



**Portal Administrator Guide**  
**1 June 2014**

|   |          |
|---|----------|
| <b>Overview.....</b>                              | <b>1</b> |
| Architecture.....                                 | 1        |
| Supported Operating Systems.....                  | 1        |
| <b>Installation and Prerequisites .....</b>       | <b>1</b> |
| Minimum and Recommended Hardware.....             | 2        |
| Network Firewall.....                             | 2        |
| Mailborder Portal Server Installation.....        | 2        |
| Installation Environment.....                     | 3        |
| Installation Script Download.....                 | 3        |
| Installation Details.....                         | 3        |
| Source Guardian.....                              | 3        |
| <b>Portal Member Groups and Permissions .....</b> | <b>4</b> |
| Groups.....                                       | 4        |
| Base User Group.....                              | 4        |
| Global User Group.....                            | 4        |
| Organization Groups.....                          | 4        |
| Requirements and Limitations.....                 | 4        |
| <b>Privilege Levels.....</b>                      | <b>5</b> |
| Member Level.....                                 | 5        |
| Organizational Level.....                         | 5        |
| Global Level.....                                 | 6        |
| <b>Portal Interface .....</b>                     | <b>7</b> |
| My Email.....                                     | 7        |
| Email Log.....                                    | 7        |
| Filters.....                                      | 7        |
| Advanced Search.....                              | 7        |
| Charts and Graphs.....                            | 7        |
| Organizations.....                                | 8        |
| Email Log.....                                    | 8        |
| Filters.....                                      | 8        |
| Advanced Search.....                              | 8        |
| Charts and Graphs.....                            | 8        |
| Global.....                                       | 8        |
| Email Log.....                                    | 8        |

|                         |          |
|-------------------------|----------|
| Filters.....            | 8        |
| Advanced Search .....   | 8        |
| Charts and Graphs ..... | 8        |
| <b>Rule Logic .....</b> | <b>9</b> |
| Example.....            | 9        |

## Overview

The Mailborder Member Portal is an add-on component for Mailborder clusters that allows for distinct user, manager, and administrator access to information and resources within the cluster. This capability greatly reduces the work load for Mailborder cluster administrators by safely granting lower level administrative capabilities to users, which is tightly controlled by role assignments.

## Architecture

The Mailborder Member Portal is designed to run on a web server platform, which accesses the Mailborder Master server remotely. The Portal utilizes several capabilities that are only available on Linux operating systems and therefore must be hosted only on supported platforms.

## Supported Operating Systems

As of the current version, the Mailborder Member Portal installation script supports the following operating system deployments for hosting:

- CentOS 6
- Debian 7
- RedHat 6 \*\*
- Ubuntu 12.04 LTS
- Ubuntu 14.04 LTS

\*\* The licensing required for the use of Red Hat Enterprise Linux is not included in Mailborder licensing.

Other Linux or BSD variants may be used as long as the appropriate web server capabilities are supported and the PHP version is at a minimum of v5.3. However, automatic installation scripts and cron task support are not available for unsupported operating systems.

## Installation and Prerequisites

The Mailborder Member Portal must be installed on a fresh installation of one of the supported operating systems in order to utilize the automated installation scripts and cron tasks. Graphical interfaces such as Gnome or KDE are not required or recommended, but may be installed if so desired. The architecture can be either physical or virtual. The Mailborder Member Portal has been extensively tested on VMware vSphere Hypervisor (ESXi v5 and v5.1) and is the recommended platform for virtualization. However, any virtualization platform should be sufficient.

## Minimum and Recommended Hardware

The following is the bare minimum system resources recommended and supported:

- 512MB RAM
- Late model multi-core Intel or AMD processor
- 5GB hard disk

The following or greater system resources are recommended and encouraged:

- 2GB - 8GB RAM
- Late model multi-core server Intel or AMD processor
- 20GB hard disk

## Network Firewall

The Mailborder Member Portal will require the ports listed below for normal operation. Additional ports may be opened as required for any additional services running on the server. Ports may be changed for the web service as required. The Mailborder Member Portal does not require a specific port for the web service in order to function correctly.

| Port        | Protocol | Network          | Direction |
|-------------|----------|------------------|-----------|
| <b>22</b>   | TCP      | Internal Network | Inbound   |
| <b>80</b>   | TCP      | External Network | Inbound   |
| <b>443</b>  | TCP      | External Network | Inbound   |
| <b>3306</b> | TCP      | Master Server    | Outbound  |

## Mailborder Portal Server Installation

The Mailborder Portal should be installed on a supported operating system and version. Only the server variants of these operating systems should be utilized. Graphical user interfaces such as Gnome and KDE are not recommended or supported, but may be utilized. Additional third party software can be installed if desired.

If an unsupported operating system is used, the following capabilities or their equivalent are required:

|                     |                                      |
|---------------------|--------------------------------------|
| • PHP 5.3+          | • PHP: Command Line Interface        |
| • PHP: GeolIP       | • PHP: JSON                          |
| • PHP: MySQL Client | • PHP: Curl                          |
| • PHP: GD           | • PHP: Suhosin (recommended)         |
| • PHP: Mcrypt       | • Apache: Mod Security (recommended) |

## Installation Environment

The Mailborder Portal installation script must be installed as the root user. On systems such as Ubuntu where the root user is disabled by default, you will be required to switch to a persistent root environment using sudo. To switch to root:

### Debian, Red Hat, and variants:

```
> su -  
> (enter password)
```

### Ubuntu:

```
> sudo -i  
> (enter password)
```

## Installation Script Download

Once in the root environment, change to a safe directory (e.g /root) to download the install script. For the exact install script, see the Mailborder website for direction specific to your operating system:

**[www.mailborder.com](http://www.mailborder.com) > Main Menu > Docs > Install**

## Installation Details

The install script downloads the required components for the Mailborder Portal server from a repository and logs the details of installation to **/mailborder/install/mbs\_install.log**

During the installation process a number of software packages are installed. This requires that the server have access to the Internet to download the required packages. For a list of all installed packages, review the Mailborder install script for your distribution or for a complete list, which includes installed dependencies, review the **/mailborder/install/mbs\_install.log** file.

On Red Hat based systems the EPEL repository may be installed and enabled. For more information regarding this repository, see: <http://fedoraproject.org/wiki/EPEL>

## Source Guardian

The Mailborder Portal GUI (Graphical User Interface) is a web-based interface written in PHP. In order for the interface and Mailborder Portal scripts to function, the appropriate version of Source Guardian must be installed. This is typically done by the Mailborder Portal installation script, but may need to be changed or updated if the PHP version on the server is upgraded.

For more information regarding the Source Guardian loaders:

<http://www.sourceguardian.com/loaders.html>

## Portal Member Groups and Permissions

There are three basic permission groups on the Mailborder Portal that control access, features, and actions of each user. These groups are combined with a privilege level for that group that determines what a portal user can view and what actions can be executed by that user.

### Groups

#### Base User Group

The Base User Group is the group that all portal members are assigned to when created and is the group that controls access to their own personal email in the Mailborder Portal. Every portal user account must be a member of this group.

#### Global User Group

The Global User Group is the group used to assign Demo Reviewer, Global Reviewer, and Global Administrator roles to portal members. Being a member of this group enables the display of the "Global" menu in the Mailborder Portal and allows the user to see all email and related data within the entire cluster.

#### Organization Groups

Within the Mailborder Master server Organizations can be defined. Each Organization can then have hosted domains assigned to it, which in turn can be reviewed or managed by organizational roles assigned to portal members.

### Requirements and Limitations

- The Base User Group and the Global User Group cannot be modified or deleted. Portal Members can be assigned to these groups. The Base User Group is managed automatically by the Mailborder Master server.
- Every portal member must be a member of the Base User Group and is automatically assigned to this group during creation. If a member is created with an organizational group as the only assignment, the member will automatically be added to the Base User Group with the lowest level permission set. If a user is edited and removed from this group, the user will automatically be added back to the group with the lowest level permission set.
- The Global User Group must be used to assign Global Administrator, Global Reviewer, and Demo Reviewer roles. Attempts to assign these privilege levels to other groups will be ignored during the save process.
- Domains may be assigned to multiple groups at the same time. For example, domain.com can be assigned to the organization group "Manny's Widgets" and then also be assigned to "Global Tire Company". Portal members assigned organizational privilege levels from either group will be able to see and manage domain.com.

## Privilege Levels

A portal member may have multiple privilege levels assigned to control access to various sections of the Mailborder Portal. These privilege levels run in parallel and do not stack. The three base tiers are **Member Level**, **Organizational Level**, and **Global Level**. Each tier opens new base menu trees within the portal interface depending upon if the base tier is assigned to the portal user.

### Member Level

Member level permissions apply directly to the email address registered to the user's Mailborder portal account. Any action taken under this privilege level will apply only to that address and no other. This includes email logs, charting and graphing, whitelists and blacklists, and Object Templates.

#### Basic User

This is the most limited privilege level for users. Users will be able to view and search their own email.

#### Standard User

This privilege level allows users to view, chart, and release quarantined email for their own email address.

#### Extended User

This privilege level has the same privileges as the Standard User and is also allowed to add addresses and domains to their own whitelists and blacklists. These lists only apply to the user's own email address.

#### Power User

\*\* This privilege level has the same privileges as the Extended User and is also allowed to create Object Templates, which are custom scanning rules, for themselves.

\*\* Future release capability. Expected September 2014.

### Organizational Level

Organizational privileges apply to all domains associated with an organization. For example, an organization named "Manny's Widgets" has the domains mailborder.net and mailborder.org assigned to it. When a portal user is assigned an organizational role in Manny's Widgets, a new tree menu item will be available in the Mailborder Portal for that user labeled "Organizations". When the user views the email log, it will show all email for both mailborder.net and mailborder.org. The same applies for creating whitelists and blacklists, charting data, and performing an advanced search.

#### Organizational Reviewer

This privilege level allows the user to view and chart all email for all domains that belong to an organization.

#### Organizational Release Manager

This privilege level allows the user to view, chart, search, and release quarantined email for all domains belonging to an organization.



**Organizational Manager**

This privilege level includes all capabilities of the Organizational Release Manager plus the ability to edit Object Templates for the organization. \*\*

**Organizational Administrator**

This privilege level includes all capabilities of the Organizational Manager plus the ability to manage user privileges for organizational members. \*\*

\*\* Future release capability. Expected September 2014.

**Global Level**

Global privileges apply to all organizations and domains. The global level also allows viewing of email that does not belong to any organization or domain hosted by the Mailborder cluster. An example would be all email that is relayed through the cluster from an external device in the Relay Policy.

Note that all rules from whitelists, blacklists, and Object Templates will apply to all email passing through the Mailborder cluster. Rules that are defined within the Mailborder Master server will be combined with global level rules defined within the Mailborder Portal.

**Global Reviewer**

This privilege level allows the user to view and chart all email that passes through the Mailborder cluster.

**Global Administrator**

This privilege level allows the user to execute all available administrative actions within the Member Portal.

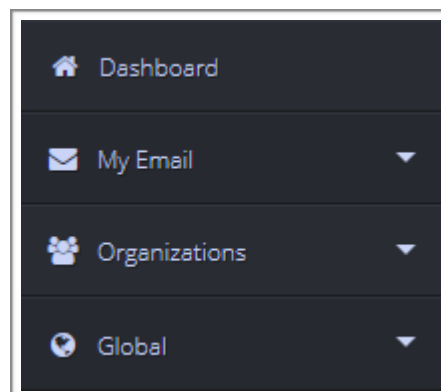
**Demo Reviewer**

This permission level is designed as a marketing tool for the Mailborder Portal. If a user is assigned this privilege level, it locks all actionable items available in the Member Portal. All portal menus will be available, but the user will not be able to change anything to include the password or preferences for their own account. Note that the locks for this privilege assignment override all other assignments.

## Portal Interface

The graphical user interface for the Mailborder Portal is broken into three primary groups based upon the portal member's permission assignments. Menu tree items will only be available if the corresponding privilege level is assigned.

The three primary menu items are **My Email**, **Organizations**, and **Global**.



## My Email

All menu actions under this menu item are restricted to the portal member's personal email address. All views, rules, searches, and charting are filtered to include only this address.

### Email Log

When viewing the email log only email that contains the member's email address in the From or To portions of the personal email will be displayed. If the portal member has the required privilege level to release his or her own quarantined email, then the Release button will be visible and functional. Note that non delivery reports (NDRs) related to the user's email will not be shown since the sender, or From address, is null and the recipient, or To address, is typically an external user being notified of the delivery failure.

### Filters

Filters refer to user created whitelists and blacklists. These filters only apply directionally To the member's personal email address and to nothing else within the Mailborder cluster. When each Mailborder server rebuilds its configuration files these rules are placed first in the rule logic allowing their personal preferences to override any organizational or global rules.

### Advanced Search

The search feature applies only to the portal member's personal email address. All search requests will automatically filter the results to include only the results that contain the portal member's email address in the From or To fields of the email message.

### Charts and Graphs

Like the Advanced Search feature, the charting features will only include the data where email messages include the portal member's personal email address in the From or To fields of each email message.

## Organizations

This menu item is visible only if the portal member is assigned an organizational role within the Mailborder Master server. All menu actions under this menu item are restricted to domains assigned to the organization within the Mailborder Master sever.

### Email Log

The email log is limited to viewing email where the From or To domain is one that belongs to the organization in which the user is assigned privileges. A drop down filter allows the viewer to view all records for all domains at once or by individual domain.

### Filters

Filters refer to organizational user created whitelists and blacklists. The filters apply directly to any domain belonging to the organization. Organizational filters are applied after user filters when building cluster rules. Organizational filters will override global and Mailborder Master server filters where the To domain is one that is owned by the organization.

### Advanced Search

The advanced search is limited to domains assigned to the organization. Search results are filtered so that results are displayed only when the From or To domain in the email message matches a domain or domains assigned to the organization.

### Charts and Graphs

The charting and graphing capability is limited to domains assigned to the organization. The From or To domain in each email message must match a domain assigned to the organization in order to be included in statistical results. A drop down filter allows the viewer to chart and graph all records belonging to the organization at once or by individual domain.

## Global

The global menu item is only visible if the portal member is assigned a global role within the Mailborder Master server. All menu items are unrestricted in regards to the email logs, filters, search, and charting functions.

### Email Log

The email log in the global menu will display all email recorded by the Mailborder cluster. This includes additional email not assigned to a hosted domain. A drop down filter allows the viewer to view records for all email or to filter the records by domain.

### Filters

Any filter created in the global menu will apply to the From address of all incoming email into the cluster. For example, if domain.com is blacklisted, any email From domain.com will be quarantined regardless of the destination To address in the email message. Global filters are built and applied to rule logic after Member and Organizational filters.

### Advanced Search

The advanced search is unlimited and allows all email records to be searched.

### Charts and Graphs

The charting and graphing capability is unlimited. A drop down filter allows charting and graphing of individual domains if desired.

## Rule Logic

Below is an example of the rule logic used when building whitelists and blacklists. The rule logic is applied from top to bottom on a first-match basis.

### Example

```
# Built by Mailborder Systems
# Build Time: Sun, 01 Jun 14 14:18:01 +0000
# Mailborder version: 4.1.1 build: 1

# Blacklist Rules

# Individual Portal Member Rules
#
From: *@kgagerin.us and To: qool@jaranya.com           yes
From: marzspray@biosiseyasscbe.us and To: qool@jaranya.com   yes
From: *@lpsealsnc.us and To: qool@jaranya.com           yes

# Portal Organization Domain Rules
#
From: *@aol.com and To: hekil.com                       yes
From: *@aol.com and To: jaranya.com                     yes
From: *@aol.com and To: mailborder.net                  yes
From: necole_cummins@yahoo.com and To: hekil.com        yes
From: necole_cummins@yahoo.com and To: jaranya.com      yes
From: necole_cummins@yahoo.com and To: mailborder.net   yes

# Portal Global Rules
#
From: *@etb.net.co                                     yes
From: *@eco.de                                         yes

# Mailborder Gateway Rules
#
From: user@domain.com and To: mailborder.net           yes
From: bob@ibm.com and To: mailborder.net               yes
From: user@domain.com and To: jaranya.com              yes
From: bob@ibm.com and To: jaranya.com                  yes
From: user@domain.com and To: milposts.com             yes
From: bob@ibm.com and To: milposts.com                 yes
From: user@domain.com and To: hekil.com                yes
From: bob@ibm.com and To: hekil.com                   yes
FromOrTo:      default                                 no
```