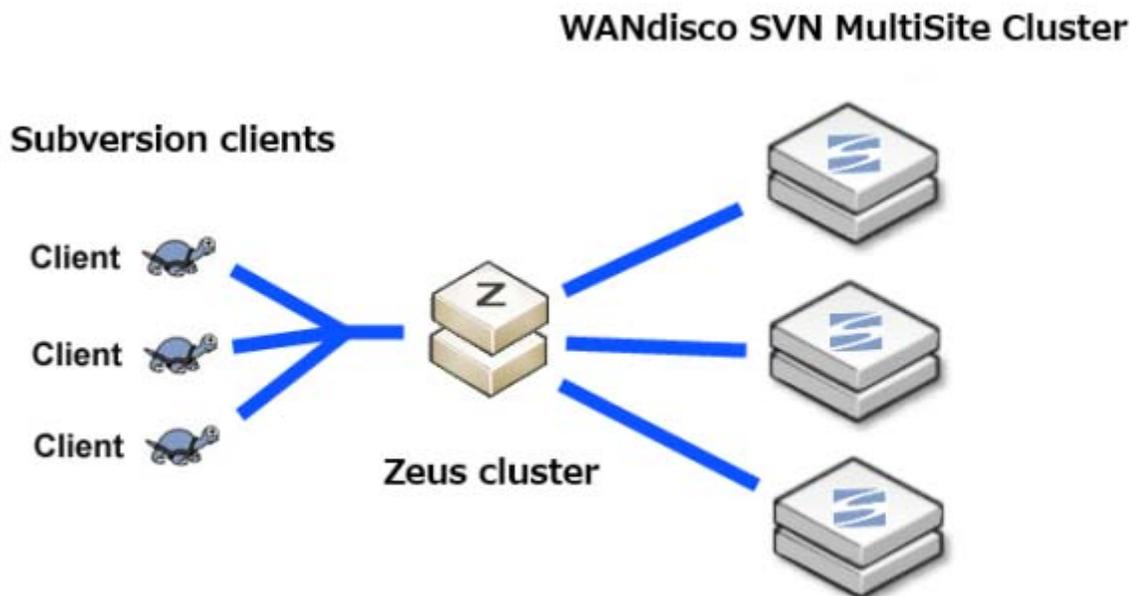




Zeus Quick Start Guide

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1. Introduction



Zeus software has been selected to provide a high-availability, application specific load balancing solution for use in conjunction with WANdisco Clustering products.

This brief quick start guide shows you how to set up the Zeus software to load balance between nodes in a Subversion MultiSite cluster.

1.1 Before you begin



You **must** install, configure and start Zeus software as the Root user. Root privileges are necessary to bind to the restricted lower ports.

You may login as the Root user with the following:

```
su
Password: *****
```



Ensure that you have your **Zeus license key** saved to your installation directory (e.g. /usr/local/zeus) before starting. We would have sent you the license key via email, contact [WANdisco sales](#) if you're unable to find your license key. See [Installing a new Zeus license](#)

2. Downloading Zeus Software

This sections shows you how to get the Zeus software.

- **2.1** Download the Zeus software from the WANdisco download website to your installation server.



Software Download Page

Name	Download	Size	MD5 Checksum
Subversion MultiSite v3.7 build 2616	svnrep.tar.gz Release Notes	8.0 MB	0b1c18b2ec4695249a25eab2817c1818
Zeus Load Balancer 6.0r4 - Linux x86_64	ZeusTM_60r4_Linux-x86_64.tgz	48 MB	146bbd2acd77d6e9b173f26c53d9a99d
Zeus Load Balancer 6.0r4 - Linux x86	ZeusTM_60r4_Linux-x86.tgz	47 MB	9a54726526d9b04152d1037836f0a26b

By using software of WANdisco, Inc. or its subsidiaries ("WANdisco"); you agree to the terms and conditions of the license agreement you have entered into with WANdisco. For more details, please refer to that license agreement.

Ensure you download the appropriate (32-bit or 64-bit) version.



Zeus software requires approximately **250MB** of disk space during installation. Removing temporary installation files cuts the required drive space to about **100MB**.

- **2.2** Extract the archive file to the install directory (i.e. /usr/local/zeus), where you saved your license key.
You might use the tar command:

```
tar -zxvf ZeusTM_60r3_Linux-x86.tgz
```

- **2.3** Change to the new Zeus directory:

```
• cd ZeusTM_60r3_Linux-x86
```

```
total 101048
-rw-rw-r-- 1 root sys 8355840 2010-01-20 07:42 admin-6.0r3.tar
drwxrwxr-x 4 root sys 4096 2010-01-20 07:42 common
-r--r--r-- 1 root sys 24677 2010-01-20 07:42 LICENSE
-rw-rw-r-- 1 root sys 1801 2010-01-20 07:42 MANIFEST
-r--r--r-- 1 root sys 5105 2010-01-20 07:42 README
-r--r--r-- 1 root sys 122416 2010-01-20 07:42 RELEASE_NOTES
-r--r--r-- 1 root sys 838058 2010-01-20 07:42 Zeus_6.0_Software_Getting_Started.pdf
-r--r--r-- 1 root sys 3700472 2010-01-20 07:42 Zeus_6.0_User_Manual.pdf
-r-xr-xr-x 1 root sys 9008 2010-01-20 07:42 zinstall
-rw-rw-r-- 1 root sys 54958080 2010-01-20 07:42 zxtm-6.0r3.tar
-rw-rw-r-- 1 root sys 16916480 2010-01-20 07:42 zxtmadmin-6.0r3.tar
-rw-rw-r-- 1 root sys 10240 2010-01-20 07:42 zxtmadmin_lang_en_gb-6.0r3.tar
-rw-rw-r-- 1 root sys 18503680 2010-01-20 07:42 zxtmadmin_lang_en_us-6.0r3.tar
```

3. Installing Zeus Software

This section covers the software installation.

- **3.1** From the Zeus install directory (see step 2.3), run the installer by entering the command

```
./zinstall
```

- **3.2** Read through the product license, press return to read to the end. Type in "accept" to continue with the installation.

12.10 Contracts (Rights of Third Parties) Act. The Contracts (Rights of Third Parties) Act 1999 shall not apply to this Agreement and nothing in this Agreement confers or purports to confer on any third party any benefit or any right to enforce any term of this Agreement or operates to give any third party the right to enforce any term of this Agreement except as expressly provided herein.

Enter `accept` to accept this license, or press return to abort: **accept**

- **3.3** You'll be prompted for an installation path. Press **Enter** to accept the default path `/usr/local/zeus`.

Enter `accept` to accept this license, or press return to abort: accept

Where should the product be installed? **[/usr/local/zeus]:**



You can install the software anywhere on your file system, but you should not install it in the same directory as any other Zeus products.

- **3.4** The Zeus software is now installed, you're prompted to continue with the setup. Click **Enter** to proceed.

```
This program will install the Zeus Traffic Manager product.  
Installing zxtm-6.0r3..  
Installing admin-6.0r3..  
Installing zxtmadmin-6.0r3..  
Installing zxtmadmin_lang_en_us-6.0r3..  
Installing zxtmadmin_lang_en_gb-6.0r3..
```

Zeus Traffic Manager is now installed in `/usr/local/zeus`.

Are you ready to perform the initial configuration now ? (Y/N) [Y]:

If you choose to complete the configuration later, you can return to this point in the setup by running

```
<ZEUSHOME>/zxtm/configure
```

- **3.5** Enter the absolute path to the Zeus software license key (we'll have provided this in an email) and click **Enter**.

Are you ready to perform the initial configuration now ? (Y/N) [Y]: Y

Running /usr/local/zeus/zxtm/configure

Zeus Configuration Program - Copyright (C) Zeus Technology 2010

This program will perform the initial configuration of the Zeus Traffic Manager.

This product requires a valid license key file to run. It will run in unlicensed mode if none is supplied.

Enter the key filename, or leave blank for unlicensed mode: /usr/local/zeus/ztm.key

Copying license key... done



If you continue to install without referencing a license key, you'll complete the installation in "**unlicensed mode**", in which the software will start, but will not allow you to configure and run any services.

- **3.6** Enter an owning *user* and *group* for the zxtm process, or click **Enter** to leave it unrestricted.

Copying license key... done

Choose a UNIX user for the zxtm process to run as [nobody]:

Choose a UNIX group for the zxtm process to run as [nobody]:



The Zeus software must be configured and started as root, but it can be run as any user. Running the process with no privileges ensures that it can never be used to compromise the security of your system.

- **3.7** The management of the Zeus software can be restricted to a single IP for improved security. To restrict management access to a single IP, enter **Y**. Otherwise enter **N**.

Zeus Traffic Manager can be configured to only allow management on one specific IP address. This restricts all admin server access, SOAP management and other control information to this IP. This setup is useful if you want to completely separate your public and private networks.

Would you like to restrict Zeus Traffic Manager management to one IP? Y/N [N]: **Y**

- **3.8** If you selected **Y** in step **3.8** you'll be prompted for the IP address on which the Zeus software can be managed.

Please enter the IP address to use: **10.2.5.62**

- **3.9** For the first installation you'll be creating a new cluster, option "**C**". Just press **Enter**.

Searching for Zeus Traffic Manager clusters... done

Which Zeus Traffic Manager cluster should this installation be added to?

C) Create a new cluster

1) Cluster 1:localhost:9090

S) Specify another machine to contact

R) Refresh the cluster list

Select option [C]: **█**

The Zeus installer is able to detect pre-existing Zeus clusters on the network. When installing additional load balancers, you're able to add them automatically to a pre-existing cluster. If you add the load balancer to an existing cluster, it will automatically inherit the settings of the load balancers already in the cluster.

- **3.10** Select a password to use when logging in to the Zeus Administration Server. The Username is automatically "**admin**".

Please choose a password for the admin server:
Re-enter:

- **3.11** To set the Zeus software to automatically start when the server boots, enter "Y". Otherwise, enter "N".

Zeus Traffic Manager can be installed so that it automatically runs when this computer boots.

```
Would you like Zeus Traffic Manager to start at boot time? Y/N [Y]: Y
```

```
Start script linked into /etc/rc5.d/S85zeus
```

```
Configuration successful
```

```
Starting Zeus Traffic Manager Software... █
```

- **3.12** The setup configuration is now complete. The Zeus software will start up and you'll be directed to the web interface of the Zeus Administration Server.

```
Configuration successful
```

```
Starting Zeus Traffic Manager Software... OK
```

```
**  
** To configure the Zeus Traffic Manager, please go to  
** localhost:9090  
** and login as 'admin' with your admin password  
**
```

```
Please read the release notes (/usr/local/zeus/zxtm/RELEASE_NOTES)
```

```
[root@Fed11-2 ZeusTM 60r3 Linux-x86]# █
```

Open a browser and point it at

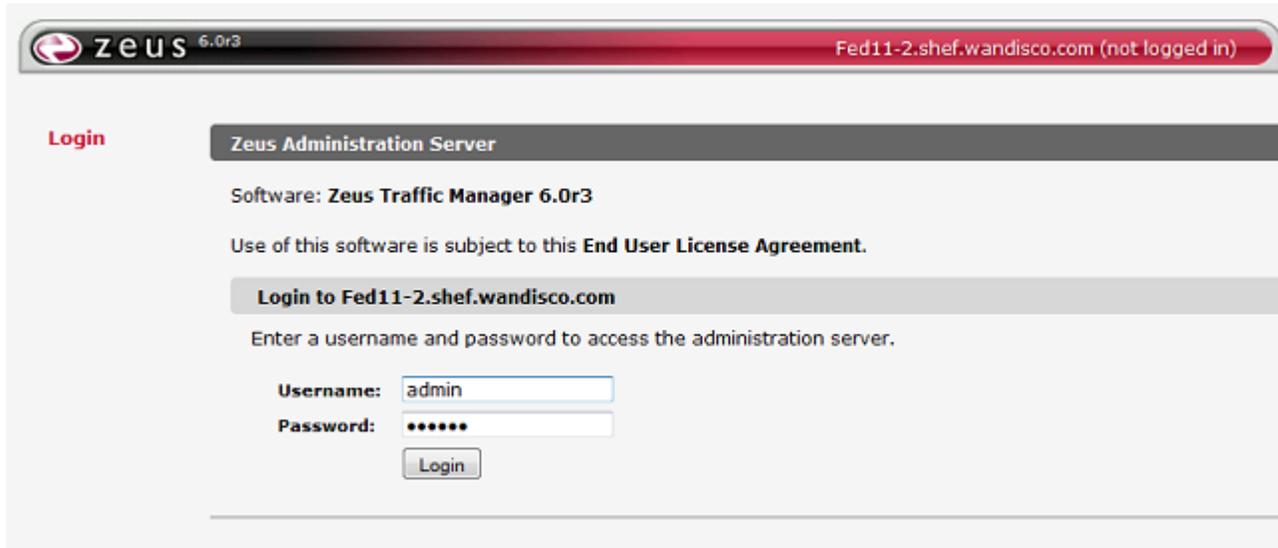
```
https://<Server IP or hostname>:9090/
```

When you access the website for the first time you will see an error message because of the invalid SSL certificate. Nevertheless, the connection is completely encrypted and you can safely confirm the error message.

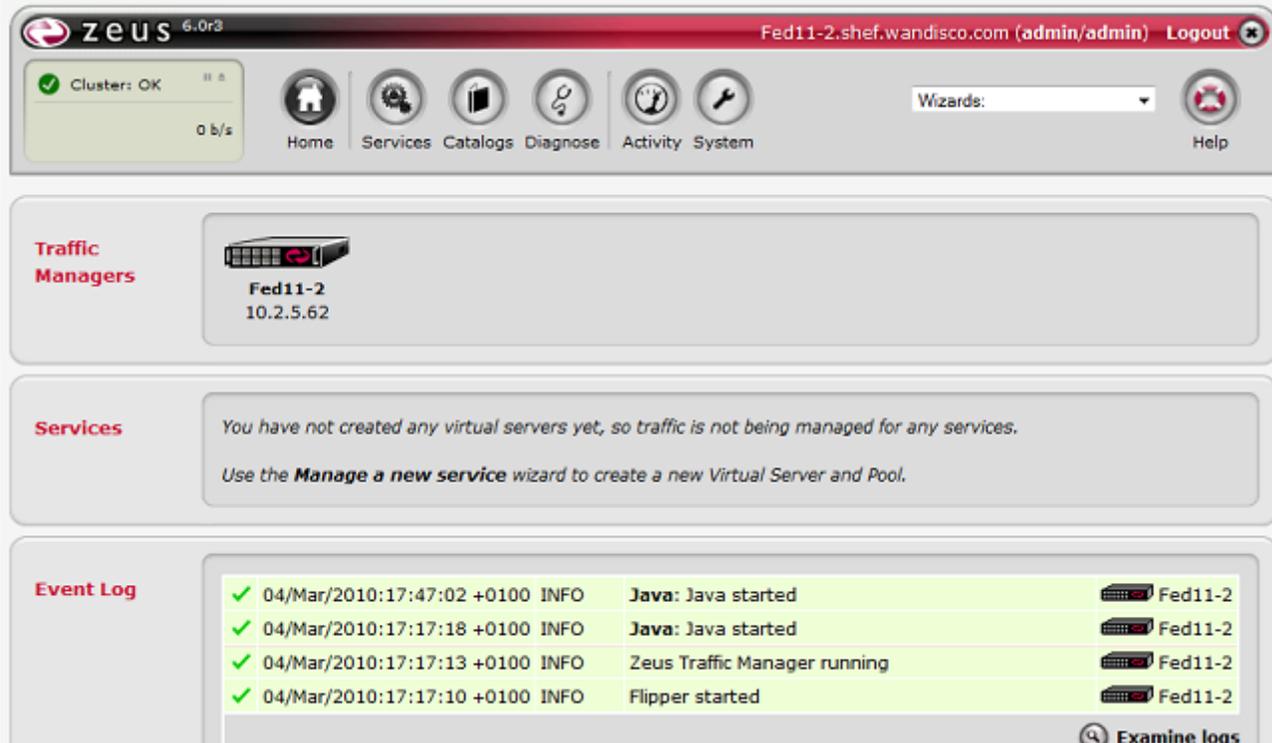
4. Integrate Zeus Software with WANdisco

This section covers the software installation.

- **4.1** Enter the Zeus Administration Server with the Username "**admin**" and the password that you provided in step **3.11**. Click **Login**.



- **4.2** The Zeus Administration Server is broken down into four areas, The *Menu bar*, *Traffic Managers Bar*, *Services* and *Events Log*. Click on the **Help** button on the menu bar for a brief explanation of what everything does.



- **4.3** Next, add a service, using the first option "**Manage a new service**" from the "*Wizards:*" drop-down menu.



- **4.4** A pop-up window will appear, beginning a series of 4 steps for adding a new service (virtual server). Click **Next**.

Manage a new Service, step 1 of 4

1. Manage a new Service

This wizard will guide you through the process of managing a new service.

It will require information such as the type of service to be managed and the back-end nodes that the service will be balanced to.

Cancel

<- Back

Next ->

- **4.5** Enter a name for the service, and confirm what protocol and port it will use.

Manage a new Service, step 2 of 4

2. Specify the service

Please enter a brief name to identify the service you would like to balance.

Name:

Please select the protocol that the service uses.

Protocol:

Please specify the port that the protocol listens on.

Port:

- 4.6 Enter the IP address and port for each of your WANdisco nodes.

Manage a new Service, step 3 of 4

3. Specify the back-end nodes

Please enter the hostname and port of each node:

Hostname: Port:

Nodes:

To remove a node from the list, select it and press 'Remove node':

- 4.7 The wizard ends with a Summary of your settings. In example shown below it confirms that web (port80) traffic will be load balanced across the cluster on a selected port (in this case, port 5000). Click **Finish** to close the wizard and return to the main screen.

Manage a new Service, step 4 of 4

4. Summary

You have chosen to create a virtual server with the following settings:

Description: `Wandisco SVN Traffic`

Protocol: `http, port 80`

This virtual server will balance traffic onto the following nodes:

Nodes: `10.2.5.25:80`

To create this service, press 'Finish'. To change your settings, press 'Back'.

- **4.8** You need to make a change to the default settings of the WANdisco service you just created. Click on the title link on the *Default Pool*.

The screenshot shows the Zeus 6.0r3 web interface. The top navigation bar includes 'Home', 'Services', 'Catalogs', 'Diagnose', 'Activity', and 'System'. A 'Wizards:' dropdown menu and a 'Help' icon are also present. The main content area is divided into two sections: 'Traffic Managers' and 'Services'. Under 'Traffic Managers', there is a card for 'Fed11-2' with IP '10.2.5.62'. Under 'Services', there is a card for 'Wandisco SVN Traffic' (HTTP (5000)) which is 'Running'. A sub-card for 'Wandisco SVN Traffic' (Default Pool) is highlighted in green and shows 'All nodes are OK'.



WANdisco's replication technology doesn't support the load balancing of a single session, applying IP-based session persistence ensures that each client session is pinned to a single node in the cluster.

- **4.9** On the Pool's settings, click **Edit** on the **Session Persistence** bar.

Pools Pool: Wandisco SVN Traffic (HTTP, 1 node) [Unfold All / Fold All](#)

Virtual servers that use this pool:  **Wandisco SVN Traffic** Pools that use this pool as their failure pool: *none*

Last Modified: 5 Mar 2010 16:51

- ▶ **Basic Settings**
The basic settings specify the nodes that the pool is balancing traffic to.
- ▶ **Load Balancing** ▶ Edit
Load Balancing controls how the pool distributes traffic across its nodes.
- ▶ **Session Persistence** ▶ Edit
Session Persistence controls how the pool ensures that client sessions are consistently directed to the same nodes.
- ▶ **Bandwidth Management** ▶ Edit
A Bandwidth Management Class in a Pool limits the upstream bandwidth to the backend nodes.
- ▶ **Health Monitoring** ▶ Edit
Adding monitors to a pool enables the status of backend nodes to be known more accurately.
- ▶ **SSL Settings** ▶ Edit
Enable and configure SSL encryption between the pool and its back-end nodes.
- ▶ **Connection Management** ▶ Edit

- **4.10** Click on the **Create New Session Persistence Class** link.

zeus 6.0r3 Fed11-2.shef.wandisco.com (admin/admin) Logout

Cluster: OK Wizards:

Home Services Catalogs Diagnose Activity System Help

Configuring: [Traffic IP Groups](#) [Virtual Servers](#) [Pools > Wandisco SVN Traffic > Session Persistence](#) [Config Summary](#)

Edit Session Persistence Pool: Wandisco SVN Traffic (HTTP, 1 node)

Session Persistence ensures that all requests from a client will always get sent to the same node.

You are not using a Session Persistence class with this pool.

Choose Session Persistence Class

There are no Session Persistence classes to choose from.

▶ **Create New Session Persistence Class**

- **4.11** Enter a name, such as **"IP Persistence"**, click on the checkbox to associate the persistence with the WANDisco pool, then click the **Create Class** button.

zeus 6.0r3 Fed11-2.shef.wandisco

Cluster: OK 0 b/s

Home Services Catalogs Diagnose Activity System

Catalogs: Rules Java Monitors SSL Protection **Persistence** Bandwidth SLM

Session Persistence Catalog

The Session Persistence Catalog contains a set of classes which control how to identify the same node.

Your Session Persistence catalog is empty.

Create new Session Persistence class

Name: IP Persistence

Create Class and associate it with pool **Wandisco SVN Traffic**

- **4.12** Set the basic settings of the Persistence, by assigning the following values using the radio buttons.
 - Which session method should be used? **IP-based persistence**
 - What action should the pool take if the session data is invalid or cannot contact the node specified by the session? **Choose a new node to use**
 - When a session failure occurs, should the session be deleted? **Yes**

Name:

Which session persistence method should be used?

type: **IP-based persistence**
Send all requests from the same source address to the same node.

What action should the pool take if the session data is invalid or it cannot contact the node specified by the session?

failuremode: Choose a new node to use
 Redirect the user to a given URL ...
 Close the connection (using error_file on Pools > Edit > Connection Management)

When a session failure occurs, should the session be deleted?
(Note, a **failuremode** of choosing a new node implicitly deletes the session).

delete: Yes No

A note, used to describe this class

note:

- **4.13** Click the **Update** button to Apply Changes.

A note, used to describe this class

note:

Apply Changes

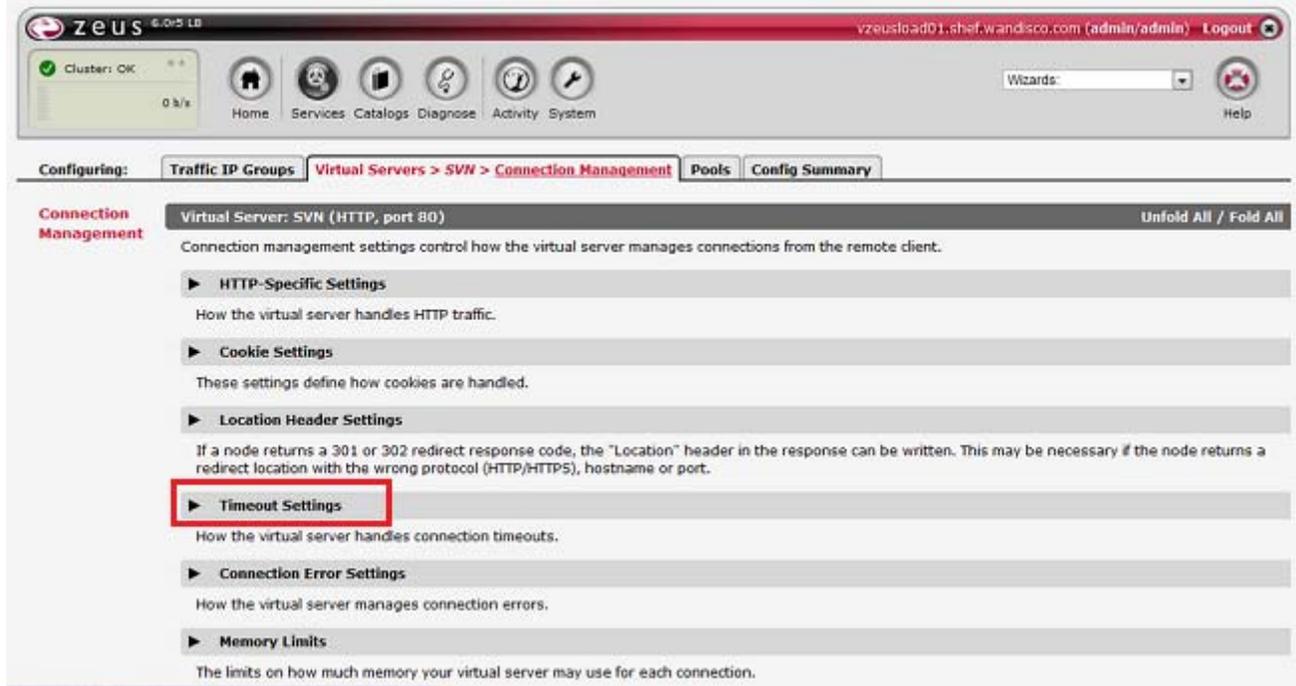
Save As New Class

- 4.14 Confirm that the configuration update has been accepted.

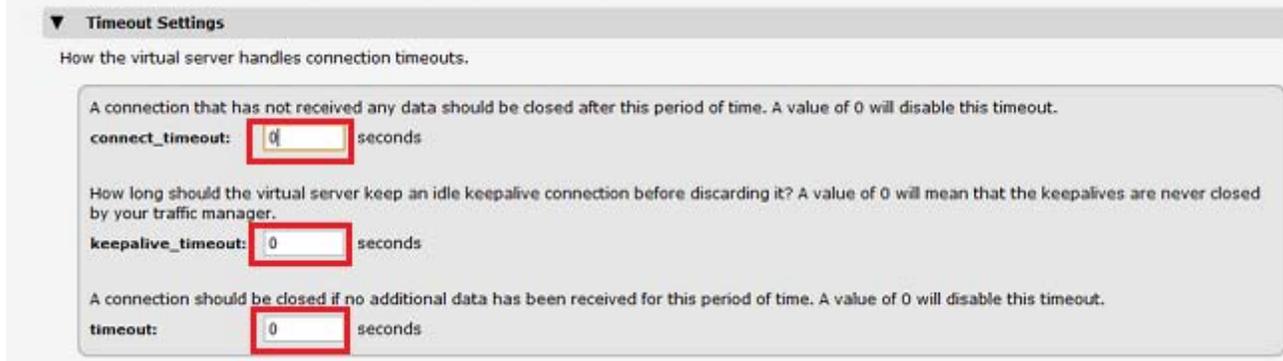


The Zeus software has been successfully set up. You should repeat the process for any additional load balancers you wish to add to the cluster.

- 4.15 Back on the Pool's settings screen, edit the **Timeout Settings**.

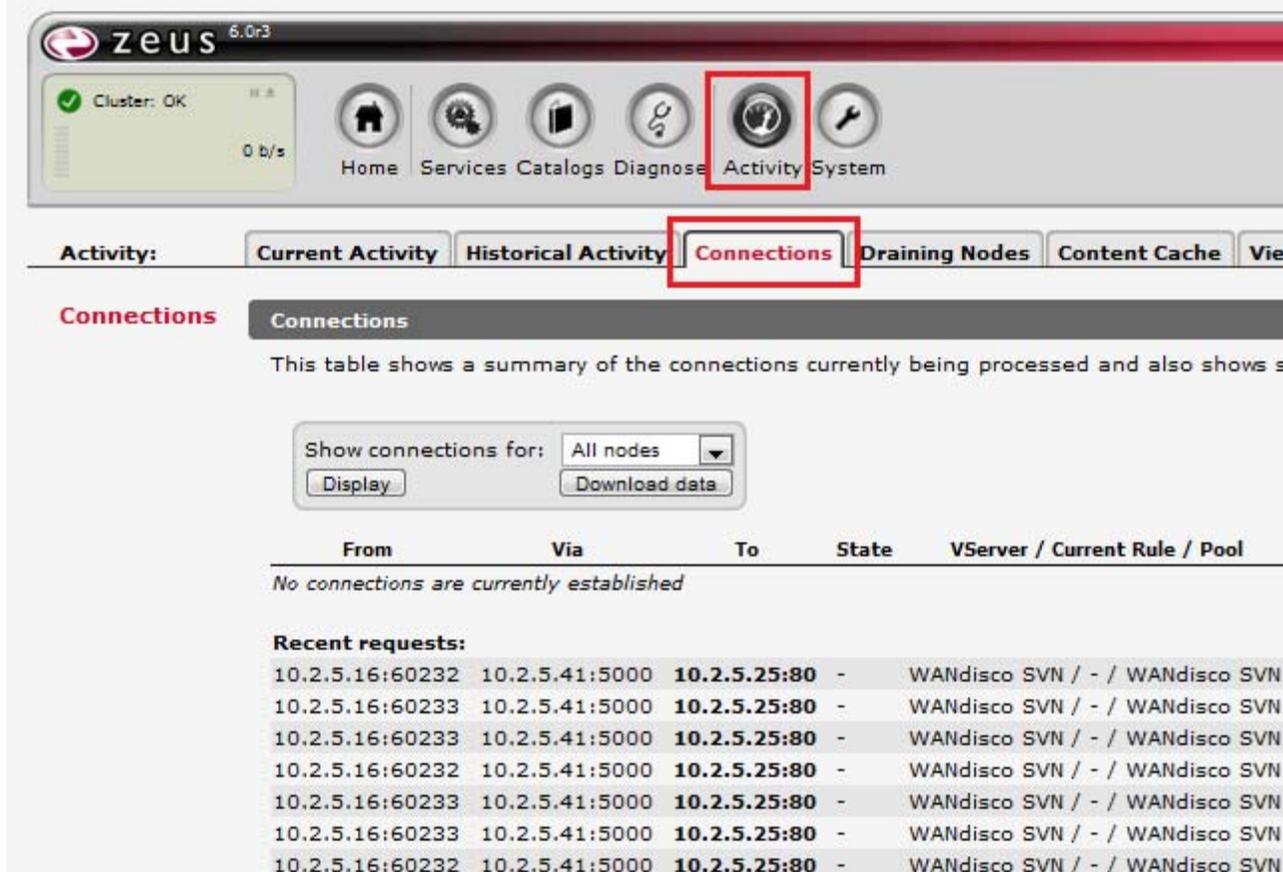


- **4.16** Update the **connect_timeout**, **keepalive_timeout** and **timeout** values to **0**. Then click **Update** under the 'Apply Changes' at the bottom of the screen.



- **4.17** Test that the Zeus software is handling traffic. Browse to one of your WANdisco nodes, using the port you assigned for load balancing (port 80 was used as an example in step 4.5 although it can be any port).

You'll be able to access the node on the load balancing port, and also see the traffic management details by viewing the **Connections** tab on the **Activity** section of the Zeus Administration Server screen.



The Zeus software has been successfully set up. You should repeat the process for any additional load balancers you wish to add to the cluster

5. Basic Operations

Stopping Zeus Software

You can stop the software running by running the following command (as root):

```
<ZEUSHOME>/stop-zeus
```

Starting Zeus Software

The Zeus software starts automatically at the end of the configuration sequence. Having stopped the software you can restart it using the following command (as root):

```
<ZEUSHOME>/start-zeus
```

Changing the Zeus Software configuration

You can re-run the configure script to change any or all of the settings that were chosen in [section 4](#). or you can use it to remove the software cleanly from your machine and any cluster it was in, before clearing the installation files from your machine.

```
<ZEUSHOME>/zxtm/configure
```

Installing a new Zeus license

You don't need to have a valid license installed in order to start the Zeus service or web interface, however, you should use this procedure to install your license before going into production.

1. Open the Zeus web interface and click on the **System** button on the top menu bar.



2. Click on the **Licenses** tab.

The screenshot shows the Zeus 6.0r4 web interface. At the top, there is a navigation bar with the Zeus logo and version number, the current user 'localhost.localdomain (admin/admin)', and a 'Logout' button. Below this is a status bar showing 'Cluster: OK' and '0 b/s'. A row of icons for 'Home', 'Services', 'Catalogs', 'Diagnose', 'Activity', and 'System' is present, along with a 'Wizards' dropdown menu and a 'Help' icon. A horizontal menu below the navigation bar contains tabs for 'Traffic Managers', 'Alerting', 'SNMP', 'Security', 'Users', 'Backups', 'Licenses', and 'Global Settings'. The 'Licenses' tab is highlighted with a red box. The main content area shows the 'Traffic Managers' section with a server icon and the following details:

System:	Linux localhost.localdomain 2.6.18-164.el5 #1 SMP Thu Sep 3 03:33:56 EDT 2009 i686
Software:	Version 6.0r4, Build date: Feb 10 2010 09:17:17
Architecture:	x86
License Serial:	20069
Installed at:	/usr/local/zeus

3. Click on **Browse** and [find your license key file](#). Then Click **Install Key**.

The screenshot shows the 'Install new License Key' form in the Zeus interface. At the top, there is a 'Remove Selected Keys' button. Below it is a section titled 'Install new License Key'. This section contains a 'Key file:' label followed by an empty text input field and a 'Browse...' button. The entire 'Key file:' input area is highlighted with a red box. Below the input field is an 'Install Key' button.

4. You can now view your license details by clicking on the small triangle next to the license entry. Should you need to, you can remove the license by clicking on the

checkbox and clicking the **Removed Selected Keys** button.

The following license keys are installed on your traffic manager:

License Serial	Details	Remove
200	<input type="checkbox"/> Used by traffic managers: localhost.localdomain Product: Zeus Traffic Manager Platforms: Linux Issued: Wed Feb 24 00:00:00 2010 Expires: Tue Aug 31 11:00:00 2010 Cluster size: unlimited Additional Info: ▶ Customer Info: NFR License Customer ID: CCPI	<input type="checkbox"/>

Remove Selected Keys

6. Setting up IP Sharing

With IP sharing you can ensure that the multi-hosted IP module shares incoming data traffic for an IP address across multiple hosts in a cluster. This has the advantage of evening out the load distributed across every active node, even when some nodes have failed.

Single-hosted traffic IPs often end up with an uneven distribution of load when failure occurs, as an entire IP's load is transferred to a single machine when the original host fails.

Requirements

- **Operating system:** Linux
- **Kernal Versions:** 2.6.8.1 - 2.6.31
- **Zeus Software Version:**
 - **IP Transparency:** 4.0 or higher
 - **Multi-hosted IPs:** 6.0 or greater
- [IP Transparency module \(ztrans\)](#) (click to download)

6.1 Install Zeus on two machines.

6.2 Install the IP Transparency module: ([ztrans](#))

6.3 Ensure the kernel headers package is installed for the kernel/distribution you are using.

6.4 Unpack the Zeus modules tarball, and cd into the directory created:

```
•  
• # tar -xzf zeus_modules_installer-2.1.tgz; cd  
zeus_modules_installer-2.1
```

6.5 To install all modules, login as root, run the installation script "*install_modules.pl*":

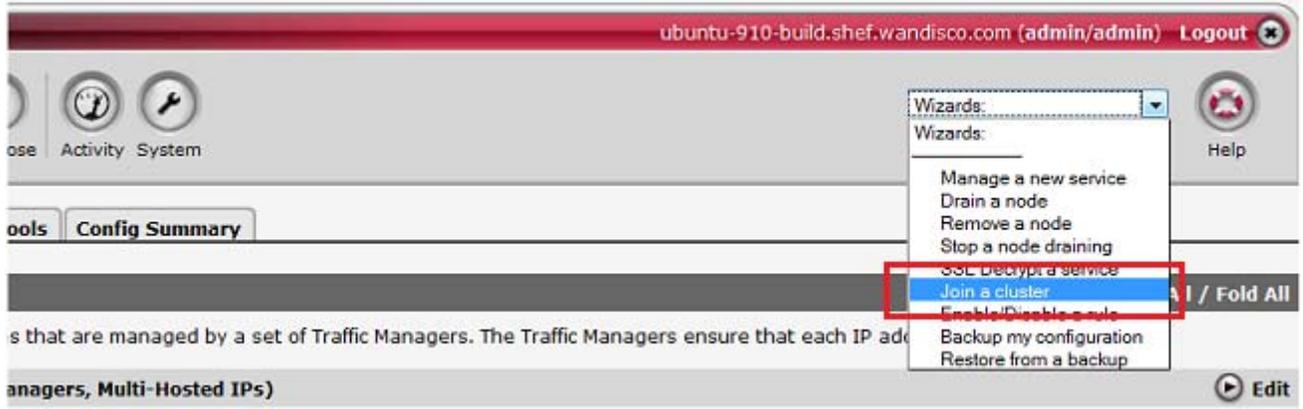
```
•  
• # ./install_modules.pl
```

6.6 The script will attempt to build and install both the kernel modules, and should give you a helpful error message if it fails. If you have problems, see the [Kernel Modules installation guide PDF](#) provided by Zeus.

6.7 Restart Zeus on both nodes:

```
•  
• # /etc/init.d/zeus restart
```

6.8 Check both Zeus nodes are running, then from the Zeus Administration Server click on the drop-down wizard and select **Join a cluster**



6.9 Follow the wizard to complete the clustering, selecting which other Zeus node you wish to join in the new cluster.

6.10 It's now time to configure a traffic IP group. From the Zeus Administration Server go to **Services > Traffic IP Groups**.

6.11 Under the "Create a new Traffic IP Group" section fill in as a per this screenshot:

The screenshot shows the 'Create a new Traffic IP Group' form. The 'Name' field is filled with 'SharedIP'. The 'Traffic Managers' section contains a table with two entries:

Traffic Manager	Add
ubuntu-910-build.shef.wandisco.com 10.2.6.80	<input checked="" type="checkbox"/>
vzeusload01.shef.wandisco.com 10.2.2.50	<input checked="" type="checkbox"/>

The 'IP Addresses' field is filled with '10.2.2.192'. The 'IP Mode' section has two radio buttons: 'Raise each address on a single machine (Single-Hosted mode)' and 'Raise each address on every machine in the group (Multi-Hosted mode) - IPv4 only ...'. The second option is selected. Below it, the 'Multicast IP to share data with' field is filled with '239.101.1.2'. A 'Create Traffic IP Group' button is at the bottom.

6.12 Once you have a traffic IP group you can bind services to it as shown below:

The screenshot displays the configuration page for a Virtual Server named 'SVN (HTTP, port 80)'. The breadcrumb navigation shows 'Traffic IP Groups > Virtual Servers > SVN > Pools > Config Summary'. The server is associated with 'SVN Servers' (Default) pools. The 'Basic Settings' section is expanded, showing the following configuration:

- Name: SVN
- Internal Protocol: HTTP
- Port: 80
- Default Traffic Pool: SVN Servers
- Listening on: Traffic IP Groups ...

Traffic IP Group	Select
Test	<input checked="" type="checkbox"/>
Domain names and IP addresses ...	<input type="checkbox"/>

Notes: [Empty text area]

Update

6.13 IP Sharing is now set up.
For more information visit the [Zeus Knowledge Hub](#)

Troubleshooting

The following articles may help you if you problems relating to your Zeus IP Sharing:

- [Why Can't users connect to my multi-host?](#)
- [Multi-hosted IP addresses with Zeus Software](#)
- [Zeus Timeout Settings](#)

7. Installing the node monitoring script

We provide a script, `zeus_read_only_monitor.pl` that can be used to monitor the status of your cluster nodes, should a node become read-only, the Zeus software will then drop the node from the pool to ensure continued load balancing of the remaining nodes. Once you have the script, follow this procedure to install it. The monitoring script has been tested on Zeus Software up to version 3.7.10. Contact us if you need to run the monitor on a later version.

7.1 Copy the script `zeus_read_only_monitor.pl` to your Zeus server, placing it here:

```
/usr/local/zeus/<zxlb-(version) or zxtm-  
(version)>/conf/scripts/
```

e.g. `/usr/local/zeus/zxtm-6.0r4/conf/scripts`

7.2 Go to the Zeus web interface, e.g.

```
https://<Server IP or hostname>:9090/
```

7.3 Click on the **Catalogs** link.



7.4 Click on the **Monitors** tab.



7.5 Go to the bottom of the Monitors screen and complete the **Create new monitor** form.

Create new monitor

Name: **Monitor name**

The actual internal monitor type to use

type:

- Ping monitor
- TCP Connect monitor
- HTTP monitor
- TCP transaction monitor
- External program monitor ...
- SIP monitor
- RTSP monitor

Program:

Select the script from the dropdown

The scope of the monitor - does it affect each node separately, or does it affect all the nodes

scope:

- Monitor each node separately
- Monitor one machine only (pool-wide monitor) ...

Name: Enter a name for the monitor.

type: Select **External program monitor...** and then select the **read_only_monitor.pl** script from the dropdown.

scope: Select **Monitor each node separately**, then click **Create Monitor**. The page will refresh to confirm that the configuration has been updated.

7.6 Click on the **Services** button.

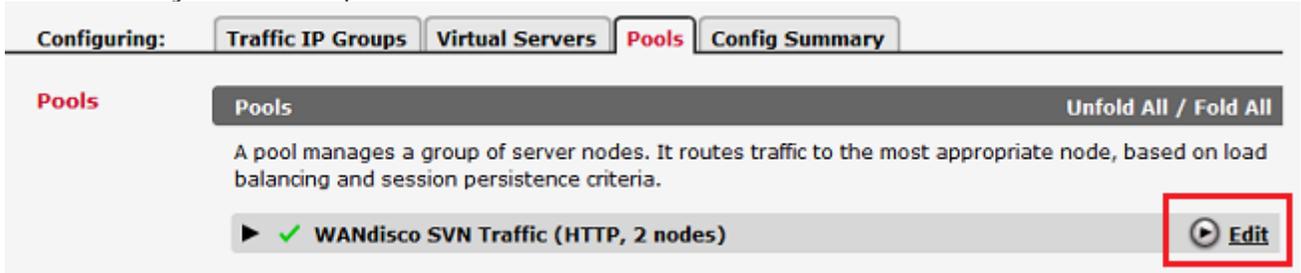


7.7 Click on the **Pools** tab.



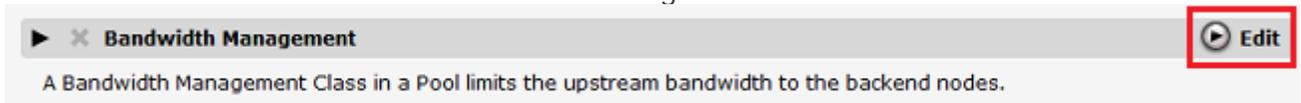
The screenshot shows the Zeus 6.0r4 web interface. At the top, there is a navigation bar with the Zeus logo, version 6.0r4, and the user information 'localhost.localdomain (admin/admin) Logout'. Below the navigation bar, there is a status bar showing 'Cluster: OK' and '0 b/s'. The main navigation area contains several icons: Home, Services, Catalogs, Diagnose, Activity, System, and Help. Below this, there is a 'Configuring:' section with tabs for 'Traffic IP Groups', 'Virtual Servers', 'Pools', and 'Config Summary'. The 'Pools' tab is highlighted with a red box. Below the tabs, there is a section for 'Virtual Servers' with a description: 'A virtual server accepts network traffic and processes it. It normally gives each connection to a pool; the pool then forwards the traffic to a server node.'

7.8 Click on your chosen pool's **Edit** link.



The screenshot shows the Zeus 6.0r4 web interface with the 'Pools' tab selected. The 'Configuring:' section has tabs for 'Traffic IP Groups', 'Virtual Servers', 'Pools', and 'Config Summary'. Below the tabs, there is a section for 'Pools' with a description: 'A pool manages a group of server nodes. It routes traffic to the most appropriate node, based on load balancing and session persistence criteria.' Below the description, there is a list of pools. The first pool is 'WANdisco SVN Traffic (HTTP, 2 nodes)' with a green checkmark. The 'Edit' link for this pool is highlighted with a red box.

7.9 Click on the **Edit** link for the Health Monitoring section.



The screenshot shows the Zeus 6.0r4 web interface with the 'Pools' tab selected. The 'Configuring:' section has tabs for 'Traffic IP Groups', 'Virtual Servers', 'Pools', and 'Config Summary'. Below the tabs, there is a section for 'Bandwidth Management' with a description: 'A Bandwidth Management Class in a Pool limits the upstream bandwidth to the backend nodes.' The 'Edit' link for this section is highlighted with a red box.

7.10 Select your new monitor from the dropdown and click **Add Monitor**. Ensure that the Passive monitoring is set to **Yes**, if not select it and click **Update**.

The screenshot shows a configuration page for a monitor pool. At the top, a dark header bar contains the text "Pool: WANdisco SVN Traffic (HTTP, 2 nodes)". Below this, a light gray box contains the text "Monitors watch the nodes in a pool, and inform the traffic manager if the nodes are functioning correctly." and "No monitors have been registered to watch this pool." Below this is a section titled "Add new monitor" with a dropdown menu showing "ReadOnlyCheck" and an "Add Monitor" button. Below that is a section titled "Passive monitoring" with explanatory text and a "passive_monitoring:" label with radio buttons for "Yes" (selected) and "No". At the bottom of the "Passive monitoring" section is an "Update" button. Red boxes highlight the "ReadOnlyCheck" dropdown, the "Add Monitor" button, the "Yes" radio button, and the "Update" button.

The monitor script is now installed. It's important that if you upgrade your version of the Zeus software that you check back with WANdisco to ensure that the script remains compatible

8. Getting more help

Documentation

You can download a copy of the [Zeus software User Manual](#) for information about advanced configuration, function and troubleshooting.

Knowledge Hub

Go to the Zeus Knowledge Hub <http://knowledgehub.zeus.com/docs> for support, knowledgebase articles and further documentation.