



GWAVA 5

# Appliance Installation Guide

GWAVA 5

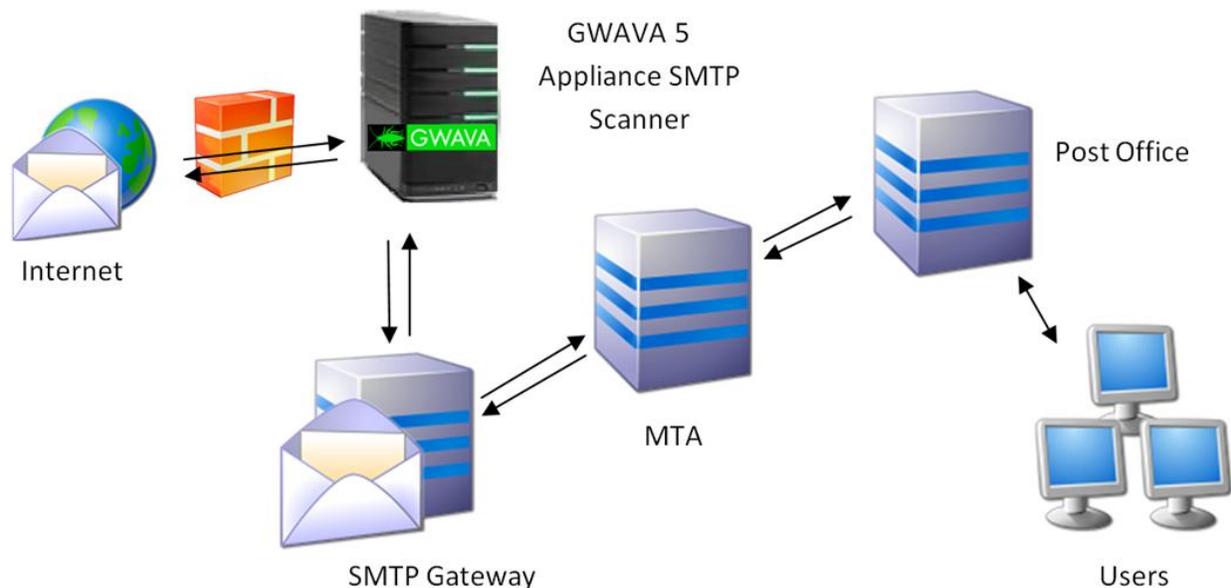
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## Overview

The GWAVA 5 Appliance is a complete software package for implementing the GWAVA 5 system and is designed to replace an existing GWAVA 5 server with a standalone GWAVA 5 system running an SMTP scanner for any mail system. The GWAVA 5 Appliance is ideal for a virtual machine environment.

The GWAVA 5 Appliance is designed to run the SMTP scanner for any email system in the market. The SMTP scanner, and GWAVA 5 Appliance, are completely independent of any GroupWise system and can be implemented in any system. The SMTP scanner acts as a proxy for the SMTP Gateway of your mail system.



The SMTP scanner and GWAVA appliance are meant to be placed in front of the current GWIA or SMTP Gateway for the mail system. Incoming email sent to your domain will first go to the GWAVA appliance, which scans then sends clean email to the GWIA or SMTP Gateway. Mail sent from your domain will pass through the normal system, but the SMTP Gateway will send the mail to the GWAVA appliance, which sends the email to the internet.

If the GWAVA appliance is set behind a firewall, or multiple firewalls, the following ports should be open for mail flow and GWAVA functions or services:

#### Inbound and general traffic

- 53 – UDP (DNS lookups)
- 25 – TCP Inbound (Used for Mail)

The following should be open to access the GWAVA appliance from outside the network:

- 49285 – TCP Inbound (QMS message release service)
- 49282 – TCP Inbound (GWAVA Management Console)
- 22 – TCP (SSH access. This can be a security concern, but may be necessary to enable for support access.)

#### Outbound traffic

- 80 – TCP Outbound (Updates services for Antivirus, Signature Engine, and GWAVA system.)
- 21 – FTP Outbound (OS updates)
- 25 – TCP Outbound (Only if scanning outbound mail)
- 123 – TCP Outbound (Network Time Protocol (NTP))

## Minimum System Requirements

For a system which processes ~2,000 messages per hour:

- 2.4 GHz Pentium 4 or equivalent processor
- 1 GB RAM
- 36 GB Hard Drive (entire drive will be formatted automatically).
- 1 Network connection

For a system which processes ~4,000 Messages per hour:

- 3.2 GHz Pentium 4 or equivalent processor
- 1.5 GB RAM
- 40 GB Hard Drive (entire drive will be formatted automatically).
- 1 Network connection

For a system which processes ~8,000 messages per hour:

- 3.6 GHz Pentium 4 or equivalent processor
- 2 GB RAM
- 60 GB Hard Drive (entire drive will be formatted automatically).
- 1 Network connection

Download

<http://www.gwava.com/solutions/trial-downloads.html>

## Installation

To install the GWAVA 5 appliance, download the ISO and burn the image to a blank CD using your preferred CD burning program.

Insert the GWAVA 5 Appliance CD into the CD or DVD drive of the target system and boot from the Appliance CD.

On boot, you will be presented with the following menu.

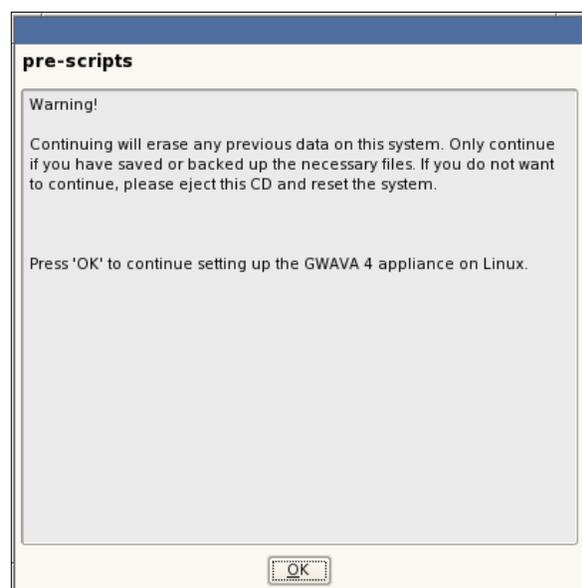


To install the Appliance, choose the install option.

Allow the system to completely boot from the Appliance CD, and the installation will automatically start.

You will be warned that running the installation will delete all data currently on the system. **This is the last chance you have to avoid formatting the drive in this system.**

If you have several hard disks in the system, GWAVA5 will only install on the first one, (/dev/hda or /dev/sda), and ignore others. To ensure you install to the correct drive, physically disconnect or remove all but the destination drive from the system before you boot.



As soon as you select 'OK', the installation will begin.

**Base Installation**

- ✓ AutoYaST Settings
- ➔ Perform Installation

**Configuration**

- System Configuration
- Clean Up

**Package Installation**

Media	Size	Packages	Time
Total	400.51 MB	50	04:52
GWAVA4			
CD 1	189.11 MB	1	02:18
SUSE Linux Enterprise Server 10 SP2			
CD 1	211.41 MB	49	02:34

Remaining: 04:52

Progress bar: 100%

Package list:

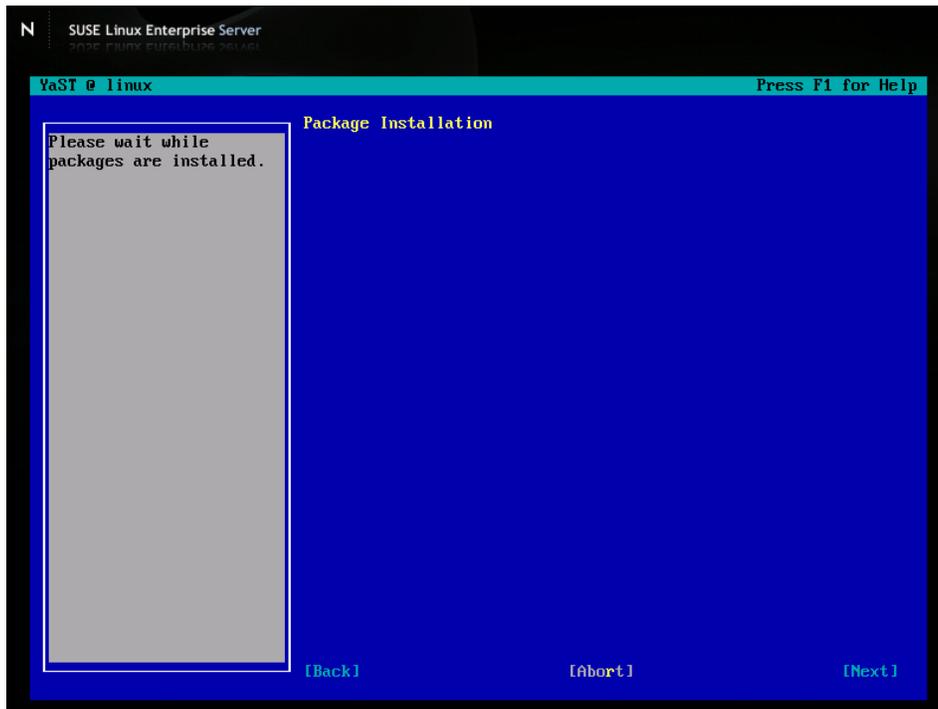
- yast2-slp-2.13.4-0.17.i586.rpm (installed size 295.13 KB) – SLP Agent and Browser for YaST
- yast2-transfer-2.13.4-0.10.i586.rpm (installed size 327.47 KB) – YaST2 - Agent for Various Transfer Protocols
- dbus-1-glib-0.60-33.19.i586.rpm (installed size 169.50 KB) – D-Bus Message Bus System
- dbus-1-mono-0.60-33.22.i586.rpm (installed size 51.80 KB) – Mono Bindings for D-BUS
- mysql-5.0.26-12.18.i586.rpm (installed size 31.81 MB) – A True Multiuser, Multithreaded SQL Database Server
- rpm-4.4.2-43.28.i586.rpm (installed size 7.62 MB) – The RPM Package Manager
- hal-0.5.6-33.36.i586.rpm (installed size 1.52 MB) – Daemon for Collecting Hardware Information
- dbus-1-python-0.60-33.22.i586.rpm (installed size 895.34 KB) – Python bindings for D-BUS
- kernel-smp-2.6.16.60-0.21.i586.rpm (installed size 56.22 MB) – Kernel with Multiprocessor Support
- kernel-default-2.6.16.60-0.21.i586.rpm (installed size 48.76 MB) – The Standard Kernel
- kernel-default-2.6.16.60-0.21.i586.rpm (installed size 48.76 MB)

Buttons: Help, Back, Abort, Next

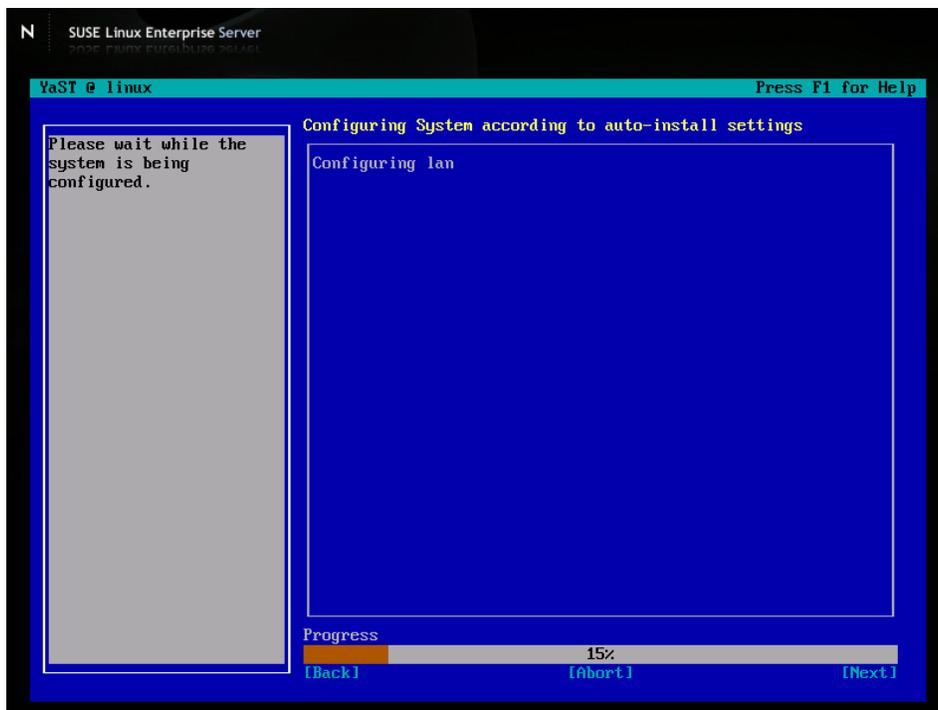
The setup does not require any user input until after the system reboots.

On system reboot, select boot from hard disk, and the default SLES 10.2 kernel listed.

The install will continue.



Allow the automatic configuration to continue.



Once the installation has completed, you will be asked to provide connection and security information for your new system.

```
N SUSE Linux Enterprise Server
##### Final Setup Step (1/6) #####
##### Network Setup #####

Please enter the correct values for your network.
The current value or previously entered value appears in parentheses.
If nothing is entered the value in parentheses will be used.

IP address (example: 192.168.1.8):
Subnet Mask (example: 255.255.255.0):
Gateway (example: 192.168.1.1):
Primary DNS (example: 192.168.1.1):
Secondary DNS (example: 192.168.1.1):
Domain (example: gwava.com):
Hostname (example: linux-szf4.site):

Please verify that these values are correct:
IP address: 192.168.1.8
Subnet Mask: 255.255.255.0
Gateway: 192.168.1.1
Primary DNS: 192.168.1.1
Secondary DNS: 192.168.1.1
Domain: gwava.com
Hostname: linux-szf4.site

Finish setting up the server with these values? (y\N): _
```

To complete the setup, all pertinent network information must be provided for your system. The defaults detected in parentheses will be set if you simply hit 'enter'. To change the setting, enter the appropriate value.

Ensure that you have the ip address configured correctly, this is the only interface to set or change the network settings.

After the settings have been entered, you are asked to verify that the following information is correct. Review the information and hit 'y' or 'n' and 'enter' to either re-enter the information or to continue.

```
N SUSE Linux Enterprise Server
##### Final Setup Step (2/6) #####
##### Test Network #####

Your network settings will now be tested. If there is a failure, you
will be directed to resolve the problem before continuing.

Testing general connectivity using Ping
PING gwava.com (67.212.76.2) 56(84) bytes of data.
64 bytes from host.cabserver.net (67.212.76.2): icmp_seq=1 ttl=47 time=88.8 ms
64 bytes from host.cabserver.net (67.212.76.2): icmp_seq=2 ttl=47 time=90.3 ms

--- gwava.com ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1004ms
rtt min/avg/max/mdev = 88.808/89.600/90.393/0.847 ms
Test port 80 inbound
--09:38:02-- http://download.gwava.com/gwava4/test/test
=> /tmp/test'
Resolving download.gwava.com... 209.90.108.26
Connecting to download.gwava.com|209.90.108.26|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 54 [text/plain]

100%[=====>] 54          --.-K/s

09:38:03 (1.20 MB/s) - '/tmp/test' saved [54/54]

Test port 25 outbound
```

After you have set the network settings, they will be tested for connectivity.

```
N SUSE Linux Enterprise Server
##### Final Setup Step (3/6) #####
##### SSH Setup #####

SSH allows access to the server via a private key or via the root
password. It is recommended that you enable SSH permanently.

Please select an option.
1: Start SSH now and enable it permanently.
2: Stop SSH now.
3: Start SSH now.
4: Stop SSH now and disable it permanently.
5: Exit
Enter Selection: _
```

SSH allows remote console administration on port 22. This can be turned on and off later through the GWAVA appliance control web interface. When you permanently enable or disable the service, it is removed from the runlevel and will be enabled or disabled on system startup until the setting is changed.

Next, is the time setup for the server. It is strongly recommended to setup the time on your system.

```
N | SUSE Linux Enterprise Server
    | 2022-01-19 10:00:00 UTC
    |
    | ##### Final Setup Step (4/6) #####
    | ##### Time Setup #####
    |
    | It is recommended that you set your time information now.
    |
    | Set up the time and timezone? (y/n)
```

Pick your location. The wizard will narrow the terms to display a manageable list of time zones for you to select from.

```
N | SUSE Linux Enterprise Server
    | 2022-01-19 10:00:00 UTC
    |
    | ##### Final Setup Step (4/6) #####
    | ##### Time Setup #####
    |
    | It is recommended that you set your time information now.
    |
    | Set up the time and timezone? (y/n)y
    | Please identify a location so that time zone rules can be set correctly.
    | Please select a continent or ocean.
    | 1) Africa
    | 2) Americas
    | 3) Antarctica
    | 4) Arctic Ocean
    | 5) Asia
    | 6) Atlantic Ocean
    | 7) Australia
    | 8) Europe
    | 9) Indian Ocean
    | 10) Pacific Ocean
    | 11) none - I want to specify the time zone using the Posix TZ format.
    | #? _
```

```

N SUSE Linux Enterprise Server
2008-01-01 10:00:00

8) Europe
9) Indian Ocean
10) Pacific Ocean
11) none - I want to specify the time zone using the Posix TZ format.
#? 2
Please select a country.
 1) Anguilla                27) Honduras
 2) Antigua & Barbuda      28) Jamaica
 3) Argentina              29) Martinique
 4) Aruba                   30) Mexico
 5) Bahamas                31) Montserrat
 6) Barbados                32) Netherlands Antilles
 7) Belize                  33) Nicaragua
 8) Bolivia                 34) Panama
 9) Brazil                  35) Paraguay
10) Canada                  36) Peru
11) Cayman Islands         37) Puerto Rico
12) Chile                   38) St Barthelemy
13) Colombia               39) St Kitts & Nevis
14) Costa Rica             40) St Lucia
15) Cuba                   41) St Martin (French part)
16) Dominica               42) St Pierre & Miquelon
17) Dominican Republic    43) St Vincent
18) Ecuador                44) Suriname
19) El Salvador            45) Trinidad & Tobago
20) French Guiana         46) Turks & Caicos Is
21) Greenland              47) United States
22) Grenada                48) Uruguay
23) Guadeloupe            49) Venezuela
24) Guatemala              50) Virgin Islands (UK)
25) Guyana                 51) Virgin Islands (US)
26) Haiti
#? -

```

Select your resident nation.

```

N SUSE Linux Enterprise Server
2008-01-01 10:00:00

24) Guatemala              50) Virgin Islands (UK)
25) Guyana                 51) Virgin Islands (US)
26) Haiti
#? 4?
Please select one of the following time zone regions.
 1) Eastern Time
 2) Eastern Time - Michigan - most locations
 3) Eastern Time - Kentucky - Louisville area
 4) Eastern Time - Kentucky - Wayne County
 5) Eastern Time - Indiana - most locations
 6) Eastern Time - Indiana - Daviess, Dubois, Knox & Martin Counties
 7) Eastern Time - Indiana - Starke County
 8) Eastern Time - Indiana - Pulaski County
 9) Eastern Time - Indiana - Crawford County
10) Eastern Time - Indiana - Switzerland County
11) Central Time
12) Central Time - Indiana - Perry County
13) Central Time - Indiana - Pike County
14) Central Time - Michigan - Dickinson, Gogebic, Iron & Menominee Counties
15) Central Time - North Dakota - Oliver County
16) Central Time - North Dakota - Morton County (except Mandan area)
17) Mountain Time
18) Mountain Time - south Idaho & east Oregon
19) Mountain Time - Navajo
20) Mountain Standard Time - Arizona
21) Pacific Time
22) Alaska Time
23) Alaska Time - Alaska panhandle
24) Alaska Time - Alaska panhandle neck
25) Alaska Time - west Alaska
26) Aleutian Islands
27) Hawaii
#?

```

Select the appropriate time zone.

```

N SUSE Linux Enterprise Server
  9) Eastern Time - Indiana - Crawford County
 10) Eastern Time - Indiana - Switzerland County
 11) Central Time
 12) Central Time - Indiana - Perry County
 13) Central Time - Indiana - Pike County
 14) Central Time - Michigan - Dickinson, Gogebic, Iron & Menominee Counties
 15) Central Time - North Dakota - Oliver County
 16) Central Time - North Dakota - Morton County (except Mandan area)
 17) Mountain Time
 18) Mountain Time - south Idaho & east Oregon
 19) Mountain Time - Navajo
 20) Mountain Standard Time - Arizona
 21) Pacific Time
 22) Alaska Time
 23) Alaska Time - Alaska panhandle
 24) Alaska Time - Alaska panhandle neck
 25) Alaska Time - west Alaska
 26) Aleutian Islands
 27) Hawaii
#? 17

The following information has been given:

    United States
    Mountain Time

Therefore TZ='America/Denver' will be used.
Local time is now:   Tue Mar  3 07:54:17 MST 2009.
Universal Time is now: Tue Mar  3 14:54:17 UTC 2009.
Is the above information OK?
1) Yes
2) No
#? -

```

If you opt to specify a custom time zone, or do not find your time zone listed, you may choose the custom option: 'none'.

```

It is recommended that you set your time information now.

Set up the time and timezone? (y/n)y
Please identify a location so that time zone rules can be set correctly.
Please select a continent or ocean.
1) Africa
2) Americas
3) Antarctica
4) Arctic Ocean
5) Asia
6) Atlantic Ocean
7) Australia
8) Europe
9) Indian Ocean
10) Pacific Ocean
11) none - I want to specify the time zone using the Posix TZ format.
#? 11
Please enter the desired value of the TZ environment variable.
For example, GST-10 is a zone named GST that is 10 hours ahead (east) of UTC.

```

The time zone must be specified in Time Zone environment Variable. Syntax: <time zone name> <hours ahead of UTC> The time zone name does not matter, but the hour variable sets the time for the system.

for example:

MST-6

...would be accurate for the Mountain Standard Time zone, U.S. and Canada. The time zone may be any name you like, as long as it conforms to Posix Time Zone format.

```

Please enter the desired value of the TZ environment variable.
For example, GST-10 is a zone named GST that is 10 hours ahead (east) of UTC.
GST-6
awk: cmd. line:4: warning: escape sequence `\' treated as plain `\'

The following information has been given:

      TZ='GST-6'

Therefore TZ='GST-6' will be used.
Local time is now:      Wed Jul  1 23:50:39 GST 2009.
Universal Time is now: Wed Jul  1 17:50:39 UTC 2009.
Is the above information OK?
1) Yes
2) No
#? █

```

After your custom time zone has been created, the information must be verified.

```

Setting the time using NTP

Specify custom time server? (y/n)y
Time server (example: time.nist.gov): █

```

A custom Network Time server may also be specified. If a custom time server is used, provide the DNS name or IP address of the NTP server. Default, (time.nist.gov), is shown.

```

Setting the time using NTP

Specify custom time server? (y/n)y
Time server (example: time.nist.gov): time.nist.gov
Server: time.nist.gov
  1 Jul 17:51:34 ntpdate[3525]: adjust time server 192.43.244.18 offset 0.080447
sec

Time is now set to Wed Jul  1 17:51:34 UTC 2009
Try to get initial date and time via NTP from time.nist.gov           done
Starting network time protocol daemon (NTPD)cp: cannot stat `/etc/localtime': No
such file or directory                                           done

Time and timezone setup complete
gwava-iso:/opt/begininfinite/gwava/scripts # █

```

After the time server is specified, the system attempts to connect and sync the time.

Confirm the time settings for your system to continue.

```
N SUSE Linux Enterprise Server
2022-07-19 10:10:10

##### Final Setup Step (5/6) #####
##### QMS Migration #####

If you have an old GWAVA 4 installation running on NetWare you can migrate the
databases and their message data over to the new GWAVA 4 appliance.

The migration process is time consuming and may take several hours depending
on the size of your quarantine. It is highly recommended that you run this
migration during off hours.

If you plan on running the migration later you may lose some data. You are
not required to migrate your old QMS data if you do not wish to.

Migrate your old QMS data now? (y/n)_
```

If you want to migrate an existing NetWare GWAVA5 Quarantine to the GWAVA Appliance, select 'yes' here. The wizard uses ncpmount to pull the information over the network connection from the existing qms to the Appliance.

**You will be required to shut down the QMS system on the NetWare machine to complete the operation. This process can take several hours and should only be performed after-hours. If you wish to migrate QMS, this is the time to do so. Thought you may invoke the command later, you will have data loss unless the migration is completed during setup.**



For the final step, you are asked to set the root password for the system. This is the administrator password which will be required to log in to the system via ssh or through the console. **DO NOT LOSE THIS PASSWORD.**

The Appliance is designed to provide all the necessary functions for GWAVA 5 inside the GWAVA 5 web administration, thereby removing all need for console level administration. While normal operation of the GWAVA 5 Appliance removes all need for console level administration, the root password may be required for support.

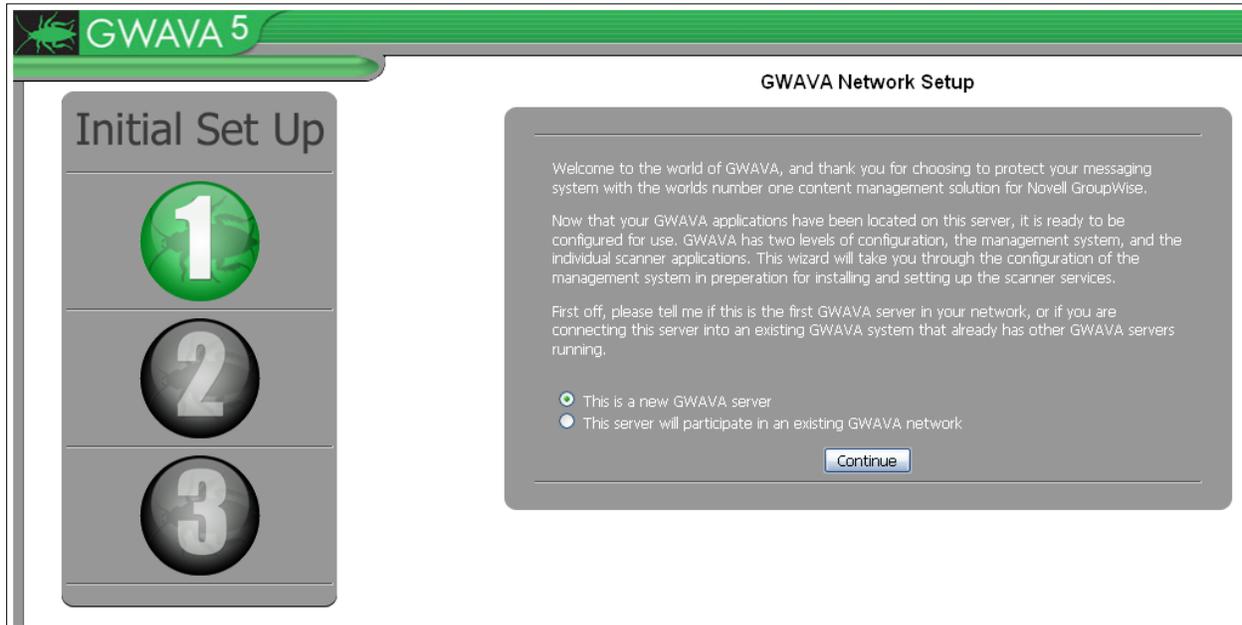
GWAVA 5 appliance setup is now complete. All that remains is activating the GWAVA 5 server and creating a scanner of your choice.

## Server Activation

To Activate your server, open a browser and enter the ip address or DNS name of the Appliance, with port 49282.

[http://<your\\_server\\_ip>:49282](http://<your_server_ip>:49282)

This is the connection address for the GWAVA 5 management console. When you first connect to the system, you should be taken to the setup page, shown below.



The GWAVA Appliance is designed to replace existing GWAVA 5 servers, and as such it is recommended to setup the Appliance as a new GWAVA server.

Select '**Continue**'.

The following information is required.

**GWAVA 5**

### Initial Set Up

- 1
- 2
- 3

#### GWAVA Network Setup

Because this is the first, or only GWAVA management server in your network, we need to gather some rudimentary settings to secure the server and prepare it for installing the scanner applications that will protect your e-mail system.

**Server Parameters**

Server identifying Name:  ⓘ  
Client connection address:  ⓘ

**Administration Information**

GWAVA administrator Login Name:  ⓘ  
GWAVA administrator password:  ⓘ  
Verify administrator password:  ⓘ  
Internet Domain (eg. GWAVA.com):  ⓘ  
GWAVA administrators full name:  ⓘ  
GWAVA administrator e-mail address:  ⓘ

**Mail Relay / User Authentication**

SMTP server for notification/authentication:  ⓘ  
SMTP AUTH username:  ⓘ  
SMTP AUTH password:  ⓘ

The server name should match the host name you set for the server. The connection address is the address that GWAVA 5 will use to serve the management console. Both the Server parameters should be left as default.

The Administrator login name and password are required to connect to, and administer the GWAVA 5 management console. **DO NOT LOSE THIS PASSWORD.**

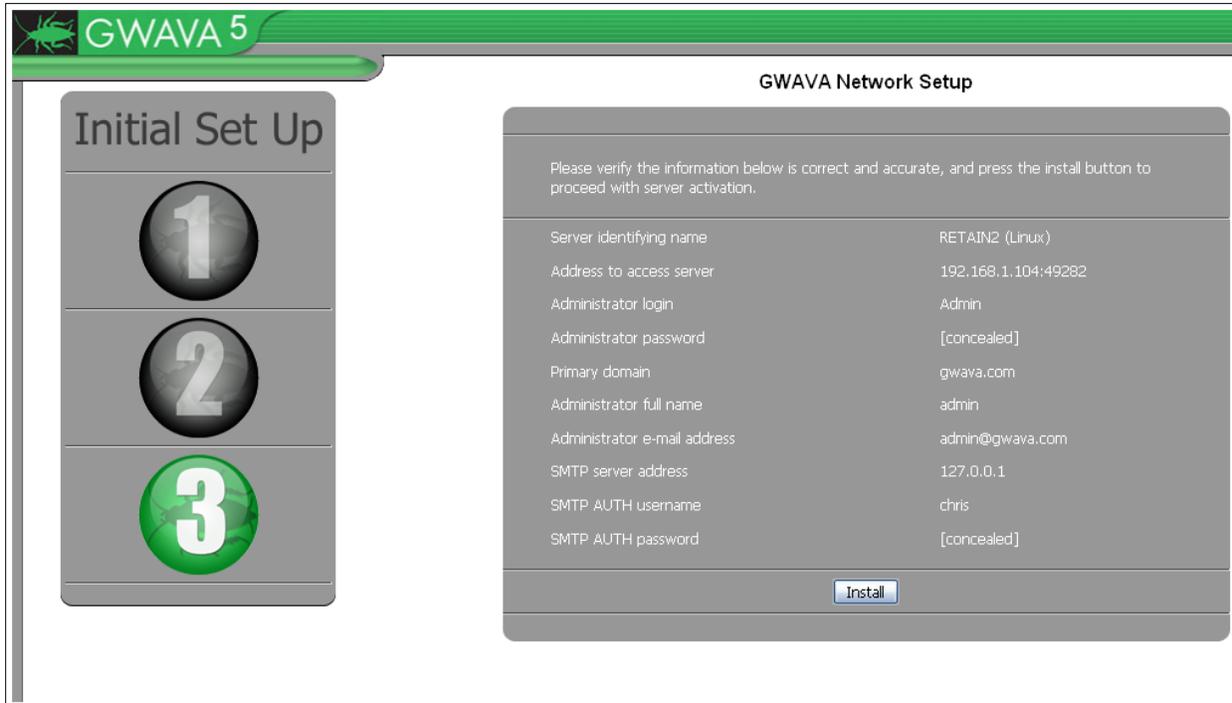
The Internet domain is the domain that the GWAVA 5 server will filter mail for. This should be your company domain. (ie. GWAVA.com)

The administrator name and email address is the name and address which will appear on GWAVA 5 notifications and digests. Any responses to these messages will be sent to the Administrator's e-mail address.

The SMTP server address should be the address of your GWIA or SMTP gateway. If you are using an SMTP scanner, this will be the address which GWAVA 5 will forward the incoming mail to. GWAVA 5 also uses this address for GroupWise authentication for QMS authentication and access.

The SMTP authorization name and password are not required for notifications, but are recommended. For GroupWise systems, this can be any username and password, and does not have to be an administrator. (ie. Username: bob Password: c751h)

After you have provided the information, select '**Continue**'.

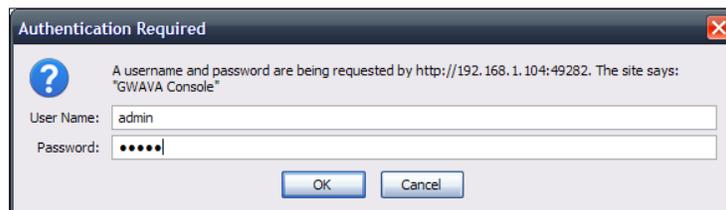


You will be asked for confirmation. Clicking **'Install'** will activate the GWAVA 5 server, and you will be required to login using the admin name and password you provided earlier. Click **'back'** on your browser if you need to make any changes.

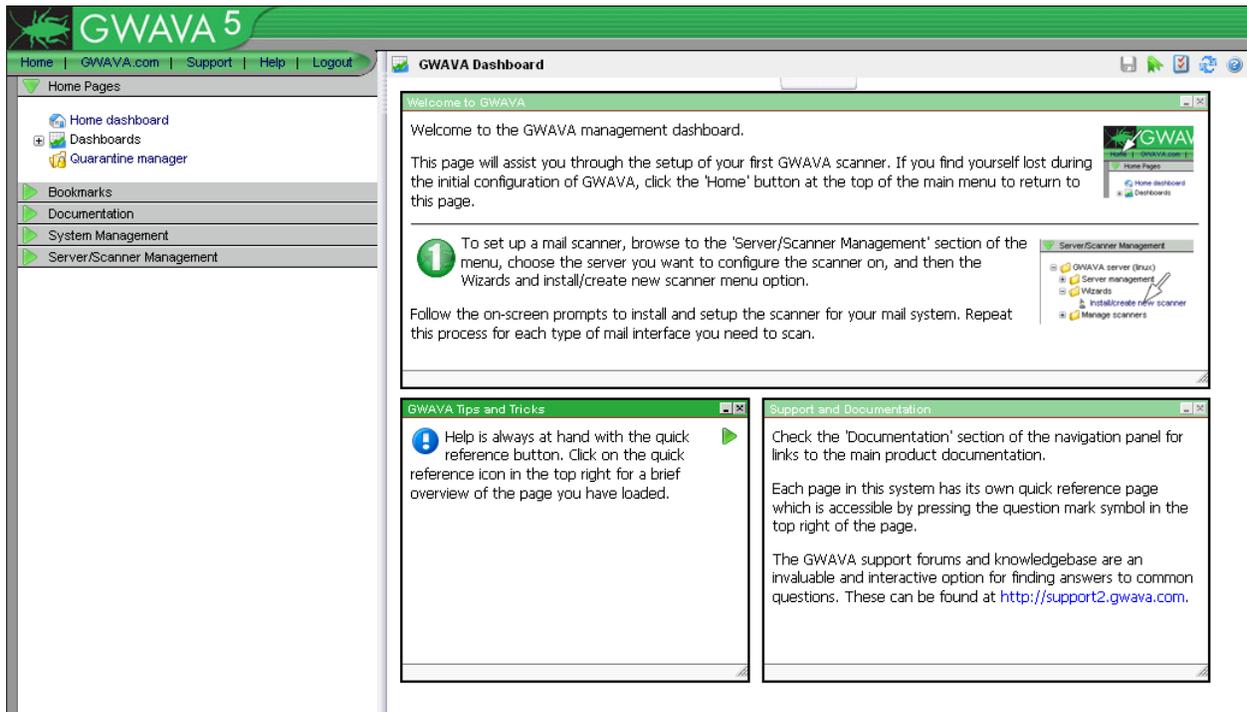
When you click **'Install'**, wait for the activation process to complete. You should be redirected to the management login screen.



Click on **'Enter Management Console'** and provide the administrator username and password to login.

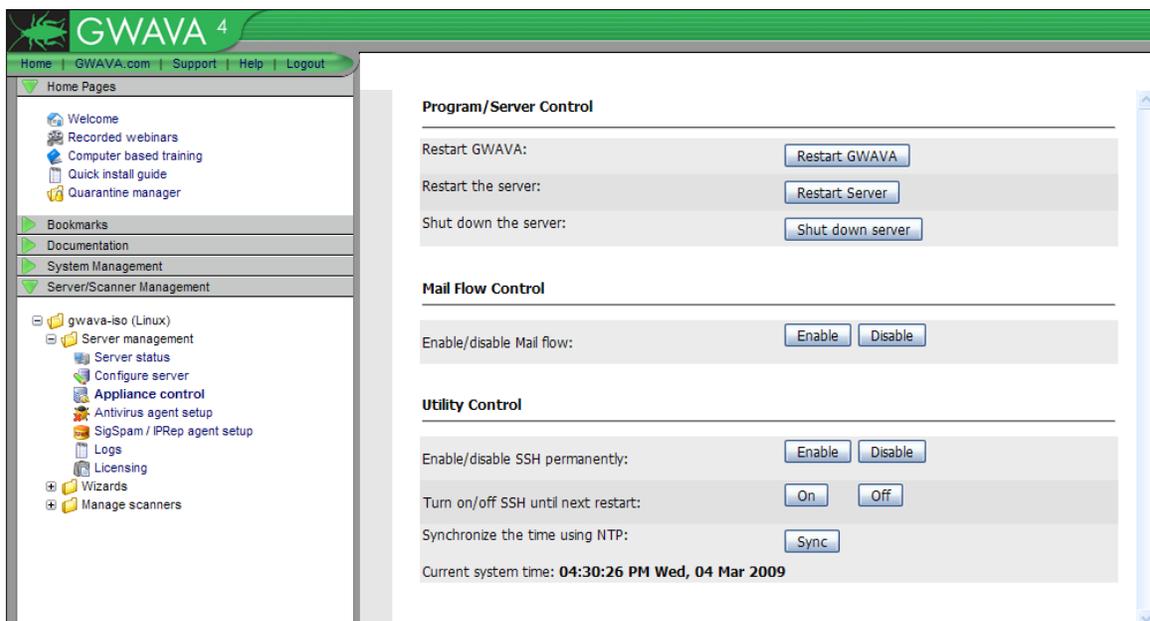


Once you log in, your new GWAVA 5 server should display the following page.



This page is the home page for the Management Console.

To administer any necessary changes to the GWAVA 5 appliance, open the **Appliance Control** page found under **Server/Scanner Management | <Server name> | Server Management**, as shown below.



The Appliance Control page allows you to control the basic functions of the server, and open SSH access if required.

### Program/Server Control

---

Restart GWAVA:	<input type="button" value="Restart GWAVA"/>
Restart the server:	<input type="button" value="Restart Server"/>
Shut down the server:	<input type="button" value="Shut down server"/>

### Mail Flow Control

---

Enable/disable Mail flow:	<input type="button" value="Enable"/>	<input type="button" value="Disable"/>
---------------------------	---------------------------------------	--

### Utility Control

---

Enable/disable SSH permanently:	<input type="button" value="Enable"/>	<input type="button" value="Disable"/>
Turn on/off SSH until next restart:	<input type="button" value="On"/>	<input type="button" value="Off"/>
Synchronize the time using NTP:	<input type="button" value="Sync"/>	

Current system time: **04:04:38 PM Tue, 03 Mar 2009**

When an update is performed, GWAVA 5 must be restarted to complete the process. This can be achieved from this web console at the click of a button, as well as a full system restart or shutdown.

Suspending mail flow, enabling or disabling SSH, and synchronizing the system time can all be performed from this page.

The GWAVA 5 server is now installed and ready to be configured for your system.

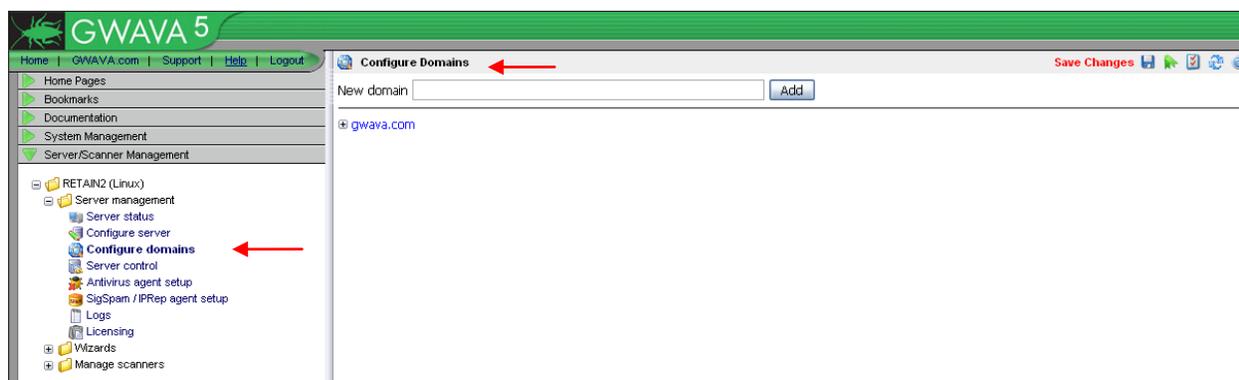
## SMTP Scanner, SMTP Proxy Mail Scanner

The SMTP scanners are the most recent options to the GWAVA system, and allow the incoming and, or, outgoing mail to be intercepted, scanned, and filtered completely independent of the mail system. This setup has the distinct advantage of relieving the mail system of unnecessary and unwanted traffic, leaving mail system resources open to function with greater performance and security.

The SMTP interfaces add a layer between the GWIA, or any other mail system's SMTP sending agent, and the internet. Sending mail is forwarded through an SMTP proxy, which then sends the filtered, clean mail to the original recipient. Incoming mail is scanned via the SMTP scanner, which then sends the filtered and clean mail to your mail system, unaltered. These scanners allow GWAVA to act independently of your mail system.

The SMTP scanner will only work if your MX record points to the GWAVA SMTP interface for mail delivery, and if your domain and mail system SMTP are listed correctly in your GWAVA system.

GWAVA SMTP will then forward the clean mail to the SMTP Gateway specified during server activation. To view or change the domain and SMTP for your Mail system, go to [Server/Scanner Management](#) | [<Server Name>](#) | [Server Management](#) | [Configure domains](#).



The default domain specified during Server Activation will be specified. Additional domains may be added through the new domain addition field along the top of the screen. As always, make sure you save all desired changes made to the page before browsing to a different section of the management console.

The Mail relay agent SMTP Server and Default domain MUST be correct for your system. If you have multiple domains, you must list the additional domains. GWAVA will only accept mail for the listed domain(s). Domains can be deleted or removed from the system by selecting the domain, then the red 'X' next to the selected domain name.

Select the desired domain to expand and modify the settings for the desired domain. The default domain settings are shown below.

When a domain is selected, it is expanded and allows for multiple settings for user mail validation.

GWAVA checks for valid users for each message received, blocking those which are undeliverable due to an incorrect domain or nonexistent user for each domain. GWAVA must have a connection to an active SMTP server for each domain to verify the users. LDAP lookup is also supported. If users or messages are received which do not contain domain information, GWAVA checks these users against the default domain. Be sure to set the default domain for your system.

Multiple SMTP or LDAP servers are supported for failover purposes. If a SMTP server is unavailable GWAVA will send messages to the next available SMTP server listed according to the 'order' value. The 'order' values lowest numbers first, usually with the default SMTP listed as '0', second as '1', and so on.

If the SMTP server requires authorization then the user name and password must be provided for each SMTP server listed. Generally, the authorization username and password will not be needed unless the SMTP server has been specifically configured to only accept authorized connections.

GWAVA shares the user list for each domain between the GWAVA modules, and specific SMTP servers can be selected to serve in different roles for each system, such as using one to receive mail, digests, and notifications, while another is used by QMS to authenticate users. Default settings allows SMTP servers to serve in all roles.

If the SMTP server requires encryption such as TLS or SSL, the setting must be correct.

If the GWAVA server is part of a GWAVA system network with multiple GWAVA servers, then the information from the domains can either be shared across the GWAVA network, or it can be made specific to this one server. For most all systems the option of 'Global' will work sufficiently.

## LDAP (optional)

GWAVA supports the option to use LDAP user authentication instead of SMTP authorization for QMS authorization and recipient verification. In general, this will not be required for most systems; LDAP information is only required if you wish to use LDAP for lookup or authentication.



In order to use LDAP for user lists and authorization, the LDAP lookup information must be filled in.

ldap server	username	password	encryption	DN search base	search fields (optional)	order	
ldap1.gwava.com	cn=admin,o=gwava	•••••	no encryption	ou=users,o=gwava		0	✖

For the LDAP server connection address, place DNS name or IP address of the server

The username and password needs to be a full LDAP username including context. The user should have administrator rights.

The DN search base can be set to specify the LDAP tree where GWAVA will begin to search for objects. For eDirectory this field can be left blank, though if set, it specifies a starting point for the search in the LDAP tree. (For instance: ou=users,o=gwava) If using Active Directory the DN **must be set** for the user list to work. (ie. Cn=users,dc=exg,dc=gwava,dc=com)

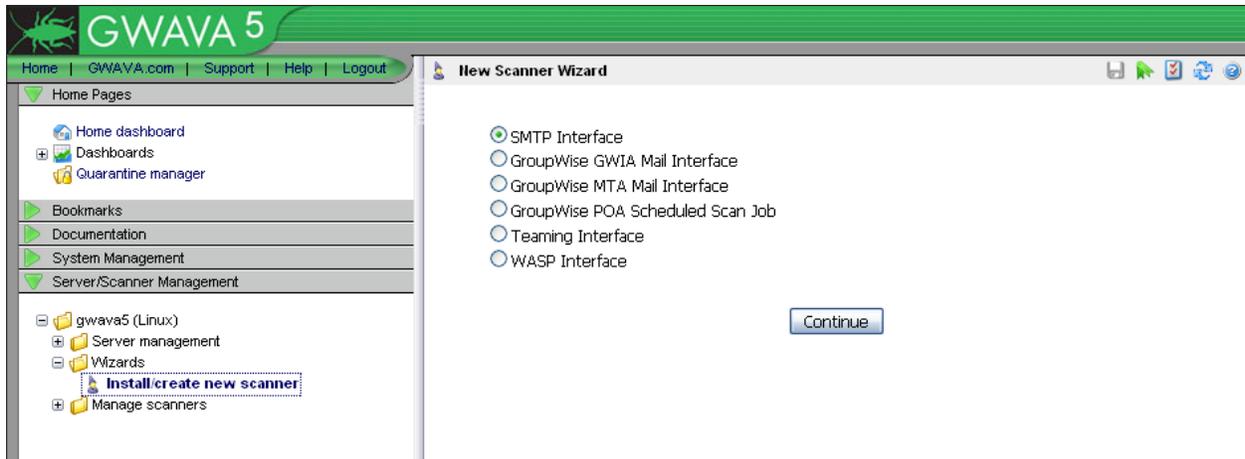
Search fields are usually not necessary for any system to setup, but can be useful if desired. By default most LDAP servers (including eDirectory and Active Directory) have an attribute applied to an object of the type "mail" which contains the object's or user's email address. If you have email addresses for users stored under an attribute other than mail you can specify the possible attributes by separating them with commas.

In the example below the LDAP server is set to search for the attributes 'mail' and 'secondarymail'.

ldap server	username	password	encryption	DN search base	search fields (optional)	order	
10.1.5.12	cn=admin,o=robtain	•••••	no encryption	ou=users,o=robtain	mail,secondarymail	0	✖

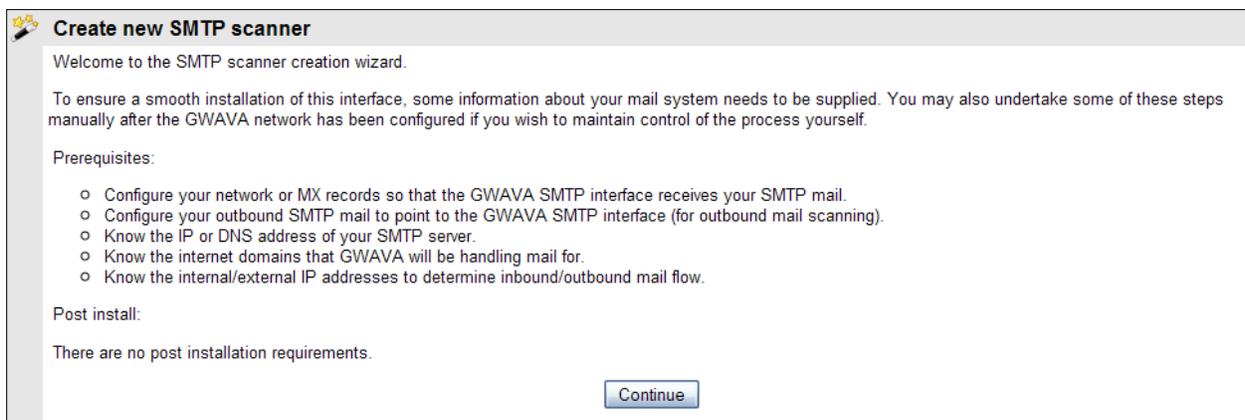
Once the Domains have been properly configured for the system, the SMTP scanner, and any other scanners may be properly created.

The Scanner creation wizards, (found under Server/Scanner Management | <Server name> | Wizards | Install/create new scanner), walk through the steps and information required to install the different scanners for your system. Select the SMTP Interface scanner and follow the instructions to install the scanner.



To install a SMTP scanner, select the SMTP scanner option from the wizard and click next.

The SMTP scanner creation wizard informs you of the information you must know to successfully create the scanner.



The **Scanner Name** is whatever you wish the scanner to be named in the GWAVA server.

The **IP listen address** is the address of the GWAVA Appliance. This should also be listed on the MX record for your domain.

### Allowed relay addresses

are the source addresses which are allowed to send mail through the GWAVA SMTP scanner. Your mail system SMTP address should be listed here, as well as any other mail sending source for your domain. Mail coming from these addresses will be treated as outbound mail. No source but these listed addresses will be allowed to send mail through the SMTP interface.

The red 'X' removes listed address ranges and the blue 'add...' link provides an extra address/range box.

**IP Reputation** and **RBL** drop at connection settings are recommended as default. This dumps any incoming message that fails these initial incoming tests, saving bandwidth and performance.

### RBL

The Real-time Blackhole List scanner searches the header of incoming message files to see if their source address is listed on an RBL. When enabled to drop on connection, a positive RBL event will cause the SMTP scanner to terminate the connection to the sending server for the offending message as soon as the event occurs. The RBL scanner utilizes real-time blackhole lists hosted on the servers listed under the RBL configuration page. RBL servers may be added or removed from the configuration. This is a strict pass or fail engine, and an offending ip address listed on the RBL will not be allowed to send mail to your system. Take time to verify that the RBL servers listed in the configuration are the desired list servers. The default list servers for RBL are, sbl-xbl.spamhaus.org and bl.spamcop.net.

### IP Reputation

IP Reputation works much like the RBL scanner does, in that it uses a black list, but also has a white list for common mail sources. When used with the SMTP scanner, IP Reputation will also temporarily fail messages from sources not found on either list. The temporary fail will allow the sending SMTP gateway to retry, and it will eventually get through. This catches one-time spam bursts from sources not found on the black list, while enabling good mail to still be delivered to the system. The black and white lists are maintained and updated online, but are cached on the local machine as they are used.

### SPF

Sender Policy Framework can be used with the GWIA and SMTP scanners. Sender Policy Framework, (SPF) attempts to verify the sender of each email message, which can eliminate spoofed email and most

**Create new SMTP scanner**

Scanner Name

Install on this server gwava-iso (Linux)

IP listen address

Allowed relay addresses     [\[add another address/range\]](#)

Perform IP reputation test

Perform RBL drop at connection

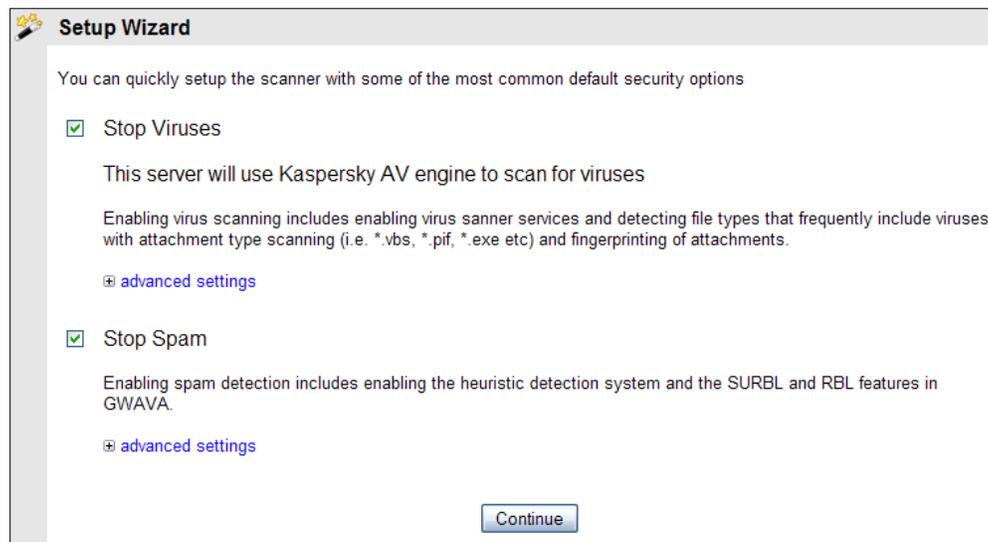
Perform SPF drop at connection

backscatter attacks. For SPF to work correctly, the sending domain must have an updated SPF record set up in DNS. If the sending domain does not have a SPF record set in their DNS, then their mail will not be blocked. Setting up a correct SPF record will block messages from spammers who are pretending to be you, to your system.

To use SPF on a GWIA scanner, you must correctly specify which line in the header of mail messages is to be used. If the mail system is using a relay or proxy which adds a line to the message, then you should set SPF to use the second line (2), otherwise, the line used should be set to one (1), which is the default.

SPF is not enabled by default, but can be a powerful tool to keep spam from entering your system.

Select your preferences, and click 'Continue'.



Set the default actions for viruses and spam. These settings can be changed after scanner creation.

Click 'Continue'.

Review and confirm your settings. If you wish to make changes, use the **'back'** button on your browser, correct the information, and continue.

### Create new SMTP scanner

The requisite information has been collected and is ready to be deployed. If you are satisfied that the installation information is correct, press the install button to commit the installation procedure to the GWAVA network.

Scanner name	SMTP Scanner
Install to server	gwava-iso (Linux)
IP listen address	192.168.1.104
Outbound SMTP sources	127.0.0.1 192.168.*.* 172.16.*.* 10.*.*.*
IP Reputation	enabled
Greylisting	disabled
RBL connection drop	enabled
SPF connection drop	enabled
Stop Viruses	Yes
Stop Spam	Yes

Click **'Install'** to continue.

### Installing SMTP scanner

Installation tasks are now being performed. On completion, you will be able to continue to configure the scanner services to start protecting your messaging system.

**DO NOT** change pages during this procedure or the installation will not complete. Please wait until you are taken to the completion response page.

Wait while the installation completes.

### SMTP scanner installation finished

Activating virus scanning ....

Activating Attachment Blocking ...

Setting up Fingerprinting ...

Setting up Spam System ...

Setup of Antispam system complete.

Scanner 'SMTP Scanner' was created successfully.

You should now refresh your servers view for the server that this scanner was connected to for configuration options.

Once installation is complete, refresh the Server/Scanner Management | <Server Name> | Manage scanners folder to view your new SMTP scanner.

Your SMTP scanner is now created and ready to configure.

As soon as the MX record pointing to the GWAVA SMTP is active, the SMTP scanner will begin filtering mail.

