



Ellucian Luminis Portal

Deployment Guide

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1 Introduction

Ellucian Portal is a web services and delivery environment tailored for higher education. It enables you to provide an interactive and collaborative environment. It supports a richer, more personalized user experience, improved information and service delivery and simplified administration and technology management.

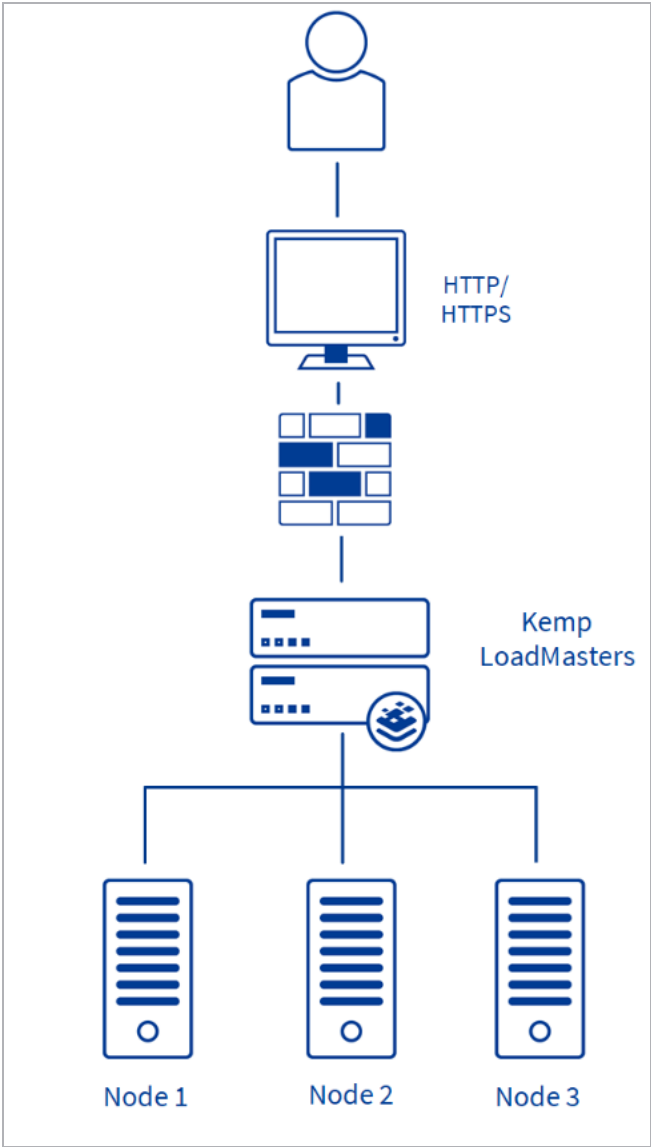
1.1 Document Purpose

This document provides the recommended LoadMaster settings used when load balancing the Ellucian Portal workload. The Kemp Support Team is available to provide solutions for scenarios not explicitly defined. The Kemp support site can be found at: <https://support.kemptechnologies.com>.

1.2 Intended Audience

This document is for anyone deploying Ellucian Portal with a Kemp LoadMaster.

2 Architecture



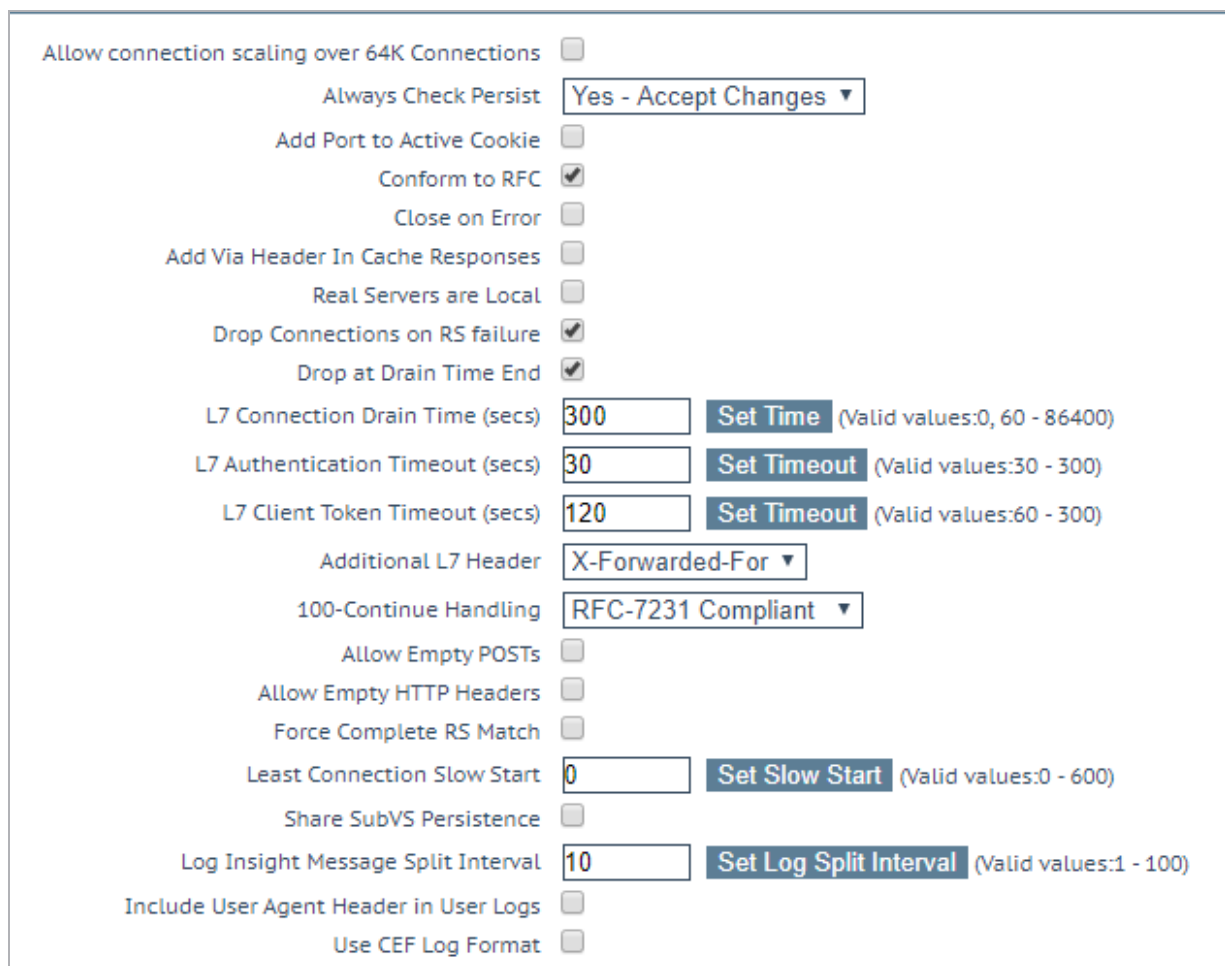
3 Configure the LoadMaster

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

3.1 Enable Check Persist Globally

It is recommended that you change the **Always Check Persist** option to **Yes – Accept Changes**. Use the following steps:

1. Go to **System Configuration > Miscellaneous Options > L7 Configuration**.



The screenshot shows the L7 Configuration page with the following settings:

- Allow connection scaling over 64K Connections: ☐
- Always Check Persist: **Yes - Accept Changes** (selected)
- Add Port to Active Cookie: ☐
- Conform to RFC: ☒
- Close on Error: ☐
- Add Via Header In Cache Responses: ☐
- Real Servers are Local: ☐
- Drop Connections on RS failure: ☒
- Drop at Drain Time End: ☒
- L7 Connection Drain Time (secs): **Set Time** (Valid values:0, 60 - 86400)
- L7 Authentication Timeout (secs): **Set Timeout** (Valid values:30 - 300)
- L7 Client Token Timeout (secs): **Set Timeout** (Valid values:60 - 300)
- Additional L7 Header: (dropdown)
- 100-Continue Handling: (dropdown)
- Allow Empty POSTs: ☐
- Allow Empty HTTP Headers: ☐
- Force Complete RS Match: ☐
- Least Connection Slow Start: **Set Slow Start** (Valid values:0 - 600)
- Share SubVS Persistence: ☐
- Log Insight Message Split Interval: **Set Log Split Interval** (Valid values:1 - 100)
- Include User Agent Header in User Logs: ☐
- Use CEF Log Format: ☐

2. Click the **Always Check Persist** drop-down arrow and select **Yes – Accept Changes**.

3.2 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.

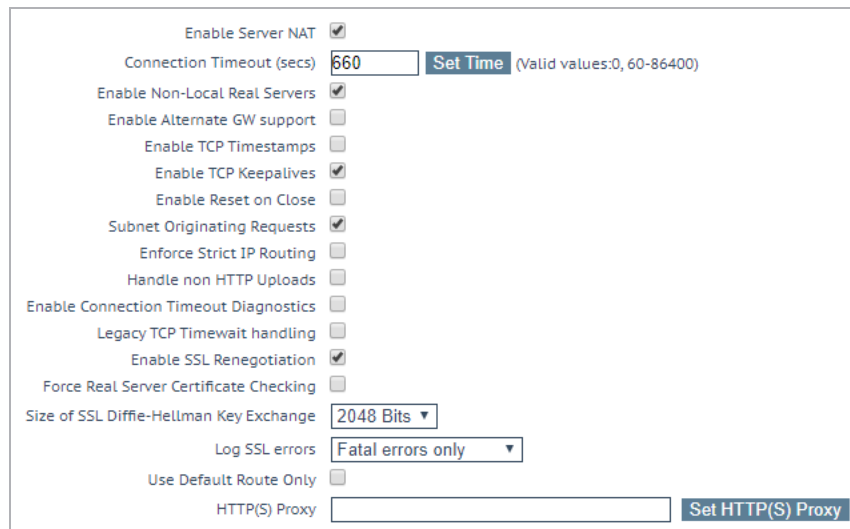
In a two-armed setup where the Virtual Service is on network/subnet A, for example, and the Real Servers are on network B, **Subnet Originating Requests** should be enabled on LoadMasters with firmware version 7.1-16 and above.

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**.



The screenshot shows the 'Network Options' configuration page in the LoadMaster WUI. The 'Subnet Originating Requests' checkbox is checked. Other visible options include 'Enable Server NAT' (checked), 'Connection Timeout (secs)' (660), 'Enable Non-Local Real Servers' (checked), 'Enable Alternate GW support' (unchecked), 'Enable TCP Timestamps' (unchecked), 'Enable TCP Keepalives' (checked), 'Enable Reset on Close' (unchecked), 'Enforce Strict IP Routing' (unchecked), 'Handle non HTTP Uploads' (unchecked), 'Enable Connection Timeout Diagnostics' (unchecked), 'Legacy TCP Timewait handling' (unchecked), 'Enable SSL Renegotiation' (checked), 'Force Real Server Certificate Checking' (unchecked), 'Size of SSL Diffie-Hellman Key Exchange' (2048 Bits), 'Log SSL errors' (Fatal errors only), 'Use Default Route Only' (unchecked), and 'HTTP(S) Proxy' (empty field).

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

4 Configure the Portal Reencrypted Virtual Service

Follow the steps below to create and configure the recommended settings for the Portal Reencrypted Virtual Service:

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

Please Specify the Parameters for the Virtual Service.

Virtual Address

10.154.11.186

Port

443

Service Name (Optional)

Luminis Portal Reenc

Use Template

Select a Template

Protocol

tcp

Cancel

Add this Virtual Service

- 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, **Portal Reencrypted**.
- 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	Active Cookie	You must enable SSL Acceleration before you can select Active Cookie

4 Configure the Portal Reencrypted Virtual Service

Section	Option	Value	Comment
	Timeout	1 Hour	
	Cookie name	jsessionid	
	Scheduling Method	least connection	
	Idle Connection Timeout	660	
SSL Properties	SSL Acceleration	Enabled	
	Reencrypt	Selected	
	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>
Real Servers	Real Server Check Method	HTTPS Protocol	
	Checked Port	443	

8. Add the Real Servers:

- Expand the **Real Servers** section.
- Click **Add New**.
- Type the address of the Real Server.
- Type **443** as the **Port**.
- Click **Add This Real Server**.

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

4.1 Configure the Portal Reencrypted 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.