

# vRealize Automation

# **Deployment Guide**

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# 1 Introduction

VMware's vRealize Automation provides cloud automation software that facilitates the delivery and management of infrastructure and accelerating the deployment and release of applications. It allows deployment across multi-vendor hybrid cloud infrastructure and greatly reduces the time required to provision services, reducing costs and improving business agility. End-users are given different service levels, policies and automation processes, as appropriate for their needs.

The Kemp LoadMaster is able to load balance the vRealize Automation IaaS Web Server workload. 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 LoadMaster intelligently and efficiently distributes user traffic among the application servers so that users get the best experience possible.

### 1.1 Document Purpose

This document provides guidance on how to deploy vRealize Automation with a Kemp LoadMaster. 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 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 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 <u>Virtual Services</u> and <u>Templates</u>, <u>Feature Description</u> on the Kemp Documentation page.



# 3 Configure vRealize Automation Virtual Services

The environment in which vRealize Automation is deployed determines which of the following setups should be used.

## 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 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:

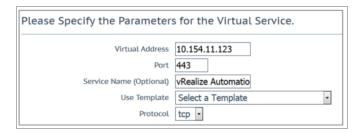


- 1. In the main menu of the LoadMaster User Interface (UI), go to **System Configuration > Miscellaneous Options > Network Options**.
- 2. Select the **Subnet Originating Requests** check box.

### 3.2 vRealize Automation IaaS Web Virtual Service

The following are the steps involved and the values required to configure the vRealize Automation VRA VC Web Virtual Service:

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



- 2. Enter a valid IP address in the Virtual Address text box.
- 3. Enter 443 in the Port text box.
- 4. Enter a recognizable Service Name, for example vRealize Automation laaS Web.
- 5. Ensure **tcp** is selected as the **Protocol**.
- 6. Click Add this Virtual Service.
- 7. Enter the details shown in the following table:

Section	Option	Value	Comment
Standard Options	Transparency	Deselected	
	Persistence Mode	Source IP Address	
	Timeout	6 Minutes	
	Scheduling	Least Connection	



Section	Option	Value	Comment
	Method		
	Idle Connection Timeout	360	
SSL Properties	SSL Acceleration	Enabled Reencrypt	A wildcard certificate allows secure connections to be established with a request URL in the format of *.example.com. With this approach, a single certificate secures traffic for all clients in a multi-tenant environment.
	Supported Protocols	TLS1.0 TLS1.1 TLS1.2	While this workload may not support TLS1.3 yet, Kemp recommend enabling it for future proofing.
	Cipher Set	TLS1.3  BestPractices	
Advanced Properties	Content Switching	Disabled	
	Add HTTP Headers	Legacy Operation (X- ClientSide)	
Real Servers	Real Server Check Method	HTTPS Protocol	
	URL	/wapi/api/statusweb	Click Set URL.
	Checked Port	443	
	HTTP Method	GET	

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Users should note that clicking the Add HTTP Redirector button, automatically creates a redirect Virtual Service on Port 80.

- 8. Add the Real Servers:
  - a) Click the **Add New** button.
  - b) Enter the address of the vRealize Automation laaS Web Server.
  - c) Enter **443** as the **Port**.

The Real Server Port should match the Virtual Service Port.

The Forwarding method and Weight values are set by default. An administrator can change these.

- d) Click Add this Real Server. Click OK to the pop-up message.
- e) Repeat the steps above to add more Real Servers as needed, based on the environment.



# Last Updated Date

This document was last updated on 24 March 2021.