



Ellucian Portal

Deployment Guide

UPDATED: 23 March 2021



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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>.

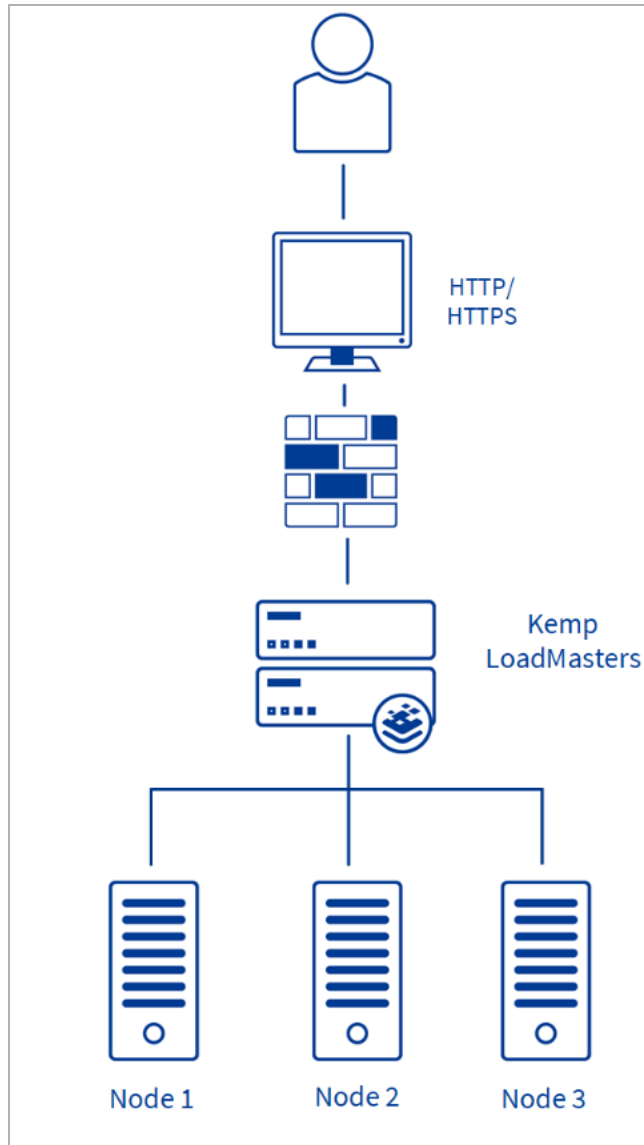
1.2 Intended Audience

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

1.3 Related Firmware Version

Published with LMOS version 7.2.48.4 LTS. This document has not required substantial changes since 7.2.48.4 LTS. However, the content is in sync with the latest LoadMaster LTS firmware.

2 Architecture



3 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. For some workloads, additional manual steps may be required such as assigning a certificate or applying port following, these steps are covered in the document, if needed.

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 **Templates** section on the [Kemp Documentation page](#).

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

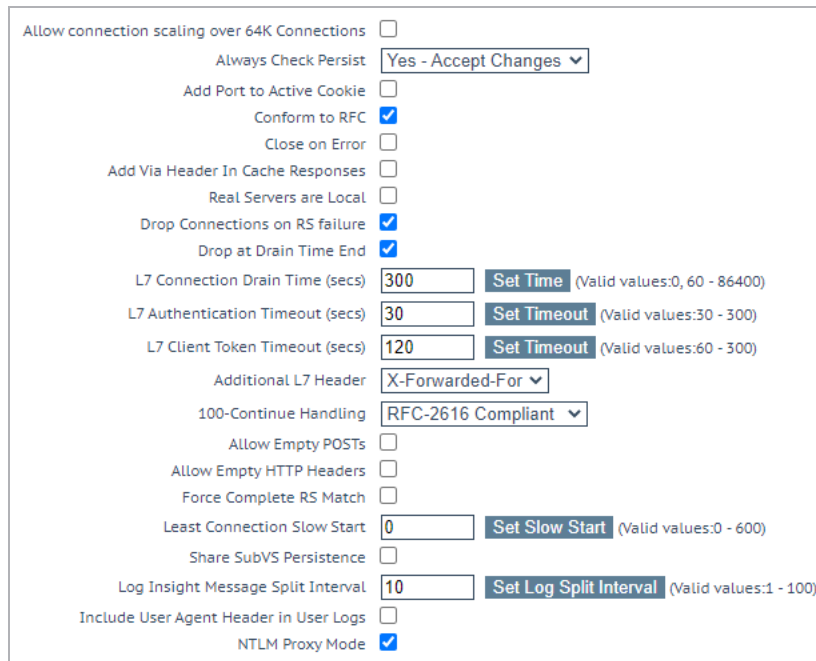
4 Configure the LoadMaster

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

4.1 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**.



Allow connection scaling over 64K Connections

Always Check Persist **Yes - Accept Changes** ▼

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 - 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 **X-Forwarded-For** ▼

100-Continue Handling **RFC-2616 Compliant** ▼

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

NTLM Proxy Mode

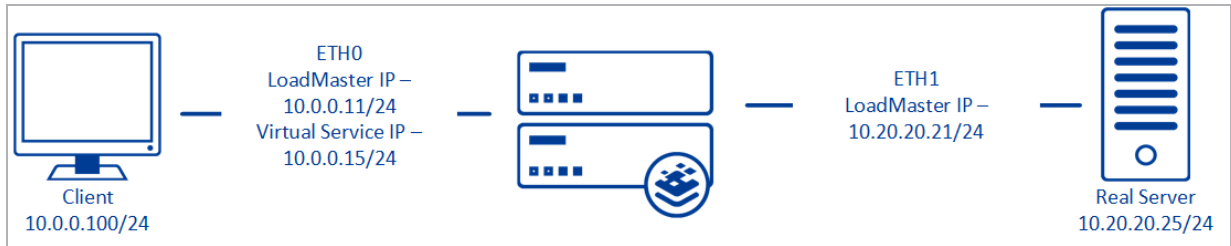
2. Click the **Always Check Persist** drop-down arrow and select **Yes – Accept Changes**.

4.2 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 Real Server sees traffic originating from 10.20.20.21 (LoadMaster eth1 address) and responds correctly in most scenarios.

With **Subnet Originating Requests** disabled, the Real Server sees traffic originating from 10.0.0.15 (LoadMaster Virtual Service address on **eth0**) and responds to **eth0** which could cause asymmetric routing.

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 User Interface (UI), go to **System Configuration > Miscellaneous Options > Network Options**.
2. Select the **Subnet Originating Requests** check box.

5 Virtual Service - Ellucian Portal

This step-by-step set up of the Virtual Services leverages the Kemp application template for Ellucian Portal.

The table in each section outlines the settings configured by the application template. You can use this information to manually configure the Virtual Services or use the Kemp LoadMaster Application Programming Interface (API) and automation tools.

5.1 Create the Ellucian Portal HTTPS Re-Encrypted Virtual Service

To configure the Virtual Service using the application template, perform the following steps:

1. In the main menu of the LoadMaster WUI, go to **Virtual Services > Add New**.
2. Type a valid **Virtual Address**.
3. Select **Ellucian Portal HTTPS Re-encrypted** in the **Use Template** drop-down list.
4. Click **Add this Virtual Service**.
5. In the left-hand navigation select **View/Modify Services**.
6. Click **Modify** on the **Ellucian Portal HTTPS Re-encrypted** Virtual Service on port TCP 443.
7. Expand the **SSL Properties** section.
8. Select the certificate to use from **Available Certificates** and click the arrow (➤) to move it to **Assigned Certificates**.
9. Expand the **Real Servers** section.
10. Click **Add New**.
11. Type the **Real Server Address**.
12. Confirm that port **443** is entered.
13. Click **Add This Real Server**.

14. Repeat this step to add more Real Servers as needed.

5.1.1 Portal HTTPS Re-encrypted Virtual Service Recommended API Settings (optional)

This table outlines the API parameters and values set using the Kemp application template. You can use these settings with scripts and automation tools.

API Parameter	API Value
port	443
prot	tcp
SubnetOriginating	1
Persist	active-cookie
Cookie	jsessionId
PersistTimeout	3600
Schedule	lc
IdleTimeout	660
SSLAcceleration	1
SSLReencrypt	1
CipherSet	BestPractices
ClientCert	0
CheckUseGet	0

5.1.2 Portal HTTPS Re-encrypted Redirect Virtual Service Recommended API Settings (optional)

This table outlines the API parameters and values set using the Kemp application template. You can use these settings with scripts and automation tools.

API Parameter	API Value
port	80
prot	tcp
Transparent	0

API Parameter	API Value
Persist	none
Schedule	rr

Last Updated Date

This document was last updated on 23 March 2021.