

# MSP Deployment Guide Zyrion Traverse™ 5.1



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This Deployment Guide contains instructions for installing Zyrion Traverse in a Managed Service Provider (MSP) environment. You need at least v5.1 of Traverse which has the DGE-extension technology described in this Deployment Guide.

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## Overview

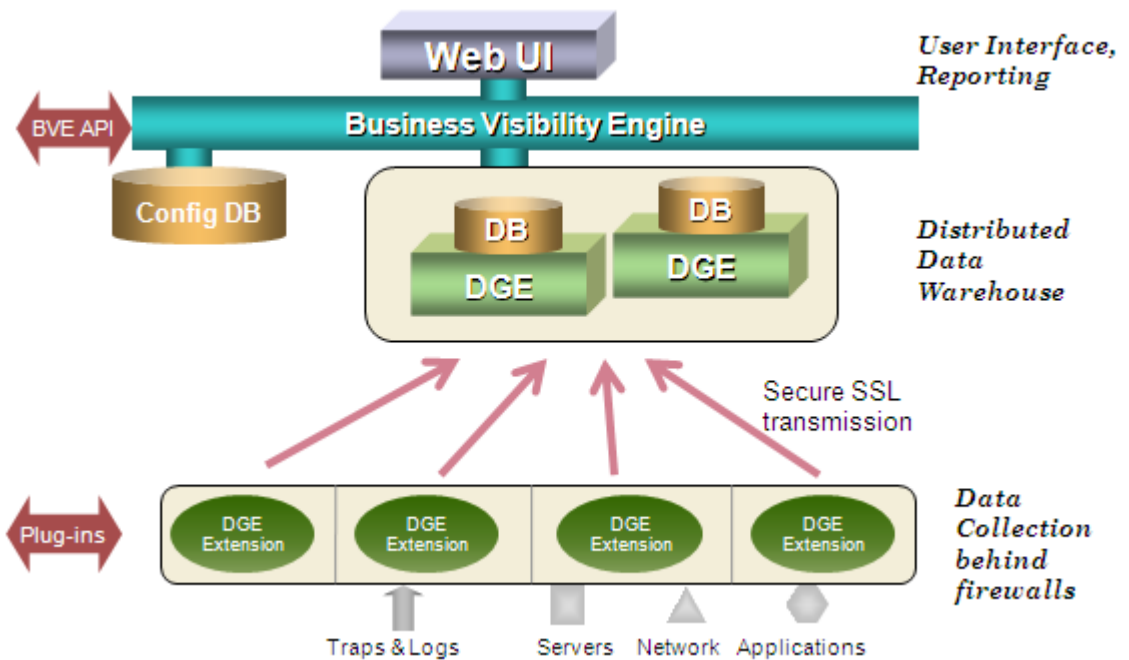
MSP environments require that the monitoring data for their customers be isolated from one another, and a security model which allows the customers to log in and see their own data in a controlled manner. Furthermore, it is common for the customer networks to have overlapping IP address space and NAT environments. Traverse supports all of these features as a core component of its architecture.

The Traverse architecture supports distributed data collection using distributed Data Gathering Engines (DGEs). In large customer environments (over 100 devices), a remote DGE can be installed within the customer network and it will collect and store data for the customer on the DGE itself, which reduces management traffic over wide area networks. This architecture also allows monitoring overlapping IP addresses which is typical in MSP environments.

If there are only a few devices at a customer location, and a VPN tunnel can be setup from the central MSP site to the customer site, then a central DGE at the MSP can monitor all the devices reachable via VPN connections (only if they are not using overlapping IP address spaces).

Traverse v5.1 added support for DGE-extensions, which is a software component running on a Linux, Windows or Sparc server for monitoring local applications, servers and routers and "pushing" the monitored data to an upstream DGE over a secure SSL connection.

The advantage of using DGE-extensions in MSP environments is that all data transmission is outbound from the DGE-extension and it can be placed inside a customer network behind a firewall, and no firewall ports need to be opened up on the customer side. Each DGE-extension can monitor a mid-sized IT environment with a few hundred elements while running on a small server. Additionally, these DGE-extensions are also designed to handle overlapping IP addresses and operate behind NAT firewalls. You can add custom monitors to a DGE-extension (however, you cannot add a custom action script to a DGE-extension and all the notifications are triggered at upstream DGE).



The different models described above can be mixed depending on the needs- for few remote devices, a VPN and central polling will suffice, while the DGE-extension and full DGE models can be used for larger customers.

## Security Model

### Overview

Traverse has a robust and flexible federated user security model which provides read-only or read-write privileges for end users depending on your requirements as an MSP. A full description of the security model is described in the Traverse User Guide, but the most common deployment scenario for MSP's is described below.

The following example assumes that the reader is familiar with the concepts of Admin-Users, Departments, and End-users as described in the Traverse User Guide.

Your staff (assuming you are the Managed Service Provider) should belong to an Admin-Group (called msp-group), and an end user department will be created for each of your customers. This will isolate each of your customers devices automatically so that even if you give full login access to each of your customers, the system will automatically prevent them from seeing each other's data unless the data is "exported" to the other user intentionally.

### Configuring Groups

- 1 Log in as "superuser" (default password "zyrion")
- 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 on Update User Class. (Alternately 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 on "User Class Mappings" and then "Assign User Class to Admin Class". Select the default grid that is presented and click on 'Update Privileges' button.

- 6 Navigate to "Administration" -> Departments and click on 'Create new Admin Group'. Create a new admin group called 'MSP Group' belonging to the "MSP Class"
- 7 Create new users in the 'MSP Group' for each of your staff by going to Administration -> Departments and clicking on 'Create User'

**MANAGE ADMIN GROUPS/DEPARTMENTS**  
 Select an operation for an admin group/department below or use the link below to create a new admin group/department  
[Create New Admin Group](#)  
[Create New Department](#)  
[Search Users](#)

ADMIN GROUP	ADMIN CLASS	STATE	MODIFY
MSP Group	MSP Class	Enabled	<a href="#">Users</a> <a href="#">Create User</a> <a href="#">Update</a>
SuperUsers	SuperUsers	Enabled	<a href="#">Users</a> <a href="#">Create User</a> <a href="#">Update</a>

DEPARTMENT	USER CLASS	STATE	MODIFY
Customer.A	Default Customer Class	Enabled	<a href="#">Users</a> <a href="#">Create User</a> <a href="#">Update</a>

At this point, you have the basic security model setup with all your staff belonging to 'MSP Group'. When you add a new customer, follow the steps below "Adding a new customer"

## Installing Traverse at MSP Site

Download and install the core Traverse software on your network first. You can install the BVE and the DGE on the same physical server, or on two separate servers for scalability. The hardware specifications are listed on the Zyrion support site.

**NOTE:** All the files listed above are directly downloadable from the Zyrion support web site at <http://www.zyrion.com/support>. For hardware and software requirements and installation and update instructions, see the *Traverse 5.1 User Guide*.

You will also need to enable the following ports on your firewall to allow incoming connections from the DGE-extensions at the customer site. You can allow all incoming connections or explicitly list the IP address of each of your customer's DGE-extensions depending on your security policies.

**Table 1-1.**

Port	From	To
TCP/7651	DGE-x	BVE
TCP/7652	DGE-x	BVE
TCP/7653	DGE-x	BVE
TCP/9443	DGE-x	DGE

### Installation Steps

- 1 When installing Traverse 5.1 at your central site (data center), choose the "Complete Application" option. This will install both the BVE as well as the DGE components on a single server. If you want to install the DGE on a separate server, run the installer on the DGE and select 'Install DGE only' during the install process.

## Configuring New Customers

### At the central MSP Traverse installation:

- 1 Log into the Web Application as “superuser” with default password “zyrion”
- 2 Navigate to Administration -> Departments and then click on “Create New Department”
- 3 Give a meaningful name to the Department (such as Customer X). A default user will automatically be created.
- 4 If you want to create a ‘read only’ account for your customer, click on ‘Create User’ and add a new user (preferably use the user’s email address as the login).
- 5 Navigate to Superuser -> DGE Mgmt. Create a new DGE-extension for the end customer using the following steps:
  - Click on “Create New DGE Extension”
  - Provide a unique name like “dgex-customerA”
  - Give a suitable Description field to identify the customer for example
  - Select the upstream DGE name from the drop down list. In most cases if you have only one DGE, it will be “localhost”.
  - Provide the IP address of the upstream DGE from the DGE-extension’s network. As an example, for a DGE-x on the same internal network as the DGE, the IP address might be 192.168.1.2 but for a DGE extension at a remote customer network, this would need to be the externally visible IP address of the DGE (e.g. 128.121.x.y)
  - Click on “Create DGE Extension”

The screenshot shows the 'CREATE DGE EXTENSION' form in the Zyrion Traverse web application. The navigation bar at the top includes 'STATUS', 'DASHBOARD', 'REPORTS', 'ADMINISTRATION', and 'SUPERUSER'. Below the navigation bar, there are sub-menus: 'DGE MGMT', 'HEALTH', 'ADMIN CLASS', 'USER CLASS', and 'GLOBAL CONFIG'. The user is logged in as 'superuser'. The form fields are as follows:

- \* Unique Name: dgex-CustomerA
- \* Description: Customer A devices
- \* Upstream DGE Name: Select Upstream DGE (dropdown menu)
- \* Upstream DGE IP Address: 10.2.3.4
- \* Soft Limit: 15000
- \* Hard Limit: 20000

At the bottom of the form, there are two buttons: 'Create DGE Extension' and 'Reset'.

### At End Customer site

- 1 Run the Traverse DGE-X installer at your customer location and choose the "Data Gathering Engine" option. You will need to give the same name for the DGE-extension which you entered in the step above (dgex-customerA). You will also need to enter the IP address of the central BVE.
- 2 At the end of the installation, the server will reboot if running on Windows and on reboot, the DGE extension service will automatically start and establish a connection to the upstream BVE and DGE. On Linux or Solaris platforms, just start the DGE extension by running the startup script under traverse/etc/traverse.init start
- 3 On the central BVE web application, log in as superuser and navigate to Superuser -> Health to verify that the new DGE-extension is communicating with the central BVE & upstream DGE.

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## Provisioning Customer Devices

You are now ready to provision devices for this customer.

- 1 Represent a user in this customer's department
- 2 Create a new device by navigating to Administration -> Devices -> Create a Device
- 3 Provide a suitable device name, IP address or FQDN and other information
- 4 For "Create in Location", you must select the Unique Name for the customer's DGE extension "dgex-customer A".

The newly created device will automatically be monitored from the DGE-extension specified and periodically transfer the data over an SSL connection to the upstream DGE.

The DGE-extension is also capable of handling traps and logs and provides functionality similar to a DGE for filtering.

## Customer Logins

You can either give your end customers a full read-only login account so that they can get read-only access to all the data in their 'department', or else you can create a special URL so that they can log in and only see a single page.

### Creating Read-Only Login Account

- 1 Log in as superuser
- 2 Navigate to Administration -> Departments

For the desired customer's department, click on 'Create User' and specify read-only account. You can also hide the navigation menu and specify the initial login page by setting the User Preferences for read only users. It is suggested that you use the email address of the user as the login name.

### 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/)

## Product Branding

If your purchased license permits you to change the logo, you can replace the Zyrion logo by replacing the image. You can get the location and size of the image by right clicking on the logo and selecting Properties.

## Available Documentation

Documentation for Zyrion Traverse is available in Adobe PDF format or online help system in HTML format.

Acrobat Reader is needed to open documents in PDF format. A free copy of Acrobat Reader is available from the Adobe website.

The documentation set for this release consists of the following documents:

- *Traverse 5.1 Release Notes (this document)*
- *Traverse 5.1 User Guide*
- *Traverse 5.1 Developer Guide & API Reference*

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## Contacting Zyrion

### **Contacting Zyrion, Inc.**

#### **Customer Support**

You can reach Zyrion technical support online:

<http://www.zyrion.com/support>

Telephone

In the US: **877-7-ZYRION (877-799-7644)**

Outside the US: **+1 408-524-7424**

E-mail

[support@zyrion.com](mailto:support@zyrion.com)

#### **User Forum**

To join a customer-driven user group connecting the worldwide community of Zyrion users, visit our online forum:

<http://community.zyrion.com/>