. For example, a numeric value of -2 a specific time interval from the drop-down (e.g. 1 minute). 		
SLA	 Required. Choose a method to return a list of objects representing the FSM ServiceLevelPolicy by using one of the following functions: Data—displays a tree of objects descending from a defined Root Object, for a single object of that data type. Query Selection—to use WCF queries that are similar to SQL queries to select a subset of information in a data source. Invoke Function—to invoke a function run-time value by specifying a null parameter. 		

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Working with Reports

This section describes the functions that are available to work with reports such as run a report, schedule a report, test a report template, and add a new schedule to the default report schedules list. The tasks of running a report and scheduling a report are available in both the Reports dashboard and Report Manager dashboard. The Test and New Schedule buttons are only accessible in the Report Manager dashboard.

Running a Report

The **Run Report** option on the Reports Manager dashboard or the Reports dashboard enables you to choose a report from the report template list and run the report so you can view the PDF output of the report immediately without having to schedule the report. The resulting report appears in the Generated Reports table.

When you run a report you do not attach a schedule to it. To schedule the report to run on a particular date and time, see "Scheduling a Report" on page 194.

When choosing a template in the Run Report option you can specify values for the report inputs or leave the report values without attaching any values to it.

To run a report:

- 1 In the navigation panel, under Dashboards, click **Reports** > **Report Manager**. If you do not have access to the Report Manager dashboard, click **Reports** > **Reports**.
- 2 Click **Run Report** is to open the Run Report dialog box.

Run Report		□ ×
Report Template	Please click here to select a template	
Module		
Туре		
Description		
Report Inputs		
Report inputs will be available	e when a template is selected.	
Name		
View Now		
Report Format	PDF •	
Email Recipients		
	*	
		Run Cancel

3 Complete the entries in the Run Report dialog box:

a Report Template—click **Please click here to select template** and drill-down to the report template on which to base your report. To help you focus on the source of the report, when choosing a report you can select by module, role or all.

Template 🔺
All Report Templates
By Module
By Role

• Click the report template you want to use.

The dialog box populates with the data for the template you selected.

• You can leave the report inputs as is or tailor the report by specifying report input values according to your business requirements. To specify an input value to this report, click the ^{Henot set} Edit icon in the Value column of the Report Inputs table to open an edit dialog. The contents of this dialog vary depending on the type value you are editing. For example, an input can be a time range that determines the range of data to display. For information on report inputs, see the Report Input section for the appropriate report template in "Supplied Report Templates" on page 138. If a Report Input is marked as required under the Usage column, a value must be set to create the scheduled report. If you enter a new value click Set.

For more information on the Web Component Framework and context inputs, see the Web Component Guide and Web Component Tutorial.

- **b** Name—type a unique name for the report. This is a required field.
- **Note** If you are using a template in which the host name is required, you must enter the host name in the text field exactly as it appears at the top of the reports.
- **c** View Now—select the check box to view the PDF output of the report immediately.
- d Report Format—select PDF to create the report in PDF format.
 - Note The CSV option does not appear for pre-defined reports (with the exception of the vFMS Database View diagnostic report) since most pre-defined reports are not capable of generating meaningful CSV data. To generate a CSV report, the component type of the report must support CSV output. For details, see "Creating a CSV Report" on page 215.
- e Email Recipients—type the recipient's email address in the text box to send an email notification about this report. For multiple email recipients, you can

enter a list of comma-separated email addresses however, you must restart the vFoglight Management Server.

- Note To send reports to email recipients from the Report Manager, you must configure the e-mail server by enabling the "Email Reports Sample" rule. By default, this rule is disabled. When enabling the rule you may also have to edit the "Fire" condition to filter the reports before sending them to email recipients. For more information, see the vFoglight Administration and Configuration Guide under "Working with vFoglight Rules and Registry > Working with Rules > Defining Conditions, Alarms, and Actions > Defining actions > vFoglight actions > Viewing email settings and configuring email actions".
- 4 Click **Run** to generate the report immediately in PDF format.

Scheduling a Report

Select the **Schedule Report** option on the Reports Manager dashboard or the Reports dashboard to create a report using the report template list and then scheduling the report to run at a particular time. You have the option to leave the report input values as is or tailor the report by specifying input values according to your business requirements.

Note You can also schedule a report that has generated. See "Scheduling a Generated Report" on page 208.

If you want to define a new schedule other than the out-of-box schedules provided with vFoglight, see "Adding a New Schedule" on page 198.

To schedule a report:

- 1 In the navigation panel, under Dashboards, click **Reports** > **Report Manager**. If you do not have access to the Report Manager dashboard, click **Reports** > **Reports**.
- 2 Click Schedule Report to open the Scheduled Report dialog box. You can schedule a report by either:
 - Choosing a template from the Reports list in the Reports Manager dashboard:

By Module By Role All	
Schedule Report 🔂 Test 式 New Schedule	
Template 🔺	
< Show All >	
🖽 Foglight	
🖬 foglight	
Hosts	
Operating Systems	
Reports	
Canned Reports	
Event Analysis - Any Resources	
Event Analysis - Hosts	
Physical Host - CPU Utilization Monthly Summary	
Physical Host - Memory Utilization Monthly Summary	

If you chose this option, when clicking Schedule Report, the Create Scheduled Report populates automatically with data for the selected template.

Create Scheduled Report				$\square \times$
Report Template	Physical Hos	t - CPU Utilization Monthly Summary		-
Module	Reports/Car	nned Reports		
Туре	WCF			
Description	A monthly s	ummary of host CPU utilization.		
Report Inputs				
Name	Usage	Туре	Value	
nMonths	Optional	Common:Integer	III., not set	
fsmService	Optional	Foglight:FSMService	III., not set	
longNameLike	Optional	Common:String	III, not set	
maxHosts	Optional	Foglight:Integer	I≡, not set	
pageNumber	Optional	Common:Integer	III, not set	
currentTime	Optional	Common:Date	III., not set	
reportTitle	Optional	Common:String	III, not set	
Name Schedule Retained Results Enabled Report Format	Beginning o 5 PDF V	of the day	:	
[4]				Þ
			Create	ancel

• Choosing Schedule Report from the top pane of the Reports dashboard or Reports Manager dashboard.

Report Manager		Oct 20, 2000 1:42:01 PM EDT
Run Report Generate a report from the report template list. The resulting report appears in the Generated Reports table.	Create Report Greate a custom report using the reportal page to extract data detends for display. Drag views and data elements from the Action Panel, on the right, onto the custom report.	Schedule Report Schedule a report from the report template list to run at a specific date and time

If you chose this option you will need to click **Please select report template**.

Create Scheduled Report			×
Report Template	Please select Report Template		
Module			
Туре			
Description			
Report Inputs			
Report inputs will be available wh	nen a template is selected.		
Name			
Schedule	Beginning of the day		
Retained Results	5		
Enabled	V		
Report Format	PDF V		
Email Recipients	A		
	v		
	Create C	ance	:

Drill-down to the report template on which to base your report. Select a template on which to base your report from the Report Template column. To help you focus on the source of the report, choose a report based on their classification: By Module, By Role, or All.

Template 🔺
All Report Templates
By Module
By Role

If you choose this option, the dialog automatically populates with the data for the template you selected.

- 3 Complete the remaining entries in the Create Scheduled Report dialog box:
 - **Report Inputs**—if you want to specify a value of an input to this report, click the Edit icon in the **Value** column of the Report Inputs table to open an edit dialog. The contents of this dialog vary depending on the type value you are editing. For example, an input can be a time range that determines the range of data to display. For information on report inputs, see the Report input section for the appropriate report template in "Supplied Report Templates" on page 164.

If a Report Input is marked as required under the Usage column, a value must be set to create the scheduled report.

If you enter a new value click Set.

For more information on the Web Component Framework and context inputs, see the *Web Component Guide* and *Web Component Tutorial*.

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- Name—type a unique name for the report. This is a required value.
- **Note** If you are using a template in which the host name is required, you must enter the host name in the text field exactly as it appears at the top of the reports.
- **Schedule**—choose when to run the report. For example, choose "End of day" to run the report on an end-of-day schedule.

To create a schedule that is not in the list, see "Adding a New Schedule" on page 198.

• **Retained Results**—choose a value to indicate how many instances of a report to keep. This is a required field. For example, if the value is 3, then when a fourth report is generated, the oldest report will be deleted.

- Enabled—the checkbox to set report generation is selected by default.
- **Report Format**—select PDF to create the report in PDF format.
- **Note** The CSV option does not appear for pre-defined reports (with the exception of the vFMS Database View diagnostic report) since most pre-defined reports are not capable of generating meaningful CSV data. To generate a CSV report, the component type of the report must support CSV output. For details, see "Creating a CSV Report" on page 215.
- **Email Recipients**—type the recipient's email address in the box to send an email notification about this report. For multiple email recipients, you can enter a list of comma-separated email addresses however, you must restart the vFoglight Management Server.
- Note To send reports to email recipients from the Report Manager, you must configure the e-mail server by enabling the "Email Reports Sample" rule. By default, this rule is disabled. When enabling the rule you may also have to edit the "Fire" condition to filter the reports before sending them to email recipients. For more information, see the vFoglight Administration and Configuration Guide under "Working with vFoglight Rules and Registry > Working with Rules > Defining Conditions, Alarms, and Actions > Defining actions > vFoglight actions > Viewing email settings and configuring email actions".
- 4 Click **Create** to create and schedule the report. The report appears in the Scheduled Reports View. See "Managing Scheduled Reports" on page 200.

When the report is generated, it will appear in the Generated Reports view. See "Viewing a Generated Report" on page 204.

Testing a Report Template

If you have the appropriate permissions, you can use the Test button on the Report Manager dashboard as a quick and easy way to preview a report template without having to create a scheduled report nor generate the report. To test a selected report template:

- 1 In the navigation panel under **Dashboards**, click **Reports** > **Report Manager**.
- 2 Create a report based on a pre-defined or custom template. For a pre-defined report template, see "Supplied Report Templates" on page 164. For custom report templates, see "Creating a Custom Report Template" on page 213.
- 3 Click Test.

A test dialog box with the context inputs for the selected report appears.

Test Template: FMS Database Size View					
Name Usage Type					
timeRange	l≣₊n/a				
			Test		

4 You can optionally enter context input values for the report. If a Report Input is marked as required under the Usage column, a value must be set to preview the

report. To change the value of a context input value click ^{Export set}. By entering values for the context input you can set your own specialized parameters using the Web Component Framework which is used to build all the views in the vFoglight user interface. If you specify a context input value, make sure you click **Set**. For information on report inputs, see the Report input section for the appropriate report template in "Supplied Report Templates" on page 164. For more information on the Web Component Framework and context inputs, see the *Web Component Guide* and *Web Component Tutorial*.

5 Click **Test** to view a PDF output of the report template.

Adding a New Schedule

If the schedule options available in the Report Manager do not meet your needs, you can define a new schedule to fit your requirements. For more information about schedules, see the *Administration and Configuration Guide*.

To add a new schedule:

- 1 In the Report Manager dashboard, click 🔜 New Schedule.
- 2 Type a unique name for the schedule in the Schedule Name field.
- **3** Add an optional description about the schedule in the **Description/Comments** field.

- 4 Click Next to go to the Details of Schedule page.
- 5 Set the Start Date using the fields and drop-down menu, or click the browse button (...) to open a calendar where you can select the start date.
- 6 Enter a **Start Time** and **End Time**, or select the **Whole Day** check box if you want the schedule to cover the whole day. The Whole Day check box may or may not be available depending on the Recurrence Pattern you select. For example, it does not appear for the Recurrence Pattern "Once" (which is the default option.)

Note The End Time must be later than the Start Time.

- 7 Choose an option under Recurrence Pattern:
 - Once—to specify the schedule to execute only one time during the specified start and end time.
 - Periodical—specify the hour and minute that the report will run. For example, type 06:00 to run the report every 6 hours.
 - Daily—specify the number of days the report will run. For example, type 2 to run the report every 2 days.
 - Weekly—specify the number of weeks and the days that the report will run. For example, to run the report to schedule every 2 weeks on Friday, type 2 and select Friday.
 - Monthly—select to run the report by date or by week.
 For example, to run the report by date you can run the report every 6th day each month. Type 6 in the Day box and type 1 in the month field.
 If you select to run the report by week, select the week (First, Second, Third, Fourth, or Last), the weekday and monthly frequency. For example, you can schedule the report to run on the last week of every Tuesday every 2 months.
 - Yearly—select the report to run by date or by week. For example, to run the report by date you can run the report on a particular day on the selected month such as every December 31. If you select to run the report by week, select the week (First, Second, Third, Fourth, or Last), the weekday and the month. For example, you can choose to specify the report to run on the last week on Friday every December.
- 8 Choose an option under **Range of Occurrence** (the period during which the schedule will recur).

If you selected an option other than **Once** as the recurrence pattern, you can select the **No End** option button to cause the schedule to recur indefinitely, or set an **End By Date** using the fields and drop-down menu or by clicking the browse

button (\Box) to open a calendar from which you can select the end date.

9 Click Add to create the schedule.

Managing Scheduled Reports

After you scheduled a report, the report appears in the Scheduled Reports view in the Reports Manager dashboard where you can edit, copy, enable/disable, and delete scheduled reports.

elect All Select N	None Manage 🗮							
	Name 🔺	Template	Schedule	User	Retain	Enabled	Сору	Edit
🗌 kjhk		Performance Report	Beginning of the day	foglight	5	true	- E	1
test performa	nce report	Performance Report	Frequent [Test]	foglight	5	true	1	1

For information on creating a report with a schedule, see "Scheduling a Report" on page 194.

Editing a Scheduled Report

You can change any or all the parameters of a scheduled report.

To edit a scheduled report:

1 In the Scheduled Reports with Filter view of the Report Manager dashboard, click the edit icon *i* beside the report that you want to edit.

The Edit Scheduled Report dialog opens.

Edit Scheduled Report					
Name	tor2008	tor2008			
Schedule	First day of wee	First day of week			
Retained Results	5	5			
Enabled	V	V			
Report Format	PDF -				
Report Inputs					
Name	Usage	Туре	Value		
timeRange	Optional	Common:Time Range	l⊟,n/a		
fsmService	Optional	Foglight:FSMService	I≣₊n/a		
longNameLike	Optional	Common:String	I≣₊n/a		
maxHosts	Optional	Foglight:Integer	I≕,n/a		
Email Recipients	[1		
	I				
			Save		

- 2 Make your changes (see "Supplied Report Templates" on page 164 to create a report using the report template list. You have the option to leave the report values as is or tailor the report by specifying the input values according to your business requirements.
- 3 Click Save to save your changes.

Copying a Scheduled Report

You can create a new scheduled report by copying an existing one and changing one or more of the parameters.

To copy a scheduled report:

1 In the Scheduled Reports with Filter view of the Report Manager dashboard, click the copy icon a beside the report that you want to edit.

The Copy Scheduled Report dialog box opens.

Copy Scheduled Report			
Template Name	Hosts Summary P	Report	
Module	Reporting		
Туре	WCF		
Description	There Is No Data	i To Display	
Report Inputs			
Name	Usage	Туре	Value
timeRange	Optional	Common: Time Range	EĘn/a
fsmService	Optional	Foglight:FSMService	I≣₊n/a
longNameLike	Optional	Common:String	l≡₊n/a
maxHosts	Optional	Foglight:Integer	I≣,n/a
Name Schedule	Copy of tor2008 Frequent [Test]		
Retained Results	5		
Enabled	V		
Report Format	PDF -		
Email Recipients			A
			Cre

- 2 Make your changes (see "Supplied Report Templates" on page 164 for details about the parameters).
- 3 Click Create to create a copy of the report.

Disabling/Enabling a Scheduled Report

When a scheduled report is created, it is enabled by default. You can disable a report, which means that it will not run at the scheduled time until it is enabled again.

To disable a scheduled report:

- 1 In the Scheduled Reports with Filter view of the Report Manager dashboard, click the check box(es) beside the report(s) that you want to disable.
- 2 Click Manage Scheduled Reports.
- 3 In the popup, click **Disable**.

In the Disabled column, the value changes from false to true.

To enable a disabled report, click **Enable** in the popup menu. The value in the Disabled column changes to false.

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Deleting a Scheduled Report

When you delete a scheduled report, any generated reports that are associated with it are also deleted.

To delete a scheduled report:

- 1 In the Scheduled Reports with Filter view of the Report Manager dashboard, select the check box(es) beside the report(s) that you want to delete.
- 2 Click Manage > Delete..
- 3 In the popup menu, click **Delete**.

A dialog prompts you to confirm the deletion.

Delete Scheduled Reports	<
Are you sure you want to delete selected Scheduled Reports? Note: This action will also delete associated Generated Reports.	
Delete	

4 Click Delete.

The report is removed from the list of scheduled reports and all generated reports associated with it are removed from the list of generated reports.

Applying a Filter to Scheduled Reports

Creating a filter on scheduled reports helps you find reports based on criteria such as the report name, template, schedule or if the report was enabled.

To apply a filter to a report:

- 1 In the navigation panel, under **Dashboards**, click **Reports** > **Report Manager**.
- 2 In the Scheduled Reports view, click Scheduled Report Filter Not Set.

Scheduled Report Filter Not Set	X
Name]
Template	
Schedule	
Enabled 🔲 True 🔲 False	
Find Reset Cl	ear

- 3 Enter the criteria for the filter based on criteria such as a report name, template, schedule (such as "day" for end of day reports), or enabled (True or False).
- 4 Click **Find** to output the reports that match the filter condition.
- 5 If you want to apply another filter, click **Clear** and repeat steps 2 to 3.

Managing Generated Reports

Reports that have generated appear in the Generated reports view in both the Reports dashboard and Report Manager dashboard. The Generated reports view contains reports that were generated when clicking **Run Report** and **Schedule Report** icons.

Generated Repo	rts					
Select All Select	None 🤤 Delete 🗮					
	Date 🔻	Name	View	Size		Template
🗆 🔂 10/7/08	12:00 AM	Test001	PDF	22 KB	Event Analysis Report - Hosts	
🗆 🔂 10/7/08	12:00 AM	TestTopology	PDF	57 KB	Event Analysis Report - Topology Objects	

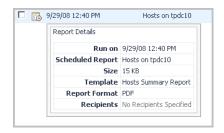
Viewing a Generated Report

As a convenient way of visualizing the data, you can view report details or reports can be output to a PDF on a ongoing basis. Operators can view and output a generated report in the Reports dashboard. Advanced operators can access the Report Manager dashboard to view report details or produce a PDF output of a generated report.

To view PDF reports, Adobe Acrobat Reader version 7.0.9 or later is preferred.

To view a report that has been generated:

- 1 In the navigation panel, under Dashboards, click Reports > Report Manager. If you do not have access to the Report Manager dashboard, click Reports > Reports.
 - To view details of a generated report, hover over 🔤 **Report Details** or **PDF**.



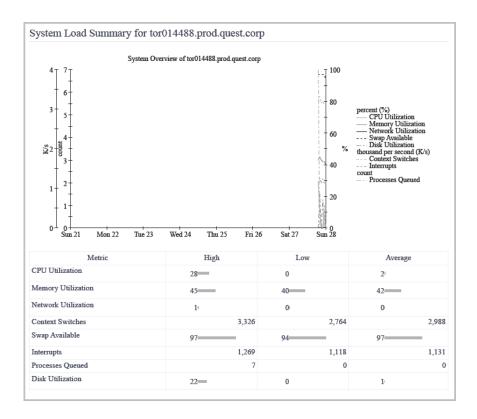
2 To view the PDF output of the report, click the PDF link next to the report.

Generated Reports				
Select All Select None 🤤 Delete 🗮				
Date 🔻	Name	View	Size	Template
9/29/08 12:50 PM	Hosts on tpdc10	PDF	15 KB Host	ts Summary Report
			Tiew Report 😜	Delete Report
			Run on	9/29/08 12:50 PM
			Scheduled Report	t Hosts on tpdc10
			Size	15 KB
			Template	Hosts Summary Report
			Report Format	PDF
			Recipients	No Recipients Specified
			Generated Report His Select All Select No	
			Date 🔻	Size Name PM 15 KB Hosts on tpdc10

3 Click 🖬 View Report.

The PDF output of the report is displayed.

							-	-p, -	 Sep 28, 200	
		~		m 1 1						
Hosts – Ui	tilizatio	on Sum	mary	Table						
Hosts — Ui Host Name	tilizati	on Sum CPU	mary	Table	Memory		File System		Network	٤



Applying a Filter to Generated Reports

Creating a filter on a generated report helps you find reports based on criteria such as the report name, template, schedule or the date range for which the report was run.

To apply a filter to a generated report:

- 1 In the navigation panel, under Dashboards, click Reports > Report Manager. If you do not have access to the Report Manager dashboard, in the navigation panel, under Dashboards, click Reports > Reports.
- 2 In the Generated Reports view, click Report Filter Not Set.
- 3 In the Report Filter Not Set dialog box, enter the criteria for the filter such as report name, template, schedule (such as "day" for end of day reports), or specify a time range for the report on the **Date Run** fields.

Report Filter Not Set		□ ×
Scheduled Report Name		
Template		
Schedule		
Date Run		
From	То	
Earliest Available	Current Date	
Generated Manually 🔲 True 🔲 False		
	F	nd Reset Clear

- If you select the **Earliest Available** check box, enter the period end date in the **To** fields.
- If you select the **Current Date** check box, enter the start date in the **From** fields.
- 4 To have the report filter generate manually, select the **True** check box.
- 5 Click **Find** to output the reports that match the filter condition.
- 6 If you want to apply another filter, click **Clear** and repeat steps 2 to 5.

Deleting a Generated Report

To delete a generated report:

- 1 In the navigation panel under Dashboards, click Reports > Report Manager. If you do not have access to the Report Manager, in the navigation panel, under Dashboards, click Reports > Reports.
- 2 In the Generated Reports view, click the check box beside the report(s) that you want to delete.
- **3** For generated reports, click **Delete** from the menu.

Gene	erated Reports				Report Filter Not S
Sele	ect All Select None 😑 Delete 🗟 🗌				
	Date 🔻	Name	View	Size	Template
7	9/29/08 1:45 PM	Hosts on tpdc10	PDF	15 KB	Hosts Summary Report
	9/29/08 1:40 PM	Hosts on tpdc10	PDF	15 KB	Hosts Summary Report

A dialog box asks you to confirm the deletion.

4 Click **Delete** to delete the report from the list of generated reports.

Scheduling a Generated Report

You can re-schedule or add another schedule to a report that has generated.

To schedule a generated report:

- 1 In the navigation panel under Dashboards, click Reports > Report Manager. If you do not have access to the Report Manager, in the navigation panel, under Dashboards, click Reports > Reports.
- 2 In the Generated Reports view, click the check box beside the report(s) that you want to schedule.
- 3 Click **PDF** for the generated report you want to schedule.
- 4 In the dialog box that appears, click Schedule Report:

Report Details		
Run on	10/22/08 9:05 AM	
Scheduled Report	Not Scheduled	
Size	16 KB	
Template	Event Analysis - Hosts	
Module	Reports/Canned Reports	
Report Format	PDF	
Recipients	No Recipients Specified	

Now you can attach a new schedule or re-schedule the report. To schedule the report, see "Scheduling a Report" on page 194.

Adding Your Own Logo to Reports

You can add your own company logo or a logo of your choice to replace the Vizioncore logo that appears on the top-left corner of reports. This section shows how you can replace the logo for out-of-the-box, pre-defined reports.

To add your own logo to out-of-the-box reports:

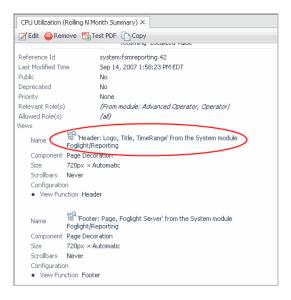
1 From the Generated Reports view of the Reports dashboard or Report Manager dashboard, click the PDF for the report to view it. As an example, you will change the default logo that appears on the out-of-the-box report: Rolling CPU Utilization.

					CPU Uti	ilization Ro	lling 12 Mo	nth Summar	у					
_														
							Rolling 12	Months (%)						
Host	Processor	Oct	Nov	Dec	Jan	Feb	Rolling 12 Mar	Months (%) Apr	May	Jun	Jul	Aug	Sep	Summ

2 To edit the image on the top left of the report, click Configuration > Definitions on the left-hand panel. In the content page, expand Reports and click Canned Reports. From the list of Views in the lower left-hand pane, select CPU Utilization (Rolling N Month Summary).

▼ Bookmarks	Definitions			CPU Utili	ization (R	olling N Mo	nth Summary)	*×		
There are no bookmarks	My Definitions 🗮			Edit	O Demo		st PDF 🛅 Co	2DV		
▼ Homes	👻 🖾 Administration 👻			2 LOK	- Kome			7P7		
Administration Agents Alarms Hosts Reports Services Welcome to Foglight Tachboards	Alarms + Applications + Foglight + Hosts + Conrects + Canned Reports + Editor + Editor +			Module Name Compone Preferred Purpose(Context 1	d Size s)		Report 800p× × 600p Report	n (Rolling N Mon		
	Transactions -			nMo		Optional C			12	
Administration Alarms	Other User Definition:	5			Service	Optional F		ESMService	12	
Applications	0					Optional C		String		
Foglight					Hosts	Optional F		Integer		
Hosts	Views Queries R	enderers i	Tasks Icon 🔻	Additiona	Contevi					
Operating Systems Reports	🕥 Add				Ke	V			Value	
Report Manager Reports Services Configuration	Event Analysis - Secondary header (timerange/server)	Cell- Oriented Table	Pagelet, Reportlet	title			Localized string (CPU Utilization Rolling {0} Month Summary) • {0} Context Selection <nmonths> returning "Localized Value"</nmonths>			
Data Data Sources Definitions	Event Analysis - Table of Events for Topology Object/Severity	Row- Oriented Table	Pagelet, Reportlet		foglightServer			ned Reports, Pa :: true)	ath: longName,	
Feeds User Preferences	Event Analysis - Topology Object Iterator	Iterator	Pagelet, Reportlet	aliMo	allMonitoredComponents		ts Query Selection (getAllMonitoredComponents) • {fsmService} Context Selection <fsmservice> returnin "Localized Value"</fsmservice>			
	Event Count Chart -	Iterator		max	HostsDef	ault	15			
	Iterator		Page,	host			Query Selection ('Get Top N Hosts with like longName' from the System module Reports/Canned Reports)			
	Host Utilization Grid	Grid	Pagelet					.ist (merge: true		,
	Host Utilization Iterator	Iterator	Page, Pagelet				Syster	II Query Selecti m module Repor Return First Ob	ts/Čanned Rep	orts, Path:
	•	Row-	Page V	1			0 {0} C	ontext Selection	n	odilart voturning

3 Scroll down on the right-hand pane for the CPU Utilization (Rolling N Month Summary) view and click the hyperlink for the embedded view Header: Logo, Title, Time Range.



The Header Logo view opens.

CPU Utilization	(Rolling N Month S	Summary)	× Heade	r: Logo, Title, TimeRange 🖈 🗙				
📝 Edit 😂 Re	move 🕞 Test PD	F Co	РУ					
Module		Reportin						
Name		Header:	Logo, Title, '	TimeRange				
Component								
Preferred Size								
Purpose(s)		Pagelet,	Reportlet					
Context Inputs Key	Usage Data Sou			Default Value				
timeRange title	Optional Common Optional Common		Time Range	Localized string (Foglight Report)				
Configuration	Optional Common		String	Localized scring (Poglight Report)				
 Center Cor Right Conte 	ight/Reporting retu Ins	le> returr Range>,	ning "Localize Renderer: 'A	Absolute Time Range' from the Syste	em			
Reference Id		system:	orereporting	g.40				
Last Modified T	ime	Aug 16,	2007 11:41:	03 AM EDT				
Public		Yes						
Deprecated		No						
Priority		None						
Relevant Role(5)	(none)						
Allowed Role(s)		(all)						

4 To upload the image you want to use for your reports, return to the lower lefthand pane and click the **Files** tab. Click **Add** and then click **Browse...** to upload the image.

Views Queries Renderers Task	s Icons Files Addit
New File	×
Under Directory (none) images Add Directory	
Add or Replace File	Browse
	OK Cancel

5 Click the **Header: Logo, Title, Time Range** tab. Click **Edit** and select the **Configuration** tab.

Save X Cancel Test		
General Context Configuration		
Show Advanced Properties		Legend: Set Unset Require
Property	Туре	Value
Left	Any	t and the second
Left Image	Any	I⊞, "Company Logo"
🖬 Left Image's Size		
Center	Any	iii, <title></td></tr><tr><td>Right</td><td>Any</td><td>i∺, <timeRange></td></tr><tr><td>Right Image</td><td>Any</td><td>E.</td></tr><tr><td>🖬 Right Image's Size</td><td></td><td></td></tr><tr><td>Title</td><td>Any</td><td>ing
Kag</td></tr><tr><td>Disabled</td><td>Boolean</td><td>E,</td></tr><tr><td>Background</td><td></td><td></td></tr><tr><td>Error Renderer</td><td>Error Renderer</td><td>it,</td></tr><tr><td>Null Renderer</td><td>Null Renderer</td><td>in,</td></tr><tr><td>Page Options</td><td></td><td></td></tr><tr><td>Portlet Options</td><td></td><td></td></tr><tr><td>Popup Options</td><td></td><td></td></tr></tbody></table></title>

6 Select the drop-down icon next to the Value for the row Left Image. Select the Image Reference link.

Definitions	U Utilization (Rolling N M	Ionth Summary) ×	Header: Logo, Title, TimeRange ×				
My Definitions 🗮	Save X Cancel						
Alarms -	General Context	Configuration					
🖾 Foglight 👻	Show Advanced Pro	perties	Legend: Set Unset Required				
Hosts Operating Systems	Property	Туре	Value				
Reports -	Left	Any	IE,				
Canned Reports + Editor +	Left Image	Any	I=,				
Services Transactions	Center	Any	String				
Cother User Definitions	Right	Any	Rich Text Image Reference				
	Right Image	Any	Date				
	Title	Any	Context Selection Query Selection				
Views Queries Renderers Tasks Icons Files	Disabled	Boolean	Localized String				
O Add			Icon Selection				
Name 📥			Theme Selection				
images/Report_edit_logo_image.gif			String Template				
			Rich Text Template				
			Data				
			List				

7 In the pop-up window, locate the image you just uploaded. It should be located under Reports > Canned Reports.

dit - Left Image	X
Enter a valid URL to an image or select one from the tree below	
WCFMODULE:system:fsmreporting/images/Report_edit_logo_image.gif	
Available Images	Preview
Administration	FIGVIOW
Poglight	
Hosts	
Reports	
Canned Reports	
images/Report_edit_logo_image.gif	
Editor	
Services	
Theme - application_default	
	78×74
	Save Cancel

- 8 Click Save to keep this change and the Header: Logo, Title, Time Range view.
- **9** Select the tab showing CPU Utilization (Rolling N Month Summary) and click the **Test PDF** button.

The new report appears with the image you recently uploaded.

Host Processor Ang Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Su	22														
			Rolling 12 Months (%)												
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Host	Processor	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Summar
10/04-TOUT-Jaourdina - Configuration - Configu	tor014004.prod.quest.corp	0	0	(0 0	0	0	0	0	C	0	0	(0 0	

Note Most of the reports share 1 or 2 header views. These headers can all be edited directly by expanding vFoglight > Reporting in the upper left-hand content pane of the Definitions view.

Working with Custom Reports

If you have the appropriate permissions, the Report Manager dashboard enables you to create a custom report at a more specific level than what is available on the set of supplied report templates. By creating your own report templates you can customize the content and presentation of a report.

Creating a Custom Report Template

The process of creating a custom report is similar to creating a dashboard. You can add any dashboard displayed in the user interface to the list of reports in the Report Manager or Report dashboards. Custom reports that you create will appear under My Dashboards in the navigation panel. They also appear in the Report Manager dashboard as a report template as soon as the report is created, and you can schedule the report.

To create a custom report:

- 1 In the navigation panel under Dashboards, click Reports > Report Manager. If you do not have access to the Report Manager, in the navigation panel, under Dashboards, click Reports > Reports.
- 2 To create a custom report, click the Report icon on the Reports dashboard or Report Manager dashboard or click Create Report... in the action panel.

The Create Report dialog box opens.

Create Report		×
Name		:
Allow this rep	ort to be included in another report	
Relevant Role(s)	E, (none)	
Allowed Role(s)	i=, (all)	
Help	A	
	×	
		OK Cancel

- **3** Type a unique name for the report in the **Name** box. This is the only information required to create a new report.
 - **Tip** Since custom reports are listed under My Dashboards in the navigation panel, you may want to choose a name that indicates that this is a report.
- 4 To set access to this report, click the edit icon ≒ beside **Relevant Role(s)** and **Allowed Role(s)** and select the role(s) to control which users can access the

report. For example, choosing "Operator" publishes your dashboard to everyone with the Operator role.

- **Relevant Role**—this option is only valid for super users who may have multiple roles. For example, a Java administrator who also has an operator role can choose the Cartridge Developer role to restrict the Operator role from accessing the report.
- Allowed Role—determines which user role is allowed to see the dashboard.
- **5** You can enter a description of the report in the **Context Help** box. This text appears in a tooltip when you hover over the report name in the navigation panel.
- 6 Click **OK** to save your report.

Two additional tabs (Views and Data) appear at the top of the action panel.

- 7 Select the **Views** or **Data** tab and locate the views or portlets that you want to add to your report. You can add both types of information to the same report. For information on creating and editing charts, see "Creating a Metrics Chart" on page 78.
- 8 To add parameterized inputs to include in your report, click the **Data** tab. A parameterized input allows you to define a view in which you can enter an input value for the object during report scheduling or testing the template.
 - Drag an object into the Parameterized Input section.
 - Drag an element from the Parameterized Input section onto the workspace to the left.
- **9** If you want to add text to the report, click and drag **Drag into report to add text** under Text in the action panel into the display area and type the text in the Entering User Text dialog box.
- 10 If you want to customize the header or footer of the report, click **Customize** header or **Customize footer** in the action panel. For details, see "Customizing the Header or Footer of a Custom Report" on page 215.
- 11 To divide the display area into one, two, or three columns, choose the number of columns in the action panel, under the General tab > Columns.
- 12 To see how the report will look when it is printed, click **Create PDF** in the action panel. Use the browser's Back button to return to the report.
- 13 You have the option to schedule a report by clicking **Schedule Report** in the Reports dashboard or Reports Manager dashboard.

When you have finished creating a report, you do not need to save it. It is automatically available under My Dashboards in the navigation panel and also appears as a template

in the Report Manager, where it can be scheduled. To schedule the report, see "Scheduling a Report" on page 194. To run and generate a report without scheduling it, see "Running a Report" on page 192.

If you want to preview the report template without scheduling or generating the report, see "Adding a New Schedule" on page 198.

Creating a CSV Report

By generating a comma-separated value (CSV) report, you can import raw data for the contents of the report into Excel for charting and analysis.

Note You can also export metrics and generate a CSV report for a table or chart using the customizer. See "Exporting Data from Charts and Tables" on page 57.

When scheduling a custom report, you can choose to run a report as either a PDF report or a CSV report using the dropdown. See "Scheduling a Report" on page 194.

Note To generate a CSV report, the component type of the report must support CSV output and have meaningful results for the CSV report to generate. This applies to most chart and tables. For the full list of supported component types, see the *Web Component Guide*. The CSV option will not appear if the report is not capable of generating meaningful CSV data. Except for the pre-defined vFMS Database View (diagnostic) report, most default reports will not work as CSV reports.

Customizing the Header or Footer of a Custom Report

You can add custom headers and footers to a custom report while you are creating it, or you can customize them at a later time.

To customize a header or footer:

- 1 Open the report from the Report Manager dashboard.
- 2 Click Customize header or Customize footer in the action panel.

The Customize header (or Customize footer) dialog opens.

I	Customize header				×
	Page Number Report Title	Current Time Time Range			
	Select an Image I≡, Size 0.0 × 0.0 Pixels ♥ Maintain Aspect Ratio♥			{@timeRange}	Select an Image III, Size 0.0 x 0.0 Pixels Maintain Aspect Ratio
		Left	Center	Right	
					OK Cancel

- 3 Click in a text box to add text, or click **Page Number**, **Report Title**, **Current Time**, or **Time Range** to add those variables to a box. You can add both text and variables to a box.
- 4 If you want to add your own graphic to the report, click the icon to the right of **Select an Image** to open the Select an Image dialog.
- **5** From the drop-down selector for the left image, navigate to an image that was previously uploaded and click **OK**. For more information on uploading an image, see "Adding Your Own Logo to Reports" on page 208.

The image appears in the Customize header dialog box.

- 6 Use the Size text fields and drop-down menu to adjust the size of the image.
- 7 If you leave the **Maintain Aspect Ratio** check box selected, you need to enter only one size value. Clear the check box if you want to change the ratio of the image.
- 8 Click **OK** to save your changes.

Printing a Custom Report

You can print a custom report in two ways (when it is in the display area):

- Click **Print** in the action panel and print the HTML page from the Print dialog. For more information, see "Printing Views" on page 92.
- Click **PDF** beside the report to print a gray color PDF output of the report from the PDF viewer. To print a colorful PDF report, you need to setup the PDF behavior in the User Preferences dashboard under the Themes setting. For more information, see "User Preferences" on page 36.

Deleting a Custom Report

You can delete any custom report that you have created. You may also be able to delete reports created by other users, depending on the roles that were assigned to them.

To delete a report:

- 1 Select the report that you want to delete from the list under My Dashboards.
- 2 Click **Delete this Report** in the Actions panel.

A confirmation dialog box appears.

3 Click **Delete** to confirm the deletion.

Deleting a report removes the report from the My Dashboards view and the Report Template list.

For details about how to work with charts in a dashboard, see "Working with Charts" on page 78.

Example: Create a Custom Host Report

In the following example, you will create a simple custom host report in which you will:

- Include parameterized input in which you can drag and drop views onto your report for the Windows_host object. During report scheduling, you can define what the report's input values will be at run-time.
- Include host elements (Virtual Memory metrics).
- Test the template.
- Schedule the report to generate hourly.

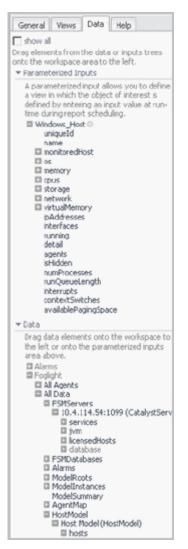
To create a custom host report:

- 1 In the navigation panel under Dashboards, click Reports > Report Manager. If you do not have access to the Report Manager, in the navigation panel, under Dashboards, click Reports > Reports.
- 2 Click the **Create Report** icon or click **Create Report** in the action panel.
- 3 In the dialog box that appears:
 - a Type a report Name.
 - **b** Select which roles are allowed to view this report.

- **Relevant Role**—this option is only valid for SuperUsers who may have multiple roles. For example, a Java administrator who also has an operator role can choose the Cartridge Developer role to restrict the Operator role from accessing the report.

- Allowed Role—select the user role that is allowed to view the report.

- **c** To make text appear in a tooltip when you hover over the report name in the navigation panel, type a description of the report in the **Context Help** text box.
- 4 Click OK.
- 5 Click the **Data** tab.
- 6 Drag a Host object (Windows_Host) into the Parameterized Input section.



7 Drag host elements (i.e. VirtualMemory) from the data or input trees of the Parameterized Input section onto the display area to the left.

Heat_topdc01				O Thursday, May 15, 2000 9441 AM - 141 PM 4.0 hours +	General Views Data Help
Metric Analyzer				* B 1 ×	show al
* Metrics for ()					Drag elements from the data or inputs tree
Metric	Sat	End	Range	% Change is	· Parameterized Inputs
There is two Data To Depi					A parameterized rout, allows you to de interest is admed by entering an input scheduling. If Windows, Host © uniqued manee is montoredrieut. is on is montoredrieut. is memory is gaute is memory is gaute is memory is defined in memory is defined in memory is defined is d

- 8 On the navigation panel, under **Dashboards**, click **Reports** > **Report Manager**. Notice that the report is added to the list of report templates.
- **9** From the Report Template, choose the report you created.
- 10 To test (i.e. preview) your report template before generating the report.
 - Click the host report you just created.
 - Click Test.
 - In the Test dialog box, enter the context for the run-time values to include in your report. This step is optional.

Test Template: Host_to	pdc01		
Name	Usage	Туре	Value
timeRange	Optional	Common:Time Range	i≡,n/a
Windows_Host	Optional	Foglight:Windows_Host	i≣,n/a
			Test Cancel

- Click Test.
- 11 To generate your report hourly, you need to add a schedule.
 - Select the report template you just created from the Report Template column.
 - Click Click Chedule Report to open the Scheduled Report Editor.

Scheduled Report Editor Report Template Custom Host report Module foglight WCF Туре Description There Is No Data To Display Report Inputs Nene Useps Type Value tinekange optional Conmon: Time Range ituria. Windows_Host Optional Foglight /vindovrs_Host Early Name Ny custom host report Schedule Hourly . **Retained Results** Email Recipients * Create Cancel

- 12 Enter the report inputs for the time range and Windows host. This step is optional.
- 13 Click Create to schedule the report.
- 14 After an hour, the report appears under Generated Reports view.
- 15 Click **pdf** to view the generated report.

Example: Create an SLA Availability Report

In the following example workflow, you will create a report showing SLA availability data for the workweek from 8 am to 8 pm.

Reporting Parameters

The report will use the following criteria:

- Outages from 8 am to 8 pm
- Time plot with chart type "Stacking area"
- Include number of outages, outage duration and cause(s) of outage

Step 1: Add a New Schedule

To get the 5 time ranges, schedule the report for Friday nights at 7:59 pm. You will need to create a new schedule since this is not part of the standard schedules in the Schedule drop-down.

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To create a new schedule:

- 1 In the Report Manager dashboard, click Add New Schedule.
- 2 Create the schedule. Type a Schedule Name and Description/Comments.

Schedule Name and Description	Details of Schedule	Schedule Adde
Step 1: Create Schedule - Schedule Name	and Passeston 0	
	an cesa puor	
Schedule Name:		
Friday nights at 7:59 pri		
Description/Comments:		
EX 10	:59 pm to get 5 time ranges for	
Schedule report for Friday nights at 7 workweek.		

- 3 Click Next.
- 4 Add the schedule details.

t Browter > Create Schedule		
Schedule Name and Description	Details of Schedule	Schedule Added
ep 2: Greate Schedule - Details of Scher	s.in ()	
Description/Comments: Schee works Start Date 18 Apri	veek.	at 7:59 pm to get 5 time ranges for
Start Time(hbrown) 7 99 Recurrence Pattern C'Once C'Daily C'Daily C'Daily C'Weekly C'Monthly Friday Tuest C'Yearly	s) on day []Wednesday [] Thurs	
Range of Occurrence GNo End C End By Date		
		Raci

- 5 Click Add.
- 6 View the details of the schedule.

Fri Apr 18, 2008 07:59:00	Weekty	No End	Every 1 week(s) on	07:59-19:59
llext Scheduled Time	Recurrence Pattern	Range of Occurrence	Details	Time Rang
Schedule Items				
Schedule report for Frid	day nights at 7:59	pm to get 5 time r	anges for workweek.	
Description/Commen	ts:			
Friday nights at 7:59 p	m			
Schedule Name:				
The following schedule v	was successfully	added to the syste	m.	
p 3: Create Schedule - Sche	dule Added			
Schedule Name and Descrip	ption Del	tails of Schedule	Schedule Added	

Step 2: Create the report

To create the report:

- 1 In the navigation panel under Dashboards, click Reports > Report Manager. If you do not have access to the Report Manager, in the navigation panel, under Dashboards, click Reports > Reports.
- 2 Click the **Create Report** icon or click **Create Report** in the action panel.
- 3 Type a report Name.
- 4 If you want to enable this report to be included in other reports, click the Allow this report to be included in another report checkbox.
- 5 Select which roles are allowed to view this report.
 - **Relevant Role**—this option is only valid for super users who may have multiple roles. For example, a Java administrator who also has an operator role. The Java administrator can choose the Cartridge Developer role to restrict the Operator role from accessing the report.
 - Allowed Role—select the user role that is allowed to view the report.

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Create Report		×
Name		:
Allow this rep	ort to be included in another report	
Relevant Role(s)	E, (none)	
Allowed Role(s)	i≡, (all)	
Help	×	
		OK Cancel

- 6 You can enter a description of the report in the **Context Help** text box. This text appears in a tooltip when you hover over the report name in the navigation panel.
- 7 Click OK.
- 8 Click Set metric chart defaults.
- 9 In the Chart drop-down choose Stacking Area and click OK.

Metric Chart Defa	uts ×
Chart Stacking	Area 💌 Height 300
Layout	
	axis of selected metric arts will line up)
+ Advanced	
	OK Cancel

- 10 Create two derived metrics for a specific FSMServiceLevelPolicy:
 - Outage every minute, if previously available and currently not, return 1. The sum of this metric over the period gives the number of outages.
 - OutageTime every minute, if unavailable return 60. The sum of this metric over the period gives the approximate outage duration.
- 11 Create Time Chunks query the last 5 days in 12 hourly chunks.

Step 3: Generate the Report

To generate your report hourly, you need to add a schedule.

- 1 Select the report template you just created from the Report Template column.
- 2 Click **Schedule Report** to schedule the report.
- **3** Type a name for the scheduled report.
- 4 In the Schedule drop-down, select Friday nights at 7:59 pm.
- **5** Enter the report inputs.

- 6 Click **Create** to schedule the report.
- 7 Check that the report appears under Generated Reports with Filter on Friday after 8:00 pm.
- 8 Click **PDF** to view the generated report.

Hosts			
Service Level	Agreement Information	Status	
	Service Level Agreement Information		Status
Name	Hosts	Current Status	
Description	This service measures availability on Hosts. Availability is defined by the state of the measured object.	Availability	100
Type	State-based	Health History	
Monitored Source	Hosts	Time Period	Monday, January 28, 2008 3:40 AM – Now 4.0 hours
Evaluation Criteria	State of measured object must be at a severity level of Critical or lower to be considered available.		
			100 80 60
03.50	04'10 04'30 04'50 05'10 05'30 05'50 06	10 0630 0	50 60 % 20
03:50	* 04:10 * 04:30 * 04:50 * 05:10 * 05:30 * 05:50 * 06	10 06:30 0	80 60 40

Working with Data and Data Sources

In vFoglight you can create custom views using the framework that is available in the Configuration module. This type of work is primarily focused on those users who are advanced dashboard designers.

This chapter contains the following sections:

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Overview

The dashboards listed under the Configuration module include the following:

- Data Dashboard
- Data Sources Dashboard
- Definitions
- User Preferences

The Definitions dashboard is where you create and edit views. For information about these functions, see the *Web Component Guide* and the *Web Component Tutorial*.

The options in the User Preferences page are described under "User Preferences" on page 36.

This section briefly describes the Data and Data Sources dashboards.

Data Dashboard

The Data dashboard is an advanced tool intended for use by dashboard designers and data modelers. It shows the underlying set of objects that are available in the system and how they are organized. This dashboard is useful for figuring out the paths used to define dashboard tooling queries, and for inspecting the underlying objects to ensure that the data is collected and transformed properly.

To display the Data dashboard:

• From the navigation panel, under **Dashboards**, click **Configuration** > **Data**. The Data dashboard appears.

Working with Data and Data Sources Data Dashboard

Value	Data Type	Property View	er					Thursday, Feb	vary 14, 2	008 10:20 AM - 2:20	PM 4.0 hours-
Alarms		her@14	199 out a set	Losso Allind	ows_Host) (Window	e Hoet)					
E Foglight			me	c.corp (mino	Value	s_rost/					
Hosts		topologyObjec		46	TURNE						
AI Hosts	Host	topologyObjec		585							
tor014488.prod.quest.corp (Windows_Host)	Windows_Host	topologyObjec		10							
aggregateAlarms	List of Alarms	effectiveStart	Date	2/13/08 3	: 10 PM						
aggregateAlarmState	AlarmStateObserv	effectiveEndD	ate	11/16/38	4:46 AM						
monitoredHost	Windows_Host	lastUpdated		2/13/08 1	:04 PM						
III modelAlarmWarningCount		name		tor014488	8.prod.quest.corp						
	Metric	longName		tor014488	3.prod.quest.corp (Windows_Host)					
II modelAlarmFatalCount	Metric	is8lackedOut		false							
I modelChangeCountDelta		localState		•							
II memory	Windows Memory	appregateStat	e								
II cpus	Windows_CPUs	alarmWarning	Count	-							
III storage	Windows_Storage	alarmCriticalCo									
III network	Windows_Network	alarmFatalCou									
III detail	List of	alarmTotalCou	nt	0							
agents	TopologyObjects	alarmAggregat	teWarningCour	nt 💶							
numProcesses	List of Agents Metric	alarmAggrega	teCriticalCount	4							
		alarmAggregat	teFatalCount								
runQueueLength	Metric	alarmAggregat	teTotalCount	5							
interrupts	Metric	changeCount		0							
contextSwitches	Metric	aggregateCha	ngeCount	0							
availablePagingSpace	Metric	topologyTypet	lame	Windows,	Host						
3 Services											
		topologyObject	tid topologyOb	viectVersion3	topologyObjective	rsion effectiveStartDi	ate effectiveEndDat	e last lodated		name	
		46	585		10	2/13/08 3:10 Pf		2/13/08 1:04 PM		88.prod.quest.com	p tor01448 (Window)
		topologyChier	et d'annalana (Ch	iartitarriant.	f monlos (Objective	rsion effectiveStartD	an affarm all office	a last Indatad	0.000	longName	istiacka
			380	pectre anna	2		11/16/38 4:46	2/13/08			
		225	389		2	2/13/08 12:39	AM AM	12:39 PM	Memory	(Windows_Memo	ry) false
		topologyObjec	tId topologyOb	jectVersionI	d topologyObjectVe	rsion effectiveStartDi			name	longName is	BlackedOut
		219	380		3	2/13/08 12:39	M 11/16/38 4:46 AM	2/13/08 12:39 PM		PUs Windows_CPUs)	alse
		topology@biec	tel topologuOk	vier Trier sign T	(modoru@biectile	rsion effectiveStartDi	te effectiveErclDat	e lasti ivrlater	name	longName	isBlacke
				general status				2/13/08		Storage	
		209	381		3	2/13/08 12:39	M 11/16/38 4:46 AM	1:04 PM	Storage	(Windows_Storag	pe) false
-		<1 · · ·		_							1.1

You can expand the nodes in the left-hand pane and follow a path to find objects. For example, you can find a Host object by expanding the Hosts object, expanding All Hosts, then finding the Host of interest (as in the above screen).

The right-hand pane is a display area. You can choose from a number of views, which are listed under Views in the action panel. The most useful view for inspecting an object is the Property Viewer. The Property Viewer shows the raw object details — the property values and metrics.

Understanding Metrics and Observations

In general, vFoglight and the Web Component Framework are concerned with the collection of information over time. This collection is referred to as observations. The Data dashboard displays metrics and observations for a topology object.

An observation is a collection of a particular piece of data over time. An EnumObservation is the data collected by agents, which is a type of observation where the data being observed is a enumerated value. For example, the state of an object.

A metric is a type of observation that is concerned with numeric observations. For example, the CPU usage of a host.

All observation objects have the following properties:

- **latest**—the value of the last recorded sample.
- **current**—the same as the latest value except if the latest value is considered stale (not fresh), the current value is considered null.
- history—contains a historical list of values for the selected time range.

To view the current, latest, or history values for a topology object:

- 1 From the navigation panel, under **Dashboards**, click **Configuration** > **Data**.
- **2** In the Data dashboard, drill-down to the topology object to view the metric values:

Value	Data Type
Administration	
Alarms	
Outstanding Alarms	Alarm
🖽 Foglight	
Hosts	
All Hosts	Host
tor014004.prod.quest.corp (Host)	Host
aggregateAlarmState	AlarmStateObservation
🗉 current	AlarmStateValue
🗉 latest	AlarmStateValue
history	List of AlarmStateValues

3 Click on the metric to view more details about the topology objects in the Property Viewer. Each value entry for an observation has a **Start time**, **End time**, and **Value**.

Value	Data Type 🔺	Property	liewer			G
Administration		(Foglight:		Tuesday, July 29,	2008 11:50 AM - 3:50	PM 4.0 hours 🔭
Alarms		current	(AlarmStateValue)			
Outstanding Alarms	Alarm	Name	Value			
Foglight		startTime	7/29/08 11:50 AM			
Hosts		endTime	7/29/08 3:50 PM			
All Hosts	Host					
tor014004.prod.quest.corp (Host)	Host	topologyC	bjectId topologyOb	jectVersionId top	ologyObjectVersion	effectiveStartDa
aggregateAlarmState 🗖	AlarmStateObserva	31	65	2		7/22/08 11:06 AM
current	AlarmStateValue					APT
value	AlarmSeverity					
aggregateAlarmState	AlarmStateObserva					
current	AlarmStateValue					
value	AlarmSeverity					
🗖 latest	AlarmStateValue					
value	AlarmSeverity					
history	List of AlarmStateValues					
AlarmStateValue	AlarmStateValue					
value	AlarmSeverity					

Data Sources Dashboard

The Data Sources dashboard is where you choose a data source for vFoglight. The default (and only current) option is the foglight-5 data source. Click a data source to display its ID, name, and topology and UI query service JNDI names.

To display the Data Sources dashboard:

• From the navigation panel, under **Dashboards**, click **Configuration** > **Data Sources.**

The Data Sources dashboard appears.



The icons above the data sources allow you to add O, delete O, copy D, and edit \swarrow them, as well as set a default \checkmark data source.

Caution If you click the Delete icon, the data source is removed without a confirmation dialog.

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