Progress®
Kemp® LoadMaster®

Deployment Guide BMC Remedy

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1

Introduction

BMC Remedy is an IT Service Management suite providing effective collaboration, visibility, and reporting. BMC Remedy components such as Smart IT provides a single interface to create multiple ticket types such as incidents, work orders, change requests, or service requests.

The LoadMaster delivers an exceptional, cost effective, and easy to use solution which by employing High Availability, Global Server Load Balancing (GSLB), intelligent load balancing, and intelligent server health checking can support BMC Remedy's always-on application experience initiative.

Related Links

For details, see the following topics:

- Document Purpose
- Intended Audience

Document Purpose

This document provides the recommended LoadMaster settings used when load balancing BMC Remedy. The Progress Kemp Support Team is available to provide solutions for scenarios not explicitly defined. For further details, refer to the: LoadMaster Support and Learning Hub.

Intended Audience

This document is intended to be read by anyone who is interested in configuring the LoadMaster to optimize BMC Remedy.

2

Template

Progress 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.

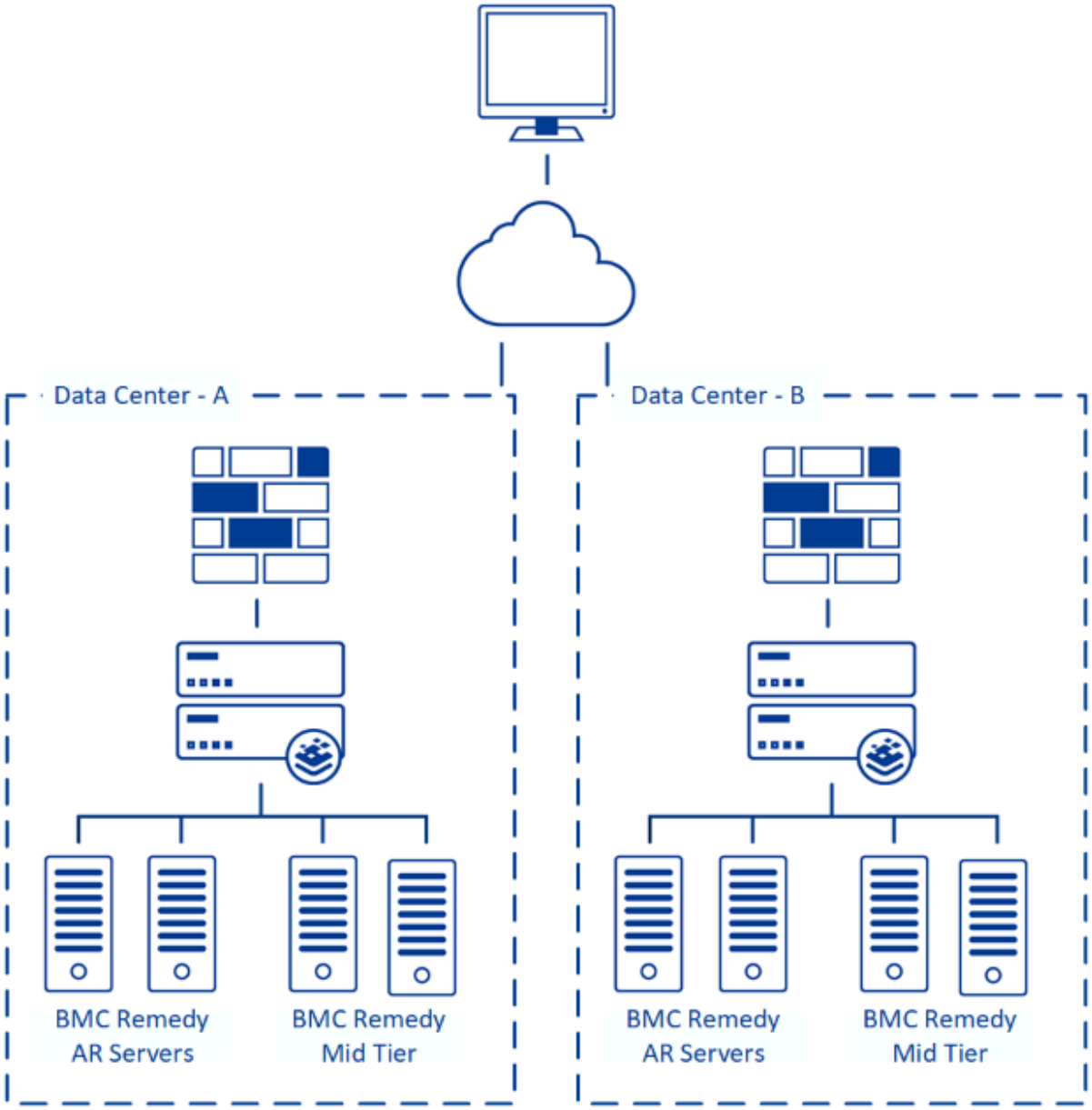
Download released templates from the following page: LoadMaster Templates.

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

3

Architecture

BMC Remedy consists of two back end server types that can be load balanced, AR servers, and Mid Tier servers.


Data Center - A
Data Center - B
BMC Remedy
AR Servers
BMC Remedy
Mid Tier
BMC Remedy
AR Servers
BMC Remedy
Mid Tier

4

Configure the LoadMaster

Refer to the sections below for details on some recommended global settings.

Related Links

For details, see the following topics:

- Enable Subnet Originating Requests Globally
- Enable Check Persist Globally

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.

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

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Virtual Services

BMC Remedy consists of several components that can be load balanced and optimized depending on the environment in which it is deployed. BMC Remedy AR Server, Mid Tier, or both can leverage the LoadMaster to provide the necessary high availability and failover to ensure an always-on application experience.

This step-by-step setup of Virtual Services (VSs) leverages the Progress Kemp application template for BMC Remedy.

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

SSL/TLS certificates should be added before creating this Virtual Service. For further information on certificates, refer to the SSL Accelerated Services Feature Description.

Related Links

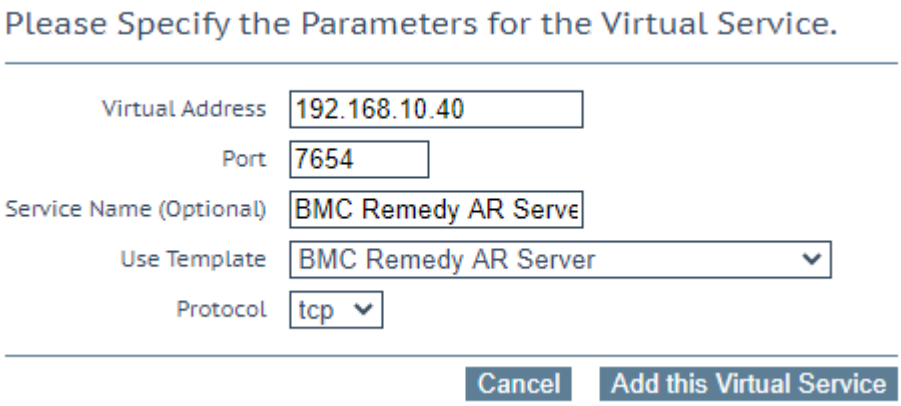
For details, see the following topics:

- Create the BMC Remedy AR Server Virtual Service
- Create the BMC Remedy Mid Tier HTTP Virtual Services
- Create the BMC Remedy Mid Tier HTTPS Offloaded Virtual Services
- Create the BMC Remedy Mid Tier HTTPS Reencrypt Virtual Services

Create the BMC Remedy AR Server Virtual Service

The following are the steps involved and the recommended settings to configure the BMC Remedy AR Server Virtual Service:

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



2. Type a valid **Virtual Address**.
3. Select the **BMC Remedy AR Server** template in the **Use Template** drop-down list.

   Note: The BMC Remedy AR Server template uses tcp port 7654. This port can be changed to match the port used in the environment.

4. Click **Add this Virtual Service**.
5. Expand the **Real Servers** section.
6. Click **Add New**.
7. Type the **Real Server Address**.
8. Confirm that the port entered is the correct TCP port configured in the BMC Remedy environment.
9. Click **Add This Real Server**.
10. Repeat these steps to add more Real Servers as needed.

BMC Remedy AR Server Virtual Service Recommended API Settings (optional)

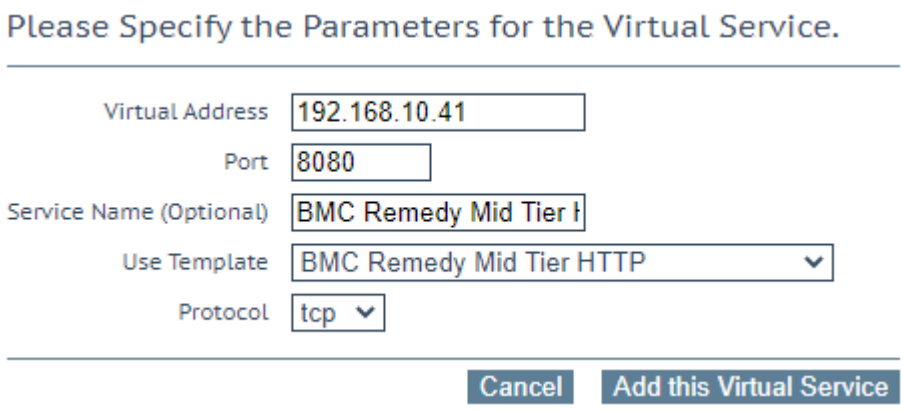
This table outlines the API parameters and values set using the Progress Kemp application template. You can use these settings with scripts and automation tools.

API Parameter	API Value
port	7654
prot	tcp
VStype	gen
SubnetOriginating	1
Forcel7	1
Schedule	lc
Persist	none
CheckType	tcp

Create the BMC Remedy Mid Tier HTTP Virtual Services

The following are the steps involved and the recommended settings to configure the BMC Remedy Mid Tier Virtual Service:

1. In the main menu of the LoadMaster UI, go to **Virtual Services > Add New**.



2. Type a valid **Virtual Address**.
3. Select the **BMC Remedy Mid Tier HTTP** template in the **Use Template** drop-down list.

   Note: The BMC Remedy Mid Tier HTTP template uses the default tcp port 8080. This port can be changed to match the port used in the environment.

4. Click **Add this Virtual Service**.

5. Expand the **Real Servers** section.
6. Click **Add New**.
7. Type the **Real Server Address**.
8. Confirm that the port entered is the correct TCP port configured in the BMC Remedy environment.
9. Click **Add This Real Server**.
10. Repeat these steps to add more Real Servers as needed.

BMC Remedy Mid Tier HTTP Virtual Service Recommended API Settings (optional)

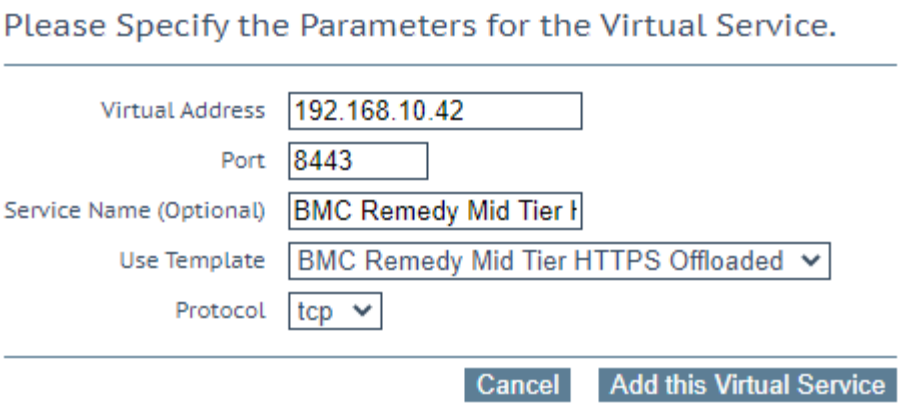
This table outlines the API parameters and values set using the Progress Kemp application template. You can use these settings with scripts and automation tools.

API Parameter	API Value
port	8080
prot	tcp
VStype	http
SubnetOriginating	1
Forcel7	1
Schedule	lc
Persist	src
PersistTimeout	360
CheckType	http
CheckUseGet	1

Create the BMC Remedy Mid Tier HTTPS Offloaded Virtual Services

The following are the steps involved and the recommended settings to configure the BMC Remedy Mid Tier Virtual Service:

1. In the main menu of the LoadMaster UI, go to **Virtual Services > Add New**.



2. Type a valid **Virtual Address**.
3. Select the **BMC Remedy Mid Tier HTTPS Offloaded** template in the **Use Template** drop-down list.

   Note: The BMC Remedy Mid Tier HTTPS Offloaded template uses the default tcp port 8443. This port can be changed to match the port used in the environment.

4. Click **Add this Virtual Service**.
5. Expand the **SSL Properties** section.
6. Select the certificate to use from **Available Certificates** and click the arrow (**>**) to move it to **Assigned Certificates**.
7. Expand the **Real Servers** section.
8. Click **Add New**.
9. Type the **Real Server Address**.
10. Confirm that the port entered is the correct tcp port configured in the BMC Remedy environment.
11. Click **Add This Real Server**.
12. Repeat these steps to add more Real Servers as needed.

BMC Remedy Mid Tier HTTPS Offloaded Virtual Service Recommended API Settings (optional)

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

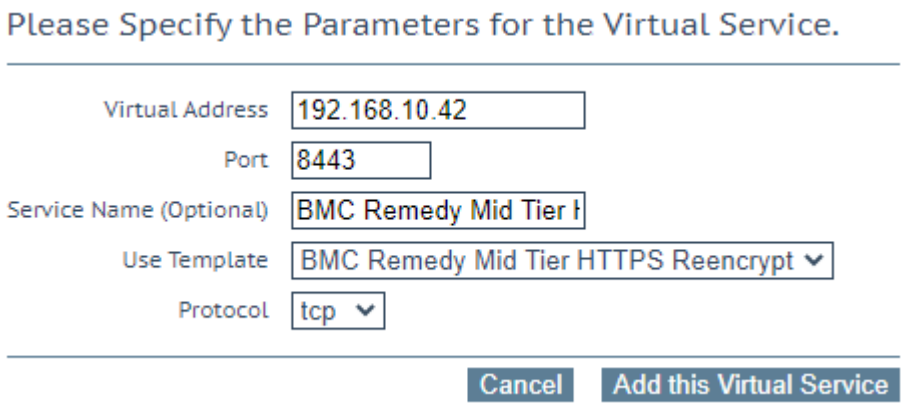
API Parameter	API Value
port	8443
prot	tcp
VStype	http

API Parameter	API Value
SubnetOriginating	1
Forcel7	1
Schedule	lc
Persist	src
PersistTimeout	360
SSLAcceleration	1
SSLReencrypt	0
TLSType	3
CipherSet	BestPractices
CheckType	http
Checkport	8080
CheckUseGet	1

Create the BMC Remedy Mid Tier HTTPS Reencrypt Virtual Services

The following are the steps involved and the recommended settings to configure the BMC Remedy Mid Tier Virtual Service:

1. In the main menu of the LoadMaster UI, go to **Virtual Services > Add New**.



2. Type a valid **Virtual Address**.

3. Select the **BMC Remedy Mid Tier HTTPS Re-encrypt** template in the **Use Template** drop-down list.

   Note: The BMC Remedy Mid Tier HTTP Reencrypt template uses the default TCP port 8443. This port can be changed to match the port used in the environment.

4. Click **Add this Virtual Service**.
5. Expand the **SSL Properties** section.
6. Select the certificate to use from **Available Certificates** and click the arrow (**>**) to move it to **Assigned Certificates**.
7. Expand the **Real Servers** section.
8. Click **Add New**.
9. Type the **Real Server Address**.
10. Confirm that the port entered is the correct tcp port configured in the BMC Remedy environment.
11. Click **Add This Real Server**.
12. Repeat these steps to add more Real Servers as needed.

BMC Remedy Mid Tier HTTPS Reencrypt Virtual Service Recommended API Settings (optional)

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

API Parameter	API Value
port	8443
prot	tcp
VStype	http
SubnetOriginating	1
Forcel7	1
Schedule	lc
Persist	src
PersistTimeout	360
SSLAcceleration	1
SSLReencrypt	1
TLSType	3
CipherSet	BestPractices

API Parameter	API Value
CheckType	https
CheckUseGet	1