# infovista

### KNOW YOUR NETWORK™



# VistaPortal<sup>®</sup> 2019.10

User Guide

December 2021

#### HotFix number: VP-21338

**Note:** The latest documentation is available for download on e-Delivery as a Documentation\_Only.zip file.

Copyright 2021 Infovista S.A.S.

All rights reserved.

InfoVista®, VistaBridge®, VistaCockpit®, VistaDiscovery®, VistaFoundation®, VistaInsight®, VistaLink®, VistaMart®, VistaPortal®, VistaView, Vista360®, 5Views, Mentum®, Mentum Ellipse®, Mentum Fusion®, Mentum Planet®, Planet®, XEDA®, XEUS®, VistaNEO®, TEMS®, TEMS® DISCOVERY, Application Quality Score®, INTELLISIGHT®, HAMMER®, ONESIGHT®, EMPIRIX®, onesight one sight®, HAMMER ON-CALL®, HOLISTIX® and VOICE WATCH® are registered trademarks or trademarks of Infovista S.A.S. in the United States and/or other countries.

All other trademarks, registered trademarks, product names and company names or logos mentioned in this guide are the property of their respective owners.

The information contained in this document is the property of Infovista S.A.S. No part of this publication may be reproduced in any form (including photocopying or electronic storage on any medium) or by any means or used to make any derivative work (such as translation, transformation or adaptation) without the express written permission of Infovista S.A.S.

The information contained in this document is subject to change without notice and does not carry any contractual obligation for Infovista. Infovista reserves the right to make changes to any products or services described in this document at any time without notice. InfoVista shall not be held responsible for the direct or indirect consequences of the use of the information contained in this document.

Web: www.infovista.com

E-mail: support.sa@infovista.com

Technical support Web site: support-sa.infovista.com

# Contents

C	ontents	3
1	Getting Started with VistaPortal	5
	About this guide	6
	Purpose	6
	Intended audience	6
	Organization	7
	Related documentation	7
	What's New	8
	Liability disclaimer	. 9
	VistaPortal and VistaPortal SE in a Nutshell	10
	VistaPortal Documentation	10
	VistaPortal key features	. 11
	The end user interface	12
	Web browser recommendations	. 14
	Installing the Java plugin	15
2	Creating a Personal VistaPortal	16
	Setting up personal VistaPortal pages	17
3	The Standard Displets in detail	21
	The Displet Toolbar	22
	The Object Navigator	23
	The List pane	24
	Accessing the Object Navigator tools	26
	Synchronizing with displets	26
	Editing event threshold values	27
	The Time Navigator Displet	31
	Using time zone shifting	31
	The Report Displet	33
	Manipulating data in the displet	34
	E-mailing reports and pages	39
	Preparing an e-mail	42

	Adding a report to an existing schedule	43
	Working with scheduled e-mails	44
	Business Calendars and Maintenance Periods in Reports	. 47
	The Graph on Demand Displet	. 48
	Using the Graph on Demand	49
	Zooming in on chart data	50
	Viewing graph data	51
	Exporting graph data	. 52
	The Time Navigator in the Graph on Demand	. 53
	The Big KPI Displet	. 54
	The Dashboard Displet	. 55
	The Connect As Displet	. 57
	The Memo Displet	. 58
	The Web Page Displet	. 59
	The News Displet	. 60
	Subscribing to a Category	60
Α	Glossary	62
In	dex	66

# 1 Getting Started with VistaPortal

This section provides the basic information necessary to start using VistaPortal. See:

About this guide	6
Purpose	6
Intended audience	6
Organization	7
Related documentation	7
What's New	8
Liability disclaimer	9
VistaPortal and VistaPortal SE in a Nutshell1	0
VistaPortal Documentation1	0
VistaPortal key features1	1
The end user interface1	2
Web browser recommendations	4
Installing the Java plugin	5



# About this guide

This section describes the purpose, intended audience and organization of this guide. It also provides information on related documentation.

## Purpose

This **VistaPortal User Guide** contains all the necessary information to use VistaPortal's interface, as well as how to configure and manage VistaPortal reports.

## Intended audience

This guide is intended for day-to-day VistaPortal users who need to get reports on their network environment. To use this guide effectively, you need to be familiar with:

- VistaPortal reporting
- InfoVista products of the VistaFoundation
- network-specific features
- devices to monitor and their capabilities.

# Organization

This table provides an overview and direct access to the information available in this guide:

Section	Topics
"Getting Started with VistaPortal"	Introduces the VistaPortal, the end user interface, and various recommentations
"The Standard Displets in detail"	How to use the VistaPortal displets
"Glossary"	Explains fundamental terms common to the VistaPortal environment

# **Related documentation**

### VistaPortal documentation

Depending on your objectives you can use the following VistaPortal documents in either PDF or HTML format:

Guide	Description
VistaPortal Administration Guide	This guide provides information on advanced VistaPortal configuration features and options
VistaPortal Author Guide	This guide explains how to design your own page packages, users, groups and reports.
VistaPortal Installation Guide	The Installation Guide explains how to install, deploy or upgrade VistaPortal on Windows or Linux platforms.

### Other documents

To perform given tasks described in this guide or to understand various concepts, refer to the following additional VistaFoundation Kit documents:

- VistaFoundation Deployment Guide
- VistaMart User Guide
- VistaMart Installation Guide
- VistaCockpit User Guide
- VistaPortal SE User Guide.

# What's New

This version of VistaPortal provides these new features and enhancements.

Refer also to the ReadMe for complete information regarding security, supported operating systems, and other important details.

### The Dashboard displet

The Dashboard displet is now fully functional and replaces the former Vista360 Flash component. This is described in "The Dashboard Displet" on page 55 with configuration details provided in the **VistaPortal Author Guide**, "The Dashboard Displet".

#### Reporting

- 15-second and 1-minute display rates are now supported.
- You can now simultaneously display the temporal evolution of different display rates, with one chart per display rate. This is described in the VistaPortal Author Guide, "Creating a drilldown to show multiple display rates".
- Auto-refresh can be activated in full-screen view.
- Minimum, maximum, average, and the latest values over a specific period can now be displayed in a Report legend. This is described in the VistaPortal Author Guide, "Viewing companion pseudo properties".
- Pagination is applied to reports if more than 10 charts are obtained after a synchronization, indicating total number of instances obtained, and enabling you to navigate to and from all the charts. This is described in the VistaPortal Author Guide, "Changing the number of displayed instances per page".
- Multi-instance detail view synchronization from basic to proxy and group to content is now supported. This is described in the **VistaPortal Author Guide**, "Creating a multi-instance drilldown to Details".

#### Security

- Users can reset their own password. This is described in the **VistaPortal Administration Guide**, "Enabling user password reset".
- External authentication: VistaPortal can now be integrated with a SAML v2.0 Identity Provider. This is described in the **VistaPortal Administration Guide**, "Implementing SAML 2.0".
- GDPR: User information is now encrypted in the VistaPortal database in accordance with the **General Data Protection Regulation**.

#### Operating systems

- Windows 2016 is now supported.
- Oracle Solaris is no longer supported.

# Liability disclaimer

Modifying files that were distributed in your VistaPortal installation directory may cause serious product instabilities.

Do not modify any VistaPortal distribution file unless instructed in the VistaPortal guides and/or Readme. Infovista shall not be liable for any hardware or software damage, service disruption, loss of business that may occur subsequently to any distribution file change that was not described in the VistaPortal documentation.

# VistaPortal and VistaPortal SE in a Nutshell

VistaPortal and VistaPortal Standard Edition (SE) are the presentation modules of the VistaFoundation. The VistaFoundation is a group of InfoVista products that work together to provide performance reporting on IT infrastructures:



VistaPortal retrieves historical performance data from VistaMart, which processes data collected from InfoVista Servers and computes derived metrics.

VistaPortal SE, which is installed with VistaPortal, retrieves live real-time data directly from InfoVista Servers.

Both VistaPortal and VistaPortal SE present data to the user in various reports and formats using a Web interface. These reports can be custom or pre-packaged as VistaInsight® reporting solutions. VistaPortal SE reports are referred to as instant reports, unlike VistaPortal reports.

# VistaPortal Documentation

The VistaPortal documentation line consists of the:

- VistaPortal User Guide: This guide is designed for VistaPortal users and presents the VistaPortal user interface.
- VistaPortal Installation Guide: This guide details the installation and deployment procedures for the VistaFoundation kit.
- **VistaPortal Administration Guide**: This guide is designed for system administrators and provides advanced VistaPortal configuration options.
- VistaPortal Author Guide: This is guide is designed to teach how to develop custom performance reports and pages.

The VistaPortal SE documentation consists of a single User Guide, which includes installation and configuration sections.

VistaPortal can call up VistaPortal SE to view instant reports. You can find configuration information for instant reports in the VistaPortal SE User Guide.

# VistaPortal key features

### Overview

VistaPortal is a comprehensive web-based application that builds Service Level Management (SLM) portals for proactive IT resource monitoring. It provides an extensive reporting environment for all InfoVista IT management data through a single end user interface.

### VistaPortal functionality

VistaPortal incorporates data from InfoVista databases into display elements (Displets) to show information information in reports. To do this, VistaPortal offers:

- The Management Console, which is used to configure the end user interface, allowing:
  - Centralized user and group management
  - Security access configuration
  - User page contents and Displet configuration
  - Portal customization for specific users
- A report designer for creating and editing report templates
- A displet library consisting of InfoVista reporting displets (reports)

The following diagram illustrates the relationship between the components:



# The end user interface

You access the VistaPortal end user interface via a Web browser using the user name and password that your administrator defined for each user. Your administrator has the option of enabling you to reset your password. This is explained in the VistaPortal Administration Guide, "Enabling user password reset".

The end user interface shows a variety of InfoVista service level information such as graphs, charts, and exceptions. VistaPortal displays each type of information as independent display elements called **displets**.

The interface header provides access to displets with a megamenu, with a drop-down list of reports, and shows report categories in breadcrumb navigation style.



#### Log in to the end user interface

- 1 In your Web browser, enter the URL of the VistaPortal end user interface: http:/<hostname>/VPortal. The login window appears.
- 2 Enter a valid username and password.
- 3 Click Login. The main VistaPortal page for the current user appears.

### User page settings

Once logged in, click the user icon at the upper right to access fundamental user-specific options:

info	visto	ĥ		R	loot >	M	ain Pa	age	Ē ≥ × × ×
happent						Rep	-	众	Set this page as home page
Instance	Location		Ballunal Nex			11. 11.		A 00 0%	Display QRCode for this page
Last 200 -	Lan Ma	• 188.	• •					Q	Reset page layout
10760-107 -	Loss 100a		• **						Thresholds default colors
anarar .	interes		• **						Open Dashboard Dashboard Settings
nara.	true.		• **				1	<b>₽</b> O	Change password
marya.	Inter		• **				10	G	Logout
# #F gro.	riterral.		• 05						

- The option "Dashboard Settings" is described in "The Dashboard Displet" on page 55.
- The option "Threshold default colors" apply to the threshold colors displayed in the reports on your page. For advanced display configurations, refer to the specific displet section in the **VistaPortal Author Guide**.

# Web browser recommendations

#### Browser navigation buttons

The 'Back' navigation button of client Web browsers enables you to display the previous page delivered to the browser regardless of whether the session is still valid on the server. However, even though it is still possible to view the previous VistaPortal end user interface page using the Back button, be aware that your VistaPortal session may have expired. In such cases, the information you see is not current, and operations on the page are no longer possible. InfoVista recommends that you do not use the Web browser navigation buttons when browsing VistaPortal.

### Logging off

InfoVista recommends you log off and close your Web browser when you finish with VistaPortal if you regularly display sensitive information on a shared client.

### Your working session

When you log on to the Web you create a session. The session you work in is associated with your specific end user interface, which requires cookies to function properly. When you log out the session is terminated.

#### Logins and browser windows

If you create a new browser window, or create a new tab in your browser from an existing session, the new browser or tab shares the "parent" session. This means that you cannot have different logins using the same Web browser. If you want to use several different logins, you must create a new independent browser window for each one.

# Installing the Java plugin

The Java plugin must be installed as some displets require it to display correctly in Internet Explorer. Refer to the ReadMe for the latest version of Java.

Note: Refer to the Readme for the latest version of Java.

# 2 Creating a Personal VistaPortal

Starting with VistaPortal 5.1, you can create your own personal VistaPortal reporting pages, and edit, rename, or remove them when required.

Creating and managing personal VistaPortal pages is described in the following section.

See:

Setting up personal VistaPortal pages		17
---------------------------------------	--	----



# Setting up personal VistaPortal pages

Setting up a personal page consists of two procedures:

- First you select an existing page to which you are subscribed, and then declare it as your home page. Doing so makes it your own personal page, which you can now modify. This procedure is described below in "Create your own personal page".
- You then copy and paste the displets you want from an existing VistaPortal reporting page into your personal page. This procedure is described below in "Copy and paste desired displets" on page 19.

Once you have set up your personal page, you can rename, move (on the page to change the page layout), and delete any displet that you have set up there.

Note that personal pages are subject to certain limitations, described below.

### Prerequisites

- Your user role has the permission **MyPortal capabilities**.
- One or more page packages are assigned to you.

Your VistaPortal administrator is generally responsible for creating and assigning roles and permissions, and for assigning page packages to users. These processes are described in the **VistaPortal Administration Guide**, section "Managing Roles", and "Working with page packages", respectively.

Note that no out-of-the-box role comes with 'MyPortal capabilities' permission by default.

### Limitations

The MyPortal feature enables you to create your own reporting pages, but note these limitations:

- You cannot edit inherited pages or pages that belong to groups or page packages.
- **Time-sensitive information**: Displets that are copied from one page to another lose all time-sensitive information. This means that the date, the display rate, and the time span are not copied.
- Offline report export: MyPortal is not compatible with the offline report export command reports.bat and reports.sh (described in the VistaPortal Administration Guide, section "Offline Report Export").
- **Report**, **Graph on Demand**, and **Object Navigator** displets: The copy and paste operation freezes these displets' inventory of instances. Their original setup is used, and their synchronization context is maintained. You cannot set up these displets once they are copied to your personal page. For example, when you synchronize a Report and then paste it to your personal page, you will see the same instances, following their original criteria, but you cannot change the inventory. However, you can use the Time Navigator to synchronize that inventory to get data on a given date or over a specific period.
  - Exception: Users who have been assigned the role of **Author** and have the permission **Full content edition** can edit the set up of copied Report, Object Navigator, and Graph on Demand displets. When such Author users copy a displet to their personal page, they copy the synchronization context, but can then edit the setup of the displet they have copied.

Note also that such users can remove the synchronization context by selecting the option "Remove original synchronization context" in the **General** tab of the setup of Report, Graph on Demand, and

Object Navigator displets. This option is available only when a synchronization context is linked to the displet. You cannot undo this operation.

- **Time Navigator** displet: A copied Time Navigator will automatically synchronize any time-sensitive displet on your page.
- Synchronization Tools: When copying Object Navigators, any tools that synchronize other displets are not copied.

For example, if a synchronization source key has been set up in an Object Navigator that you copy, it will not be able to synchronize other displets on your personal page (for an explanation of the synchronization source key, see the **VistaPortal Author Guide**, section "Using the Report displet Sync Source Key").

#### Create your own personal page

- 1 Log on with your user name and password (if required).
- 2 In the VistaPortal header click the user icon R and and select 'Set this page as home page'.

The next time you log on this will be your home page.

3 In the VistaPortal header select 'Manage your pages' :



The Portal Pages Edition dialog opens. For example:

Portal Pages	s Edition	×	
🔓 Ma	ain Page	② aI 直 ①	
🖪 Int	terface Util-Saturation		
🔓 New Page	Co New Menu	Done	

In this example, the Portal Page Edition dialog opens on the **Summary** category page because that is the page you have selected as your home page.

4 Click **New Page**, and give your page a title - for example, 'My personal page' (note that you can also create a new category by clicking **New Menu**, with the same behavior as described in the following steps).

Your new personal page appears in the list.

The page editing window is where you add new pages and menus, with these options:

 Edit this page content: opens the page's 'Edition' mode.
 Selects displets from the General category; once dragged and dropped onto your page, you can move, resize, delete, otherwise manipulate the displets as required. This opens the page in Edition mode, and is available only for personal pages. The Time Navigator displet has no setup dialog, and their default setups are taken into account.
 Copies displets from the Clipboard, and place them on your page. The Clipboard is explained below in "Setting up personal VistaPortal pages" on page 17.
 Change page title: Opens a field where you can name the page; this is available only for personal pages.

- **Delete this page and its content**: Deletes the page, and cannot be undone; this is available only for personal pages (customized and inherited pages are merged into 'standard pages', and pages provided this way cannot be edited, renamed or deleted).
- A personal page: Indicates the type of page (personal or standard page); in the case of personal pages, this icon indicates that you can drag and drop this page (not possible for standard pages note that this icon also appears for standard pages, but you cannot change their position in the tree).
- 5 Set up your personal page by clicking the Edit this page content icon i and
  - dragging and dropping the desired displets onto the page; you are prompted to give the displet a name, but this is optional; and/or
  - copying displets from existing pages to your new home page from the **Clipboard** this is described in the following procedure.
- 6 When satisfied with your page, click the 'Stop editing' icon in the header.

The new displet appears on your new page.

Now that you have set up your home page (and added a displet), you can copy existing active displets to the clipboard and then paste them onto your page.

### Resetting page layout

You can move displets around on your pages, but you may want to reset them to the original layout.

To do so, in the header click the user icon  $\ensuremath{\mathsf{R}}$  and and select  $\ensuremath{\mathsf{Reset}}$  page layout.

This reloads the the page as it was originally designed by the author.

### Copying displets you want

The Clipboard enables you to copy displets from an existing page and paste them to your personal page. It is only a temporary space for holding a maximum of eight displets, and it is emptied when you log off.

### Copy and paste desired displets

- 1 Navigate to the page and find the displet you want to copy and paste to your personal page.
- 2 Click the copy icon:

	Copy to the displet clipboard
🔗 Big KPI	

The icon turns yellow to indicate that the displet is now copied to the clipboard.

- 3 Navigate back to your personal page and click the Edit this page icon . The clipboard opens with the displet you copied.
- **4** Drag and drop the displet onto your personal page. You are prompted to give it a new name, but this is optional.

Result: The copied displet is now on your personal page.

To add other displets to your page, simply follow the procedure above.

# 3 The Standard Displets in detail

The following sections describe the standard displets delivered with VistaPortal. All the VistaPortal displets are described. If some of them are not visible in your operating environment, this may be because your administrator has not given you access to them.

#### See:

The Displet Toolbar	22
The Object Navigator	23
The List pane Accessing the Object Navigator tools Synchronizing with displets Editing event threshold values	26 26
The Time Navigator Displet	
Using time zone shifting	
The Report Displet	
Manipulating data in the displet E-mailing reports and pages Preparing an e-mail Adding a report to an existing schedule Working with scheduled e-mails Business Calendars and Maintenance Periods in Reports	
The Graph on Demand Displet	48
Using the Graph on Demand Zooming in on chart data Viewing graph data Exporting graph data The Time Navigator in the Graph on Demand	
Zooming in on chart data Viewing graph data Exporting graph data	
Zooming in on chart data Viewing graph data Exporting graph data The Time Navigator in the Graph on Demand	
Zooming in on chart data Viewing graph data Exporting graph data The Time Navigator in the Graph on Demand The Big KPI Displet	50 51 52 53 54 55
Zooming in on chart data Viewing graph data Exporting graph data The Time Navigator in the Graph on Demand The Big KPI Displet The Dashboard Displet	50 51 52 53 54 54 55 57 57 58
Zooming in on chart data Viewing graph data Exporting graph data The Time Navigator in the Graph on Demand The Big KPI Displet The Dashboard Displet The Connect As Displet The Memo Displet	50 51 52 53 54 55 57 57 58 59

# The Displet Toolbar

All displet toolbars have a minimum set of tools to minimize, maximize, copy, and get online help:



Some displets have tools specific to that displet, such as "Display table report" for the Report displet.

All displets can be maximized, and in that state they take the entire page space. Click the restore button at the upper right, or anywhere outside the displet - in the page header, for example - to restore the displet to its normal size.

Minimized displets are indicated by a button in the page header, which shows the number of displets on the page that have been minimized:

 $\bowtie$ R ~ ŝ

Click this button to restore minimized displet.

If you trigger a tool on a page whose target is a minimized displet, the page header button blinks to indicate that the tool results are hidden.

# The Object Navigator

The Object Navigator enables you to view instances, exceptions and reports on your network.

It also enables you to view and filter instances according to various criteria (set by your administrator), and to view the InfoVista reports running on those instances. The Object Navigator can display this information in different ways.

Object Navigator		
Network Device		-
Network Service Elements		
PE - CE Interface		
Name	Description	
RT MPLS Dallas_AnyVendor - Device Availability - 15_min	Report creat	
📊 RT MPLS Dallas_AnyVendor - Device Availability - 1_day	Report creat	1
RT MPLS Dallas_AnyVendor - Device Availability - 1_hour	Report creat	1
RT MPLS Dallas_AnyVendor - Device Utilization Overview	Report creat	-
<pre></pre>	1 - 500 of 528 rd	ows

### Previous page context recovery

VistaPortal "memorizes" your navigation throughout the reporting interface, and returns you to the place - a node or device - where you left off. VistaPortal does this by propagating, on a "best effort" basis, your Object Navigator contexts.

This works for dashboards and tree nodes, as well as with promptable criteria, but only for single items selected in a list. Context recovery does not work when multiple items are selected.

For example, if you navigate to a node in a tree - **UCService1** in the Service Navigator - and then synchronize to see a performance report, VistaPortal will try to select **UCService1** and apply your synchronization if you then go to a new page with a similar Object Navigator.

### Refreshing tree and dashboard views

When the maximum number of items in a tree or dashboard is retrieved, " ... " appears. Click this to reload a new batch of items.

# The List pane

The List pane displays instances according to the selection in the Tree pane. If the Tree pane presents instances grouped by Vista, for example, clicking a Vista loads all the instances in that grouping (with columns, provided they are configured by the administrator).

### Filtering in Lists

If the total number of rows in a list exceeds the number of visible rows, hover your mouse over the column header to access the filter field, enabling you to perform dynamic searches.



You can filter two types of data: string and numeric.

### Filtering string data

You can enter any text string in the filter input field, including special characters. Searches are "CONTAIN" operations, which means that entering "ab" will render search results containing "ab". This could be 12ab34, ab123, or 123ab, for example.

Note that entering the asterisk wildcard "\*" quotation marks finds all instances.

### Filtering numeric data

Note: Filtering is applied to the underlying raw data, not to the data values displayed.

In the input field, you enter expressions as follows:

- [operator][number] where operators are "=", "<", "<=", ">", ">=".
- If no operator is provided, "=" is used.
- Numbers may not use thousand separators; the decimal separator can be either "." or ",".

For example ">12.5" would result in any data with a value greater than 12.5.

Note that Severity columns and Duration columns (both for events), as well as all date columns, are filtered according to their representation values as strings, even if their internal representation is numeric and is used for sorting.

For example, even though the event status **Major** has an internal numeric representation, you filter using the convention "**M**\*" that lists **Major** and **Minor** states.

### Opening lists in a new window

Besides filtering the items in a list (see "Filtering in Lists" on page 24), you can open a list of instances or reports in a new window. To do so edit the file ExtObjectNavigator.tpl.

#### Enable opening lists in a new window

- 1 Locate the file ExtObjectNavigator.tpl in the folder <installation\_dir>\site\WEB-INF\config\messages.
- 2 Copy and rename the file to ExtObjectNavigator.properties.

#### For Linux only:

Once you have created the .properties file, set correct ownership by using the

• VistaPortal command:

installation directory... /bin/setprivs.sh, or the

• Linux commands:

chown infovist <file>.properties

chgrp infovista <file>.properties

- **3** Open the file and uncomment the line EON1001.
- 4 Restart VistaPortal.

Clicking the symbol >> which now appears at the bottom right of the Object Navigator shows the options "Open in New Window".

## Accessing the Object Navigator tools

The Object Navigator displet provides specialized tools for navigating your instances. You can access these tools in different ways, depending on how your administrator has configured the displet. The following ways are possible:

- Through icons
- Through the contextual menu (from a right click)
- By clicking directly on an instance

#### lcons

Tools are accessible from icons in the Object Navigator toolbar. The icons available depend on which tools your administrator has configured. Hover your mouse over an icon to find the name of the tool it represents:



In this example, the user is hovering the mouse over an icon which has been selected to represent the action "synchronize all". Selecting an instance in the Object Navigator and then clicking this icon would synchronize all other (compatible) displets on the Portal page with the selected instance.

### Clicking an instance

As well as providing access to the tools through icons and the menu, your administrator might also configure certain tools to be launched directly from a single or double-click an instance. In other words, you may be able to (double) click an instance to immediately load a report into the Report displet, or call the Graph on Demand displet to load a graph for that instance simply by clicking its name in the Object Navigator.

**Note:** All these tools may vary in your configuration. The icons used, and the access modes available, all depend on the configuration chosen by your administrator. Configuration procedures are covered in the **VistaPortal Author Guide** and the **VistaPortal Administration Guide**.

# Synchronizing with displets

The Synchronization tool synchronizes the displets on the Portal page with the Object Navigator (if they are compatible with the synchronize action). The Object Navigator selection is applied as a filter (criterion) to the other displets in order to see more details for the selection. The synchronization can be performed on a group of instances, or on an individual instance.

Only displets present on the same page as the Object Navigator are synchronized. You can synchronize data with a report displet, a Graph on Demand displet, and another Object Navigator.

Synchronization is described in detail in the VistaPortal Author Guide, in the respective sections that address the individual displets.

# Editing event threshold values

You can change the event threshold value settings of resources listed in an Object Navigator, as well as the threshold settings of a specific event.

Event threshold settings reside in VistaMart as numeric property values. When you change these values in an Object Navigator and save them, they are saved to VistaMart.

You need to be familiar with the instances and the threshold values that you are editing.

Changing event thresholds in VistaPortal is possible only in an Object Navigator.

#### Prerequisites

Threshold editing is not available by default. To edit threshold values, a VistaPortal administrator needs to:

- 1 enable VistaMart for threshold editing
- 2 give users permission to edit thresholds

These procedures are described in the **VistaPortal Administration Guide**, section "Enabling event threshold editing".

#### Process

In an Object Navigator, you select an instance or instances, then the menu option **Edit Event Thresholds**. The threshold editing dialog box appears, where you can modify threshold settings. This is described in the following procedure.

#### Edit event threshold settings

1 Select and right-click an instance, then select **Edit Event Thresholds** from the drop-down menu:



The threshold editing dialog box appears, listing instance and its associated indicators:

dit Event Thresholds				$\times$
single instance.		Prope	rty filter:	
Instance / Property	Value		Default	
<ul> <li>ATM RT bf-info-les2-pth-eu.yourdomain.com:ATM</li> </ul>				~
B Degrade Mode Threshold ☆	20	~	20	
📱 Ex 0 - Broadcast 🕁	25	~	25	
📱 Ex 0 - Discards 🕁	25	~	25	

**Note:** You can filter the listed indicators by using the field 'Property filter' at the upper right - case-insensitive; undo with the 'x'.

- A solid star \* indicates that the value is the default value for that property.
- A hollow star \* indicates that the property is an InfoVista Server property. Note that if this property is taken into account for generating InfoVista Server events, it will be pushed to the InfoVista Server only at the next InfoVista Server synchronization. This means that your edit will not be taken into account immediately.
- 2 In the Value column select the indicator value you want edit, and enter the new value.

The new value appears in the **Value** column, and the VistaMart default value appears in the **Default** column. The modified value is identified with a red marker.

3 Make other changes as required, and click the button **Apply to current instance** at the bottom of the theshold editing dialog box to apply your edits.

**Note:** For your edits to be taken into account, you need to apply them to either the current instance, or to all instances, using the button(s) at the bottom of the threshold editing box.

4 Your changes are saved to VistaMart and taken into account when thresholds are calculated.

Clicking **Apply to current instance** saves your edits in VistaMart and flags the respective properties there ("Owner=user") to protect them from being overwritten during the next provisioning.

This protection in VistaMart is removed when you click the "restore default" arrow:



This restores the flag to the original default setting in VistaMart ("Default"), and the property value may therefore be overwritten during the next provisioning.

### Editing multiple instances

The principles are the same as editing a single instance. In this case you select multiple instances and can apply your changes to them individually, or all at the same time.

Select the instances of your choice, right-click and select **Edit Event Thresholds**. The instances you selected are listed in the threshold editing dialog box.

Click the arrow to the left of the desired instance to expand the list of its properties.

The instance's properties are listed. Edit them as described above in "Edit event threshold settings". Do the same for all the desired instances in the list.

In each case, you have the option of applying your changes to the current instance, or to all the instances with the buttons Apply to current instance. Apply to all instances......

### Editing the threshold values of specific events

The principles are the same as editing the threshold values of resources displayed in an Object Navigator, as explained above. In this case, however, you edit specific events individually.

#### Edit threshold values of specific events

1 In an Object Navigator event list, select and right-click an event, then select **Edit Event Thresholds** from the drop-down menu.

The threshold editing dialog box appears, displaying the event, associated indicator and threshold properties.

- A solid star \* indicates that the value is the default value for that property.
- A hollow star \* indicates that the property is an InfoVista Server property. Note that if this property is taken into account for generating InfoVista Server events, it will be pushed to the InfoVista Server only at the next InfoVista Server synchronization. This means that your edit will not be taken into account immediately.
- 2 In the **Value** column select the indicator value you want edit, and enter the new value.

The new value appears in the **Value** column, and the VistaMart default value appears in the **Default** column. The modified value is identified with a red marker.

- 3 Make other changes as required, and click the button Apply to current instance at the bottom of the theshold editing dialog box to apply your edits.
- 4 Your changes are saved to VistaMart and taken into account when thresholds are calculated.

Clicking **Apply to current instance** saves your edits in VistaMart and flags the respective properties there ("Owner=user") to protect them from being overwritten during the next provisioning.

This protection in VistaMart is removed when you click the "restore default" arrow:

95 🕞 98

This restores the flag to the original default setting in VistaMart ("Default"), and the property value may therefore be overwritten during the next provisioning.

#### Information about instances and properties

Hovering your mouse in threshold editing dialog box provides information about the listed instances, properties, and events.

### Filtering the display of available thresholds

VistaPortal's default display of available thresholds is suitable for most users. However, you can filter the display of editable thresholds by using regular expressions in the dedicated properties file threshold.tpl. This file enables you to set the maximum number of instances displayed, and include and exclude thresholds with regex recognition patterns.

The file is located in the folder <installation dir>/Portal/site/WEB-INF/config.

#### Filter available thresholds

1 Make a copy of the threshold.tpl file, and rename it threshold.properties. Keep both in the same directory as the original .tpl file.

For Linux only:

Once you have created the .properties file, set correct ownership by using the

• VistaPortal command:

installation directory... /bin/setprivs.sh, or the

• Linux commands:

chown infovist <file>.properties

chgrp infovista <file>.properties

- 2 Open the threshold.properties file with a text editor, use a regular expression to modify the desired property, and uncomment the line.
- 3 Save the file.
- 4 Stop and restart VistaPortal.

# The Time Navigator Displet

• Time Navigator								- 53 %	č 12
Hourly 🛩	09:50	01 Feb 2018 🛗	Paris	4	Þ	۶I	~		

The **Time Navigator** displet interacts with the **Report** displet and the **Graph on Demand** displet that are on the same page. You use the Time Navigator to synchronize the date of all (Report and Graph on demand) displets in one action, and to navigate all compatible displets forward and backwards in Time.

**Note:** Depending on how your Administrator has configured the Time Navigator, it will either interact both with Report displets and with Graph on Demand displets on the same page, or with just one or the other.

### Using the Time Navigator

The Time Navigator contains 2 or 3 entry fields, depending on the display rate.

If you select an **Hourly** display rate, you can enter a time as well a date; if you select **Daily**, you can set the date only.

**Note:** The display rate option is only available if your Administrator has given you access to it. Otherwise, the display rate drop-down list is not present in the Time Navigator.

The default display rate for the Time Navigator is automatically selected from the shortest display rate used by the reports present on the Portal page.

You can perform the following actions with the Time Navigator:

- Click <sup>4</sup> to move back one display rate.
- Click to move forwards one display rate.
- Enter a date, or select the calendar icon to select a date in the calendar field.
- Click Hourly v to open the drop-down list for display rates.
- Click ✓ to confirm your settings. When you click this icon (Apply), the settings you entered are applied to any report and Graph on Demand displets present on the page.
- Click <sup>▶I</sup> to get the latest data.

# Using time zone shifting

Time zone shifting allows you to display collected data into an alternate time zone other than that of the VistaMart, which is referred to as the preferred time zone. This feature translates all time stamps into your preferred time zone but is only available for display rates below Daily (Hourly, 30 minutes, 15 minutes, 10 minutes, and 5 minutes.) Time bars default to your preferred time zone for display rates below Daily when configured and automatically time shift.

**Note:** Time zone selection and shifting are only available if your Administrator has set up and/or given you access to an alternate (preferred) time zone. Otherwise, the time zone drop-down list is not present in the Time Navigator.

### Time zone shifting with the temporal bar

In the temporal bar, the time zone indicator appears following the date.

Time zone shifting is not possible for Daily display rate and higher.

#### Select a time zone

- 1 Go the temporal bar.
- 2 Select the desired time zone using the drop-down to the left of the forward and back buttons.
- 3 Click the **Apply** icon ✓. Displets, such as Graphs on Demand and Reports (with a display rate below Daily), shift to the selected time zone and indicate it in the title.

If data coming from different VistaMarts is displayed on the same page and those VistaMarts use different global time zones, the temporal bar of the Time Navigator displays GMT±X for the time zone.

Selecting a time zone with the Time Navigator and clicking Go forces all displets with below-Daily display rates within the page to that time zone. If a displet is unable to apply the time settings (time zone/display rate/date & time) requested by the Time Navigator, time indications for that displet may differ from those of the Time Navigator.

### Time shifting and the Object Navigator

Time zones appear differently depending on if you use the instances list, exceptions list, or instant reports.

In the list of instances, the CDate, UDate, and TTL columns display the VistaMart time zone (which are stored in the Oracle time zone).

In the list of exceptions, the StartDate and EndDate columns use your selected time zone. When drilling down from an exception to a Report or Graph on demand, the selected time zone is used.

Instant reports ignore time shifting and only display reports using the global time zone.

### Time shifting and reports

In reports that display data mixing both Daily-or-above and below-Daily display rates, only the global VistaMarts time zones are available.

When the selected display rate for the temporal bar is below-Daily, while columns in a report use Daily-orabove display rates, only the global VistaMarts time zones are available.

Time shifting does have a side effect when working with time zones that have non hour-aligned offsets. For example, if you set your preferred time zone to 'GMT+04:30 - Kabul' and use it on data collected at UTC (Coordinated Universal Time), the hourly data displayed is aligned on the half hour (1:30, 2:30, etc.)

# The Report Displet

	CPU Usage	Memory Usage	
Instance	Daily (%)	Daily (%)	
SW frlulsw07.iv.local	7%	38.6%	
SW frlulsw08.iv.local	7.1%	38.7%	
SW frlulsw41.iv.local	8%	38.4%	
Average	7.4%	38.5%	

The report displet shows a report built using indicator values sources from a VistaMart database. The displet uses one of the templates available on the current VistaPortal server to display a report which the administrator has configured in the Report Designer.

#### Chart + Table in a report

If a report has been set up with chart+table and show charts and tables at the same time, icons appear in the header to switch between the displays. These icons are added by default if a Report is set up as a mixed chart+table report.

Simply click the respective icons in the header to switch between the two displays.

This section addresses the following topics:

Manipulating data in the displet	34
E-mailing reports and pages	39
Preparing an e-mail	42
Adding a report to an existing schedule	43
Working with scheduled e-mails	44
Business Calendars and Maintenance Periods in Reports	47

## Manipulating data in the displet

You may have access to some or all of the following Report displet functions to access, view, and manipulate data in a report.

The following section explains how to

- filter data
- sort data in a table
- sort data in a matrix
- drill down to another report to get detailed information
- linking to VistaPortal SE
- opening the displet in a full window
- editing the Report template

### Filtering data

To filter the data displayed in your tables (except in rotated and matrix tables), hover your mouse in the desired column header to make the filter field appear at the top of the column.

1,1 Report 07 Feb 2018 Paris			- 53 \$? ?
		CPU Usage	Memory Usage
Instance		Daily (%)	Daily (%)
1	I×		
SW frlulsw08.iv.local		7%	38.7%

Note that sorting and filtering are not applied to the database, just to displayed data. You cannot filter temporal data.

#### Apply your filters

- 1 Enter the filter value in the relevant field.
- 2 Hit the **<ENTER>** key in one of the filter input fields for filter settings to be processed. The table is refreshed to reflect configured filter.
- 3 To cancel the filter and display the initial table, delete the value in the input field and hit the **<ENTER>** key. When applicable, the **Re-apply current sort & filter on database** icon appears in displet header . Click this icon to apply filters to the database data instead of displayed data.

#### Filtering for textual data

In columns containing textual data, the filter is a "contains" expression.

#### Filtering for numerical data

If you are working with columns containing numerical data, filters are displayed as an expression: [<operator>]<decimal\_value>[unit]

There are a number of rules to consider when entering filters:

- You cannot filter timestamp or rank data.
- Supported operators (without quotes): "=", "<", "<=", ">", and ">=". If you do not specify an operator, "=" is used by default.
- For negative decimal values, the minus sign (-) is supported.
- The (.) separator (United States), as well as localized separators, are supported (using the local of the VistaPortal server).
- The thousands separator is not supported. For example, the comma in 120,000 must not be entered, enter 120000 instead.
- The filter function filters data according to their actual numerical values as they are stored in the VistaMart database, not according to the displayed number, which is a rounded value.

For example, the value 1.0299 in the VistaMart database is displayed as 1.030. Therefore, if you use "=1.030" to find the value, it will not be displayed. Likewise, ">1.030" does not display the value. Only ">1.02" will display the value.

• You can enter a unit by typing the first character(s) (case sensitive) of the displayed unit(s) for column values. For example ">1G" to see only interfaces with a speed higher than 1 Gbits/s.

**Note:** If the filter unit entered is ambiguous (for instance ">8" in an autofit column with Mbits/s as well as Gbits/s values), the filter will be inoperative.

### Sorting data in a table

Click on a column title or subtitle to sort data in either ascending or descending order.

Note that sorting is not applied to the database data, but just to displayed data. To apply sort on database data instead on displayed data, if it's possible, you need to click the **Re-apply current sort & filter on database** icon

If your reports includes several grouping levels, VistaPortal sorts the nested subgroups individually.

Note also sorting behavior regarding TopN data:

If Top N is set on	
the default column:	When you perform a sort on another column by clicking its header, only the displayed values are sorted.
	When you click the button Re-apply current sort & filter on database, TopN is moved and applied to this newly sorted column and data are sorted on a new set of values, namely, the sorted column top values
a specific (not default) column:	When you perform a sort on another column by clicking its header, only the displayed values are sorted.
	When you click the button Re-apply current sort & filter on database, TopN does not move: a database sort is performed on the data in the sorting

#### If Top N is set on...

column, but these data are still obtained based on the defined topN column; if there are no null values it does nothing.

If TopN is **not** defined and you perform a sort on another column by clicking the header, only the displayed values are sorted. If you click the button Re-apply current sort & filter on database, a database sort is performed on all values associated with this column in VistaMart.

If your report includes grouping criteria (such as properties), the displayed groups may be sorted in ascending or descending order. In addition, the groups' displayed instances are sorted according to the column you select:

Customer	Instance		Destination	Ava		RT
				15 m	inutes	15 minutes
Audi	SAA-Jitter RT	180.8.17.1	Oxford	99.2	3 3	.234
BMW	SAA-Jitter RT	177.12.8.10	Oxford	99.5	6 3	.781
	SAA-Jitter RT	177.12.8.10	Bristol	100		.67
	SAA-Jitter RT	177.18.7.6	Leeds	99.6	1 3	.233
	SAA-Jitter RT	180.8.17.1	London	99.6	5 3	.526
Ford	SAA-Jitter RT	177.12.8.10	Leeds	99.6	1 5	.457
	SAA-Jitter RT	177.12.8.16	London	100	2	.655
	SAA-Jitter RT	180.8.17.1	Bristol	99.5	9 2	.99
Toyota	SAA-Jitter RT	177.18.7.6	London	99.7	54	.787
	SAA-Jitter RT	177.18.7.6	Bristol	99.5	7 3	.894
	SAA-Jitter RT	177.18.7.15	Oxford	100		.569
	SAA-Jitter RT	180.8.17.9	Leeds	100	3	01
	Customer	Instan	ce		Destination	Avail
ι						15 minutes
1	Audi	SAA-Ji	tter RT 180.8.17	.1	Oxford	99.23
	BMW	SAA-Ji	tter RT 177.18.7	.6	Leeds	99.61
		SAA-Jit	tter RT 180.8.17	.1	London	99.65
	1					

	Audi	SAA-Jitter RT 180.8.17.1	Oxford	99.23	3.234
	BMW	SAA-Jitter RT 177.18.7.6	Leeds	99.61	3.233
<b>7</b>		SAA-Jitter RT 180.8.17.1	London	99.65	3.526
		SAA-Jitter RT 177.12.8.10	Oxford	99.56	3.781
		SAA-Jitter RT 177.12.8.10	Bristol	100	5.67
	Ford	SAA-Jitter RT 177.12.8.16	London	100	2.655
		SAA-Jitter RT 180.8.17.1	Bristol	99.59	2.99
		SAA-Jitter RT 177.12.8.10	Leeds	99.61	5.457
	Toyota	SAA-Jitter RT 177.18.7.15	Oxford	100	2.569
		SAA-Jitter RT 180.8.17.9	Leeds	100	3.1
		SAA-Jitter RT 177.18.7.6	Bristol	99.57	3.894
		SAA-Jitter RT 177.18.7.6	London	99.75	4.787

If your reports includes several grouping levels, VistaPortal sorts the nested subgroups individually.

### Drilling down

A drilldown is a link to another report to show more detailed information about a measurement. For each drilldown available in the report table, the standard cursor  $k_{2}$  changes to a link cursor  $k_{2}$ .

Defined drilldown icons are displayed in a popup when you hold the cursor over a cell.

#### Exporting data

On the drilldown Detail page, click the Export button to display or save the report in the following formats:

text	The report opens as a text file in a new window.
excel	The report opens as a Microsoft Excel file in a new window. If the application is not available on your station, you will only be able to save it on your disk.
PDF	The report opens in Adobe Acrobat, using the same window (make sure that Adobe Acrobat Reader is installed on your station if you intend to use this format).
-----	---
ХМI	The report opens in a new window as an XMI file. The way the XMI elements

XML	The report opens in a new window as an AML me. The way the AML elements
	are displayed (Tags/no tags, indentations, etc.) may vary depending on your
	browser. However, the file is structured as a well-formed XML file when saved
	on your disk.

#### Using the Time bar

You can use the Time bar located in the top right corner of the window to:

- display data at a specific date and time in the report,
- select a display rate, and
- extend or narrow the timespan of the drill down report.

Two display modes are available. To switch between the modes simply click the underlined word over or to:

• **Period mode** (default), which shows data starting at a specific time and date over a number of hours, days, weeks, etc.:

Hourly 🛩	ı <del>≓</del>	over	1	Day 🗸	until	08:55	09 Mar 2018 🛗	Paris	4	$\vdash$	►I	~	

• Interval mode, which shows data from a specific time and date to another specific time and date:

Hourly 🛩	i <del>≓</del> ! f	from	09:55	08 Mar 2018 🟢	to	08:55	09 Mar 2018	Paris	4	Þ	۶I	$\checkmark$

To switch between the modes simply click the "switch to..." icon  $\blacksquare$ .

#### Edit the Time bar as follows:

- 1 Manually edit the 'hours/minutes' and 'date' fields. This is an alternative to clicking the ◀ or ▸ buttons several times as described above.
- 2 Use the calendar is option to enter a date.
- 3 Select a new display rate from the drop-down list.
- 4 If necessary, modify the timespan for the data.
- 5 Click **OK** to validates your changes.

The Time bar reverts to the initial layout and the data are refreshed in the report according to the new parameters.

### Linking to VistaPortal SE

You can drill down to a report from the VistaPortal SE server. This is an Instant Report Drilldown, with the the defined icons displayed in a popup when you hold the cursor over a cell.

### Opening the displet in a full window

Click the **Display in full screen icon** in the top right of the displet to open the displet in a new detached window. The Export function and Time bar features become available.

## Editing the Report Template

If your administrator has given you the necessary rights, or if you have selected a certain page and decided to use it as your own (in which case you break inheritance), you can edit the Report Template. This applies to any displet on a page. This is described in detail in the VistaPortal Author Guide, in the respective sections addressing displets.

Complete information on the use of the Report Designer is given in the VistaPortal Author guide.

## E-mailing reports and pages

The e-mail function enables you to distribute your reports by e-mailing a snapshot of them directly from your VistaPortal interface.

You can e-mail all the reports on a page, or just a single report:

1 To e-mail **all reports** within a page, click the arrow to the right of the Email icon and select the **Email this Page** item of the drop-down menu:

			$\bowtie$	8 🗸	:
-	Email this p	age 🕕			
Å	Manage em	ail sched	ules		

**Note:** You cannot e-mail an empty page or a page for which no report template is defined, or graphs from the Graph on Demand.

The e-mail function enables you to compose an e-mail message that is sent together with your selected VistaPortal the report(s) or page. The message you write appears at the top of the e-mailed report.

You can also

- send your report(s) in PDF, Excel, Text, or XML format,
- preview your e-mail message,
- send your e-mail immediately, or schedule it for a later delivery on a recurring pattern.

#### **Enabled e-mails**

Although all users are allowed to schedule e-mail reporting, the VistaPortal e-mailing feature is not enabled by default.

If you have performed a first-time installation of VistaPortal, or completely uninstalled it and performed a fresh installation, the e-mail feature will not be available. In this case, the VistaPortal administrator needs to enable e-mails as described in the **VistaPortal Administration Guide**, section "Enabling E-mails".

In addition, some e-mail elements, such as the "Save Schedule" button, "Copy from" drop-down list, "Name" field, and "Schedule" tab, appear only if you have e-mail scheduling rights. If you do not see these elements, ensure that you have e-mail scheduling rights as described in the **VistaPortal Administration Guide**, section "Configuring e-mail scheduling".

#### The Message, Reports, and Schedule tabs

The e-mail dialog box has three tabs, **Message**, **Reports**, and **Schedule**, which are described in the following sections.

### The Message tab

The **Message** tab has the standard "To", "Cc", "Bcc", "Subject", and message text fields, as well as a text formatting toolbar and other useful options for distributing your reports.

CC		Separate multiple recipients with semi-colon (;).	
BCC Subject			
	🖉 Attach: 📃 PDF 📃	Excel Text XML	C Preview
	Show report preview i		
BIU	\$  ∃  ∃  ⊒  ⊒  ∛, 18		

Use these options to handle your e-mailed reports:

Element	Function
Attach, PDF, Excel, Text, XML	Sends the attached report in the selected format
C Preview	Shows a preview of the message text
Show report preview in mail	Shows a of the report in the e-mail body
Put attachment(s) in a Zip file	Compresses all the attachments in a single file (recommended when using the <b>Include all data</b> option)
Save Schedule	Saves the e-mail as a schedule
Send Now	Sends the e-mail now without scheduling it (any information in the <b>Schedule</b> tab is ignored)
X Cancel	Closes the e-mail dialog box

### The Reports tab

This tab lists the titles of reports that are attached to your e-mail message.

Message Reports Sci	hedule		Help
Performance Status of the Data	ay 🔶	Add To	×
😴 Copy From	Save Schedule	🖂 Send Now	Cancel

Select one or more reports to insert or remove from the e-mail. If you want to re-use a report in an existing schedule, use the **Add To** button as detailed in "Adding a report to an existing schedule" on page 43.

Note: Click hyperlink report titles to view the corresponding report in a new full screen browser window.

## The Schedule tab

This tab schedules e-mailed reports.

Messag	ge Reports Schedule
Name	
End date*	
Recurs	Daily V
Reporting time	≥ 01 ♥ : 15 ♥
Email time*	01 🗸 : 15 🗸
* Time zone: UTC	+01:00 - Paris may vary depending on server load and settings
Actual cinali unie	may vary depending on server load and settilligs

Use these options to schedule your e-mailed reports:

Element	Function
Name	Name of the report page as it appears in the upper right-hand corner of the displayed report; this name appears by default, but you can delete it and give the report a name of your choice
Reporting time	The Reporting time is the reference time of the report, or that of the report with the smallest display rate for a page. It is always before the Email time
Email time	Set this time to start the generation of the report, and to then send the corresponding e-mail.
	The e-mail time is more of a desired time, rather than a definite time, because the actual e-mail time depends on server load and settings. InfoVista therefore recommends setting an e-mail time that provides a sufficient amount of time after the report time.
	For example, if you set the report time for 00:00 a.m., set the e-mail time for 01:00 a.m not 00:15 a.m. Setting the time at 01:00 a.m. makes it likely that all report data will be available by the time the report is generated and sent.
	Note: The 'Email time' and 'End date' fields are specified using your local time zone setting.

Element	Function
End date	Sets the calendar date after which the schedule is suspended.
Recurs	Sets the recurrence of the e-mail on a daily, weekly, or monthly pattern. <b>Daily</b> is selected by default
	Weekly enables you to select the day(s) of the week.
	<b>Monthly</b> enables you to specify the day number of the month or the day of the week.
	You can user either fixed day numbers separated by a comma (1-31), or a combination of First, Second, Third, Fourth, or Last and the day in the week. The default is Last Sunday

## Preparing an e-mail

The following procedure illustrates sending an e-mail.

#### Send an e-mail for immediate delivery

1 In the Message tab, specify a recipient and other relevant information (Cc, Bcc, or Subject).

The "To" and "Subject" fields of the Message tab are color-coded to indicate that they cannot remain empty, and if an e-mail address format is invalid. The "CC" and "BS" fields are color-coded if an invalid e-mail address is entered.

Me	ssage Reports Schedule		
То	Â		
сс		Separate multiple recipients with semi-colon (;).	
BCC			
Subject	Â		
6	🖗 Attach: 📃 PDF 📃 Excel	📃 Text 📃 XML	🔍 Preview

- 2 Compose your message in the text editor; click **Preview** to see how your e-mail will appear.
- 3 Select the Reports tab, which displays the report(s) that are attached in the e-mail. You can opt to attach reports as PDFs by selecting the option
- 4 Click Send Now.

To prepare the e-mail without sending it immediately and to put it on a recurring schedule, either select an existing schedule or create a new one. The next procedure assumes that you will apply an existing schedule to your e-mail.

#### Send an e-mail using an existing schedule

In such scenarios, you use the **Copy from** drop-down to use an existing schedule for your new schedule. If you already started to enter information in the e-mail fields and then select an existing schedule, a confirmation dialog box appears asking to allow the existing schedule to overwrite the information you just entered. Using this feature removes any unchecked report from the Reports tab and lists reports of the selected source schedule as unchecked in the Reports tab; these reports must be manually selected to be included in the edited schedule.

- 1 In the Message tab, use the Copy from drop-down to select the details of an existing schedule. The list of available schedules appear with their frequency.
- 2 Click **OK**. The message, reports, and recurrence information of the selected schedule populates the new e-mail message.
- 3 Select the Reports tab, which displays the report(s) that are attached in the e-mail. You can select or remove a report to attach to the e-mail.

If you unselect a report, it appears crossed-out and the Add to button is grayed out. Re-select it and it appears normally.

```
4 Click Save Schedule.
```

Finally, you can also create a new schedule and apply it to your e-mail message. The following procedure assumes that you wish to schedule an e-mail without using one of the existing schedules.

#### Send an e-mail using a new schedule

- 1 In the Message tab, enter the necessary information in the usual e-mail fields (To, Cc, Bcc, and Subject). Use the text editor to add the content of your e-mail.
- 2 Select the Reports tab, which displays the report(s) that are attached in the e-mail. You can select or remove a report to attach to the e-mail. You can opt to attach reports as PDFs or Excel, Text, or XML files by selecting the appropriate option.

If you unselect a report, it appears crossed-out. Re-select it and it appears normally.

Message Reports Sche	dule	Help
✓ Report Report	Add To	
Copy From	🕞 Save Schedule 🛛 🖂 Send N	ow 🔀 Cancel

- 3 Select the Schedule tab and enter information as detailed in "The Schedule tab" on page 41.
- 4 Click Save Schedule.

## Adding a report to an existing schedule

If you would like to re-use a report in an from a schedule to another, perform the following procedure.

#### Re-use a report in an existing schedule

- 1 From the scheduled e-mails list, click the schedule where the report can be found.
- 2 Go to the Reports tab, select the report, and click Add to.

Add to	Main page (Daily)		~
		🕹 Add	X Cancel

- 3 Select the target schedule where the report shall be added. Click **Add** and the target schedule is updated on-the-fly. This pop-up remains open to allow for the report to be added to other schedules.
- 4 Click **Cancel** to close the pop-up.

## Working with scheduled e-mails

The Scheduled Emails list provides a complete listing of all schedules. Depending on your role, this list is accessible as follows:

- VistaPortal user: Click the e-mail icon in the reporting page header, and select Manage email schedules.
- VistaPortal admin: Click Email Schedules in the left tree menu of the Management Console.

<b>VistaPortal</b> <sup>®</sup>						
Connected as admin						
▲ 📳 TMOVPV360						
🝰 All						
🖻 🍓 Page Packages						
🖧 Email Schedules						
Report Designer						
🖻 📁 Configuration						
Iroubleshooting						

The list appears as follows:

Recu	irs Status	Last email	Result	Next email	Schedule name		Recipients	
🔍 Daily	Active			25 Feb 2017 07:00	Page9		asmith@acme.fr	
🔍 Daily	Active			24 Feb 2017 19:00	Registration		jbrown@acme.fr	
🔍 Daily	Active	20 Feb 2017 11:30	Success	25 Feb 2017 10:30	NRF41	CRITE	asmith@acme.fr	
🔍 Daily	Suspended	20 Feb 2017 11:30	Success	24 Feb 2017 10:30	NRF41	CRITE	jbrown@acme.fr	
🔍 Daily	Suspended	20 Feb 2017 11:30	Success	21 Feb 2017 12:30	NRF41	CRITE	asmith@acme.fr	
🔍 Daily	Suspended	20 Feb 2017 11:30	Success	22Feb 2017 09:30	NRF41	CRITE	jbrown@acme.fr	
🔍 Daily	Active	20 Feb 2017 11:30	Success	24 Feb 2017 11:30	NRF41	CRITE	asmith@acme.fr	

The list features the following columns:

• Recurrence: Hourly, Daily, weekly, or monthly

"Hourly" is available only if you have the specific permission "Hourly and above email scheduling". Hourly recurrence builds reports and send them as e-mails every hour, which can affect system performance. For information on assigning specific roles, refer to the **VistaPortal Administration Guide**, section "Managing Roles".

- Status: Active, suspended, due, executing
- Last email: Date and time of the last scheduled execution
- Result: Displays the result of the last scheduled execution.
  - Green: "Success" if last execution was successful
  - Red: "Failure" if an error occurred
  - Amber: "No email" if no e-mail is generated (all users locked, or subgroup has no user, etc.)
- Next email: For active reports
- Schedule name: Hyperlink to display and edit schedule details

You can preview a report by clicking the icon <a>subscription</a> listed next to each checkbox in the list of schedules.

The schedule list is sorted, by default, by Creator and then Schedule name, both in ascending order. When clicking the heading of another column, this column becomes the first sort criteria, while Creator and Schedule name become the second and third sort criteria respectively. Clicking on the Creator or Schedule name columns restores them as first and second sort criteria.

You can perform the following tasks from the Scheduled Emails list:

- "Deleting schedules"
- "Duplicating schedules"
- "Email schedule now"
- "Merging schedules"
- "Suspending schedules"

### **Deleting schedules**

The Delete button allows you to remove schedules using the checkboxes. Once a schedule is deleted, it cannot be recovered.

#### Delete a schedule

- 1 In the Scheduled Emails list, select one or multiple schedules using the checkbox.
- 2 Click **Delete** and then **Yes** in the subsequent confirmation dialog. The Scheduled Emails list refreshes minus the deleted schedule(s).

### **Duplicating schedules**

The Duplicate button allows you to duplicate an existing schedule into a suspended new schedule. This feature is helpful if you wish to create a new schedule based on the criteria of an existing schedule, as its settings and reports are applied. The new schedule is named **<existing schedule name - DUPLICATE>** by default and can be edited.

#### Duplicate a schedule

- 1 In the Scheduled Emails list, select a single schedule using the checkbox.
- 2 Click **Duplicate** and then **Yes** in the subsequent confirmation dialog. The Scheduled Emails list refreshes with the duplicate schedule.

### Email schedule now

The email now button allows you to select an existing schedule so that the e-mail is sent as soon as possible, ignoring the recurrence information of the Schedule tab.

#### Send e-mail now

1 In the Scheduled Emails list, select one or multiple schedules using the checkbox.

💥 Delete	□=‡⊟ Duplic	ate 🗟∗⊠ Merge	Em:	ail Now 🔲 Susper	nd	Resume	Abort	
Recurs	Status	Last email	Result	Next email	Creator	Schedule name	Recipients	
🔽 🔍 Daily	Active			25 Feb 2013 07:00	Mat	Page9	asmith@acme.fr	*
🔲 🔍 Daily	Suspended				Mat	Page9 - DUPLICATE	asmith@acme.fr	
🔽 🔍 Daily	Active			24 Feb 2013 19:00	Mat	Registration	jbrown@acme.fr	
🔅 Refresh								Y

2 Click **Email now** and then **Yes** in the subsequent confirmation dialog. The selected schedules are processed immediately and the e-mail is sent.

**Note:** The schedule execution occurs as soon as possible, depending on server settings and load.

## Merging schedules

The Merge button allows you to merge selected schedules (of a single user for the administrator) into a new schedule. When a merge is performed, the settings of the first schedule are maintained in the new schedule; the reports of all merged schedules are carried over to the new schedule. The new schedule is named **<First original schedule name - MERGE>** by default.

#### Merge a schedule

- 1 In the Selected e-mails dialog, select the schedule(s) to merge.
- 2 Click Merge and then Yes in the subsequent confirmation dialog. The selected schedules are merged into a new schedule using the default naming system.

## Suspending schedules

The Suspend button allows you to temporarily suspend an existing report in the Scheduled emails feature. This feature is useful to users who might not want to send a report any longer, but do not wish to delete the schedule just yet. The feature is also useful to administrators who might find that a particular user report takes up too many server resources at the scheduled time and wants to suspend it and send it later.

#### Suspend a schedule

- 1 In the Scheduled Emails list, select one or multiple schedules to suspend.
- 2 Click **Suspend** and then **Yes** in the subsequent confirmation dialog. The Scheduled Emails list refreshes and the selected schedules' status changes to Suspended.

Note: Suspending an executing schedule does not abort its execution when in progress.

### **Resuming schedules**

The Resume button allows you to change a schedule's status back to Active if previously suspended using the Suspend feature.

#### Resume a schedule

1 In the Scheduled Emails list, select one or multiple schedules to suspend.

Note: You can select all schedules by selecting the checkbox at the column header level.

2 Click **Resume** and then **Yes** in the subsequent confirmation dialog. The Scheduled Emails list refreshes and the selected schedules' status changes to Active.

# Business Calendars and Maintenance Periods in Reports

A Business Calendar defines the periods of time during which a Service Level Agreement (SLA) applies. Weeks are defined for inclusion in the SLA. This definition includes the start and end time of the day, any lunch breaks, and certain days, such as Saturday or Sunday. Specific days are defined for exclusion from the SLA, such as certain holidays.

A Maintenance Period is a fixed period during which collected data are excluded from the computation of key performance indicators. Each maintenance period is defined for a given list of instances.

Business Calendars and Maintenance Periods are set up and maintained in VistaMart. Provided that a Business Calendar and/or Maintenance Period is available in VistaMart, a report configured in Line or Bar charts will display Business Calendar and/or Maintenance Period data when the relevant timestamp is selected.

Business Calendar and Maintenance Periods are each identified with a different background color and a respective label:



📕 Time\_Indicator\_Minutes 📃 Calendar 🔳 Planned Maintenance 🔳 Unplanned Maintenance

If a Business Calendar and a Maintenance Period exist for a given timestamp, only the Maintenance Period is displayed.

## The Graph on Demand Displet



The Graph on Demand displet works together with the the Object Navigator (see "The Object Navigator" on page 23). It enables you to build an interactive graph showing instance performance data.

You select an instance in the Object Navigator, invoke the Graph on Demand displet - provided it is present on the same page - and generate a graph for that instance in the Graph on Demand displet, as shown in the example above.

This section addresses the following topics:

Using the Graph on Demand	.9
Zooming in on chart data5	50
Viewing graph data	51
Exporting graph data	52
The Time Navigator in the Graph on Demand5	53

## Using the Graph on Demand

You can display exceptions in the Graph on Demand by synchronizing it from a list of **instances** or a list of **exceptions** in the Object Navigator.

## Synchronizing from instances

When you synchronize from a list of **instances**, the Graph on Demand displays **all events** for the synchronized instance(s) with an **exceptions** bar (provided that your administrator has selected this optional feature when setting up the Graph on Demand).

The colored section of each bar displays the event's most critical level. For example, if an event is red, it means that this is the most critical event for the time period in question. It does not necessarily mean that there is only one major event.

A tooltip displays severity, total number of events, and total duration for the specific event. A green bar appears only if no exceptions occurred over the shown timespan.

Note that your administrator can set up other ways generate a Graph on Demand from the Object Navigator. For example, it is possible to synchronize from an icon, or by double-clicking an instance to load the Graph on Demand directly.

## Synchronizing from exceptions

In contrast to synchronizing from a list of instances, when you synchronize from a list of **Exceptions**, the Graph on Demand displays:

- the indicator and thresholds associated with the event you selected for synchronization, and
- the event you selected on the graph.

When synchronizing from exceptions, the Graph on Demand displays the metrics associated with the exceptions.

Synchronization aligns the graph with the time period on the temporal bar (using the Start and End dates) of the event. Only one event from the exceptions list can be synchronized at a time.

You can modify the selection of indicators displayed in the Graph on Demand. Click 🔝 to open the Graph on Demand editor:



In this example, the Graph on Demand displet is configured to display two indicators. Use the check boxes to select or deselect the indicators you want displayed in the graph.

## Zooming in on chart data

You can zoom in on charts for a closer look at displayed data.

To do so trace with your cursor over the area you want to zoom in on. Once zoomed, a scrollbar appears on the bottom to move within the chart (X-axis only), and a reset button appears that returns to the original view when clicked.

The Y axis is automatically scaled when you drag over a given section of the chart, provided that no minimum or maximum values have been set for the Y or X axis.

#### Internet Explorer and large amounts of data

If large amounts of data result when you synchronize the Graph on Demand or change the timestamp or time span, the Graph on Demand will display the data differently, depending on the version of Internet Explorer (IE) you are using.

For IE browsers prior to version 8, a maximum of 400 data points can be displayed. After version 8, up to 1000 data points can be displayed.

In addition, resetting the zoom or synchronizing according to time or instance may cause this popup window to appear:

Stop runni	ng thi	s scr:	ipt							
A script of	n this	page	is	causing	your	web	rowser	to	run	slowly
•••••										
Yes No										

If this happens, you must select **No**. Otherwise, the graph becomes unstable, and may prevent the correct functioning of other actions.

## Viewing graph data

### Getting individual data points

Hover your mouse over a data point to display its value:



#### Viewing individual indicators

When viewing multiple indicators, you can display a single indicator by clicking the corresponding legend. This automatically scales the Y-axis, if required.

To return to the view of all the indicators, double-click any one of the legends.

#### Viewing multiple instance

When you select multiple instances, the Graph on Demand switches to a single metric shared by all the instances selected.

If multiple instances have names too long to fit in the displet, you can scroll through them with the selector located at the bottom of the graph. It shows which "page" you are viewing and the total number of pages.

Left-click to select a single indicator, and CTRL+click to select several indicators one-by-one.

## Exporting graph data

You can export data from the Graph on Demand in a variety of formats. Click the **Export** icon in the upper left corner and select the desired format:



PDF is the default export format. Unlike the other formats, it is possible to zoom and scroll in the exported PDF.

Note that when you drill down from an event to a Graph On Demand, threshold curves are computed on-thefly. The computation takes into account raw data (indicator and property values) and threshold characteristics (as defined in event formulas). However, when you use the xml and text export formats, only raw data is shown. The values of the curves computed on-the-fly are not shown.

## The Time Navigator in the Graph on Demand

Depending on the settings made by your administrator, the Time Navigator in the Graph on Demand offers two display modes:

• **Period mode** (default), which shows data starting at a specific time and date over a number of hours, days, weeks, etc.:



• Interval mode, which shows data from a specific time and date to another specific time and date:



To switch between the modes simply click the "switch to..." icon  $\blacksquare$ .

## The Big KPI Displet

The Big KPI displet displays the value of a **single indicator for a single instance** in the form of large characters with an associated chart showing historical behavior. This provides quick and easy observation of key performance indicators. The display value refreshes automatically as new values become available.

🙆 Big KPI		
	IF Util IN (%)	
	7.63%	
	30 Nov 2017 15:20	
	lu	

The values displayed are from VistaMart that is selected in the reporting setup. The Big KPI in this sense is a type of adhoc dashboard.

**Note:** Even though it is possible to select up to ten indicators in the displet set up, the Big KPI displet displays only the **first relevant indicator** if more than one has been set up. Details on setting up this displet are provided in the **VistaPortal Author Guide**, section "The Big KPI Displet".

The Big KPI displet can be synchronized from Time Navigator displet to retrieve values from the past. The **Latest** button on the Time Navigator displet resets to the present value.

Click the displayed Big KPI value to drill down to the indicator's temporal evolution (this is provided only when display rate is not a live display rate).

You can also set up thresholds in order to change the appearance of the KPI if threshold values are reached, as described in the **VistaPortal Author Guide**, section "The Big KPI Displet". For example:



Drag and drop the displet onto your personal page as you do for other displets, as described in "Setting up personal VistaPortal pages" on page 17.

## The Dashboard Displet

The Dashboard displet displays selected network resources in a dashboard on your VistaPortal page:



If this feature has been set up by your administrator, you can drag and drop the Dashboard displet onto your personal page as you do for other displets, as described in "Setting up personal VistaPortal pages" on page 17.

The Dashboard displet provides a variety of functions that are available according to the role your administrator has assigned to you. For example, your administrator can set up navigation within and to another Dashboard displet, which is useful for switching between specific resources you want to view. Details of this function, as well as other advanced dashboard functions, are provided in the **VistaPortal Author Guide**.

Icons in the displet header offer a variety of options for handling the displayed dashboard. Your administrator may need to set up specific roles with their associated permissions for some functions.

Open or manage dashboards	Opens the dashboard library enabling you to select another dashboard
Back to previous dashboard	Reverts to the dashboard previously displayed
Edit selected dashboard	Opens the dashboard in an advanced editing interface where you can show content queries, import instances, select another VistaMart, change the layout of the instances, discover links, edit the background image, and edit individual objects in the dashboard.
	These functions are described in detail in the VistaPortal Author Guide.
Show list view	Toggles between a dashboard view and list view of the instances

Show all events	Toggles between a dashboard view of the instances, and any events; you can select event severity, ones that are active, and for which periods
Export	Exports the dashboard in CSV or PNG format
Change display rate	Changes the display rate
Change time zone	Changes the time zone
Show or hide compliant instances	Enables you to hide any resources that comply with violation thresholds so that you see only resources that are experiencing problems
Zoom in and out	Zooms the display of the dashboard resources in and out
Fit dashboad to screen	Fits the displayed resources to the size of the dashboard; this appears only in Freehand dashboards; if you are showing a map dashboard, a zoom function is provided

## User-specific dashboard settings

Clicking the user icon at the upper right of the page (as described in "" on page 12) provides the option **Dashboard Settings**:

ashboard Set	tings	)
General Links	Nodes	
Default Dashbo	oard No Dashboard Selected 💼 🕞 Open on Home Page	
E-Mail		
Date Format	yyyy/MM/dd hh:mm:ss a	
	OK Cancel	

This dialog enables you to set dashboard instance marker size, show instance name, as well as to configure the way links and nodes are displayed in your dashboard.

If the E-mail field is empty, the user variable "Email.Address.email" or user property "Email" will be used. Note that although all users are allowed to schedule e-mail reporting, the VistaPortal e-mailing feature is not enabled by default. The VistaPortal administrator needs to enable emails as described in the **VistaPortal Administration Guide**, section "Enabling E-mails".

For advanced dashboard display configurations, refer to the **VistaPortal Author Guide**, "The Dashboard Displet".

## The Connect As Displet

If your Administrator has given you the necessary rights, you can open the end user interface of another user by using the **Connect As** displet.

When you select a user in the **Connect As** displet, that user's full Portal opens in a new window.

This is described in detail in section "The Connect As Displet" in the VistaPortal Author Guide.

## The Memo Displet

The Memo displet, provided your administrator has set it up and added information, can be used to display useful text and even images on your VistaPortal pages.

**Note:** Starting with VistaPortal 5.0, the **Memo** and **RichMemo** displets were merged. If you are upgrading from a previous VistaPortal version, or if you are importing from a previous version, your previous Memo and RichMemo displets are automatically migrated and retained.



## The Web Page Displet

The **Web Page** displet gives access to one or more Internet sites from the VistaPortal browser page, depending on what your administrator has set up.

**Note:** Starting with VistaPortal 5.0, the **WebLinks** and **InternetLink** displets were merged. If you are upgrading from a previous VistaPortal version, or if you are importing from a previous version, your previous WebLinks and InternetLink displets are automatically migrated and retained.

It shows a preview of the web page, and you can access other sites that the administrator has set up by clicking the down arrow at the right:

<b>*</b>

## The News Displet

The News displet contains articles of interest to VistaPortal users. The type of articles that are available depends on how your administrator has set up the News displet .

Articles are listed with a brief abstract, and organized in Categories and Themes.

If you have the necessary rights, you can select which Category and Theme(s) you want to subscribe to. Once you select a Category and Theme(s), each time you log on to your Portal, if there is a new Article in your selected Theme(s), it is listed in the News Center displet.

If there are no articles in your subscribed Category, the News Center displet displays the message: **No news** for the moment.

This section addresses the following topics:

## Subscribing to a Category

If you have the necessary rights, you can subscribe to a Category and the Theme(s) it contains.

#### Subscribe to a Category

1 Click the Setup button in the News Center displet. The News Personalization area opens:

Select a category	and subscribe to the themes of your int	erest	
Choose category :	Choose category		
	Choose category		
Choose your title :	Network Technology		
Themes	VPN k	Layout	
Themes	General News (s)	Choose your layout : Left Picture and Abstract 💌	
	•		
Use right & left arrows Use up & down arrows to subscribe or unsubscribe to define the display order. to a specific theme.			
Articles			
Number of article displayed per theme : 10 💌			
Number of articles with abstract : 10			
Save X Cancel			

- 2 Choose a Category from the drop-down list.
- 3 Enter a title for the displet, as necessary.
- 4 Select the Themes you want to subscribe to from the left-hand (Themes) pane, and use the arrow keys to move them to the right-hand (Your Theme(s)) pane.
- 5 Select a Layout for the Articles from the Choose your layout drop-down list:
- 6 Set the Number of Articles displayed per theme.
- 7 Set the Number of Articles with abstract.

8 Click **Save** to confirm your subscription, or Cancel to discard your modifications.

The selected Category and the Themes it contains are now subscribed to in your News Center displet. If any articles are published for your selected Themes, they appear in the displet each time you log in to your portal.

62

## A Glossary

The glossary provides a list of terms that are common to the VistaPortal environment.

## Fundamental terms

The following is a list of fundamental terms in the VistaPortal environment.

Term	Definition
aggregation	When the display rate is greater than the acquisition rate, each data point on a graph is the result of aggregating the collected data.
	Data aggregation involves three major functions, each of which you must configure:
	Aggregation: Specifies how to aggregate the calculated values (mean, max, etc.)
	<b>Consolidation</b> : Specifies where the aggregation is applied if one or more Formulas are used to calculate the displayed values (aggregation before or after the Formulas).
	<b>Recovery</b> : Specifies how to aggregate data if polled data is not complete (for example, network delays can cause some polls to remain unanswered).
availability	In a network system, availability is the accessibility of input and output ports of IT devices.
BPI	Base Performance Indicator; the purpose of using 'base' performance Indicators is to calculate performance values for IT elements that are vendor-independent.
	This generic approach allows the system to choose the most appropriate calculations for a specific type of device and/or technology (for example, the 'utilization' measured for a router is not calculated in the same way as the utilization of a LAN segment).
	Therefore, these Indicators are designed to be as broad as possible to cover the widest base of vendors for any particular technology.
category	A category is a group of pages that share a certain commonality. Categories of pages appear in VistaPortal as clickable tabs that contain their respective pages.
Collector	An InfoVista service responsible for collecting data, calculating the Indicators and storing the results. These data are collected over a period of time specified by the lifetime of each Report. It may be as short as a few minutes or as long as a few years.
companion	Metrics added to a drilldown
connectivity	The interconnection of system devices and applications via ports and protocols.
criteria	Criteria filter the results of search and display actions applied to instances. For example, criteria can be set to display only limited number of specific instances if a report template contains a large number of instances, or you can filter events according to an event's severity, function, etc.
display rate	The frequency at which data points show up on a graph (for example, every fifteen minutes, etc.)
displet	A display element - hence "displet" - built by VistaPortal that shows data (for example, service level management information) from InfoVista servers and/or VistaMart databases.

Term	Definition
	Some displets (for example, the Object Navigator and the Time Navigator) interact with others.
drilldown	Links between reports that you can use to access one report from another report. This feature provides more detailed information about the monitored resources.
exception	An unexpected or unacceptable condition such as a threshold violation. An event can be a message from a VistaFoundation product that signals an unexpected or unacceptable condition (such as a threshold violation), and can be logged in VistaCockpit. In contrast to an 'alert', an event does not trigger a workflow of remedial tasks.
global variable	A Global Variable defines a value which, when modified, changes all attributes that have this value. An example of a Global Variable is a minimum report display rate. If it is set to 15 minutes as a Global Variable in one Library, all Rules using this Library will take the value. Therefore, you do not have to change each Rule individually if this value changes.
grant	Grants are used to set administration rights for specific users.
graph	An object that represents a real working graph (a histogram, a pie chart, a table, etc.) that displays a set of Indicators for one or more instances.
grouping	Groupings are used to display groups of instances according to a specific criterion, such as Vista, server, property, etc.
indicator	An indicator is a measurement that can be made for a resource. It represents the stored tuples for each sample of a given instance-indicator pair. Each tuple consists of all the parameter values used in the calculation of the indicator.
inheritance	Inheritance is the concept that when groups or users are defined, any subsets - i.e. subgroups or sub-users - of these groups/users inherit the definitions (pages, variables, subgroups, etc.) of the parent groups or users.
instance	An instance is a representation of a monitored IT resource, as seen by the data collection engine that gathers status and performance data.
	An instance comes with a 'property sheet' (or an identification card) indicating its name, description, and property values. It also names the Vista to which the monitored resource belongs.
	You create an instance for each IT element that you want to monitor using the appropriate Vista. Example: If you want to monitor a Cisco router, you create a router instance from the 'Vista Router' with a name (ex. Router Alpha), a description (example: Cisco), and a property value (example: IP address 164.59.13.75.)
	There are three types of instances: basic, proxy, and group.
	<ul> <li>Basic instance: Represents a physical IT resource (for example a router). It is created from a Basic Vista.</li> </ul>
	• <b>Proxy instance</b> : Represents a logical IT resource (for example a WAN interface). It is created from a Proxy Vista. A Proxy instance contains the type and characteristics of the basic instance (in this case, the router) in its property sheet. You can create as many instances as you want in one Vista. In special cases, you can have one instance attached to several Vistas.
	• <b>Group instance</b> : An instance which comprises a group of related instances. This can be a group of identical equipment such as routers, applications in a cluster, or disparate

Term	Definition
	instances located in a common geographical zone, etc. Its properties and indicators are defined and calculated on the basis of its members' respective indicators. According to its characteristics, a basic instance may be a member of several groups. This means that group instances may overlap within a given topology.
link	In the VistaMart context, links are a means to associate two instances.
live chart	Live Charts is a feature of the Graph on Demand, which displays indicators directly from an InfoVista Server. The advantage of doing so is the resulting ability to report on display rates lower than those stored in VistaMart.
metric	Response data generated by a monitored instance.
model	A coherent and logical structure that defines all the objects that may exist in an IT infrastructure. This structure, or the InfoVista [Object] Model, organizes these IT objects into functional categories and establishes the relationships between them.
page package	A page package is a distinct set of
	pages, which can be grouped in categories according to service, solution, technology, etc., and the
	variables associated with those pages.
property	In the <b>InfoVista</b> server context, a defining characteristic or attribute of a Vista. For example the Vista "IP node" has the property "IP address".
	In the <b>VistaMart</b> context, properties are used to define and manage groups. Any properties created automatically become part of a VistaMart library.
property value	The specific value of a Property for a specific instance (for example, "ipAddress=192.192.192.192").
report	An object containing one or more graphs, with each graph displaying a set of Indicators on one or several instances. The report object is created by applying instances to a report template.
report template	Defines the general layout of a report and contains the graphs using the selected metrics and indicators.
repository	A central place in which a collection of data is kept and maintained in an organized way, and allows a selective extraction of data for the purpose of computation, analysis, etc.
resource	Physical objects in the IT infrastructure such as servers, network devices, network interfaces, or applications.
	Logical resource: A resource such as a LAN or WAN (local or wide area network).
	Physical resource: A resource in the infrastructure, such as a server or a router,
Service Level Management	A service level agreement (SLA) for a Service Level Management (SLM) arrangement is a contract between a network services provider and a customer that specifies, usually in measurable terms, what services the network services provider will furnish. Some metrics for SLAs may include the percentage of the time that services will be available; the number of users that can be served simultaneously; specific performance benchmarks to which actual performance will be periodically compared; etc.
timespan	Timespan is defined as a period of time over a number of minutes, hours, days, weeks,

Term	Definition
	months, or year in which an indicator or indicators are monitored.
timestamp	The time at which data is calculated. It is a UTC value (increasing). For timestamps representing periods, we use the first date of the period:
	The 12h00 timestamp for hourly values corresponds to the period 12h-00-13h00.
	The 01/01/2007 00:00 (daily) corresponds to the period 01/01/2007 - 02/01/2007. Note that any generated event will be sent only on the 02/01 at around 02:00 (the delay is due to daily data processing).
trap	A mechanism in the software for handling unexpected or unacceptable conditions such as a threshold violation. For example, the mechanism could send an error message to a log or to a system user. Depending on the type of application, it could also specify a remedial action.
variable	A piece of data which is available on the monitored resource. It is used by formulas to calculate base indicators. Variables are created by the system when a MIB file is loaded.
Vista	The InfoVista model separates and categorizes all monitored IT elements into functional categories or 'Vistas'. A Vista is a template that describes the types and characteristics of a class of monitored resources. A Vista can describe either a:
	<ul> <li>physical resource in the infrastructure, such as a server or a router, or a</li> </ul>
	<ul> <li>logical resource such as a LAN or WAN.</li> </ul>
	A Vista comes with a set of properties. There are minimum properties which all Vistas share. There are three types of vistas: basic, common, and proxy.
	• <b>Basic Vista</b> : Known as a 'self-reliant' Vista, the Basic Vista is a template for physical IT elements that rely on their built-in capability to provide their own source data. For example, a router is built with the necessary capability (using SNMP and MIB technology) to respond directly to external data collection requests about its overall status and performance. Therefore the 'Router' Vista is a Basic Vista.
	<ul> <li>Common Vista: This Vista contains the 'common denominator', or minimum properties, that all other Vistas share. The 'Common Vista' includes properties such as location, customer names, and service names.</li> </ul>
	• <b>Proxy Vista</b> : The Proxy Vista is a template for 'logical' or other IT elements that cannot supply their own source data. Hence, a Proxy Vista is always contingent on a Basic Vista, but not vice-versa. The mandatory property values for a Proxy Vista depend on the types of resources monitored. Example: A 'logical' IT element (such as a WAN interface) cannot provide source data about itself. It 'needs' help. Since the WAN interface is located on the Router, it depends on the Router to 'help' it get its source data. Therefore, the 'Interface' Vista is a 'proxy' Vista that relies on the 'basic' Router Vista for information.

## Index

### В

business calendar	
viewing	47
D	
displet	
add to page, management console	13
ReportList	33
Documentation	
overview	8
E	
E-mailing reports	39
events	

#### F

### filtering

numerical data	35

49

49 51

#### G

Graph on Demand
selecting indicators
using the displet
viewing graph data

#### J

Java plugin	 15

#### L

lists

filtering	24
opening in new window	25

login	
end user interface	12
Μ	
maintenance period	
viewing	47
Ρ	
page layout	
resetting	19
personal pages	
setting up	17
R	
resetting	
page layout	19
S	
Scheduling emails	44
sorting	
data in a regular table	35
т	
thresholds	
editing settings	27
values, modifying	27
V	
values	27