Progress®
Kemp® LoadMaster®

# Deployment Guide Progress WhatsUp Gold

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# 1

# Introduction

## Introduction

Progress WhatsUp Gold provides the necessary monitoring of everything that is connected to the organization's network. With features such as device monitoring, application monitoring, Network Traffic Analysis, Log Management, and Configuration Management, administrators can finally take full control of all the entire infrastructure.

The LoadMaster delivers an exceptional, cost effective, and easy to use solution which, by employing intelligent server health checking and automatic failover, can support an always-on application experience for WhatsUp Gold.

**Related Links**

- Document Purpose
- Intended Audience

# Document Purpose

## Document Purpose

This document provides the recommended LoadMaster settings used when providing high availability, optimization and security for WhatsUp Gold. The Progress Kemp Support team is available to provide solutions for scenarios not explicitly defined. The Progress Kemp Support site can be found at:

https://support.kemptechnologies.com.

# Intended Audience

## Intended Audience

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

# 2

# Template

## 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.

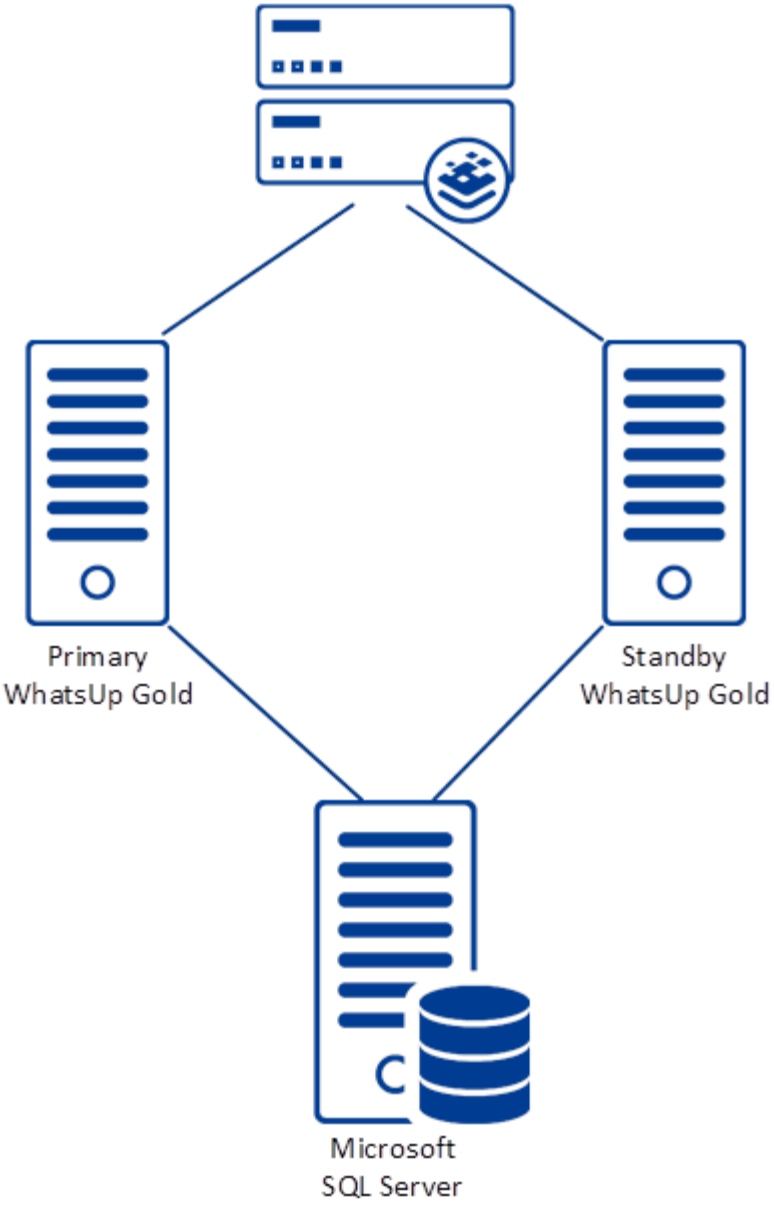
For more information and steps on how to import and use templates, refer to the Virtual Services and Templates, Feature Description.

# 3

# Architecture

## Architecture

WhatsUp Gold failover deployments consist of 2 front end servers running the WhatsUp Gold application and a back-end SQL Server (SQL clustering recommended).


Primary
WhatsUp Gold
Standby
WhatsUp Gold
Microsoft
SQL Server

# 4

# Configure the LoadMaster

## Configure the LoadMaster

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

**Related Links**

- Enable Subnet Originating Requests Globally

# Enable Subnet Originating Requests 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.

# 5

# Virtual Services

## Virtual Services

WhatsUp Gold consists of several components that can failover automatically in the event of the primary server going offline. WhatsUp Gold Web Server interface is the primary Virtual Service that will be used for health checking to ensure the server is online and ready to accept traffic.

This step-by-step setup of Virtual Services (VSs) leverages the Progress Kemp application template for WhatsUp Gold. This template configures the Virtual Services to leverage Layer 7 and transparency for the UDP services such as SNMP, Syslog, and Netflow. This approach will allow the real servers to see the source IP address of the devices running in the infrastructure.

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.

**Related Links**

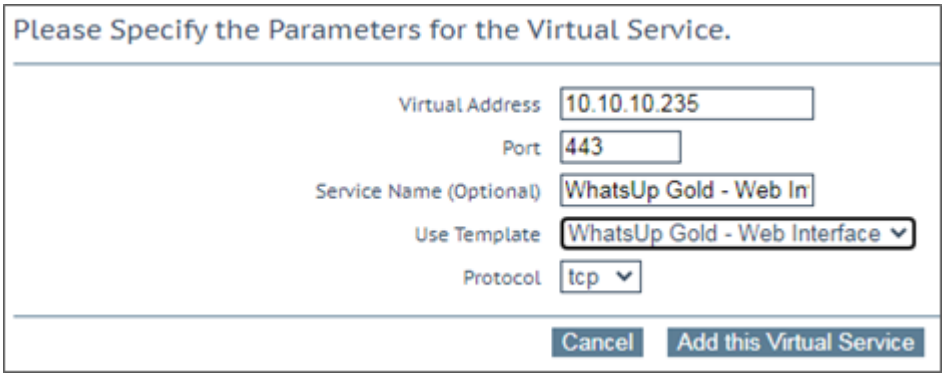
- Create the WhatsUp Gold Web Interface Virtual Service
- Create the WhatsUp Gold SNMP Virtual Services
- Create the WhatsUp Gold Syslog Virtual Services
- Create the WhatsUp Gold Netflow Virtual Services
- Create the WhatsUp Gold Agent Virtual Services

# Create the WhatsUp Gold Web Interface Virtual Service

## Create the WhatsUp Gold Web Interface Virtual Service

The following are the steps involved and the recommended settings to configure the WhatsUp Gold Web Interface.

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 **WhatsUp Gold Web Interface** template in the **Use Template** drop-down list.
4. Click **Add this Virtual Service**.
5. Expand the **Real Servers** section.
6. Click **Add New**.
7. Type the **Real Server Address** of the primary WhatsUp Gold Server.
8. Keep the **Weight** at **1000** for the primary WhatsUp Gold Server.
9. Click **Add This Real Server**.
10. Click **Add New** for the standby WhatsUp Gold Server.
11. Set the **Weight** for the secondary WhatsUp Gold Server to **1**.
12. Click **Add This Real Server**.

**Related Links**

- WhatsUp Gold Web Interface Virtual Service Recommended Settings (optional)

## WhatsUp Gold Web Interface Virtual Service Recommended Settings (optional)

## WhatsUp Gold Web Interface Virtual Service Recommended Settings (optional)

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

| API Parameter | API Value | WUI Field Name | WUI Field Value |
|---|---|---|---|
| port | 443 | Port | 443 |
| prot | tcp | Protocol | tcp |
| VStype | http | Service Type | HTTP-HTTP/2-HTTPS |
| Schedule | fw | Scheduling Method | fixed weighting |
| Persist | none | Persistence Options | None |
| CheckType | tcp | Real Server Check Method | TCP Connection Only |
| CheckPort | 9711 | Checked Port | 9711 |

# Create the WhatsUp Gold SNMP Virtual Services

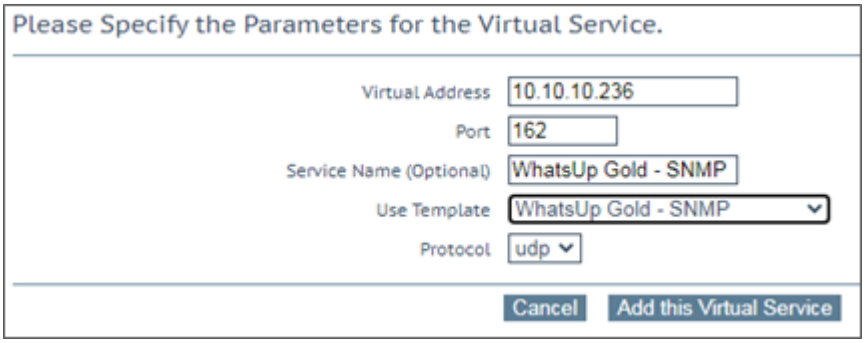
## Create the WhatsUp Gold SNMP Virtual Services

## Create the WhatsUp Gold SNMP Virtual Services

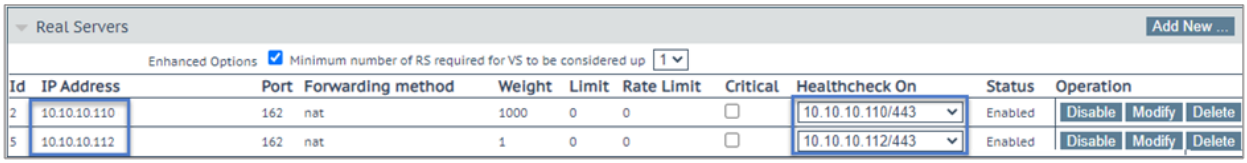
The following are the steps involved and the recommended settings to configure the WhatsUp Gold SNMP Virtual Service:

**Note:** This Virtual Service requires the WhatsUp Gold Web Interface Virtual Service to be configured for the enhanced health checking feature.

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 **WhatsUp Gold SNMP** template in the **Use Template** drop-down list.
4. Click **Add this Virtual Service**.
5. Expand the **Real Servers** section.
6. Click **Add New**.
7. Type the **Real Server Address** of the primary WhatsUp Gold Server.
8. Keep the **Weight** at **1000** for the primary WhatsUp Gold Server.
9. Click **Add This Real Server**.
10. Click **Add New** for the standby WhatsUp Gold Server.
11. Set the **Weight** for the secondary WhatsUp Gold Server to **1**.
12. Click **Add This Real Server**.
13. Click **Back**.
14. Expand the **Real Servers** section.




15. For each Real Server select the same WhatsUp Gold Web Real Server IP Address with port 443 under **Healthcheck On**.

### Related Links

- WhatsUp Gold SNMP Virtual Service Recommended Settings (optional)

## WhatsUp Gold SNMP Virtual Service Recommended Settings (optional)

### WhatsUp Gold SNMP Virtual Service Recommended Settings (optional)

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

| API Parameter | API Value | WUI Field Name | WUI Field Value |
|---|---|---|---|
| port | 162 | Port | 162 |
| prot | udp | Protocol | udp |
| Transparent | 1 | Transparency | Enabled |
| Schedule | fixed | Scheduling Method | fixed weighting |
| EnhancedHealthchecks | 1 | Enhanced Options | Enabled |

# Create the WhatsUp Gold Syslog Virtual Services

## Create the WhatsUp Gold Syslog Virtual Services

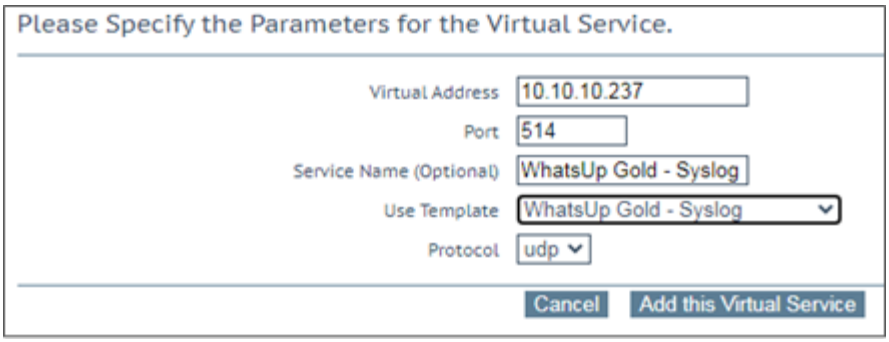
The following are the steps involved and the recommended settings to configure the WhatsUp Gold Syslog Virtual Service:

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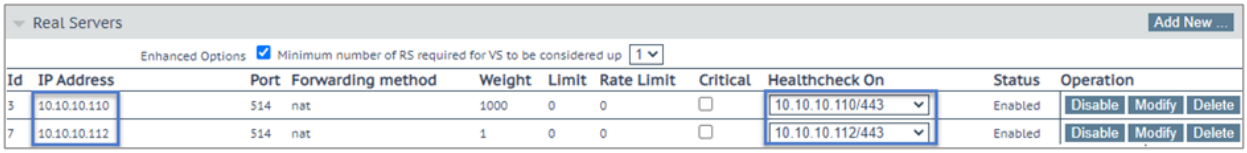
**Note:** This Virtual Service requires the WhatsUp Gold Web Interface Virtual Service to be configured for the enhanced health checking feature.

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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 **WhatsUp Gold Syslog** template in the **Use Template** drop-down list.
4. Click **Add this Virtual Service**.
5. Expand the **Real Servers** section.
6. Click **Add New**.
7. Type the **Real Server Address** of the primary WhatsUp Gold Server.
8. Keep the **Weight** at **1000** for the primary WhatsUp Gold Server.
9. Click **Add This Real Server**.
10. Click **Add New** for the standby WhatsUp Gold Server.
11. Set the **Weight** for the secondary WhatsUp Gold Server to **1**.
12. Click **Add This Real Server**.
13. Click **Back**.
14. Expand the **Real Servers** section.




15. For each Real Server select the same WhatsUp Gold Web Real Server IP Address with port 443 under **Healthcheck On**.

### Related Links

- WhatsUp Gold Syslog Virtual Service Recommended Settings (optional)

# WhatsUp Gold Syslog Virtual Service Recommended Settings (optional)

## WhatsUp Gold Syslog Virtual Service Recommended Settings (optional)

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

| API Parameter | API Value | WUI Field Name | WUI Field Value |
|---|---|---|---|
| port | 514 | Port | 514 |
| prot | udp | Protocol | udp |
| Transparent | 1 | Transparency | Enabled |
| Schedule | fixed | Scheduling Method | fixed weighting |
| EnhancedHealthchecks | 1 | Enhanced Options | Enabled |

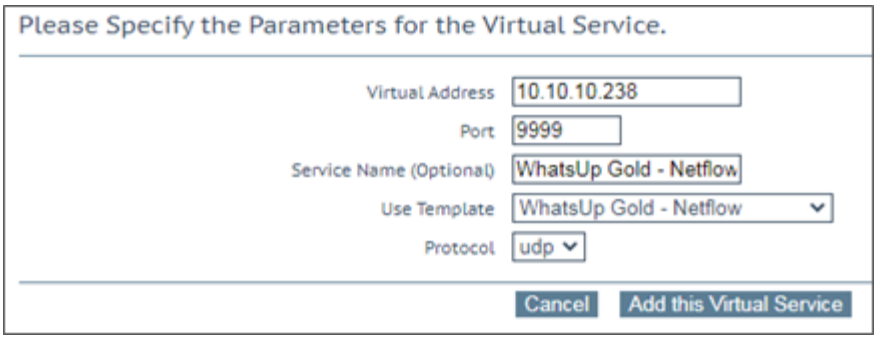
# Create the WhatsUp Gold Netflow Virtual Services

## Create the WhatsUp Gold Netflow Virtual Services

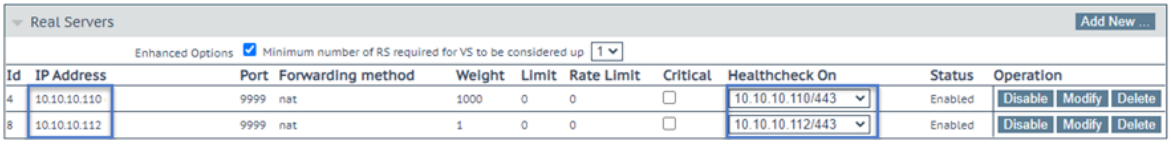
The following are the steps involved and the recommended settings to configure the WhatsUp Gold Netflow Virtual Service:

**Note:** This Virtual Service requires the WhatsUp Gold Web Interface Virtual Service to be configured for the enhanced health checking feature.

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 **WhatsUp Gold Netflow** template in the **Use Template** drop-down list.
4. Click **Add this Virtual Service**.
5. Expand the **Real Servers** section.
6. Click **Add New**.
7. Type the **Real Server Address** of the primary WhatsUp Gold Server.
8. Keep the **Weight** at **1000** for the primary WhatsUp Gold Server.
9. Click **Add This Real Server**.
10. Click **Add New** for the standby WhatsUp Gold Server.
11. Set the **Weight** for the secondary WhatsUp Gold Server to **1**.
12. Click **Add This Real Server**.
13. Click **Back**.
14. Expand the **Real Servers** section.




15. For each Real Server select the same WhatsUp Gold Web Real Server IP Address with port 443 under **Healthcheck On**.

### Related Links

- WhatsUp Gold Netflow Virtual Service Recommended Settings (optional)

# WhatsUp Gold Netflow Virtual Service Recommended Settings (optional)

## WhatsUp Gold Netflow Virtual Service Recommended Settings (optional)

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

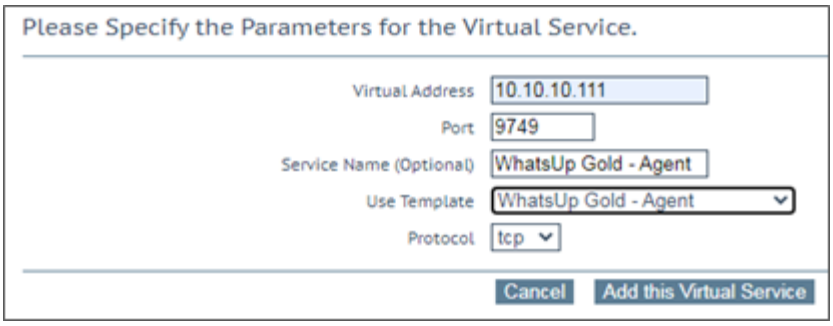
| API Parameter | API Value | WUI Field Name | WUI Field Value |
|---|---|---|---|
| port | 9999 | Port | 9999 |
| prot | udp | Protocol | udp |
| Transparent | 1 | Transparency | Enabled |
| Schedule | fixed | Scheduling Method | fixed weighting |
| EnhancedHealthchecks | 1 | Enhanced Options | Enabled |

# Create the WhatsUp Gold Agent Virtual Services

## Create the WhatsUp Gold Agent Virtual Services

The following are the steps involved and the recommended settings to configure the WhatsUp Gold Agent 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 **WhatsUp Gold - Agent** template in the **Use Template** drop-down list.
4. Click **Add this Virtual Service**.
5. Expand the **Real Servers** section.
6. Click **Add New**.
7. Type the **Real Server Address** of the primary WhatsUp Gold Server.
8. Keep the **Weight** at **1000** for the primary WhatsUp Gold Server.
9. Click **Add This Real Server**.
10. Click **Add New** for the standby WhatsUp Gold Server.
11. Set the **Weight** for the secondary WhatsUp Gold Server to **1**.
12. Click **Add This Real Server**.

**Related Links**

- WhatsUp Gold Agent Virtual Service Recommended Settings (optional)

# WhatsUp Gold Agent Virtual Service Recommended Settings (optional)

# WhatsUp Gold Agent Virtual Service Recommended Settings (optional)

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

| API Parameter | API Value | WUI Field Name | WUI Field Value |
|---|---|---|---|
| port | 9749 | Port | 9749 |
| prot | tcp | Protocol | tcp |
| VStype | gen | Service Type | Generic |
| Schedule | fw | Scheduling Method | fixed weighting |
| Persist | none | Persistence Options | None |
| CheckType | tcp | Real Server Check Method | TCP Connection Only |
| CheckPort | 9711 | Checked Port | 9711 |