

Kaseya 2

Traverse

Quick Start Guide

Version R8

September 22, 2014

Agreement

The purchase and use of all Software and Services is subject to the Agreement as defined in Kaseya's "Click-Accept" EULATOS as updated from time to time by Kaseya at

http://www.kaseya.com/legal.aspx. If Customer does not agree with the Agreement, please do not install, use or purchase any Software and Services from Kaseya as continued use of the Software or Services indicates Customer's acceptance of the Agreement."

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Preface

About this Guide

This guide is a quick installation and overview for the cloud (SaaS) version of **Traverse** monitoring software.

Audience

This guide is intended for Traverse cloud administrators.

About Traverse

Traverse is a breakthrough IT infrastructure monitoring and service management solution for mission-critical, distributed, and complex environments for enterprises and managed services providers (MSPs). **Traverse** delivers real-time, correlated, end-to-end, service-oriented views of the performance of the entire IT infrastructure - physical, virtual and cloud. **Traverse**'s massively-scalable, patented solution architecture supports tens of thousands of distributed end-points, and processes millions of metrics. The software's innovative service container technology supports creation of purpose-specific, logical management views of business services and the underlying cloud and IT infrastructure. **Traverse** is fully-aligned with ITIL and provides an open, extensible API and plug-in framework for integration with the enterprise ecosystem.

Contacting Kaseya

- Customer Support You can contact Kaseya technical support online at:
 - https://helpdesk.kaseya.com/home (https://helpdesk.kaseya.com/home)
- Community Resources You can also visit the following community resources for Kaseya Traverse:
 - Knowledge base at: http://community.kaseya.com/kb/w/wiki/1206.kaseya-traverse.aspx (https://helpdesk.kaseya.com/forums/22931123)
 - Forum at: http://community.kaseya.com/xsp/f/340.aspx (http://community.kaseya.com/xsp/f/340.aspx)

Chapter 1

Installation, Logon and Licensing

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Getting Started

You can request either a production or trial subscription to the Kaseya Traverse cloud (http://www.kaseya.com/forms/free-trial?prodcode=travsaas).

The trial subscription might limit the number of devices that you are allowed to monitor (about 50 devices).

Once your **Traverse** Cloud instance has been created, you will be receive a **Kaseya Traverse** production or trial email similar to the sample image below. The email summarizes 4 simple steps to start monitoring devices on a network.



Traverse Module Requirements

Traverse R8 requires a *DGE extension* be installed on a network Windows machine, one for each network you intend to monitor. The DGE extension relays collected data to the Traverse cloud website.

Note: Using Netflow requires a larger platform than one without Netflow (Network Flow Analysis (page 31)).

Without Netflow

Windows 2003, 2008, 2008 R2, 7, 2012, 2012 R2

- 2 GB RAM
- 10 GB free disk space
- 1 CPU

With Netflow

- Windows 2003, 2008, 2008 R2, 7, 2012, 2012 R2
- 4 GB RAM
- 50 GB disk space
- 2 CPU

Supported Browsers

- Windows
 - Internet Explorer 10 and later
 - FireFox 25 and later
 - > Chrome 30 and later
- Apple OS X
 - ➢ Safari 6 and later
 - FireFox 25 and later
 - Chrome 30 and later
- In addition, Traverse requires the Adobe Flash Player plugin be installed on your browser.

Disk Space Requirements

- 36 GB free space in a RAID 5 configuration is recommended.
- Additional free space for the <TRAVERSE_HOME>\logs directory. Plan for 5 GB of disk space for log files. The default <TRAVERSE_HOME> directory is \Program Files (x86) \Traverse.

Note: See Installation Prerequisites (http://help.kaseya.com/webhelp/EN/TV/R8/index.asp#17290.htm).

Installation Prerequisites

Prior to installing a DGE extension, review the following:

- 1. Ensure the Windows machine you will install the DGE extension on has access to the internet.
- 2. Ensure the time on the Windows machine is accurate. Windows includes Internet Time Synchronization software (under **Date & Time**, click the **Internet Time** tab and enable it with default settings). See a detailed explanation below.
- 3. Identify the administrator password for your Windows servers so that they can be queried using WMI.
- 4. Identify the username and password with SYSDBA level rights you will use to monitor Oracle databases.
- Identify, and if necessary, enable the (read-only) SNMP community string (SNMP v1 or v2) or username, password and optionally encryption key (SNMP v3) used by SNMP-capable devices on your network.
- 6. Update firewall rules and/or access lists (ACL) on routers to allow SNMP queries on the UDP port specified below from the DGE extension against the servers/routers/switches to be monitored by Traverse. If the servers are going to be installed at different physical locations, ensure that firewall rules or router access-lists have been updated to allow bi-directional communication between various Traverse components:

Source Port	Destination Port	Direction	Description
(any)	7651	DGEx > Cloud	Provisioning Database
(any)	7652	DGEx > Cloud	Provisioning Database
(any)	7653	DGEx > Cloud	Internal Messaging Bus
(any)	9443	DGEx > Cloud	Upstream DGE

Setting the Time on a Non-Domain Server

Since **Traverse** is a distributed platform, it is important to make sure that the time on your DGE extension server is accurate. Windows has a built in time synchronization mechanism to set the time from an internet time server.

Note: For domain machines, time is synchronized from the domain controller.

To set the time on the server running the DGE extension:

- Open Date and Time by clicking the Start button , clicking Control Panel, clicking Clock, Language, and Region, and then clicking Date and Time.
- Click the Internet Time tab, and then click Change settings. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.
- Click Automatically synchronize with an Internet time server, select a time server, and then click OK.

Install the DGE Extension

Identify Your BVE Location and Unique Name

This information is provided by Kaseya and included in **step 1** of the **Kaseya Traverse Evaluation** (*page 2*) email you received. For example:

- BVE Location: your-unique-site-name.kaseyatrials.com
- Unique Name: your-unique-DGE-name

Download the Installer

Download the Windows installer for the DGE extension by clicking the **Windows Install** button displayed on the **Kaseya Traverse Evaluation** email.

Run the Installer

Run the installer as a local or domain administrator, not a standard user.

Introduction

Click Next.



Checklist

Except for running the installer as a local or domain administrator, ignore the instructions on this page. Click Next.



License Agreement

Review the License Agreement, then click the I accept the terms of the License Agreement option.

Click Next.



Automatically Restart DGE Extension Services After a Reboot

Accepting the default **Yes** option to this prompt is strongly recommended. It ensures all DGE extension services will be restarted if the network Windows machine is rebooted.

Click Next.



Location BVE

Enter the value for the BVE Location you identified in Install the DGE Extension (*page 4*) in the IP Address field. It should be similar in format to your-unique-site-name.kaseyatrials.com.

Note: Do not include an http:// prefix when you enter this value.

Click Next.



DGE Name

Enter the value for the Unique Name you identified in Install the DGE Extension (*page 4*) above in the DGE Name field. It should be similar in format to your-unique-DGE-name.

Note: Typically your first DGE extension is called dge-ext-1.

Click Next.

Traverse Application Installer		Traverse :: DGE Name
Introduction License Agreement Choose Install Folder Collect Information Pre-Installation Summary Installation	Please provide a uni (DGE). This name wi provisioning databas be created via the VV logged in as superu:	que name for this Data Gathering Engine III be used to identify the DOE to the i.e. A corresponding DOE entry should already ab Application or BVE (socket) API while ser
install Complete	DGE Name	dge-ext-1
Cancel		Previous

Pre-Installation Summary

Review the following information before beginning the installation. Click **Install**. It may take a few minutes to complete the install.



Close the Installer

Ensure the text displayed in this box matches the values you were provided in **Install the DGE Extension** (*page 4*).

Note: The text prompts you to continue by logging on to your unique **Traverse** website, using the username superuser and the same assigned password you were provided in the Kaseya Traverse Evaluation (*page 2*) email.



Traverse Cloud Logon

Logon as a Standard User

Identify your Traverse Cloud assigned URL, username and password.

This information was included in **step 1** of the **Kaseya Traverse Evaluation** (*page 2*) email you received. For example:

- URL: your-unique-site-name.kaseyatrials.com
- Username: traverse
- Password: your-assigned-password

Use these values to logon to your unique Traverse Cloud website as a standard user.



Initial Page after Standard User Logon

By default, the first page a standard user sees after logon is the **Getting Started with Traverse** page. You can click any tile to jump immediately to one of these frequently used pages.

				·
STATUS DASHBOARD	CONFIG MGMT REPORTS ADMINISTRATIO	N PRO BUCKC		
DEVICES CONTAINERS	SDA ACTIONS DISCOVERY OTHER PRI	PERENCES	ugged in: traverse LOGOD1 ABUD1 OSEK GDIDE M	
Getting Started with Traver	rse			
Add	A New Device For Monitoring	Run Network & Topology Discovery	Satur Notifications & Alarts	
Provision a new router or server a	and automatically discover available metrics using signature library.	Scan network subnet and discouer all devices & Layer2/Layer3 topology between nodes for Panorama.	Create action profile for email, etc. when a device goes down.	
Ass	sign Action Profiles To Tests	Create Service Containers	Create a RealView Dashboard	
	A ASSIGN ALERTS			=
Apply of	created action profiles to devices and tests.	Group devices or tests into service views, or location.	Create a custom real-time dashboard.	
	Create Reports	Set Your Preferences	Quick Evaluation Guide	
			9 URBEI MANDAL	
Runo	capacity planning & trend analysis reports.	Configure local time-zone, change password, select default display filter criteria, enable audible alert.	This guide contains additional examples of how to perform common tasks. Also review the complete User Manual.	-

You can also navigate to other pages using the menu bar at the top.

Logon as a Superuser

You can also logon using the administrator-level username superuser and the same assigned password you were provided in the Kaseya Traverse Evaluation (*page 2*) email.

Navigate your browser to the URL you were provided, similar in format to your-unique-site-name.kaseyatrials.com

- Username: superuser
- Password: your-assigned-password

Note: You should only logon as a superuser when you need to perform an administrative-level task. Otherwise, logon as a standard user.

Initial Page after Administrator Logon

By default, the first page a superuser or other administrator sees after logon is the Status > Departments page.

Check the Health Status of the DGE Extension

Note: Whenever you install a new DGE extension, you should logon as the superuser to verify the connection.

Logon as superuser. Navigate to the Superuser > Health page. Verify the IP address and Server Name of the DGE extension you installed. The "heartbeats" for all the components of your DGE extension should display a green OK icon. Logoff when you're done. Re-logon as a standard user to resume normal operations.

STATUS D	ASHBOARD CONFIG MGMT REPORTS	ADMINISTRATION S	UPERUSER			Kaseya	DATA		i E
DGE MGMT	HEALTH ADMIN CLASS USER CLASS GI	LOBAL CONFIG			Logged in: superuser	LOGOUT	ABOUT US	SER GUIDE	•• 🗉
Component St Summary of all Modify Global D	ATUS components that has registered with the BVE is GE Configuration	s provided below. If a DO	GE fails to sen	d periodic heartbeat, email notification will be s	sent to: don.giroux@kaseya.com				
COMPONENT S	TATUS						10/10	/13 4:34:40 PM	I PDT 🍫
IP Address	Server Name (DGE ID)	Installed Version	Time Offset	Components Observed	Last Heartbeat	Config Rev #	Action		
10.29.0.152	dongirou×1 (dge-1)	5.6.118-Linux	00:00	BVE FlexAPI Server	@ Oct 10 04:34:23 PM PDT	1/1	-		
				Web Application	Oct 10 04:34:21 PM PDT				
				Message Handler	0 Oct 10 04:34:05 PM PDT				
				Data Gathering Engine	@ Oct 10 04:33:43 PM PDT				
				Correlation And Summary Engine	Oct 10 04:32:52 PM PDT				
				Remote Distribution Server	@ Oct 10 04:32:43 PM PDT			Remote up	dater has s
10.10.32.6	dev-av-win0d (dge-ext-1)	5.6.118-Windows (-00:01	Message Handler	0 Oct 10 04:34:22 PM PDT	1/1	<u>63</u>		
				Remote Distribution Client	0 Oct 10 04:34:17 PM PDT			Remote up	dater has s
				DGE Extension	Oct 10 04:33:34 PM PDT				

A component displays in the status list when the component begins operating. The **Component Status** page includes information about the following:

- IP address of the component
- component name
- the last status update received by the BVE
- the version of the component
- the last action performed on the component

By default, **Traverse** components are configured to send status updates every two minutes. The status changes to a state of "warning" if **Traverse** does not receive an update after more than five minutes. The status changes to "critical" after 10 minutes elapse without **Traverse** receiving an update.

Refresh the Component Status page to view the latest Traverse component information.

If components are in a "warning" or "critical" state, see Troubleshooting Traverse (http://help.kaseya.com/webhelp/EN/TV/R8/index.asp#16912.htm).

Run Network Discovery

Traverse can search your network and discover devices. You could add devices manually one at a time, but running network discovery is easier. You should limit the subnets to be included in the discovery to class-C networks instead of class-B or larger.

Start a New Network Discovery Session

STATUS D	ASHBOARD	CONFIG MGMT	REPO	RTS AD	MINISTRATION	SUPERUSER					Kaseya	TR		5Ę <mark>:</mark> ≫
DEPARTMENTS	DEVICES	CONTAINERS	SLA	ACTIONS	DISCOVERY	USER CLASS	OTHER	PREFERENCES	Logged in:	superuser	LOGOUT	ABOUT	USER GUIDE	•• E
NETWORK DISC Select an exist New Network [New Cloud Dis Import Server [COVERY MANA ing discovery : Discovery Ses scovery Session List from CSV	GEMENT session or use lin sion File	ks belov	w to start ne	ew discovery ses	sions								
NETWORK DIS	COVERY SESSI	ONS												
S	ESSION NAME					_				N	NODIFY			
di	iscovery (oct 10	0 2013, 4:48 pm)								s	Select Delete			
CLOUD DISCO	VERY SESSION	S												
S	ESSION NAME			DEPARTME	ENT PROV	IDER	LAST SCAN		NEXT SCAN	N	NODIFY			
				No cloud	instances are cor	figured in this dep	partment							

- 1. Logon as traverse. Navigate to the Administration > **Discovery** page.
- 2. Click the New Network Discovery Session link.
- 3. Enter the following values:
 - Network Scope Enter a network subnet starting value followed by the network mask. Example: 192.168.1.0/255.255.0. The DGE extension you installed must have network access to the range of IP addresses you specify.
 - Discovery Location Your DGE extension was assigned a unique location when it was installed. Select it from the drop-down list. Most private networks use the same range of IP addresses. This is how Traverse identifies which network you want to run Network Discovery on.
 - SNMP Community Strings/Credentials Optionally enter an SNMP read community name for SNMP-enabled devices on your network. The default community name for SNMP v1 & 2c enabled devices is public. Optionally enter a credential for SNMP v3 enabled devices.
 - VMware Hypervisor Credentials Optionally enter a VMware credential to discover additional information about VMware hypervisors.
 - > Advanced Options Ignore these advanced features for your first run of network discovery.
- 4. Click the **Start Discovery** button.

STATUS DASHBOARD CONFIG	MGMT REPORT	S ADMINISTRATION	SUPERU SER			Kaseya	TRAVERS	i E <mark>l S</mark>
DEPARTMENTS DEVICES CONTA	AINERS SLA AC	TIONS DISCOVERY	USER CLASS	OTHER PREFERENCES	Logged in: superuser	LOGOUT	ABOUT USER GUIDE	••• 🗉
NETWORK DISCOVERY Select or complete the required field:	s below. Click 'Start	t Discovery' to start dis	covery.					•
 Discovery Session Name: 				discovery (Oct 10 2013, 11	55 PM)			0
2. Network Scope (Up to 30 IP se	ubnets, one on each	1 line):		192.188.1.0/255.255.255.0				0
3. Discovery Location:				My Location				0
 SNMP Community Strings/Cre 	dentials:			Use Following Shared Cre	edentials			0
				SNMP Versions 1 & 2c				•
				SNMP Version 3 myUsername myPassword mySecret SNMP/3 Authentication Proto SNMP/3 Authentication Proto SNMP/3 Protocol Exclude Kon-SNMP Portocol	col O None @ MDS O SHA1 O None @ DES O AES			0
5. VMware Hypervisor Credential	ls:			Use Following Shared Cre Username superuser	Password			ē
Advanced Options								
			Start Disco	very Reset				-

Review Network Discovery Results

- 1. Review a summary of network Discovery Results.
- 2. Select a Department. The default department created for your **Traverse** website is Core Infrastructure.
- 3. Click Continue to Next Step.

STATUS DAS	HBOARD	CONFIG MGMT	REP	ORTS AL	MINISTRATION	SUPERU SER					Kaseya	
DEPARTMENTS	DEVICES	CONTAINERS	SLA	ACTIONS	DISCOVERY	USER CLASS	OTHER	PREFERENCES	Logge	d in: sup	truser LOGOUT	ABOUT USER GUIDE 🕶 🗐
DISCOVERY RESUL	LTS you want to	provision.										
Discovery Summa	ary											
Discover Started A Complete Network a Number Number Number	y Session Nan M ed At Scope (Up to 3 sch line) Of Devices Dis Of New Device Of Existing De	re : 0 0 IP subnets, : 1 icovered : 1 is Found : 2 vices : 0	discovery Dot 11 20 Dot 11 20 10.10.32.0 25 25 0	(oct 11 2013, 1: 13, 12:20 AM U 13, 12:21 AM U V255:255:255 0	2:19 am) TC TC							
New Devices Disc	berevo											
Provision Enable S Enable C	n Devices in Tr Amart Notificati Config Manage	nis Department, Co on:	ore Infra	astructure								
🗢 New Devices 🛛	Discovered B	/ Device Type(s) (2	5)									
Ø Type: C [ip (1 Ø Ping Ø	0ther/Generic 1_10.10.3 10.10.32. 8 Snmp 🔲 1	Device (1) 2.247 247) nternet Services		•				 ✓ Type: W 24 ✓ Ping ✓ 	indows Server (24) of 24 selected Snmp & WMI & Inter	net Services	٥	
Login Crec Plea use disc	dentials for ' ase specify the d to access the covery task.	Windows Server login credentials (up selected Windows s	s: p to 3 in D iervers. Ti	OMAIN/usema	ame or Jusername f credential will be of	format) that should nosen during the	be	Usemame: Usemame:		Password Password		
								Usemane.		Passw010		
Devices Alread	dy Provisione	d (0)										
			Contin	tue To Next	Step	Dia	card Disc	overy Results	Sta	art New Dis	covery	

Assign Standard Monitor Tests to Discovered Devices

1. A list of discovered devices is displayed. Click the Provision These Devices button.

TATUS DASHBOARD	CONFIG MONT REPORTS	ADMINISTRATION SUPE	RUBER			Kaseya	TRAVERSE	2
NARTHENTS DEVOCES	CONTAINERS SLA ACTED	NS DECOMPRY USER	CLASS OTHER PREFERENCES			Logged in: superuser LOGOUT	ABOUT USER GUIDE 00	8
OKTE DEPENDENCIES								-
Subnet 10.10.32.0								1
Other Generic Device 24 White	ors Server							
DEVICE TYPE	NAME DEV-RCJ-637RUNK	ADDRESS 10 10 32 237	CONNECTED TO					1
Windows Server	HR-XP3202-RD	10 10 32 232						
Windows Server	KDS-AGENT-OPI2	10 10 32 241						
Windows Server	KD8-W2K8-DC01	10 10 32 238						
Windows Server	QA-AV-COCHELP	10 10 32 129						
Windows Server	WIN-BRITLUMSROM	10 10 32 110						=
Windows Server	WIN-HUPONU/F20	10 10 22 90						
Windows Server	W8U82K8R2	10 10 32 218						
windows Server	08-2-0700	10 10 32 6						
Windows Server	Dev-sitese	10.10.22.119						
Windows Server	Q8-wim201200	10 10 32 238						
Windows Server	Q3-win201204	10 10 32 22						
Windows Server	qa-sim201205	10 10 32 220						
Windows Server	q#-silr201209	101022211						
Windows Server	Qa-win83201	10/10/32 174						
Windows Server	Qa-sim83202	10 10 32 16						
Windows Server	qa-sin63203	10 10 32 197						
Windows Server	Q#-min82205	10.10.32.83						
Windows Server	qa-win832p03	10 10 32 214						
Whoose Server	qa-um032p04	10 10 32 213						
Windows Server	q#-win602p05	10 10 32 205						
Windows Server	vik-dex-s/in7	10.10.32.33						
Other Generic Device	0_10.10.32.247	10 10 32 247						
		(Burning Tour	Daviase	(Phases Paules Selection)	(Grant Man Piranessa)			
		(Provision Tree	- Certain	Crange Cevice Selection	(drart rees Discovery)			

2. Wait for Traverse to provision typical monitoring tests for each of your discovered devices.

STATUS DASHOGURD CONFIGNEENT REPORTS	ADMINISTRATION BUPCHUSER		Kaseya TRAVERSE
DEPARTMENTS DEVICES CONTAINERS SIA ACTIONS	EDECOMENT USER CLASS OTHER PREFEREN	445	Logged in: expension LOGOUT ADDUT USER GLIDE 00 🗍
Test Discovery and Provisioni	ng		
	The bendles you have selected are being provisioned into the databas the test provision process is complete. The status message before will	a and being adarmed for various network, system and approach of specific heads jus induces it instruces it	c in previous steps). This process may take a write depending on the number of devices that were discoverist. Once
		U	
100000	the second	LOADING	
300	Opent-1		
Progress Standard at	0 of 25 (0%) device(s) and Drest(s) nave seen successfully prove 17 million about (707	ones	
Eapart Time			
наау	Pharmac provisioning 25 decovering devices (). Marting to decov Researcing of Provisiones 25 of 25 (100%), executes, informati- journal objects (1), of 10 (22 24) Provisioned device (1), of 10 (22 24) Researcing of Provisioned and (1), 10 (20 24) (1) (1), Researcing of Provisioned 24 of 25 (RPs), executes, information updates toboles (1) of 25 (RPs), executes, information updates toboles (1) of 25 (RPs), executes, information updates toboles (1) of 26 (RPs), executes, information updates toboles (1) of executes (1), 10 (20 (RPs)), 10 (2) (2)	A network discovery seasion is currently underway. Would you like to wait for discovery to complete? (You can let this run in the background)	
	Provisioned device INV-HUFBNU/F38 into detatate electring to provision discovered device INV-HUFBNU/F38 (10 Provisioning of Provisioned 23 of 24 (32%) device(3) intoinatio Located tocoles for device INV-BRTULA/BRDM	Wait For Discovery. I will Return Later	
	Protection device (VI-dRTLL/MRDM) into database starting to provision discourse device INV-dRTLL/MRDMS (IN Provisioning of Provisional 22 of 29 (BH), devices), information Updated sporage for device INT-MRD202-MD Provision device INT-MRD202-MD (Into catabase	10.02 110)	
	Earting to provision decovered device HR-vR3252-RC (15.10.32 Producting of Provisioned 21 of 25.10.1%) devices in information updates topology for device KISA-K2007-DM22 Provescent device KISA-K2007-DM22 rm. depose	1302)	

3. Click the Finished button to continue.

STATUS DASHBOURD COMPGINGERT REPORTS	OMINISTRATION SUPERIO STR	Kaseya TRAVERSE
DEPARTMENTS DEVICES CONTAINERS SLA ACTIONS	DISCOMENY USER CLASS OTHER PREFERENCES	Logged in: superviser LOGOUT ABOUT USER GUIDE 44 🛛
Locator Dot Hazer	No Leaden Spineti – Sti d'22 (100%) and 15 fability han beer kulturendu jironatorea.	
	Finished	

- 4. **Traverse** automatically displays the Status > **Panorama** page.
 - Watch Traverse construct a topology of monitored devices on your network. This might take a while.
 - Lines are drawn between related nodes on the network. If no lines are shown, your network discovery session did not include the discovery of a router or any other kind of hub, as shown in the image below.
 - > Hover the cursor over any node to display a description of the node.



5. Click the hyperlinked name of a device to open the Test Summary page for that device.



6. The **Device Summary** page displays the status of the device you selected.

Ce riverer		Lafreitr.	OT OT Search to		Sho	-	11558
	Status	Test Name	Dendt	Time	Duration	Warn/Dill	0.01
:PU		T ADDIVATION			0.01010011		
		IIS: HTTP (ISAPI) Operations	0 rea/s	6:28 AM	12:31	250/1000	
83 % 93 %		SQL Server: Page Lock Requests	0 locks/sec	6:28 AM	12:31	500/1500	
Memory	0	SQL Server: Application Lock Deadlocks	0 locks/sec	6:28 AM	12:31	500/1500	
1%	0	SQL Server: AllocUnit Lock Deadlocks	0 locks/sec	6:28 AM	12:31	500/1500	
	0	SQL Server: Extent Lock Deadlocks	0 locks/sec	6:28 AM	12:31	500/1500	
Disk	A0	SQL Server: Database Lock Deadlocks	0 locks/sec	6:28 AM	12:31	500/1500	1
3%	0	SQL Server: HoBT Lock Deadlocks	0 locks/sec	6:28 AM	12:31	500/1500	
W X W X	•	SQL Server: File Lock Deadlocks	0 locks/sec	6:28 AM	12:31	500/1500	
I ms -	0	SQL Server: Database Lock Requests	106 locks/sec	6:28 AM	12:31	500/1500	
15	0	SQL Server: Application Lock Requests	0 locks/sec	6:28 AM	12:31	500/1500	
	0	SQL Server: File Lock Requests	0 locks/sec	6:28 AM	12:31	500/1500	
BOOTH SOOTH ALDONN SOOTH	0	SQL Server: Extent Lock Requests	0 locks/sec	6:28 AM	12:31	500/1500	
		SQL Server: Key Lock Requests	1016 locks/sec	6:28 AM	12:31	500/1500	
54 7:00 AM 11:00 AM 3:00 PM 7:00 PM 11:00 PM 3:00 A	M 7.00 AM	SQL Server: HoBT Lock Requests	0 locks/sec	6:28 AM	12:31	500/1500	
12	•	SQL Server: Object Lock Requests	318 locks/sec	6:28 AM	12:31	500/1500	
6 -	0	SQL Server: Metadata Lock Requests	0 locks/sec	6:28 AM	12:31	500/1500	_

Congratulations! You're monitoring the network!

When your ready, explore additional **Traverse** features using:

- **Basic Configuration** (page 15)
- > Advanced Features (page 23)

Chapter 2

Basic Configuration

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Change Your Passwords

Note: Kaseya strongly urges you to change the passwords you were assigned when your **Traverse** website was created.

- 1. Navigate to the Administration > Preferences page.
- 2. Change the password for the admin called superuser.
- 3. Change the password for the user called traverse.

Note: Unless a feature specifically requires superuser access, you should logon as the traverse user.

Manually Adding New Devices

Note: You can also add devices automatically, using Network Discovery (page 10).

* Type of Device:	Select Device Type -
* Device Name	
* Fully Qualified Host Name/P Address	
Do Nat Valdate/Resolve Device Address	
Commenta/Description (optional)	
Tapt	
745.2	
Teg 2	
Tag 4	
Tegit	
Automatically Clear Comment When In OK State	0
Display Comment in Summary Screen:	3Z
" Create in Location:	Select Location -
Fap Prevention Wait Cycles	System Default 👻
Exable Smart NetToeSon	9
Enable Test Parameter Reductivery	8
Erable Network Configuration Management:	8
Create New Tests After Creating This Device:	12
Greate Device Dependency After Greating This Device	0
Create Device	Reset

- 1. Navigate to Administration > Devices > Create a Device.
- 2. Select the device type and provide the device name and IP address or fully qualified host name.
- 3. The tag fields can be used to give devices arbitrary tags that can be used to search for them later. For example, you might use a tag to record the location of the device (HQ or CHICAGO), or the function of the device (ROUTER or SWITCH). Add a device with a value for Tag 1 of ROUTER for use later in this evaluation.
- 4. Leave the Create New Tests After Creating This Device box checked and click Create Device.
- 5. To create tests for the new device, first select the type of tests. You can use built-in or user-defined Application Profiles (which auto-discover a filtered list of tests) or user-defined monitoring profiles (which define a specific list of tests), or you can manually choose which monitors and tests to add, in which case Traverse automatically discovers all monitors and tests for the device.
- If you want to use SNMP (Simple Network Management Protocol) or WMI (Windows Management Instrumentation) monitors, you must enter the SNMP community string and port number or WMI domain username and password.
- 7. Once the device is added, it appears on the Administration > Devices page. Click Tests under the Modify column to manage all tests for that device. Then, click the icon under the Modify column next to a test to update the test parameters, such as the polling interval and the values for warning and critical thresholds.

 Navigate to Status > Devices to view a status summary for all devices. From here click on a device name to drill down and see the status of the tests for that device, and then click on a test name to see details and graphs of short- and long- term history.

Creating Actions and Schedules

When a test result crosses a threshold, **Traverse** takes action based on rules defined in action profiles. Some possible actions include sending email, sending SNMP traps, opening trouble tickets, or running an external script.

- 1. Navigate to Administration > Actions > Create an Action Profile.
- 2. Create an action profile with two levels of escalation. In this example, email is sent immediately to the admin when a test goes into warning, critical, or unknown state, and to the manager after a test is critical for 15 minutes during peak hours.

* Action Profile Name:	
Action Profile Description:	
Notify Using:	Please Select +
Message Recipient	0
Notify when test is in state:	Ok: 🖾 Warning: 🗹 Critical 🕅 Unknown: 🕅
Notification should happen after (0 = immediately):	1 cycles 👻
If this test stays in the trigger state, repeat this action every (0 = never):	0 cycles +
Schedule:	Default Schedule - Manage Schedules
Select DGE to test this action:	sunnyvale 👻 Test Now
Notify Using:	Please Select 👻
Message Recipient	0
Notify when test is in state:	Ok: 🗐 Warning: 🗹 Critical: 🗹 Unknown: 🗹
Notification should happen after (0 = immediately):	1 cycles 👻
if this test stays in the trigger state, repeat this action every (0 – never):	0 cycles +
Schedule	Default Schedule Manage Schedules
Select DGE to test this action:	sunnyvale 👻 Test Now

- 3. Click Create Action Profile to create the profile.
- 4. To assign this profile to tests, click **Assign to Tests** in the row where the new action profile now appears on the **Manage Action Profiles** page, and then click **Add**.
- 5. Choose a parameter you want to search with, then a value, and then click **Add** to use this as a search criterion. Add as many other search criteria as you like, and then click **Search**.

Assign Action Profile - Email System A	kdministrator		
Assigned Devices Corporate Wabuite Email Gateway Winware ESI 3.5	Assigned Tests		
		Search Encults Search Criteria	Semenary BatticeLAJ
		Select Thre in state	
	(AM) [68	Renov	
		Select a parameter from the drop down list to analyse a soluble value and click or "Add" in include in the assoch crosses. Of on "Selec" on the spire panel is modely, the value for a garanteer the selected, disk on "Barrol" in measure the query. Interact (reasons) little	

- 6. In the **Results** pane, select the devices whose tests you want to use the action profile, and then click **Assign Action Profile**.
- The Assign Action Profile page now lists all of the devices with tests to which this action profile is assigned, and if you click on a device, you can see the specific tests on that device that are using the profile.

By default, tests and actions run all the time, but you can control when they run by creating and assigning schedules to them. For instance, you might want some tests and actions to run only during business hours.

- 1. Navigate to Administration > Other > Custom Schedules > Create a Schedule.
- 2. Enter "business hours" in the **Schedule Name** field, uncheck all the boxes for days and times that fall outside of business hours, and then click **Create Schedule**.
- 3. To assign this schedule to a device, click **Select Devices For Schedule** in the row where the new schedule appears, and then click **Add**.
- 4. Choose a parameter you want to search with, then a value, and then click **Add** to use this as a search criterion. Add as many other search criteria as you like, and then click **Search**.
- 5. In the **Results** pane, select the device you want to add, and then click **Assign Schedule**. The new schedule is assigned to all tests for that device.

You can also assign a schedule to specific tests through device administration.

- 1. Navigate to Administration > **Devices** and click **Tests** in the row for the device whose tests you want to schedule.
- 2. Click the **Modify** icon in the row for the test you want to schedule, and then use the drop-down Schedule menu to assign a schedule.

You can assign the new business hours schedule to the actions in your action profiles as well.

- 1. Navigate to Administration > Actions and click Update in the row for the action profile you created.
- 2. For each action, use the drop-down Schedule menu to assign a schedule.

Adjusting Thresholds & Baselining

Traverse comes with pre-defined thresholds for most metrics, but these warning & critical thresholds might be too low for your environment and require adjustments. If you have a small number of devices, and if you are seeing some devices in warning or critical state for long periods of time, you should click on the devices and increase the thresholds as needed.

- 1. Click on Status > Tests from the main menu
- 2. Click once on the test name which is in red or yellow state to select that row. Note the current result, and then click on the edit icon on the top right menu.
- 3. On the **Update Test** page, change the warning threshold to be a little higher than the current value for the test that you noted earlier and a matching critical threshold (slightly higher than warning).
- 4. Click on the **Submit** button.
- 5. Repeat these steps for the remaining tests which are in warning or critical state.

If you have a large number of devices, you can use the "baselining" feature in **Traverse** to automatically adjust the thresholds based on the historical data collected. This option is under Administration > Devices > **Test Baseline Management**.

Adaptive Thresholds

Traverse also supports dynamic, **Adaptive Thresholds**. This feature allows setting alarm thresholds that match varying patterns of use or load in the IT infrastructure. For example, if nightly back-up jobs increase the utilization levels of a server during the evening hours, then you can set higher threshold levels for this time period so that unnecessary alarms are not generated. Currently you have to enable this on a per test basis. To access this feature for a test:

- 1. Select a device and display its tests by going to Administration > Devices > Tests
- 2. Then click on the Modify button for a test, and select the Time Based Threshold checkbox.
- 3. You can either click on the **Configure** link if you want to set the thresholds manually, or else you can configure the thresholds automatically using the baselining feature by going to Administration > Devices > **Test Baseline Management**.

4. Click on the Submit button.

Generating Reports

Traverse has extensive and flexible reporting generated in real time from data collected by your DGE extensions and relayed to your **Traverse** instance in the cloud. Navigate to **Reports** to access the different report capabilities. **Traverse** reports are organized and accessible in four areas, each one serving a specific purpose.

Advanced

These are a set of pre-defined reports that allows users to view and analyze different "types" of performance data for a user-specified set of devices or containers (and some additional context depending on the report itself). These reports are designed to allow users to quickly perform specific types of operational analysis of the IT infrastructure, and answer some commonly asked questions for specific tests, devices and containers.

Custom

There reports allow users to conduct system-wide or broader analysis of events, thresholds, capacity, future-trending and availability. Users have greater flexibility in selecting the report parameters, and can choose to run more granular reports for specific test, devices and containers if desired.

SLA

These reports are designed for the purpose of historical and deeper analysis of the SLA metrics and measurements configured and monitored in **Traverse**.

Ad Hoc Reports (My Reports)

Users can create ad hoc report queries for the first three types of reports, and retrieve and run these in the future. **Traverse** allows adding individual components from the various pre-defined reports into the same composite, user-specific report. The reporting framework is very flexible and allows completely arbitrary user-defined statistics generated on an as needed basis.

- 1. Run a report, and then click on the icon next to a component title to bring up the Add To My Reports dialog.
- 2. Name your ad hoc report in the Create A New Report field, and then click Submit.
- Your saved report now shows up when you navigate to Reports > My Reports, where you can click the name of the report to run it.

Scheduling Automatic Reports

You can also schedule any saved report (saved query parameters or ad hoc reports) to execute automatically and email the results to a list of recipients.

- 1. Navigate to Reports > Emailed > Create A Scheduled Report.
- Name your scheduled report in the Scheduled Report Name field, use the drop-down Generate Using Saved Query menu to select a saved report, and then enter the recipient(s) and define the schedule.

Security Model

The **Traverse** security model controls user access to the data generated by customer networks and to **Traverse** user functions that act on that data.

Note: A full description of the security model is described in Users and Departments (*http://help.kaseya.com/webhelp/EN/TV/R8/index.asp#17371.htm*) in the *Traverse User Guide*.

To help quickstart your deployment of **Traverse**, the most common security scenario for MSPs is described below. This configuration will ensure that *all* your MSPs have access *across all* departments. Keep in mind the following guidelines:

- Create a unique department for each customer organization. You may need to create more than one department for larger organizations.
- Ensure all the departments you create use the same, single user class.
- Define the customers of MSPs as users of a selected department. Users of departments only have access to the data in their own department. A department user with the same name as the department is created automatically for you, each time you create a department.
- Define all MSPs as users of the same, single admin group. Each admin group can only be assigned to one admin class. Ensure the admin class you select is mapped to the single user class you are using for all your departments.

Some of the steps below require superuser access. Your configuration steps make use of the following pages, in case you have to return to them.

- Superuser > User Class
- Superuser > Admin Class
- Administration > Departments

When you're done, review the Administration > **Departments** page. It's a good way to summarize your security configuration, as shown in the example below:

STATUS	DASHBOAR	D CONFIG I	IGMT RE	PORTS	DMINISTRATION	SUPERU SER		
DEPARTME	NTS DEVIC	ES CONTAI	NERS SLA	ACTIONS		USER CLASS	OTHER P	REFERENCES
Manage Ar Select an o Create New Create New Search Us	operation for a peration for a v Admin Grou v Departmen ers	/ DEPARTMENTS an admin group IP t	/department	below or us	e the link below t	o create a new	admin group/	department.
AD	MIN GROUP	2				AI	DMIN CLASS	
Ne	twork Operations	(NOC)				Ad	min Level Acces	5
Su	perUsers	_				Su	perUsers	_
D	EPARTMENT					U	SER CLASS	
Co	re infrastructure	_				Di	fault User Class	•
cus	stomer1					De	fault Customer (Class
We	st Coast Regior	ı				Us	er Class B	

Configure an Admin Group and Admins

- 1. Log in to your Traverse website as superuser.
- 2. Navigate to Superuser > User Class and click on Update for the Default User Class.
- 3. Change the name to be **Default Customer Class** and click **Update User Class**. Alternatively, you can create a new user class instead of renaming the existing one.
- 4. Navigate to Superuser > Admin Class and create a new admin class called MSP Class.
- 5. Now click User Class Mappings and then Assign User Class to Admin Class. Select the default grid that is presented and click the Update Privileges button.
- 6. Navigate to Administration > Departments and click Create new Admin Group. Create a new admin group called MSP Group belonging to the MSP Class.
- Create new users in the MSP Group for each of your staff by going to Administration > Departments and clicking on Create User.
- 8. At this point, you have the basic security model setup with all your staff belonging to MSP Group.

Configure a Department and User

- 1. Log into your Traverse website as superuser.
- 2. Navigate to Administration > Departments and then click Create New Department.

- 3. Give a meaningful name to the department. A default user will be automatically be created with the same name as the Department name. You can provide this user logon to the MSP's customer if the customer requests access.
- 4. Ensure the new department uses the Default Customer Class described in step 2 of the previous procedure.
- 5. You can optionally create a **Read Only** user for this same department. Click **Create User** and add a new user. Using the user's email address as the login is recommended. Make sure you set the user's role to **Read Only** when you do.

Creating URL with auto-login: You can create a URL with an encrypted username and password to do autologin for a single **Traverse** page by using the Auto-Login URL generator at www.zyrion.com/support/tools/urlgen/ (http://www.zyrion.com/support/tools/urlgen/)

Adding Additional DGE Extensions

Installing a DGE extension is required to relay monitoring data from a local network to your **Traverse** website. Use the following procedure for creating *additional* DGE extensions.

Note: Adding additional DGE extensions to your **Traverse** Cloud instance requires a different procedure than the one used to install your first DGE extension.

- 1. Navigate to Superuser > DGE Mgmt.
- 2. Click Create New DGE Extension.
- 3. Provide a unique name like dgex-customerA.
- 4. Give a suitable **Description** to identify the customer.
- 5. Select the upstream DGE name from the drop down list. This is the Upstream DGE Name (page 2) you were originally assigned when your Traverse website was created. Unless support has created additional upstream DGEs for you, there should only be one upstream DGE you can select.
- 6. Select the Upstream DGE Fully Qualified Host Name/IP Address. This is your-unique-site-name.kaseyatrials.com without the http:// prefix.
- 7. Click on Create DGE Extension.
- 8. Run the DGE extension installer.
- 9. Installations steps are described in detail here (page 5).
- 10. When the installer prompts you to enter a DGE Name, ensure it matches the Unique Name you just specified above for the new DGE extension you are creating.
- 11. Finish up by confirming the "health" of the new DGE extension, as described in the installation procedure (page 9).
- 12. You are now ready to provision the monitoring of devices for this new network by running **Network Discovery** (*page 10*) or by adding devices and tests manually.

Branding (Logos)

If the provided **Traverse** license permits you to change the logo, you can set the logo and theme and custom URL for each of the customers (and intermediate MSPs) by logging in as <u>superuser</u> and going to Administration > **Departments** and selecting **Themes** from the **Modify** column.

Chapter 3

Advanced Features

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Service Monitoring & Containers

Service containers allow you to group tests and devices to create logical, business-oriented views of your network in addition to your hardware-oriented views. A service container can hold virtual devices (special types of containers that hold only tests), real devices, or other service containers.

Creating a Service Container for Devices

- 1. Navigate to Administration > Containers > Create a Service Container. A middle Container Configuration panel displays.
- 2. Enter Servers in the field at the top of the Container Configuration panel.
- 3. Select the Contains: Devices & Containers option.
- 4. You can assign devices to a container either by performing a search in the right hand panel and manually selecting the devices to include, or by specifying rules and having the results automatically assigned to the container.
- 5. For this example, check the Populated dynamically based on a rule checkbox. A Define Rule panel slides in from the right side of the page. Enter server in the Device Type field. Click Apply to see which devices match this rule. You can add additional rules, such as entering *win* in the Device Name field to filter the list of devices found even further.

STATUS DASHBOARD CONFIG MGMT REPORTS ADMINISTRATION SUPE	ERU SER				Kaseya	
DEPARTMENTS DEVICES CONTAINERS SLA ACTIONS DISCOVERY USER (CLASS OTH	ER PREFERENCES			Logged in: superuser LOGOUT	ABOUT USER GUIDE 🕶 🗄
MANAGE SERVICE CONTAINERS Create A Service Container Click on 'lock' loon to create/delete a container. Hierarchy of existing container can be c	changed by dr	ag-and-drop operation. Select existing container to view/edit current configuration.				
Service Containers	A 19	Container Configuration		Define Rule		
G Top Level		Servers		Device Name:	*win*	
- New Container			_	Device Address:		
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		Commut.		Device Model:		
		Comment:	store	Device Type:	server	
				Vendor Name:		
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		Core Infrastructure - qa-win832p05	_			
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		Core Infrastructure - qa-win83205				
		Core Infrastructure - qa-win83203	-			
			_	•	111	•
		Save Ca	ncel			Apply

6. Click the Severity tab in the middle panel when you are done.

7. Assign an action profile if desired, decide the criteria for determining the severity status of the container, and then click **Save**.



Creating a Service Container for Monitoring Tests

- 1. Navigate to Administration > Containers > Create a Service Container.
- 2. Enter Test Type Container in the field at the top of the Container Configuration panel.
- 3. Select the Contains: Tests option.
- 4. You can assign monitoring tests to a container either by performing a search in the right hand panel and manually selecting the test to include, or by specifying rules and having the results automatically assigned to the container.
- 5. For this example, check the **Populated dynamically based on a rule** checkbox. A **Define Rule** panel slides in from the right side of the page. Enter **Ping** in the **Test Type** field. Click **Apply** to see which devices have tests that match this rule.
- 6. Click the Severity tab in the middle panel.
- 7. Assign an action profile if desired, decide the criteria for determining the severity status of the container, and then click **Save**.

DEPARTMENTS DEVICES CONTAINERS SL	A ACTIONS DISCOVERY	USER CLASS OT	HER PREFERENCES		Logged in:	superuser LOGOUT ABOUT USER GUIDE 🕶 🗌
Manage Service Containers Create A Service Container Slick on "lock" icon to create/delete a container. H	ierarchy of existing container c	an be changed by d	trag-and-drop operation. Select existing container to view/edit current configuration.			
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			Save	Cancel	1	Apply

Nesting Service Containers

You can nest service containers to build a logical hierarchy of your environment. For example, you might have critical services for different departments within an organization, all contained within a Critical Services container.



Examining Service Container Status

- 1. Navigate to Status > Containers to view a status summary for all containers. Traverse provides a number of built-in containers ready to use.
- 2. Click on a container name to list its contents.
- 3. Drill down into the container hierarchy to reach a test container. Then click the Correlation Report button at the top of the page to generate reports of Recent Events and Correlation.
- 4. Click on a test name to see its status page and access Long-Term History, Trend Analysis, and Raw Data reports.

Note: The user and options filters the hierarchy of containers in the left hand panel, and items displayed in the right hand panel, by their state. Set state filter preferences for the User option using the Administration > Preferences > Only Show Devices In Following State(s) When Filter Is On settings.

STATUS DASHBOARD CONFIG MGMT REPORTS /	ADMINISTRAT	ION SUPERUSER									Kaseya	
CONTAINERS DEPARTMENTS DEVICES SLA EVENTS	PANORAM	A MAPS								Logged in:	superuser LOGOUT AB	out User Guide 🕶 🗄
Container Summary											Fri Oct 11 2013 5:16 PM	America/Los_Angeles 🛃
Hierarchy + OUSER ALL	Contain	er: Test Type Container							Q Search f	D	Show:	USER ALL
🖬 🤨 Top Level	Status	Container Name	Department	Network	System	Application	Comment				Health History	1
Core Infrastructure	0	Test Type Container	SuperUsers	0	0	0						
All Windows Servers												
Traverse Performance												
Business Visibility Engine	Tests (5	5)						Correlation Report	Q Search for		Show: 🙂	USER ALL
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O Monitor Activity	0	QA-AV-DOCHELP	Supe	Users		Round Trip Ti	me	3 ms	250/1500	5:13 PM	07:44	
Processing Backlog	0	QA-AV-DOCHELP	Supe	Users		Packet Loss		0 %	60/100	5:13 PM	07:44	
Message Handler	0	dev-av-win0d	Supe	Users		Packet Loss		0 %	60/100	5:13 PM	23:17	
 Event Management 	0	dev-av-win0d	Supe	Users		Round Trip Ti	me	1 ms	250/1500	5:13 PM	23:17	
Processing Engine Status		DEV-RCI-63TRUNK	Sune	lisers		Round Trin Ti	me	2 ms	250/1500	513 PM	23.17	
SuperUsers			Supe			Desket Less	me	2 113	250/1500	5.10 PM	23:17	
Servers	0	DEV-RO-05TRUNK	Supe	Users		Packet Loss		0.76	80/100	5:15 PIVI	25:17	
V lest Type Container	0	qa-win83201	Supe	Users		Round Trip Ti	me	1 ms	250/1500	5:13 PM	23:17	
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	•	qa-win832p01	Supe	Users		Packet Loss		0 %	60/100	5:13 PM	23:17	
	0	qa-win832p01	Supe	Users		Round Trip Ti	me	1 ms	250/1500	5:13 PM	23:17	
	0	qa-win201204	Supe	Users		Packet Loss		0 %	60/100	5:13 PM	23:17	
	0	qa-win832p05	Supe	Users		Round Trip Ti	me	1 ms	250/1500	5:13 PM	23:17	
	0	WSUS2K8R2	Supe	Users		Packet Loss		0 %	60/100	5:13 PM	23:17	
	0	WSUS2K8R2	Supe	Users		Round Trip Ti	me	1 ms	250/1500	5:13 PM	23:17	-

Customizable Dashboards

The customizable RealView dashboard feature lets you create custom dashboards to view the performance of services and infrastructure. You can create multiple dashboards, each containing dashboard components related to a particular area of service you want to monitor.

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- 1. Navigate to Dashboard > Create New Dashboard.
- 2. Enter a name for your dashboard and choose whether you want it to be visible to other users or private, and then click **OK**.
- 3. Click Create New Chart/Table in your new empty dashboard to open the Create Dashboard Component dialog.
- 4. In this example, you are creating a line chart component for traffic tests. Select the line chart component type icon, fill in the **Title** field, select the refresh interval, and then click **Apply**.

Creat	Create Dashboard Component							
Comp	onent Type	:) E					
Traffie	c Test							
Refre	5m	10m 1	15m 1	20m 1	25m 1	30m I		
	_	Apply) (Cancel				

5. Now specify the data source for the component. Select the devices and test types, and then click **Search** to find the matching tests. Select the tests you want the component to use by dragging and dropping them from the **Matching Tests** list to the **Selected Tests** list, and then click **Apply**.



- Now add a gauge component for a CPU utilization test. Click the '+' Add Dashboard Component icon in the upper right corner of the dashboard, select the gauge component type icon, fill in the Title field, select the refresh interval, and then click Apply.
- 7. Now specify the data source for the component. Select a device, and then click **Search** to find the matching tests. Drag and drop the CPU load tests to the **Selected Tests** list, and then click **Apply**.

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Panorama Topology & Maps Display

The **Panorama** feature offers an interactive graphical representation of the devices in your network that are being monitored, including the status of the devices and the dependency relationships between them. **Panorama** offers three different topology layouts, flexible display filters, pan and zoom functionality, the ability to configure and save custom views, and the ability to add or remove device dependencies.

- 1. Navigate to Status > Panorama.
- 2. Click on the **Display Filter** icon on the top left hand corner to view various filtering and layout options.



- 3. Choose between hierarchical (the default), circular, or grid layout options.
- 4. In edit mode, you can move the position of the nodes on the canvas. You can also add or remove device dependencies. When you click on a device node, a plus sign appears on the icon; click this plus sign and drag to another device to create a new parent/child dependency relationship. When you click on the line connecting two devices, a red X icon appears. Click this X to remove the device dependency.
- 5. You can filter the devices shown in the topology view by type or status. By default, the Filter By Device Type & Status frame opens with the Device Types pane expanded. If you click on the Status bar, the Status pane expands instead. You can also click on the highlight option for each device or state, and device nodes of that type or state will appear highlighted in the topology view.



- 6. You can choose to collapse nodes based on depth in the hierarchy or threshold number of child nodes. If you select the Leaf Nodes Only check box, only the leaf nodes will be collapsed.
- 7. After customizing the topology view, you can save it as a custom layout.

8. You can Navigate to Status > Maps to view network on a geographical overlay.



Creating an SLA Measurement

The SLA Manager lets you track compliance against user-defined service level agreement metrics for containers, devices and tests. These SLA metrics are calculated and displayed on a real-time dashboard that displays the amount of time that the metric is within the SLA threshold and also displays how close the metric is to violating the SLA requirement.

- 1. Navigate to Administration > SLA.
- 2. On the Configure SLA Manager page, click Create an SLA Measurement.
- 3. Fill out the fields in the Create an SLA Measurement form:
 - SLA Measurement Name
 - Comments/Description: An optional field that lets you provide some additional descriptive information that will appear in the SLA Manager list of SLA measurements.
 - > Calculation Period
 - > Calculation Frequency
 - > Threshold: The percentage of the Calculation Period that the metric must be in the OK state.
 - Schedule: Used to specify business hours and weekdays for calculation of the SLA period.
- 4. Select whether the SLA is being created for a Container, Device or Test
 - If you selected Container or Device, then via the drop-down list, select the specific Container or Device for which the SLA is being created, and then click Submit.
 - If you selected Test, then click Submit to go to the page for selecting the underlying device tests for this SLA metric, and then click Add.
- 5. Choose a parameter you want to search with, then a value, and then click Add to use this as a search criterion. Add as many other search criteria as you need, and then click Apply to run the search.
- 6. In the Search Results pane, select the tests that you want to be a part of the SLA metric for each device, and then click Assign to SLA Measurement.
- 7. You can now click on the devices you've added in the Assigned Devices list, and the tests you selected will appear under Assigned Tests.
- 8. Use the Add, Edit, and Remove buttons to make any further changes to the devices and tests you want to include.
- 9. Click **Done** to finish creating the SLA measurement.

10.Navigate to Status > **SLA** to view real-time data for your SLA metrics on the SLA Manager dashboard.



Event Manager and Message Handler

The Event Manager console displays messages (traps, logs, windows events) forwarded from the Message Handler, as well as threshold violations.

- 1. Navigate to Status > Events.
- 2. From the Event Manager console you can acknowledge, suppress, and delete events. Events can be suppressed until a particular date and time, or until the state changes. The screen refreshes automatically every few minutes (this interval can be changed on the Administration > Preferences page).

The Message Handler is a distributed component of **Traverse** which accepts syslogs, SNMP traps, Windows events or any other text messages and then searches for specified patterns in these messages. When a pattern match is found, the message string is transformed and a severity assigned to it, and then it is forwarded to the DGE. The processed messages from the Message Handler are displayed on the Event Manager console and can trigger actions and notifications. For more information on configuring the Message Handler, see the Message Handler for Traps and Logs

(http://help.kaseya.com/webhelp/EN/TV/R8/index.asp#16774.htm) in the Traverse User Guide.

Configuring NetFlow Collectors

Traverse has an integrated NetFlow collector which is pre-installed, but disabled by default.

- 1. Login to Traverse as superuser, or an equivalent user.
- 2. Navigate to the Superuser > Global Config > Netflow Collector page.



- 3. Choose the DGE or DGE extension you wish to add a netflow collector on, and select Update.
- 4. Enable the netflow collector, then choose a device from your list of network devices. Only routers, switches, and firewalls can be used as flow sources. Choose the host to allow flow data from. This allows you to send flow data from the loopback interface, or from a different IP than the one provisioned in **Traverse**). Choose the port, and the protocol that **Traverse** will accept. Additionally, you can specify the network that is "inside" of this device, so that **Traverse** can categorize the data from an internal/external standpoint.

NetFlow Collector Management									
NetFlow Sources for DGE(dge-1)									
Enabled Netflow Collector									
	A	dd New NetFlow Source							
Source #1			Ъ						
Core Infrastructure - Netflow C	ollector (127.0.0.1) 👻								
Accept From IP Address	127.0.0.1								
Flow Data Format	netflow-v5 👻								
Transport Protocol	udp 👻								
Accept On Port Number	2055								
Local Network(s) in CIDR notation Enter each entry on separate line Example: 192.168.10.0/24	10.0.0.0/8 172.16.0.0/16 192.168.1.0/24								
		Save Cancel							

5. Press the Save button when you are done. Traverse will respond with the following prompt:



 Choosing Yes, Apply Now will immediately write the new configuration out to the flow collector, and re/start the flow collection subsystem. Choosing No, Defer For Later will save your configuration, but not apply it to the DGE extensions nor re/start any flow services.

Using the Network Flow Analysis Console

You can access the **Network Flow Analysis** console from a device **Test Summary** page or from a **Test Details** page. Each chart in the network flow analysis console has a title bar that states which device(s) (and optionally, which application) are being examined, as well as their roles.

- 1. Navigate to Status > Devices and click on a device name.
- 2. On the Test Summary page, open the Run Reports drop-down menu and click on Flow Analysis.

3. By default, network flow data for the past 24 hours is analyzed to determine the top 10 destinations communicating with the selected device (source), and the results are presented in bar chart format.

Top 10 Destinati	on by total BYT	nes.								Rese
2.04 GB										
1.06-GE										
1.67 GB										
1.40 GB										
g 1.30 GB										
T 1.11 08 -										
g 953.67 MB										
10 762.93 MB										
572.20 MB										
381.46 MB										
190.73 MB										
0					-	-	1		-	-
	75.52.125.78		ayrion.com		211.25.205.3		211-25-205-13		173.194.25.	50
	1	e-76-21-120-1	7	99-123-1-81.	li., p Desti	spp-67-124-6 nation	10+	173.194.25.	ie.	67-217-77-101
III 🗶 🗍	1									Destination +

4. Click on the results for an IP address on the **Destination** chart to display the top 10 applications for that destination of that source alongside in pie chart format.



- 5. Click on the results for an application on the **Applications** chart to display historical data for network traffic for that application for the selected destination-source pair.
- 6. Normally data is displayed for a single source or destination device, but you can click **Reset** in the upper right corner of the first chart in the network flow analysis console to expand the scope of data to the entire network, providing a network-wide view of the top-N sources, destinations, or applications.
- 7. Click through as described above to get detailed device data.
- 8. Each network flow analysis chart can be displayed as a table, a pie chart, or a bar chart. Click on the corresponding button in the lower left corner of the chart to change how the data is displayed.
- 9. You can change the network flow analysis workflow by looking at a device first from any of the three different roles: source, destination, or application. Choose the role from the drop-down menu in the lower right corner of the chart.
- 10.Use the options in the menu bar at the top of the network flow analysis console to customize the data shown:
 - The Protocol drop-down menu lets you choose whether to show just tcp or udp traffic, or all traffic.
 - You can specify the Start Time and End Time to see network flow data for a particular time period.
 - > The Metric drop-down menu lets you choose whether to show data in bytes or packets.
 - > The **Top** field lets you choose how many clients or servers to show.

Note: You must click Apply to show the new data after making any changes to these options.

Extensible and Open APIs

Traverse has very powerful APIs which allow access to all components of the software. Users familiar

with Perl or C can start using the API very quickly due to its familiar commands and interface. These APIs allow you to configure connections to other legacy products or custom applications.

BVE Flex API

You can use the BVE API to perform bulk changes to tests or devices. The BVE API can be accessed via a direct telnet connection or through the perl API. Any **Traverse** end user can log in to the API and will get access to the same privileges and devices as when logging in via the Web interface.

To log in, ensure that the BVE API is running on the **Traverse** host. Then, from a Windows command prompt, UNIX shell, or alternate telnet client, telnet to port 7661 and enter the following command:

```
telnet your-unique-site-name.kaseyatrials.com 7661
LOGIN <login id>/<password>
```

The basic commands are list, add, delete, and suspend, which can be applied to contexts such as device, test, and user. The general syntax is <u>context.command <parameters</u>, as in the following examples.

List all devices.

```
device.list "deviceName=*"
```

List all tests for a device.

```
test.list "deviceName=xyz", "testName=*"
```

 Set the warning threshold for all line utilization tests to 80%. You can also set this threshold using the Web application.

```
test.update "testName=Line Utilization", "deviceName=*",
warningThreshold="80"
```

Other Advanced Features

Linked Device Templates

A linked device template contains a group of tests that can then be applied to multiple devices so that each associated device is provisioned with the same tests. The linked device template can also include an action profile and a custom schedule as well. Creating a linked device template, allows you to configure tests for a master device and then apply that template across multiple associated devices. What's important to note is that when the template for the master device is updated, you have the option to push the updated template to all the devices associated with the given linked device template. See the *Traverse User Guide* for instructions on how to use Linked Device Template (http://help.kaseya.com/webhelp/EN/TV/R8/index.asp#17555.htm) functionality.

Scheduled Maintenance

Scheduled maintenance allows defining in advance any number of time periods for automatically suspending devices at the start of the time-period, and then automatically resuming the devices at the end of the time-period. This functionality is in addition to the functionality that allows users to manually (on-demand) suspend/resume devices. Both the scheduled and the manual functionality allow you to temporarily turn off all the tests for one or more devices and turn them on again. This is useful for the purpose of performing maintenance tasks on the devices, where you do not want to receive alerts while the device is offline. Once a device is suspended, the polling and data collection for all the tests on the device is suspended and thus any associated actions to the tests will not generate notifications. Furthermore, when a device is suspended (e.g. for maintenance), this time is not included in the total downtime reports since it is considered a planned outage. See the Traverse User Guide for instructions on how to use Scheduled Maintenance (http://help.kaseya.com/webhelp/EN/TV/R8/index.asp#17555.htm) functionality.

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