



Ellucian Banner

Deployment Guide

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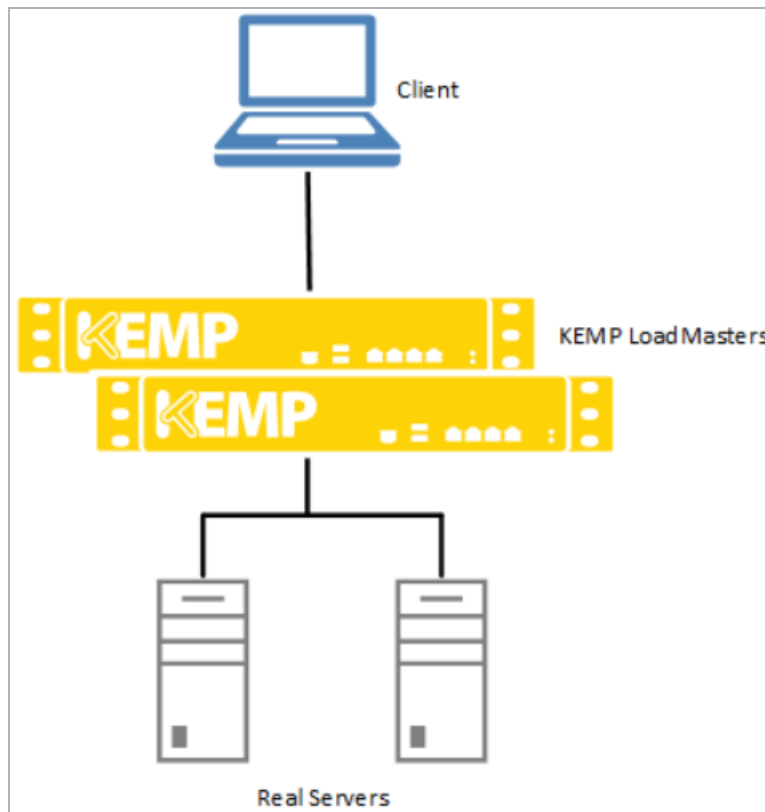
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1 Introduction

Banner® by Ellucian is the world's leading higher education Enterprise Resource Planning (ERP) system —the solution of choice for almost 1,400 institutions in 40 countries. With the industry's most comprehensive set of features and future-ready technology, Banner strengthens every major workflow in higher education, from student recruiting and retention to talent attraction and management.



The LoadMaster offers advanced Layer 4 and Layer 7 server load balancing, SSL Acceleration and a multitude of other advanced Application Delivery and Optimization (ADC) features. The Kemp LoadMaster can load balance the Ellucian Luminis Banner workload. The LoadMaster intelligently and efficiently distributes user traffic among the application servers so that users get the best experience possible.

This document provides guidance and recommended settings on how to load balance Ellucian Luminis Banner with a Kemp LoadMaster. The Kemp Support Team is available to provide solutions for scenarios not explicitly defined.

1 Introduction

The Kemp support site can be found at: <https://support.kemptechnologies.com>.

2 Template

Kemp has developed a template containing our recommended settings for this workload. You can install this template to help create Virtual Services (VSs) because it automatically populates the settings. You can use the template to easily create the required VSs with the recommended settings. You can remove templates after use and this will not affect deployed services. If needed, you can make changes to any of the VS settings after using the template.

Download released templates from the following page: [LoadMaster Templates](#).

For more information and steps on how to import and use templates, refer to the [Virtual Services and Templates, Feature Description](#).

3 Configure the LoadMaster

Follow the steps in the sections below to configure the LoadMaster with the recommended settings to load balance the Ellucian Luminis Banner workload.

3.1 Enable Subnet Originating Requests Globally

It is best practice to enable the **Subnet Originating Requests** option globally.

In a one-armed setup (where the Virtual Service and Real Servers are on the same network/subnet) **Subnet Originating Requests** is usually not needed. However, enabling **Subnet Originating Requests** should not affect the routing in a one-armed setup.

In a two-armed setup where the Virtual Service is on network/subnet A, for example, and the Real Servers are on network B, **Subnet Originating Requests** should be enabled on LoadMasters with firmware version 7.1-16 and above.

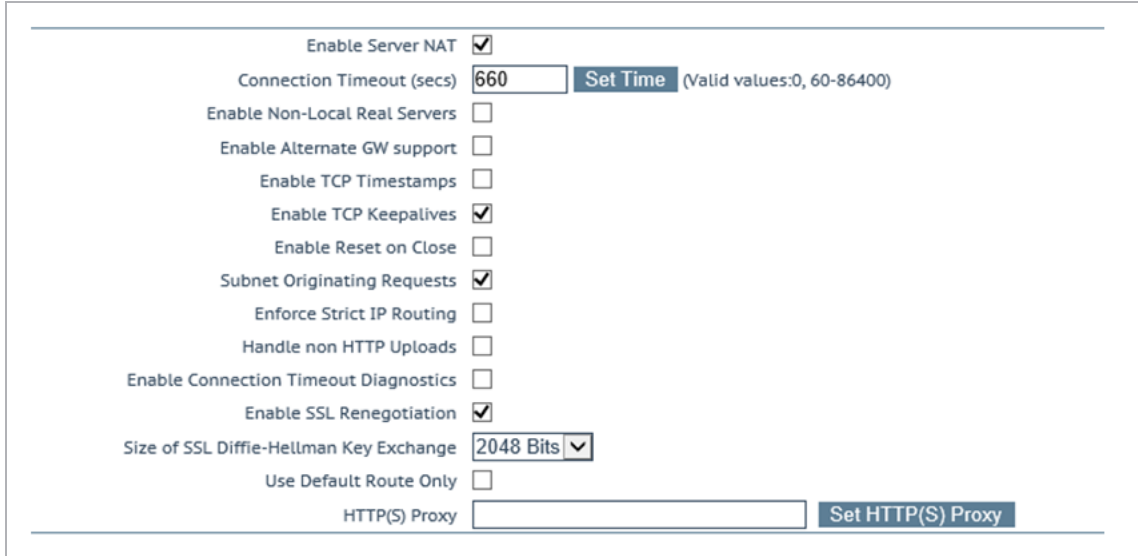
When **Subnet Originating Requests** is enabled, the LoadMaster routes traffic so that the Real Server sees traffic arriving from the LoadMaster interface that is in that network/subnet.

When **Subnet Originating Requests** is enabled globally, it is automatically enabled on all Virtual Services. If the **Subnet Originating Requests** option is disabled globally, you can choose whether to enable **Subnet Originating Requests** on a per-Virtual Service basis.

To enable **Subnet Originating Requests** globally, follow the steps below:

1. In the main menu of the LoadMaster Web User Interface (WUI), go to **System Configuration > Miscellaneous Options > Network Options**.

3 Configure the LoadMaster



The screenshot shows a configuration window with the following settings:

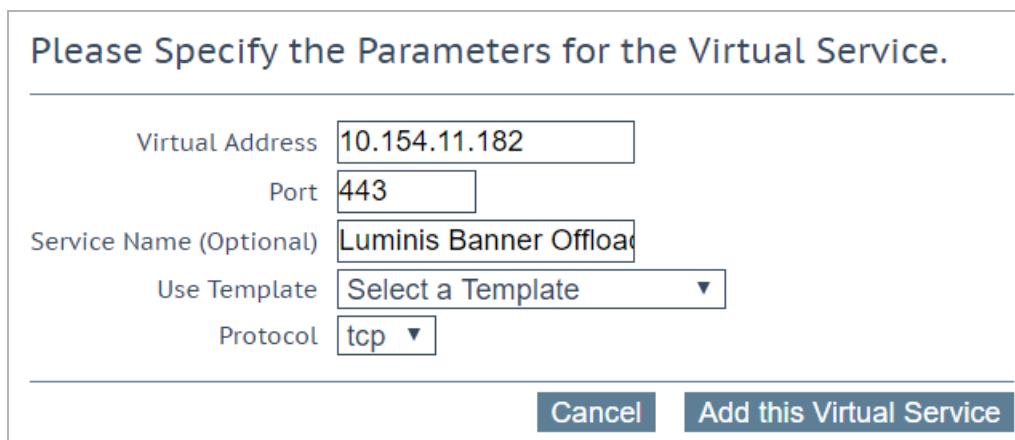
- Enable Server NAT: ☒
- Connection Timeout (secs): [Set Time](#) (Valid values:0, 60-86400)
- Enable Non-Local Real Servers: ☐
- Enable Alternate GW support: ☐
- Enable TCP Timestamps: ☐
- Enable TCP Keepalives: ☒
- Enable Reset on Close: ☐
- Subnet Originating Requests: ☒
- Enforce Strict IP Routing: ☐
- Handle non HTTP Uploads: ☐
- Enable Connection Timeout Diagnostics: ☐
- Enable SSL Renegotiation: ☒
- Size of SSL Diffie-Hellman Key Exchange:
- Use Default Route Only: ☐
- HTTP(S) Proxy: [Set HTTP\(S\) Proxy](#)

2. Select the **Subnet Originating Requests** check box.

3.2 Create the Luminis Banner Offloaded Virtual Service

Follow the steps below to create and configure the recommended settings for the Luminis Banner Offloaded Virtual Service:

1. In the main menu of the LoadMaster Web User Interface (WUI), go to **Virtual Services > Add New**.



The dialog box contains the following fields and buttons:

- Virtual Address:
- Port:
- Service Name (Optional):
- Use Template:
- Protocol:
- [Cancel](#) button
- [Add this Virtual Service](#) button

2. Type a valid IP address in the **Virtual Address** text box.
3. Type **443** in the **Port** text box.
4. Enter a recognizable **Service Name**, for example **Luminis Banner Offloaded**.

3 Configure the LoadMaster

5. Ensure **tcp** is selected as the **Protocol**.
6. Click **Add this Virtual Service**.
7. Configure the settings as shown in the following table:

Section	Option	Value	Comment
Standard Options	Persistence Mode	Source IP Address	
	Timeout	1 Hour	
	Scheduling Method	least connection	
	Idle Connection Timeout	660	
SSL Properties	SSL Acceleration	Enabled	
	Supported Protocols	TLS1.0	While this workload may not support TLS1.3 yet, Kemp recommend enabling it for future proofing.
		TLS1.1	
		TLS1.2	
		TLS1.3	
	Cipher Set	BestPractices	
Advanced Properties	Add a Port 80 Redirector VS	https://%h%s	<p>Click Add HTTP Redirector. This automatically creates a redirect on port 80.</p> <p>Note: This field disappears after it is clicked.</p>

8. Add the Real Servers:
 - a) Expand the **Real Servers** section.
 - b) Click **Add New**.
 - c) Type the address of the Real Server.
 - d) Type **443** as the **Port**.
 - e) Click **Add This Real Server**.

f) Repeat the steps above to add more Real Servers as needed, based on the environment.

3.2.1 Configure the Luminis Banner Offloaded HTTP Redirect Virtual Service

Clicking the **Add HTTP Redirector** button automatically creates a port 80 redirect Virtual Service. This is optional, but the purpose of this Virtual Service is to redirect any clients who have connected using HTTP to the HTTPS Virtual Service. Kemp also recommends changing the **Real Server Check Method** and **Persistence Mode** to **None**.

Last Updated Date

This document was last updated on 27 July 2023.