



# Comodo KoruMail

Software Version 6.0

# Admin Guide

Guide Version 6.4.020317

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# 1 Introduction to KoruMail Messaging Gateway

With unsolicited emails increasing with each passing day, employee mail boxes are flooded with spam messages that contain viruses, phishing links and more. Productivity can decline as individuals waste valuable time sorting genuine mails from junk. If a user opens a malicious attachment or visits a fraudulent website then organizations may find their network compromised or infected.

Comodo's KoruMail Messaging Gateway is an antispam and threat prevention appliance that uses advanced filtering technologies, antivirus scanners and content analysis engines to quietly and effectively prevent unsolicited mail from entering your network.

#### **Key Features**

- LDAP control
- · RBL (Realtime Blocking Lists)
- MX
- Reverse DNS
- White / grey / black lists, add titles which are industrially proven filtering techniques
- SRN Reputation Network
- Active Directory Integration
- Quarantine Reporting, Quarantine Webmail
- Reporting

#### **Guide Structure**

This guide is intended to take the user through the installation, configuration and use of Comodo KoruMail.

- Introduction to KoruMail Messaging Gateway
- Installing the Appliance
- Accessing the Appliance
  - Accessing via CLI Console
  - Accessing via Web Console
  - · The Main Interface
- The Dashboard
  - System Usage Graphics
  - About Software
  - Changing your Password
- User Management
  - Managing Administrative and End Users
  - Managing Groups
- System Configurations
  - Network Configuration
  - Services
  - License
  - Configuring System Settings



- Logs
- Tools
- System Usage Statistics
- SMTP Configuration
  - SMTP (Send E-Mail Protocol) Settings
  - Manage Domains
  - Surgate SMTP AUTH Connector
  - LDAP/Local DB/My SQL User Database
  - Greylist
  - Managing RBL Servers
  - Disclaimer
  - SMPT Relay
  - DomainKeys Identified Mail (DKIM)
  - Outgoing SMTP Limits
  - Incoming SMTP Limits
- Modules
  - Anti-spam
  - Anti-Virus
  - KoruMail Reputation Network (KRN)
  - Anti-Spoofing
  - SMTP IPS/FW
  - Auto Whitelist
  - Data Leak Prevention (DLP)
  - Anti-Phishing
  - Promotional
- Profile Management
  - Adding and Configuring a New Profile
  - · Editing a Profile
  - Deleting a Profile
- Reports
  - Mail Logs Report
  - SMTP Queue Report
  - Delivery Logs Report
  - SMTP-AUTH Logs Report
  - Summary Reports
  - Domain Reports
  - Attachment Verdict Reports
- Quarantine & Archive
  - Quarantine & Archive Settings
  - Quarantine Logs
  - Archived Mails



# 2 Installing the Appliance

- Prerequisites
- Deployment in Data Centers

#### 2.1 Prerequisites

Please ensure the following conditions are met before installing the KoruMail appliance:

- 1. The source IP of incoming mail traffic should not be changed by other devices. If the incoming emails are routed via a load balancer to KoruMail then make sure the balancer's settings are configured not to change the source IP. Else IP based filtering will not work properly.
- 2. An A and MX records should be entered for korumail.domain.com
- 3. For the protected domains, only one MX Reverse DNS record should exist and it must point to KoruMail. Otherwise, spam and viruses will pass from other servers in MX records without being filtered via KoruMail. Also, if possible SMTP port 25 should not be accessible from outside for the emails to be protected by KoruMail. Spammers can keep MX records in their memories before KoruMail installation and they can send spam/virus directly to actual mail server by-passing KoruMail.
- 4. Firewall should be permitted as follows:

#### Traffic to KoruMail:

- 1. Port 8080 and port 8443 (GUI interface and quarantine reports) must be open from outside to KoruMail
- 2. Port 25 must be open from outside to KoruMail
- 3. Port 22 should be open for KoruMail Support Center (78,186,198,152) to remote access

Traffic from KoruMail:

1. All connections to the outside must be accessible

#### 2.2 Deployment in Data Centers

Note the following points before starting:

- 1. Switch off the appliance then unplug the AC power cable
- 2. Remove all the cables and communication tools plugged into the device
- 3. Empty static electric on your body

You must place the appliance into rack cabinet with the rail-kit.

Before starting to use KoruMail appliance, check the following:

- 1. Power and network cables have been plugged in
- Device's network settings have been done properly as explained in the section Accessing via CLI Console

After completing the above steps you can do all other configurations in detail explained in the section **System Configuration**.



# 3 Accessing the Appliance

KoruMail's default IP address is 10.0.0.123 and you can use this to access the appliance for initial configuration. Default username is 'admin'. For password please contact Comodo sales representative.

There are two ways to access the appliance:

- 1. Text menu-based CLI (Command Line Interface) console
- 2. Graphic-based web management console

#### 3.1 Accessing via CLI Console

If it is not accessible from your network, then the easiest way to access the console is by using the command line interface. You can perform basic operations from this interface. The remaining network settings on the appliance can be done remotely via a web browser.

The CLI username is 'shell' and the password is 'surgateshell'. You will be asked to change the password after first login.

```
login as: shell
Using keyboard-interactive authentication.
Password:
You are using default password for the user shell
You must change it now
You will be logged out automatically after changing password
Null passwords are not ok
Changing local password for shell
Old Password:
```

After logging-in in with your new password, the following menu will be displayed.

```
login as: shell
Using keyboard-interactive authentication.
Password:

SurGATE console setup
******************************

O) Logout

1) Change Network Configuration

2) Reboot System

3) Halt System

4) Ping Host

5) Restart WebGUI

6) Change Console Password

7) Change WebGUI Password

8) View Network Configuration

9) View Interface Status

Enter an option:
```



All the functions of the appliance cannot be configured via the CLI and only limited important tasks can be performed in the following order:

- 1. Network configuration
- 2. Reboot
- 3. Halt
- 4. Pinging a host to check whether the network access is exist
- 5. Restarting the web management console
- 6. Changing CLI password
- 7. Changing the password for web management console
- 8. Displaying the network configuration
- 9. Displaying the network interface

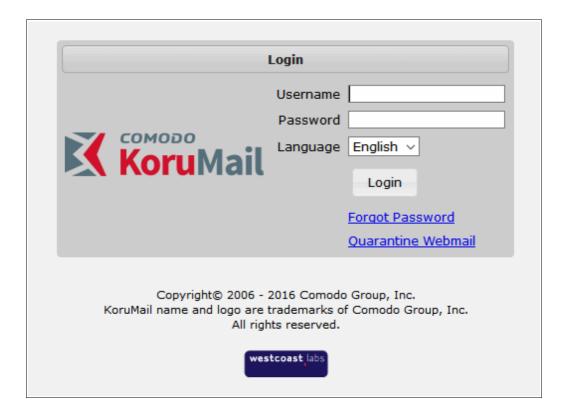
As an example, the following screenshot shows how to make network configuration.





#### 3.2 Accessing via Web Console

- 1. Enter KoruMail Messaging Gateway's IP or host name together with port 8080 (Example: http://korumail.comodo.net:8080) in the address bar of a browser
- 2. Enter your username and password. Default user name is 'admin'. For password please contact Comodo's sales representative
- 3. Choose one of the language options (English/Turkish)
- 4. Click the login button



- To connect via secure HTTPS connection, click the 'SSL' icon and enter the credentials
- In case you have forgotten the password, click the 'Forgot Password' link, enter your email address and click the 'Send' button to receive a new password.
- Users can view their quarantined mails by clicking the 'Quarantine Webmail' link and providing their credentials in the KoruMail Quarantine Webmail interface. Refer to the 'Managing End Users' section for more details.

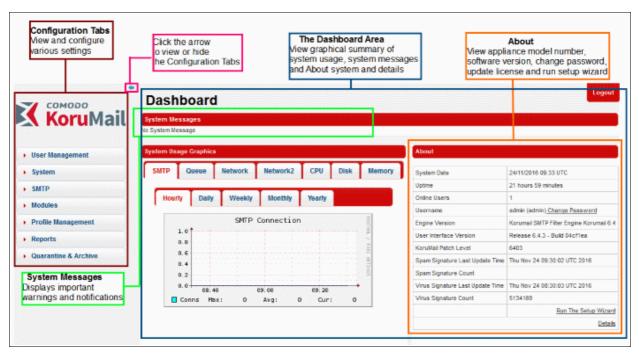
Note: The credentials are case sensitive, and so should be entered as configured.

If there is no activity by the admin for a specified time (30 minutes by default) in KoruMail's control window then the session will time out. You should login again to access the KoruMail's control panel.



#### 3.3 The Main Interface

The administrative console provides easy access to all modules, statistics and configuration screens in KoruMail Messaging Gateway.



#### **Configuration Tabs**

The tabs on the left pane allows administrators to add new users, groups, configure various settings such as domains, SMTP, view and generate reports and more.

- User Management: Allows to add/edit groups and admin users with different privileges. Refer to the section 'User Management' for more details.
- System: Allows administrators to configure network settings, add NTP servers, enable or disable services such as anti-spam engine, Snmpd, KoruMail delivery agent, view and update license and more. Refer to the section 'System Configuration' for more details.
- **SMTP:** Allows administrators to configure SMTP settings, add domains, add new LDAP profile, create greylist of domians, IP or network address, set outgoing limits and more. Refer to the section 'SMTP Configuration' for more details.
- **Modules:** Enable or disable anti-spam, anti-virus, anti-spoofing, anti-phishing and configure settings for anti-spam training and content filter. Refer to the section **Modules** for more details.
- **Profile Management:** Configure various settings such as anti-virus, anti-spam, blacklist and more for default incoming and outgoing profile. Refer to the section 'Profile Management' for more details.
- Reports: View and generate log reports for incoming and outgoing mails and a summary of mails categorized as spam, RBL, phishing and more. Refer to the section 'Reports' for more details.
- Quarantine & Archive: Enables to configure Quarantine and Archive settings, view quarantined mail logs and archived mails. Refer to the section 'Quarantine & Archive' for more details.

#### **Dashboard**

After logging-in to the console, the first screen displayed is the 'Dashboard'. It provides at-a-glance view of system usage such as SMTP, Queue mails, network utilization rate, CPU and memory utilization.

- System Messages: Displays error messages or important notifications that might affect the performance of the messaging gateway.
- System Usage Graphics: Provides a graphical representation of the system usage such as SMTP



connection rate in hourly, daily, weekly, monthly or yearly basis, utilization of network, CPU, disk and memory. Refer to the section 'System Usage Graphic' for more details.

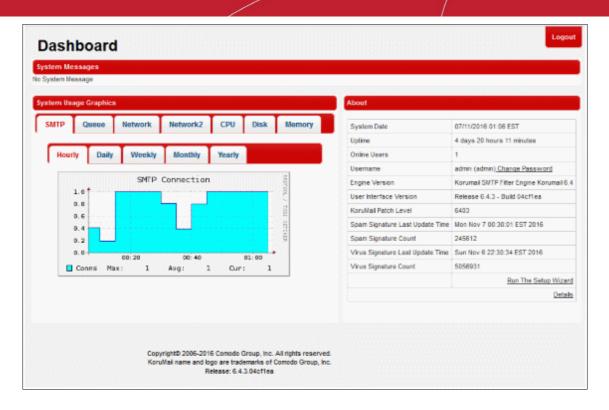
- About: The 'About' area in the dashboard allows administrators to change the current password, view
  details of the appliance and software and manage the license. Refer to the section 'About Software' and
  'Changing your Password' for more details.
- Run the Setup Wizard: Enables administrators to quickly configure the Korumail appliance.

#### 4 The Dashboard

The Comodo KoruMail Dashboard provides at-a-glance statistical summary of the current running status, system messages and allows administrators to change the password and update license.

The Dashboard is displayed by default whenever you login to the administrative interface. To switch to 'Dashboard' from a different configuration screen, click on the 'KoruMail Messaging Gateway' logo at the top left.





The 'System Messages' displays error messages or important notifications that might affect the performance of the messaging gateway.

Click the following links for more details about other areas in the dashboard:

- System Usage Graphics
- About Software
- Changing your Password

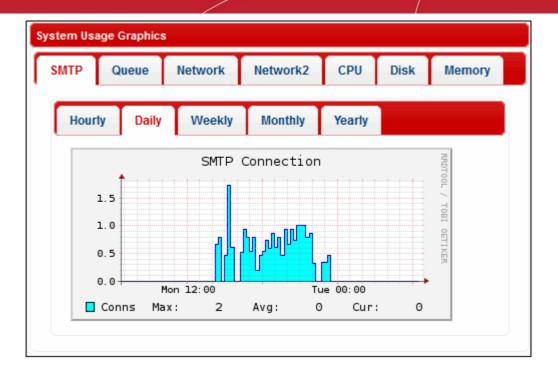
#### 4.1 System Usage Graphics

The 'System Usage Graphics' area in the 'Dashboard' displays a graphical summary of SMTP connections, number of queued mails, network utilization rate, CPU utilization rate, disk usage ratio and system memory utilization rate. The tabs in the second row allow you to view summaries on an hourly, daily, weekly, monthly and yearly basis.









- SMTP: Displays the maximum, average and current SMTP connections to KoruMail for the selected period.
- Queue: Displays the maximum, average and current emails in queue for the selected period.
- Network: Displays the network utilization rate of the system for the selected period.
- CPU: The maximum, average and current CPU utilization rate for the selected period.
- Disk: Displays the system's disk usage ratio for the selected period.
- Memory: Displays the system's memory utilization rate for the selected period.

Refer to the System Usage Statistics section for more details about each of the item.

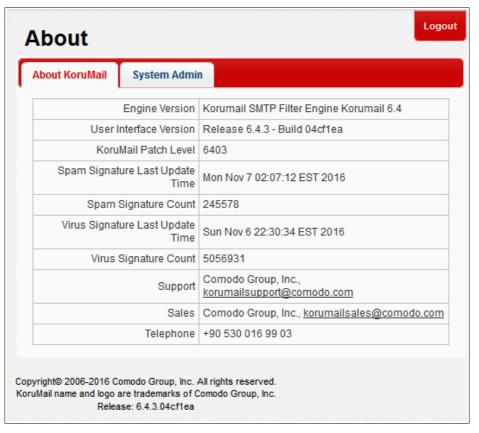
#### 4.2 About Software

The 'About' section in the 'Dashboard' area displays hardware, software and virus update details and also allows you to change the web console access password.



System Date	07/11/2016 01:06 EST
Uptime	4 days 20 hours 11 minutes
Online Users	1
Username	admin (admin) Change Password
Engine Version	Korumail SMTP Filter Engine Korumail 6.
User Interface Version	Release 6.4.3 - Build 04cf1ea
KoruMail Patch Level	6403
Spam Signature Last Update Time	Mon Nov 7 00:30:01 EST 2016
Spam Signature Count	245612
Virus Signature Last Update Time	Sun Nov 6 22:30:34 EST 2016
Virus Signature Count	5056931
	Run The Setup Wizar

Clicking the 'Details' link at the bottom opens another 'About' screen that provides more details:



By default, the 'About KoruMail' will be displayed.

• Click the 'System Admin' tab to view or update administrator details:





Note. When the SMTP IPS module blocks IP addresses, the details of the blocked IP's are sent to the system admin e-mail address shown in this interface.

Click 'Save' after the details are provided in the fields.

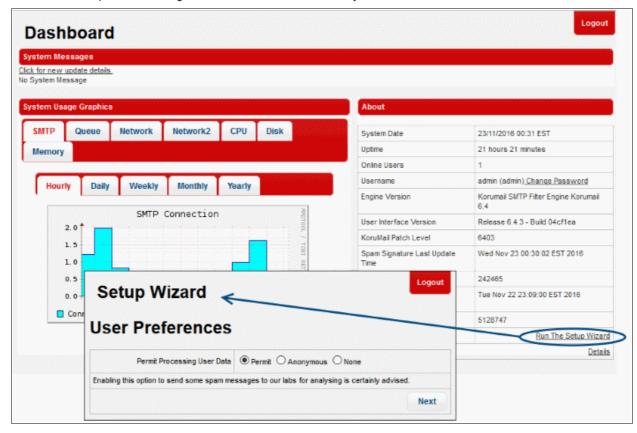
If the field 'System Admin E-mail' is left blank, then a error message will be displayed under the 'System Messages' in the 'Dashboard'.

#### Run a Setup Wizard

Allows you to quickly configure protection on a mail server.

To run the setup wizard:

- Click the 'Run the setup wizard' link.
- The 'User Preferences' screen will be displayed.
- The administrator can configure 'User Preferences', 'System Admin' details, 'Network Settings', 'Timezone', 'LDAP' profiles, 'Managed Domains', 'Routes' and 'Relay' details.



By permitting the processing of user data, administrators can upload certain spam messages for analysis to the Comodo support team. Refer to the section 'System General Settings' for more details on user preferences.



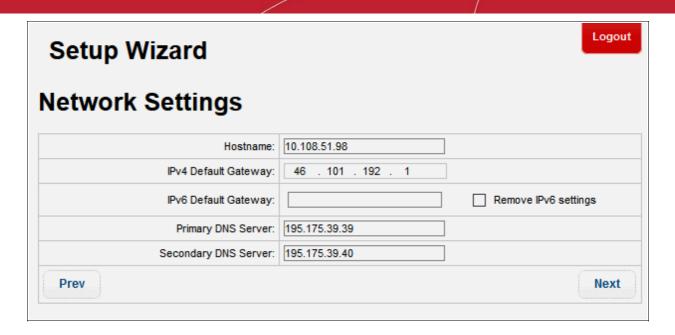
 Clicking 'Next', you can enter admin details such as 'System Admin Name', 'System Admin Surname', 'System Admin Tel. No' and 'System Admin E-mail'.



· Click 'Next', to enter network details.

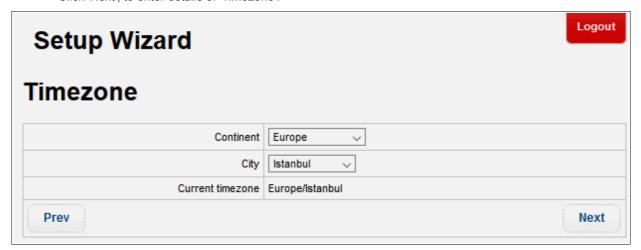






Refer to the section **Network Settings** for more details on this section.

Click 'Next', to enter details of 'Timezone'.



Refer to the **Timezone** section for more details.

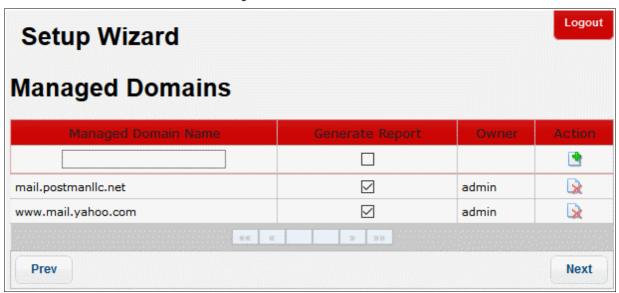
Click 'Next', to enter 'LDAP' information:





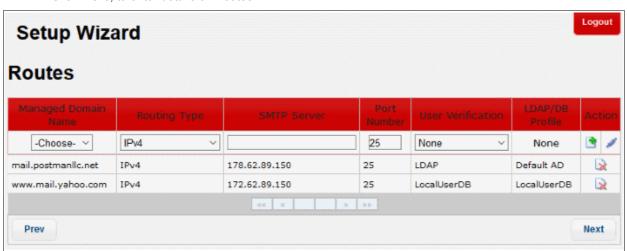
Refer to the LDAP section for more details.

Click 'Next', to enter details of 'Managed Domains'.



Refer to the Managed Domains section for more details.

Click 'Next', to enter details of 'Routes'.





Refer to the Routes section for more details.

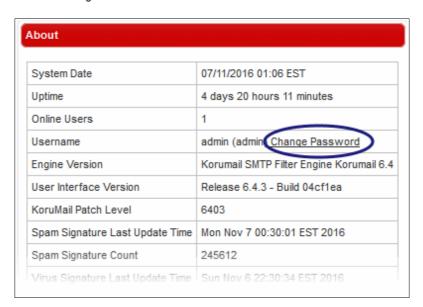
Click 'Next', to enter details of 'Relay'.



Refer to the **Relay** section for more details.

#### 4.3 Changing your Password

You can change your current password anytime from the 'About' area. To change your password, from the 'Dashboard' screen click the 'Change Password' link in the 'Username' row.



In the 'Change Password' screen, enter the current password and then enter the new password and confirm it in the last field.



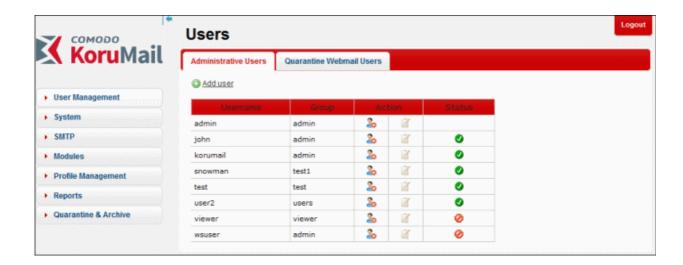


Click the 'Save' button.

The password details will be updated and you have to use the new password to access the KoruMail's web console.

# 5 User Management

The 'User Management' area allow administrators to create new admins and configure their privileges. The 'Quarantine Webmail User' tab allows administrators to add email recipients' details so that they can log into the console to view their quarantined emails. The interface also allows the creation of user 'Groups' with different access levels.



Click the following links for more details:

- Managing Administrative and End Users
- Managing Groups

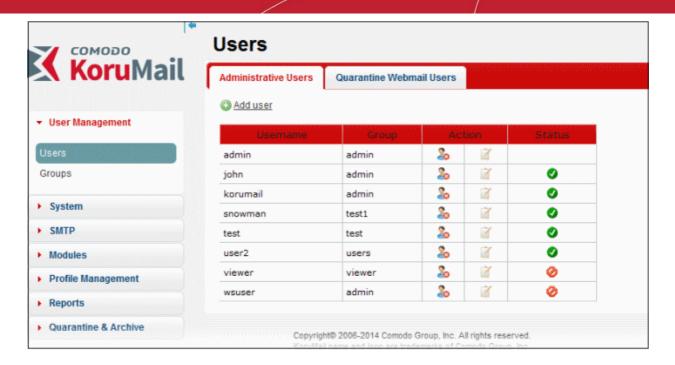
#### 5.1 Managing Administrative and End Users

The KoruMail's web console can be accessed by administrators according to their designated privileges. The 'User Management' area also allows administrators to add end users so that the email recipients can access the web console and view their quarantined emails. A new administrator must have a group assigned to them, so make sure an appropriate group already exists. Refer to the section 'Managing Groups' for more details.

To open the 'Users' screen, click the 'User Management' tab on the left menu and click 'Users'.







Click the following links for more details:

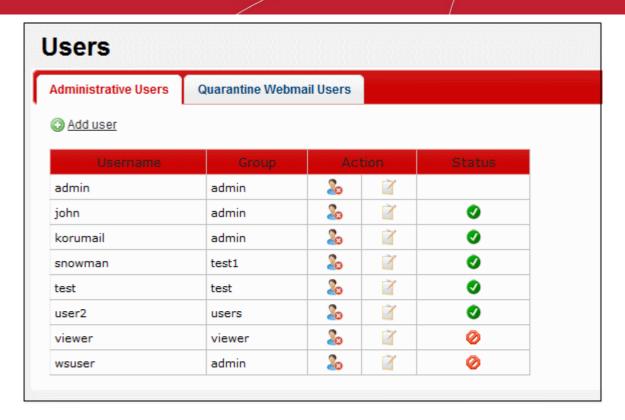
- Managing Administrative Users
- Managing End Users

#### 5.1.1 Managing Administrative Users

• To open the 'Administrative Users' screen, click the 'User Management' tab on the left menu and click the 'Administrative Users' tab from the 'Users' screen.







Administrative Users – Table of Column Descriptions		
Column Header	Description	
Username	The username provided at the time of adding the administrator to access the web console.	
Group	Displays the name of the group to which the administrator belongs. Refer to the section 'Managing Groups' for more details.	
Action	Administrators with appropriate privileges can delete other admins by clicking this icon. Please note logged-in admin cannot be deleted by himself/herself.	
	Administrators with appropriate privileges can edit other admins' details. Refer to the section 'Editing an Administrator' for more details.	
Status	Indicates whether the admin is in enabled or disabled status. Disabled admins cannot log into the web console. Refer to the section 'Enabling/Disabling Administrators' for more details.	

From the this interface an appropriately privileged administrator can:

- Add an administrative user
- Delete an administrative user
- Edit an administrative user
- Enable/Disable an administrative user

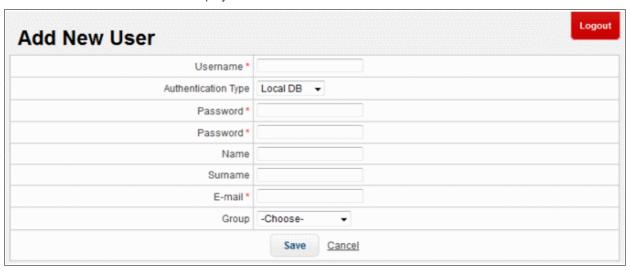
#### To add an administrative user

· Click the 'Add User' link





The 'Add New User' screen will be displayed.

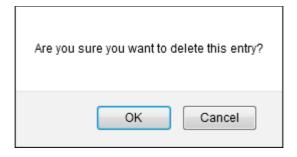


- Username: Enter the username to access the console
- Authentication Type: Two options are available Local DB and LDAP AD
  - Local DB Authentication of the user will be done using the local database
  - LDAP AD Authentication of the user will be done using LDAP
- Password: Enter the password to access the console and confirm it in the next field.
- · Name: The first name of the administrative user
- Surname: The surname of the user
- E-mail: Enter the email address of the administrative user
- **Group:** Select the group to which the admin user should be added. Refer to the section 'Managing Groups' for more details.
- Click the 'Save' button to add the new admin user.

#### To delete an administrative user

Click the <sup>2</sup> icon beside the user that you want to delete



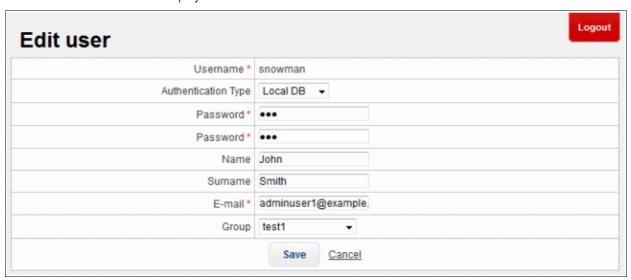


· Click 'OK' to confirm the deletion.

#### To edit an administrative user

Click the icon beside the user that you want to edit

The 'Edit User' screen will be displayed:

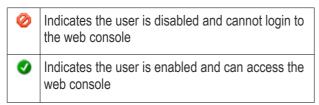


- Edit the details as required. The screen is similar to the 'Add New User' section. Refer to 'Add an administrative user' for more details.
- · Click the 'Save' button.

The changes will be saved and a confirmation note will be displayed.

#### To enable/disable an administrative user

The icon under the 'Status' column indicates whether the 'Administrator User' is enabled or disabled.



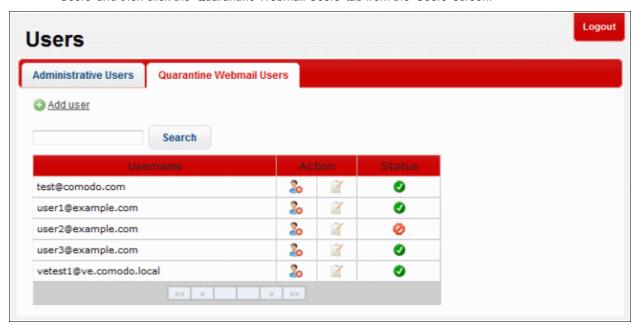
- Click the icon to toggle between enabled and disabled statuses.
- Click 'OK' in the confirmation dialog.



#### 5.1.2 Managing End Users

The 'Users' interface allows end users (email recipients) to view their quarantined emails. Administrators can provide them with web console access to view their mails. They can view only their quarantined mails. The 'Quarantine Webmail Users' tab in the 'Users' interface allow administrators to add end users, edit or delete them.

• To open the 'Quarantine Webmail Users' screen, click the 'User Management' tab on the left menu, click 'Users' and then click the 'Quarantine Webmail Users' tab from the 'Users' screen.



Quarantine Webmail Users – Table of Column Descriptions		
Column Header	Description	
Username	The username provided at the time of adding the end user to access the web console.	
Action	Administrators with appropriate privileges can delete the end user by clicking this icon.	
	Administrators with appropriate privileges can edit end user's details. Refer to the section 'Editing an End User' for more details.	
Status	Indicates whether the end user is in enabled or disabled status. Disabled end users cannot log into the web console. Refer to the section 'Enabling/Disabling End Users' for more details.	

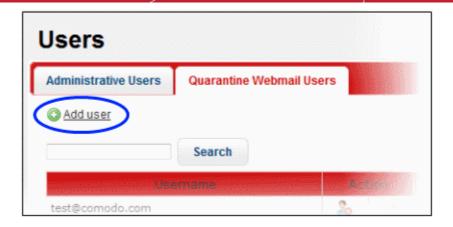
From the this interface an appropriately privileged administrator can:

- Add an end user
- Delete an end user
- Edit an end user
- Enable/Disable an end user

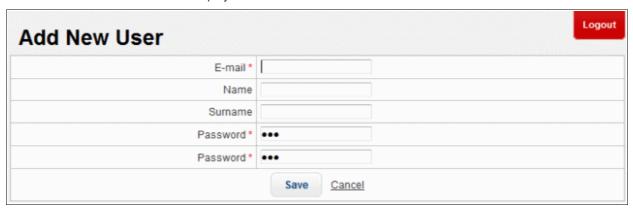
#### To add an end user

Click the 'Add User' link





The 'Add New User' screen will be displayed.



- E mail: The email address of the end user
- · Name: The first name of the end user
- Surname: The surname of the end user
- Password: Enter the password to access the web console and confirm it in the next field.
- Click the 'Save' button to add the new end user.

#### To delete an end user

Click the sicon beside the user that you want to delete



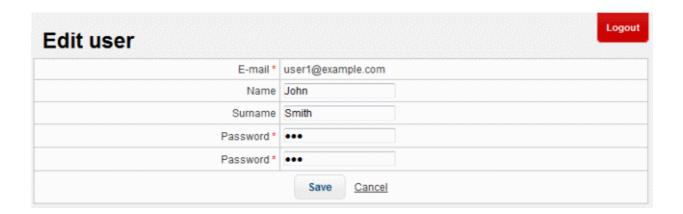
Click 'OK' to confirm the deletion.

#### To edit an end user

Click the icon beside the user that you want to edit

The 'Edit User' screen will be displayed:



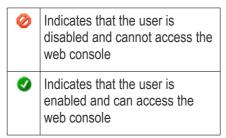


- Edit the details as required. The screen is similar to the 'Add New User' section. Refer to 'Add an end user' for more details.
- · Click the 'Save' button.

The changes will be saved and a confirmation note will be displayed.

#### To enable/disable an end user

The icon under the 'Status' column indicates whether the 'Administrator User' is enabled or disabled.



- Click the icon to toggle between enabled and disabled statuses.
- Click 'OK' in the confirmation dialog.

#### 5.2 Managing Groups

The 'Groups' interface allows the administrators with appropriate privileges to create administrator groups according to the needs of the organization. Each group can be configured with different permission levels. This simplifies the process of configuring permission levels for each administrator meaning new or existing administrators belonging to the account can be simply assigned a group with a preset policy. The admin interface will vary according to the user's permission level. Refer to the 'Managing Administrative Users' section for more details on how to assign a group to admin users.

To open the 'Groups' screen, click the 'User Management' tab on the left menu and click 'Groups'





Groups – Table of Column Descriptions		
Column Header	Description	
Group Name	The name of the group	
Group Description	Enter an appropriate description for the group	
Action	Administrators with appropriate privileges can delete the group by clicking this icon.	
/ Cuon	Administrators with appropriate privileges can edit group details and its privileges. Refer to the section 'Edit a Group' for more details.	

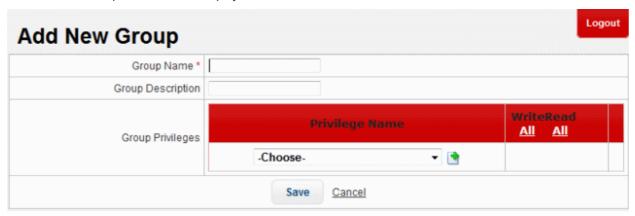
From the this interface an appropriately privileged administrator can:

- Add a new group
- · Delete a group
- Edit a group

#### To add a new group

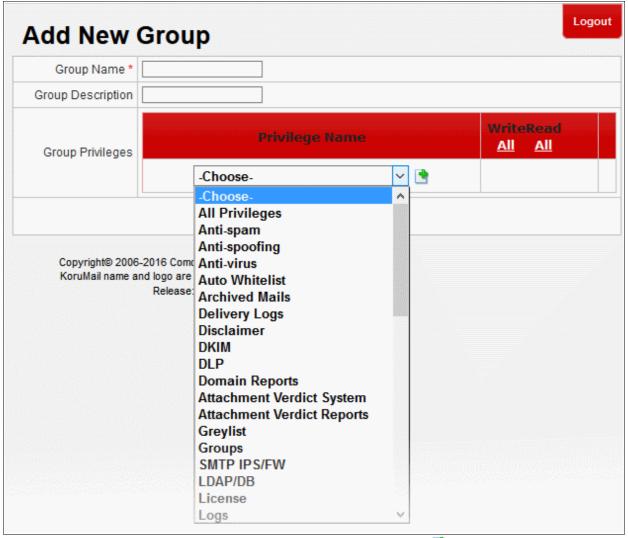
· Click the 'Add group' link

The 'Add New Group' screen will be displayed.



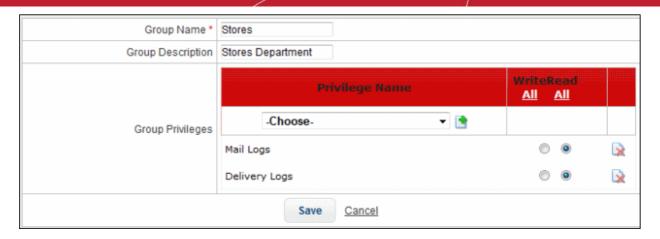


- Group Name: Enter the name of the group
- Group Description: Enter an appropriate description for the group
- **Group Privileges:** Select the privileges that should be assigned to the group from the 'Privilege Name' drop-down.



After the selecting the privilege for the group, click the 'Add' button to include it. The added privileges will be displayed.





By default, the added privileges will have 'Read' rights only, meaning the features can be viewed and cannot be configured by the admin user.

- · Select the 'Write' option to make the privileges configurable for the admin user.
- To select the 'Write' or 'Read' option for all the privileges, click the 'All' link below it.
- To delete a privilege, click the delete icon beside it.
- · Click the 'Save' button to add the new group.

Now this new group can be assigned to admin users. Refer to the section 'Managing Administrative Users' for more details on how to assign a group to admin users.

#### To delete a group

Click the icon beside the group that you want to delete



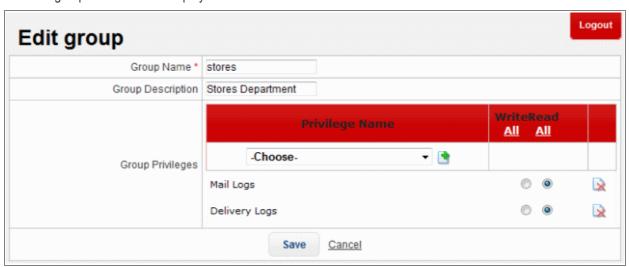


· Click 'OK' to confirm the deletion.

#### To edit a group

Click the icon beside the group that you want to edit

The 'Edit group' screen will be displayed.



- Edit the details as required. The screen is similar to the 'Add New Group' section. Refer to 'Add a new group' for more details.
- · Click the 'Save' button.

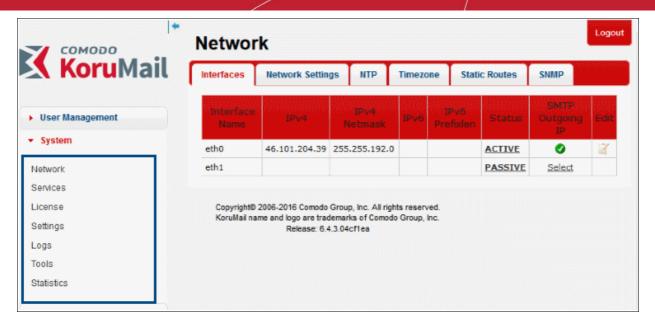
The changes will be saved.

# 6 System Configurations

The 'System' tab on the left menu of the web console allows administrators to configure important parameters after initial configuration (see 'Installing the Appliance').







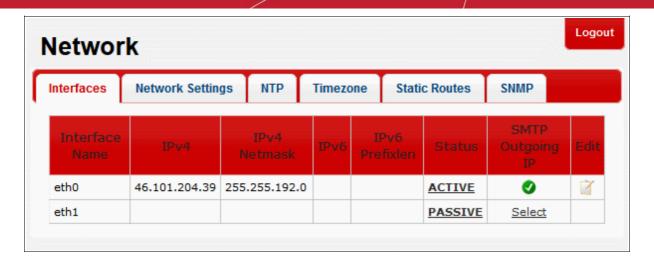
- Network: Allows admin users to configure various network settings of KoruMail such as default gateways, DNS servers, NTP servers and more. Refer to the section 'Network Configuration' for more details.
- **Services:** Allows admins to start or stop various services such as Delivery Agent, SMTP, Snmpd, Scheduler and more. Refer to the section 'Services' for more details.
- License: View and update KoruMail licenses from this interface. Refer to the section 'License' for more
  details.
- **Settings:** Configure various system settings such as Cache, Session, Backup and more. Refer to the section 'Configuring System Settings' for more details.
- Logs: View and download mail log files and configure how long the system should retain mail log records, archived mails and quarantined mails. Refer to the section 'Logs' for more details.
- **Tools:** Allows admin users to check connectivity such as SMTP, Ping, Nslookup, Telnet as well as clear SMTP queue. Refer to the section 'Tools' for more details.
- Statistics: View the graphical summary of system usage. Refer to the section 'System Usage Statistics' for more details.

### 6.1 Network Configuration

The 'Network' tab allows administrators to configure various settings such as IP addresses for the network card (NIC), hostnames, default gateway addresses, DNS server details, time-zones, static routes and SNMP servers.

To open the interface, click the 'System' tab then the 'Network' sub-tab.





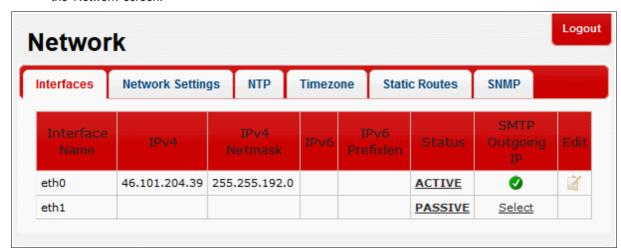
Click the following links for more details of each of the settings:

- Interfaces
- Network Settings
- Network Time Protocol (NTP)
- Time Zone
- Static Routes
- Simple Network Management Protocol (SNMP)

#### 6.1.1 Interfaces

The initial configuration of KoruMail is done at the time of installation using the Command Line Interface (CLI) console and can be edited and updated using the web console. Refer to the section 'Installing the Appliance' for more details. The details of the Network Interface Card (NIC) can be edited/updated from the 'Interfaces' screen.

• To open the 'Interfaces' screen, click the 'System' tab on the left menu, then 'Network' and 'Interfaces' from the 'Network' screen.



Interfaces – Table of Column Descriptions	
Column Header	Description
Interface Name	The name of the Network Interface Card (NIC) with physical Ethernet ports. The number of ports available depends on the appliance model. If two ports are available, then the



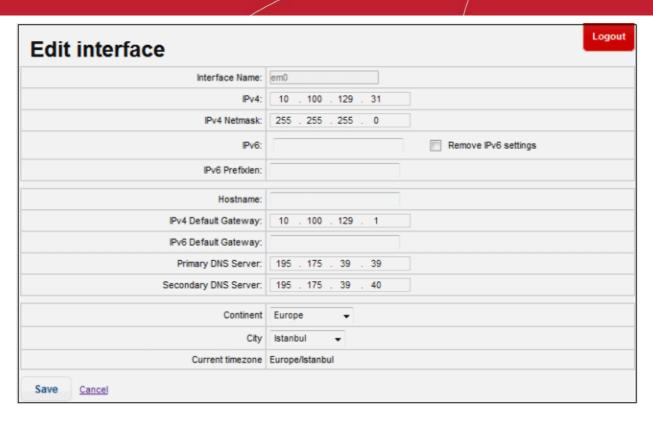
	appliance can be configured to route inbound and outbound emails on separate Ethernet ports. This configuration is preferable because it provides the best network bandwidth. If a single Ethernet post is available then both incoming and outgoing emails are routed via the same port. This may result in network bottlenecks, but can be used for organizations with relatively low email traffic.	
IPv4	The IPv4 address assigned to the port	
IPv4 Netmask	The IPv4 netmask address assigned to the port	
IPv6	The IPv6 address assigned to the port	
IPv6 Prefixlen	The prefix of the IPv6 address	
Status	Indicates whether the interface is enable or disabled. The link toggles between 'Active' and 'Inactive' statuses. Click on the link to make the interface 'Active' or 'Inactive'.	
SMTP Outgoing IP	Sets the corresponding interface IP address as SMTP outgoing IP address. Clicking 'Select' applies the setting after a confirmation dialogue.	
Edit	Allows to edit the settings of the NIC. Refer to the section 'To edit the interface' for more details.	

From this screen, administrators can edit the interface settings.

#### To edit the interface

The 'Edit interface' screen will be displayed.





- Interface Name: The name of the network interface card. This name is not editable.
- IPv4: The IPv4 address of the port. Edit as required.
- IPv4 Netmask: The IPv4 netmask address of the port. Edit as required.
- IPv6: The IPv6 address of the port. To disable the IPv6 settings, select the 'Remove IPv6 settings' check box.
- IPv6 Prefixlen: Enter the prefix length for the IPv6 address
- Hostname: The hostname of the system. The changes will be reflected in the 'Network Settings' interface
  also.
- **IPv4 Default Gateway:** The IPv4 default gateway that KoruMail will be using to connect to other networks or the Internet. Edit as required. The changes will be reflected in the 'Network Settings' interface also.
- **IPv6 Default Gateway:** The IPv6 default gateway that KoruMail will be using to connect to other networks or the Internet. Edit as required. The changes will be reflected in the 'Network Settings' interface also.
- **Primary DNS Server:** The IP of the primary DNS server that KoruMail is configured. Edit as required. The changes will be reflected in the 'Network Settings' interface also.
- **Secondary DNS Server:** The IP of the secondary DNS server that the appliance is configured. Edit as required. The changes will be reflected in the 'Network Settings' interface also.
- Continent: The name of the continent where the system is located.
- City: The name of the city where the system is located.
- Current timezone: The timezone of the city.
- Click the 'Save' button.

A reboot confirmation screen will be displayed. Reboot will not be required for DNS setting changes.



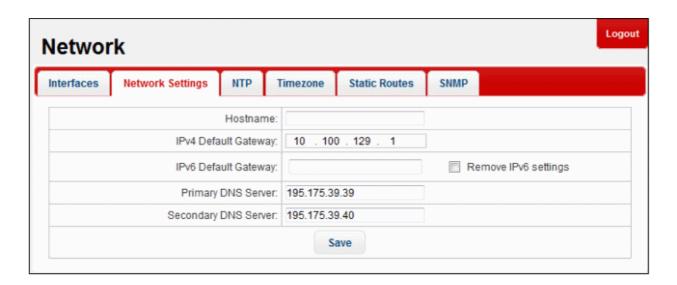


Click 'Yes' to confirm the changes and reboot the system.

### 6.1.2 Network Settings

The 'Network Settings' interface allow administrators to change the hostname of KoruMail, IPv4 and IPv6 default gateways, primary and secondary DNS server settings. The changes done here will also be reflected in the 'Edit Interface' of the NIC as explained in the previous section 'Interfaces'.

• To open the 'Network Settings' screen, click the 'System' tab on the left menu, then 'Network' and 'Network Settings' from the 'Network' screen.



- Hostname: The hostname of KoruMail. The changes will be reflected in the 'Edit interface' of the NIC also.
- IPv4 Default Gateway: The IPv4 default gateway that KoruMail will be using to connect to other networks or the Internet. Edit as required. The changes will be reflected in the 'Edit interface' of the NIC also.
- IPv6 Default Gateway: The IPv6 default gateway that KoruMail will be using to connect to other networks or
  the Internet. Edit as required. The changes will be reflected in the 'Edit interface' of the NIC also. To disable
  the IPv6 settings, select the 'Remove IPv6 settings' check box.
- **Primary DNS Server:** The IP of the primary DNS server that the system is configured. Edit as required. The changes will be reflected in the 'Edit interface' of the NIC also.
- Secondary DNS Server: The IP of the secondary DNS server that the system is configured. Edit as required. The changes will be reflected in the 'Edit interface' of the NIC also.
- Click the 'Save' button.

A reboot confirmation screen will be displayed. Reboot will not be required for DNS setting changes.





· Click 'Yes' to confirm the changes and reboot the system.

### 6.1.3 Network Time Protocol (NTP)

Network Time Protocol (NTP) is an Internet protocol that is used to synchronize computer clocks over a network. The 'NTP Servers' screen allow administrators to add time synch servers for KoruMail.

• To open the 'NTP Servers' screen, click the 'System' tab on the left menu,then 'Network' and 'NTP' from the 'Network' screen.



#### To add a new NTP server

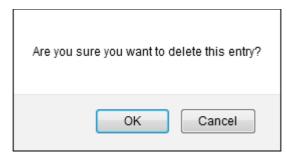
• Enter the name or IP address of the server in the 'Server name' field and click the 'Add' button ...

The message 'Settings saved successfully' will be displayed.

#### To remove a NTP server

Click the 'Delete' button beside the server name in the list.

In the confirmation dialog, click 'OK' to remove the NTP server from the list.

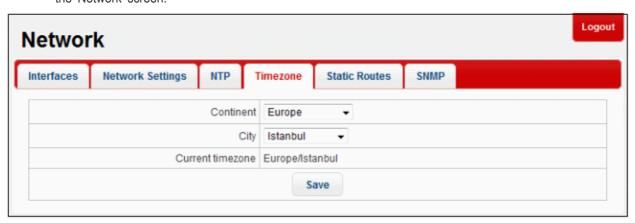


#### 6.1.4 Timezone

The 'Timezone' tab in the web console allow administrators to configure the time zone of the system to which you want to synchronize the time.



• To open the 'Timezone' screen, click the 'System' tab on the left menu, then 'Network' and 'Timezone' from the 'Network' screen.



- Continent: Select the continent from the drop-down
- City: Select the city from the drop-down

Click the 'Save' button. A reboot confirmation screen will be displayed.





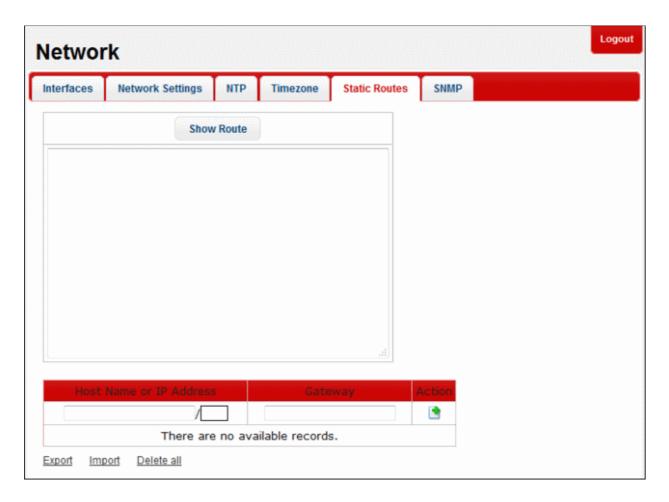


Click 'Yes' to confirm the changes and reboot the system. The changes done here will also be reflected in the 'Edit Interface' of the NIC as explained in the previous section 'Interfaces'.

#### 6.1.5 Static Routes

KoruMail can be configured to redirect traffic to different email servers using the static route in addition to the default gateway configured in 'Network Settings' section.

 To open the 'Static Routers' screen, click the 'System' tab on the left menu, then 'Network' and 'Static Routes' from the 'Network' screen.



From this screen an administrator can:

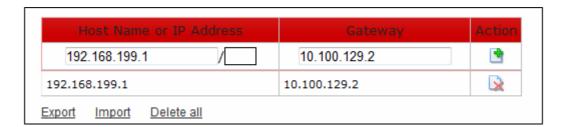
- Add host names or IP address
- · Delete host names or IP address
- View the network route

To add host names or IP address



- Enter the host name or IP address of the machine that you want to specify a static route in the 'Host Name
  or IP Address' field.
- Enter the IP address of the gateway that the machine should connect to.
- Click the button under the 'Action' column.

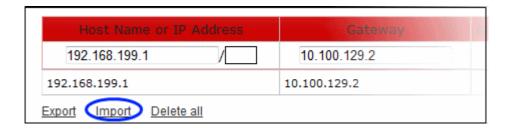
The system will be added and displayed below the field.



· Repeat the process to add more machines.

Alternatively, you can also import the machines from a file.

To import the machines, click the 'Import' link



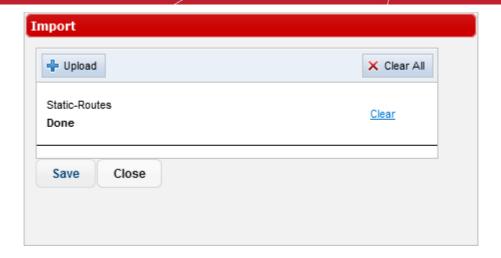
The 'Import' dialog will be displayed.



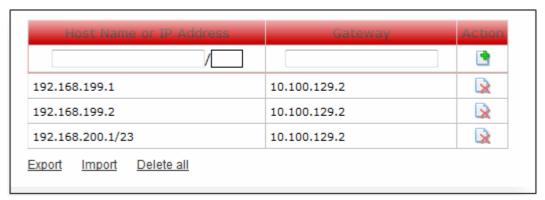
• Click the 'Upload' button, navigate to the the location where the file is saved, select it and click 'Open'.

The file will be added.





- Repeat the process to add more files.
- To remove a file, click the 'Clear' link beside it.
- · To remove all the added files, click the 'Clear All' button at the top right.
- To import the machines from the files, click the 'Save' button.



• To save the details of machines and gateway, click the 'Export' link and save it to your system.

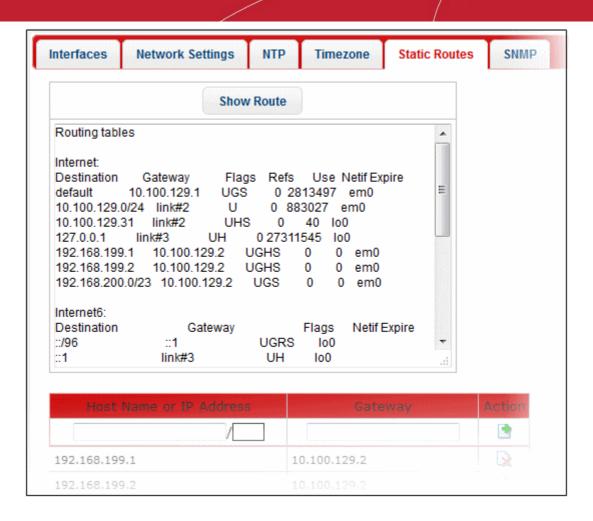
#### To delete host names or IP address

- Click the beside a system to remove it from the static route and click 'OK' in the confirmation dialog.
- To remove all the machines from the list, click the 'Delete all' link at the bottom and click 'OK' in the confirmation dialog.

#### To view the network route

• Click the 'Show Route' to view the 'Routing tables' for the machines.



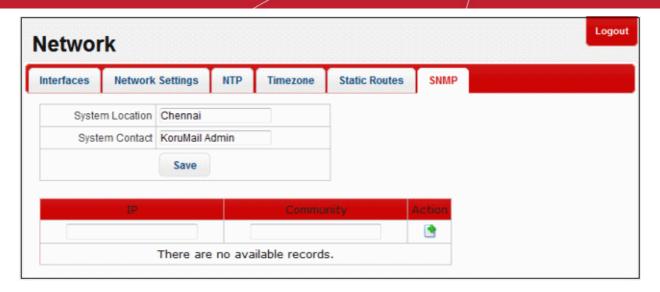


### 6.1.6 Simple Network Management Protocol (SNMP)

Simple Network Management Protocol (SNMP) allows administrators to monitor network devices such as KoruMail. Before configuring the SNMP settings, download the SNMP agent and Management Information Base (MIB).

 To configure SNMP settings, click the 'System' tab on the left menu, then 'Network' and 'SNMP' from the 'Network' screen.





- System Location: Name of the location where the KoruMail device is located.
- System Contact: The name, telephone number and/or email address of the system administrator to contact. Click the 'Save' button.
  - IP: Enter the IP address of the SNMP Manager system
  - Community: The community string that is defined between SNMP manger and the SNMP agent in KoruMail. It acts like a password to provide access to the agent in KoruMail.

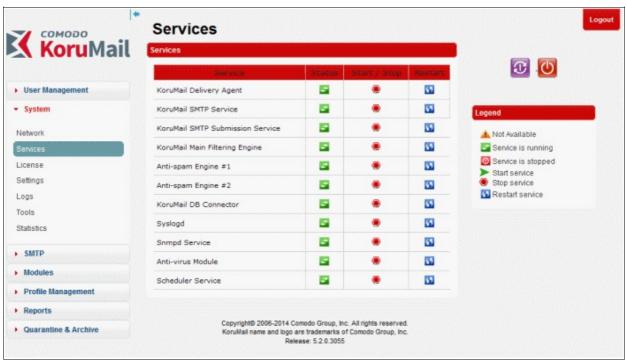
Click the link to add the SNMP manager. You can add multiple SNMP managers. You can delete any currently SNMP access enabled hosts by clicking the link click 'OK' in the confirmation dialog.

### 6.2 Services

The 'Services' screen provides the current status of various KoruMail services. You can stop or restart a service and also shutdown or reboot KoruMail.

To view and configure KoruMail services, click the 'System' tab on the left menu, then 'Services'





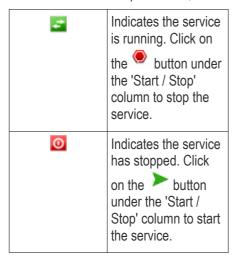
The icons in the 'Legend' screen provides the status details of the services.

Description of the Services		
Column Header	Description	
KoruMail Delivery Agent	The service forwards the emails processed by KoruMail to target email server.	
KoruMail SMTP Service	The service that filters emails on hosted domain names on KoruMail. This service accepts incoming e-mail connections listening to port 25 of SMTP. The SMTP service filters the emails per the settings configured by the administrator (Reverse DNS, RBL, SRN, MX control the White List, Black List, Grey List, etc.) in SMTP level first and then the filtered emails are passed to the next stage - KoruMail Main Engine for spam and virus analysis.	
Submission SMTP Service	Submission port (587), is a mail delivery port as port 25 (SMTP) but it requires additional authentication. If you do not have an account on this server, you cannot send an e-mail.	
KoruMail Main Filtering Engine	The emails that are filtered by 'SMTP Service' are passed to the main filtering engine software that checks for spam and virus in the mails. This module performs the actions specified by administrator such as rejecting, quarantining the infected email or saving the email to another register area or address. If e-mail is required to be sent to recipient then it is forwarded by the KoruMail Delivery Agent.	
Anti-spam Engines	KoruMail antispam engines scans emails and specifies spam scores controlling thousands of spam signatures such as header and bayesian-based content filtering. This scores are used to define an e-mail as spam.	
KoruMail DB Connector	The Postgre SQL services running on KoruMail's internal database of quarantined emails and archives.	
Syslogd	The daemon service that stores system logs in rsyslog format.	
Snmpd Service	It is an Simple Network Management Protocol (SNMP) agent which binds to port and acts on SNMP management application's requests and sends the requested	



	information to the requester.
Anti-virus Module	KoruMail includes Comodo's anti-viurs programs as a built in solution.
Scheduler Service	This service organizes the programs that runs periodically. This feature in KoruMail Messaging Gateway creates periodic reports and graphics about system usage.

• To start or stop a service, click on the buttons beside it.



- To restart a service, click on the 55 button under the 'Restart' column. If the service is running, it will stop and restart again. If the service is stopped, then it will restart.
- To shutdown the KoruMail, click on the button
- To reboot the KoruMail, click on the button

### 6.3 License

The 'License' screen allows administrators to view current license details as well as to create a license request and install a new license. KoruMail licenses can be purchased by logging into your Comodo account at <a href="https://accounts.comodo.com/account/login">https://accounts.comodo.com/account/login</a>

Licenses are priced according to the number of users and license period.

To view and purchase a new KoruMail license, click the 'System' tab on the left menu, then 'License'



From here an administrator can:

- View the details of your current license
- Purchase a license
- Activate your license



Read End User License Agreement (EULA)

#### To view the details of current license

· Click the 'Licenses' tab



License – Table of Column Descriptions		
Column Header	Description	
CAM User e-mail Address	The email ID provided at the time of CAM sign-up.	
CAM Automatic Renewal	Indicates whether automatic renewal of license is opted.	
CAM Max Users	Maximum number of users that can be enrolled	
CAM Max Servers	Maximum number of servers that Korumail can be installed.	
CAM Activation Limit	The number of times the same license key can be used to activate Korumail in the same machine.	
CAM License First Installation Date	Indicates the date when the license was activated.	
CAM License Expiration Date	Indicates the license expiry date	
CAM License Status	Indicates the status of the license, whether it is valid or expired.	

#### To purchase a license

Click the 'Click here to get CAM license key' in the 'Licenses' tab...



...or in the 'License Activation' tab.





You will be taken to Comodo Accounts Manager (CAM) login page at https://accounts.comodo.com/account/login

• Login to your CAM account or create a new one and complete the KoruMail license purchase procedure.

A license key will be sent to your email address that was provided at the time of CAM sign-up.

#### To activate your license

Click the 'License Activation' tab.



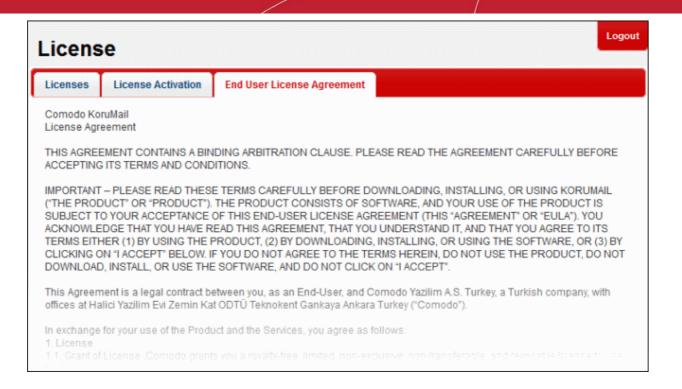
- Copy and paste the license key that was sent to your email address from Comodo in the 'CAM Activation Key' field.
- · Click the 'Save' button.

The license key will be checked and if validated, the 'Licenses' interface will be updated accordingly.

#### End User License Agreement (EULA)

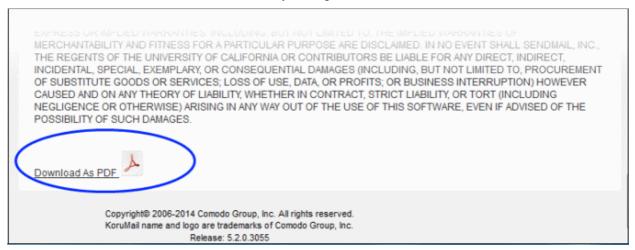
• Click the 'End User License Agreement' tab.





Read the EULA fully.

You can also download the EULA from the screen by clicking the 'Download As PDF' link at the bottom.

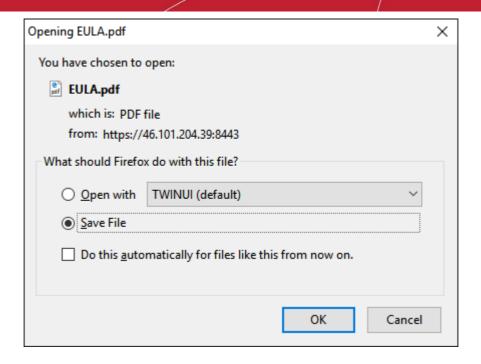


Click 'OK' to download the file to your system.









### 6.4 Configuring System Settings

The 'Settings' interface allows administrators to configure various parameters such as cache settings for Greylist IP, LDAP, SMTP-Auth logs, user session timeout duration, system backup and restore, log upload settings and more.

To open the interface, click the 'System' tab and then the 'Settings' sub tab.



Click the following links for more details:

- General
- Cache
- Session
- GUI Customization
- Backup
- Restore
- Log Upload
- Postmaster

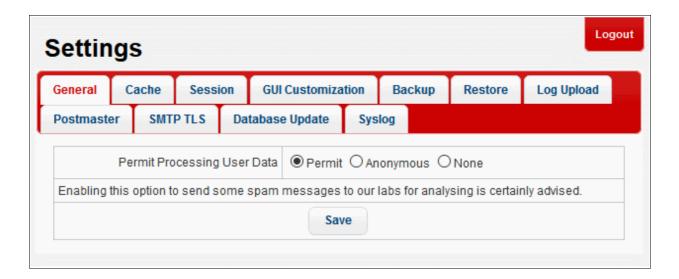


- SMTP TLS
- Database Update
- Update Database
- Syslog

### 6.4.1 System General Settings

The 'General' settings tab allows administrators to enable/disable the option to upload spam messages detected by KoruMail to Comodo labs for analytical purposes.

 To open the 'General' settings interface, click the 'System' tab from the left menu, then 'Settings' and 'General' tab.



#### Permit Processing User Data:

- Permit If enabled, spam messages detected by KoruMail will be uploaded to Comodo labs for analysis.
- Anonymous If enabled, spam messages detected by Korumail will be uploaded anonymously to Comodo labs for analysis.
- None If enabled, spam messages detected by Korumail, will not be uploaded to Comodo.
- Click the 'Save' button to apply your changes.

### 6.4.2 Cache Settings

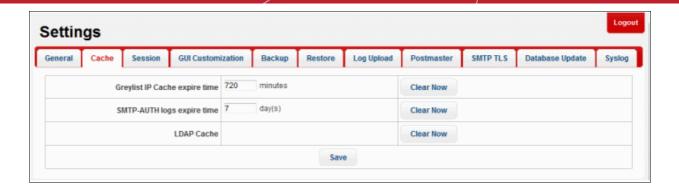
The 'Cache' settings tab allow administrators to set the cache expire time for Greylist IP addresses, SMTP Auth logs and LDAP.

To open the 'Cache' settings interface, click the 'System' tab on the left menu, then 'Settings' and 'Cache' tab.









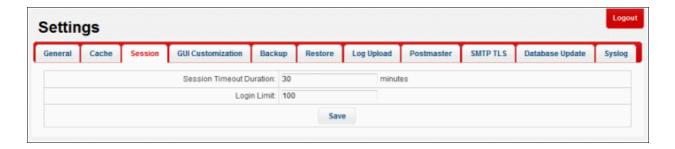
- Greylist IP Cache expire time: KoruMail greylists IP addresses from which emails are received for the first time and rejects it. If the sender is using a proper mail server, it automatically resends the email. The greylisted IP becomes whitelisted and email is not rejected. If the mail is from a spam source, then normally it will not resend mails. Enter the time for which the greylisted IPs should be cached. If within this time emails are resent from greylisted IPs, they are whitelisted. After the entered time, the greylisted IPs are deleted from the greylist.
- SMTP AUTH logs expire time: The end user authentication log details of SMTP clients are cached for the entered days and after that they are deleted.
- LDAP Cache: LDAP authentication details are cached and KoruMail does not query the LDAP server.
- Click the 'Clear Now' beside an item to clear the cache immediately.
- Click the 'Save' button to apply your changes.

### 6.4.3 Session Settings

The 'Session' settings tab allows administrators to configure the session inactivity period as well as to limit the number of times an administrator can log into the web console before the login password has to be changed.

To open the 'Session' settings interface, click the 'System' tab on the left menu, then 'Settings' and 'Session' tab.





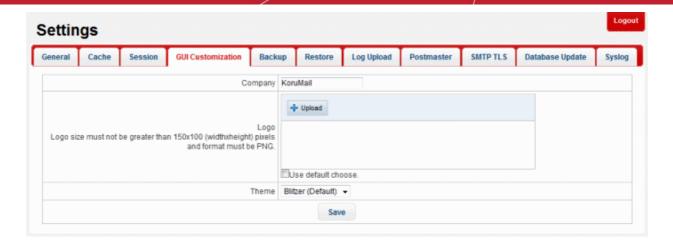
- Session Timeout Duration: Enter the period of session inactivity after which the administrator has to login again.
- Login Limit: Enter the number of users that can login to the portal at the same time.
- Click the 'Save' button to apply your changes.

#### 6.4.4 GUI Customization

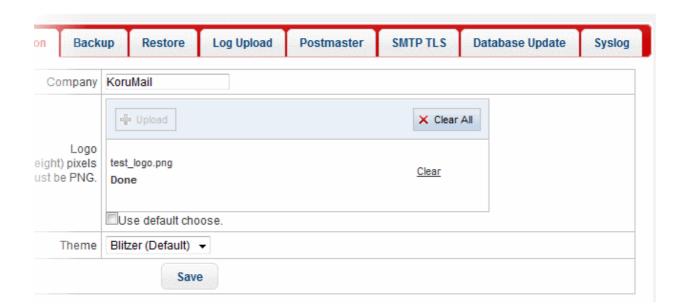
The 'GUI Customization' tab lets you customize the look and feel of KoruMail web console according to your preferences. You can also change the name and the logo to be displayed in the interface.

 To open the 'GUI Customization' settings interface, click the 'System' tab on the left menu, then 'Settings' and 'GUI Customization' tab





- Company: Enter the name of the company to be displayed
- **Logo:** To upload the logo to be displayed, click the 'Upload' button, navigate to the location where it is saved and click 'Open'.



The image will be uploaded and displayed in the interface. Please note the image should be in .png format and its size should not be greater than 150 width x 100 length.

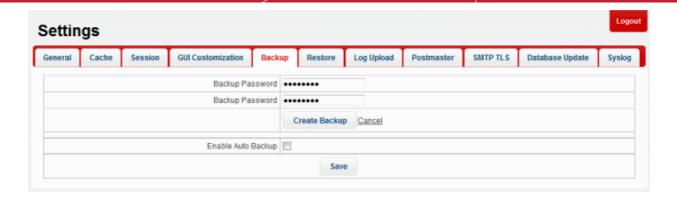
- To remove the logo, click the 'Clear' link.
- Click the 'Save' button to upload the logo.
- Theme: The 'Themes' drop-down allows you to choose the colors and appearance of the GUI as you prefer (Default = Redmond Theme).
- Click the 'Save' button to apply your changes.

### 6.4.5 System Backup

The 'Backup' tab allow administrators to backup all configurations and logs. You can also automate the backup process by scheduling the backup dates and time. You can restore the stored back up in case the need arises.

To open the 'Backup' settings interface, click the 'System' tab on the left menu, then 'Settings' and 'Backup' tab.





#### **Instant Backup**

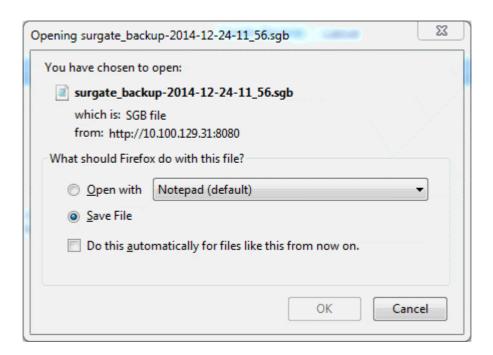
• To take an instant backup, enter the password, confirm it and click the 'Create Backup' button.

The system will backup the files and the backup download link will be displayed.





Click the 'Click here to download backup' link.



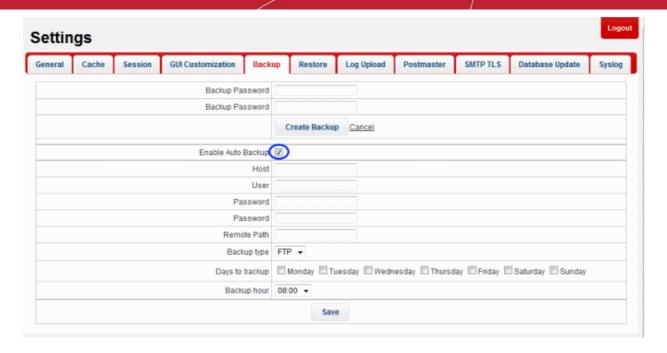
• Click 'OK' to save the file in your system. The 'Backup' file can be restored later from the 'Restore' tab.

#### **Scheduled Backup**

You can automate the backup process by scheduling the jobs.

To schedule a backup job, select the 'Enable Auto Backup' check box.



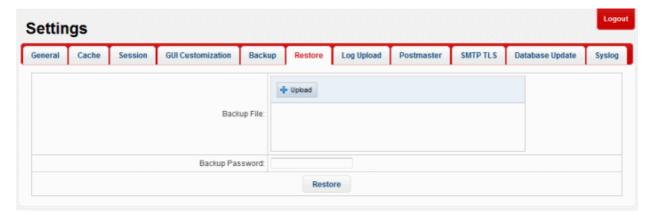


- Host: The name or IP of the system where the data should be backed up.
- User: The user name of the system
- Password: Enter the password to access the system
- Remote Path: Enter the remote path of the system including the folder name. Leaving the field blank means the backup will be uploaded to the default FTP folder.
- Backup type: Select the backup type from the drop-down. Currently only FTP option is available.
- Days to backup: Schedule the backup day(s) from the options.
- Backup hour: Select the hour when the scheduled backup should run on the selected backup day(s)
- Click the 'Save' button. The scheduled job will be saved. To change the schedule or the backup location, edit the settings accordingly and click the 'Save' button.

### 6.4.6 System Restore

You can restore KoruMail configurations and logs using the 'Restore' feature. Please note that for a restore operation to be completed, KoruMail has to be rebooted.

• To open the 'Restore' settings interface, click the 'System' tab on the left menu, then 'Settings' and 'Restore' tab

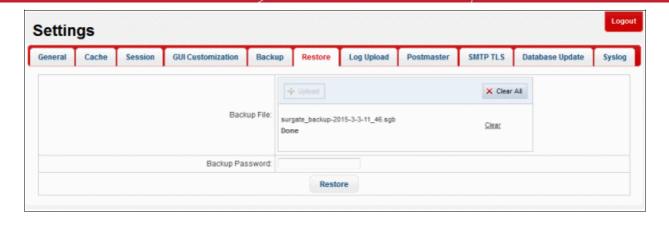


To restore, click the 'Upload' button, navigate to the location where the backup file is saved and click 'Open'.

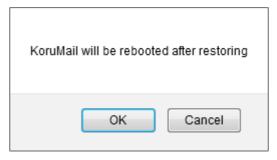


After uploading, the backup file will be displayed on the screen.





- · To remove the file, click the 'Clear' link beside it.
- To restore the backup, enter the backup password and click the 'Restore' button.



For the restore operation to be completed, KoruMail has to be rebooted. Click 'OK' to confirm.

### 6.4.7 Log Upload Settings

The 'Log Upload' tab allows admins to configure the automated upload of various types of KoruMail logs.

• To open the 'Log Upload' settings interface, click the 'System' tab on the left menu, then 'Settings' and 'Log Upload' tab



- Host: The name or IP of the system where the logs should be uploaded.
- User: The user name of the system
- Password: Enter the password to access the system



- Remote Path: Enter the remote path of the system including the folder name. Leaving the field blank means the logs will be uploaded to the default FTP folder.
- Upload type: Select the upload type from the drop-down. Currently only FTP option is available.
- Days to upload: Schedule the upload day(s) from the options.
- Upload hour: Select the hour when the scheduled upload should run on the selected upload day(s)
- Click the 'Save' button. The scheduled job will be saved. To change the schedule or the upload location, edit
  the settings accordingly and click the 'Save' button.

### 6.4.8 Postmaster Settings

It is a statutory requirement to set a postmaster address to which email errors will be directed for an SMTP domain. Postmaster addresses are commonly targeted by spammers to send unsolicited messages. Similarly, spammers also use the mailer-daemon route to flood users with spam messages. KoruMail allow administrators to forward these to other addresses and /or reject emails sent to these addresses.



- Postmaster Forwarding Address: Enter the forwarding address to which the email to postmaster are directed.
- MAILER-DAEMON Forwarding Address: Enter the forwarding address to which the Mailer Daemon notifications are to be directed.
- Discard incoming mails: Select the check box if the mails to the forwarded address is to be rejected.
- Click the 'Save' button.

### 6.4.9 SMTP TLS Settings

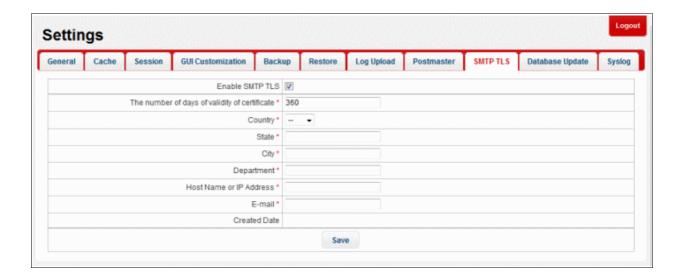
KoruMail allows administrators to enable Transport Layer Security (TLS) encryption to provide authentication and confidentiality for email traffic. In order to enable TLS encryption, a certificate should be installed in the mail server.

To open the 'SMTP TLS' settings interface, click the 'System' tab on the left, then click 'Settings' > 'SMTP TLS' tab.





• Enable SMTP TLS: Select the check box to enable TLS encryption while transmitting message between Mail Transfer Agents (MTAs). If selected, the details of the certificate should be entered in the fields.



· Click the 'Save' button.

### 6.4.10 Update Database

KoruMail updates virus and spam databases once per day. If required, the databases can be updated instantly from 'Database Update' tab.

To open the 'Database Update' settings interface, click the 'System' tab on the left menu then click 'Settings'
 'Database Update'.







- Virus Update: Click the 'Update' button to update the virus database
- Spam Update: Click the 'Update' button to update the spam database

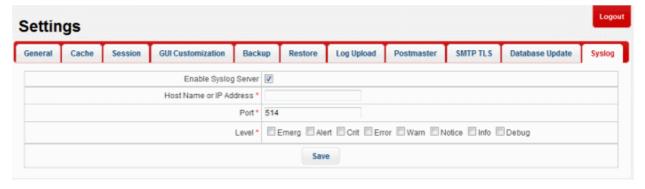
### 6.4.11 Syslog Server

KoruMail has the ability to forward logs pertaining to various operations and configuration changes to a remote Syslog server. Administrators can integrate the module with the remote Syslog server used by the organization for easy analysis of the logs and to conserve disk space.

To open the 'Syslog' settings interface, click the 'System' tab on the left menu then click 'Settings' > 'Syslog' tab



• Enable Syslog Server: Select the check box to store the logs in a remote server. If selected, the details of the Syslog server should be entered in the fields.



- Host Name or IP Address: Enter the host name or the IP address of the remote logging server to which the logs are to be passed.
- Port: Enter the port number through which the server receives the logs. Default is 514.
- Level: Select the log level that has to be passed to the remote logging server.
- · Click the 'Save' button.

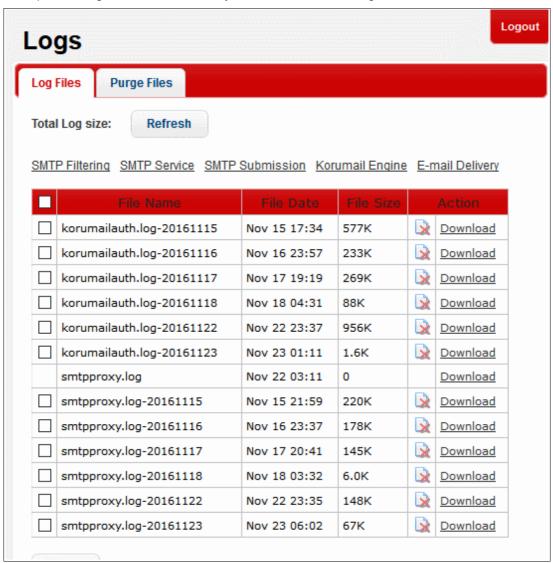
### 6.5 Logs

KoruMail stores log files for various activities and connections in the local database and uploads the logs to the



server as specified under 'System' > 'Settings' > 'Log Upload'. Administrators can download logs from the database through the 'Logs' interface. The logs interface also allows administrators to delete unwanted logs.

To open the 'Logs' interface, click the 'System' tab and then the 'Logs' sub tab.



The 'Logs' interface has the following tabs:

- Log Files
- Purge Files

### 6.5.1 Log Files

The 'Log Files' tab displays the list of available log files for different activities and connection attempts. These include:

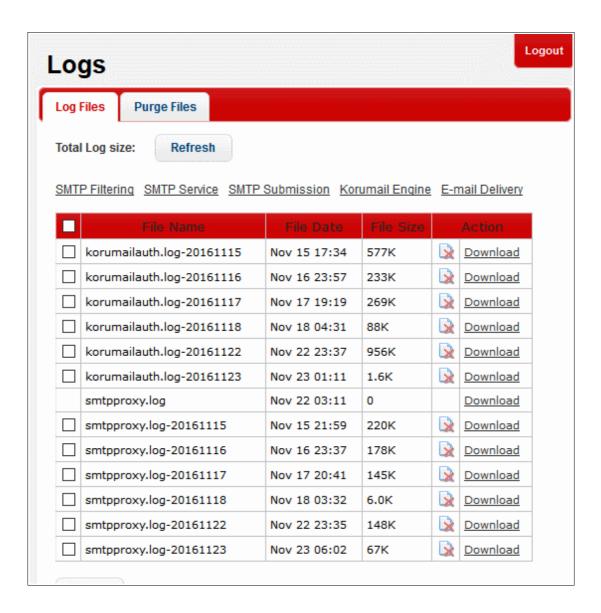
- SMTP Filtering
- SMTP Services
- SMTP Submission
- Korugan Engine Activities
- E-mail Delivery

Administrators can download the log files and delete unwanted logs from this interface.



Tip: You can also view the real-time logs from the Reports interface. Refer to the section Reports for more details.

To open the 'Log Files' interface, click the 'System' tab on the left menu, then 'Logs' and 'Log Files' tab.



- The interface displays the total size of all the log files available currently from the KoruMail system.
- Clicking 'Refresh' reloads the list of the available log files to include the latest log files generated.
- The links above the table enables the administrator to choose the category of log files to be downloaded or deleted.

Log Files – Table of Column Descriptions				
Column Header	Description			
File Name	Name of the log file			
File Date	The precise date and time at which the log file was created.			
File Size	The size of the log file.			
Actions	×	Allows the administrators to delete the log file.		



Download Allows the administrators to download the log file.

#### To download a log file

Select the category of the log files to be viewed from the links above the table

The list of available log files under the chosen category will be displayed.

Click the 'Download' link in the row of the required log file to download the file.

#### To delete an unwanted log file

Select the category of the log files to be viewed, from the links above the table
 The list of available log files under the chosen category will be displayed.

- Click the Delete icon in the row of the required log file to download the file.
  - Click 'OK' in the confirmation dialog.

#### To delete several unwanted log files

Select the category of the log files to be viewed from the links above the table

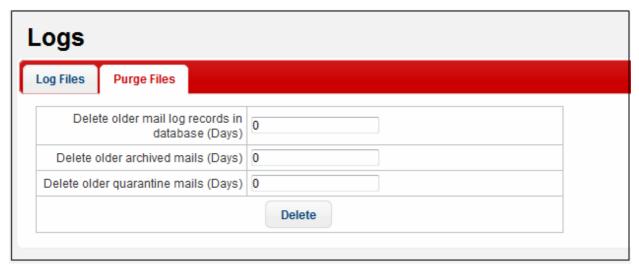
The list of available log files under the chosen category will be displayed.

- Select the log files to be deleted by selecting the checkboxes beside them
- · Click the 'Delete' button at the bottom left of the list.
- Click 'OK' in the confirmation dialog.

### 6.5.2 Purge Files

The Purge Files interface allows administrators to configure the time limit for preserving the log files and archived mails. Log files, archived mails and quarantined mails that are older than the period specified from this interface will be automatically removed.

• To open the 'Purge Files' interface, click the 'System' tab on the left menu then 'Logs' then open the 'Purge Files' tab.



- Delete older mail log records in database (Days) Specify the number of days to store the log files. The log files older than the days specified here will be automatically deleted.
- Delete older archived mails (Days) Specify the number of days for which the guarantined mails are to be



retained in the local database. Mails older than the days specified here, will be automatically deleted.

- Delete older quarantine mails (Days) Specify the number of days for which the quarantined mails are to be preserved in the local database for review by the administrators. Mails older than the days specified here, will be automatically deleted.
- To instantly remove all the saved logs, archived mails and quarantined mails, click 'Delete'.

#### 6.5.3 Tools

KoruMail has built-in tools to quickly check the connectivity to the mail servers and clients and to clear the mails in the SMTP delivery queue.

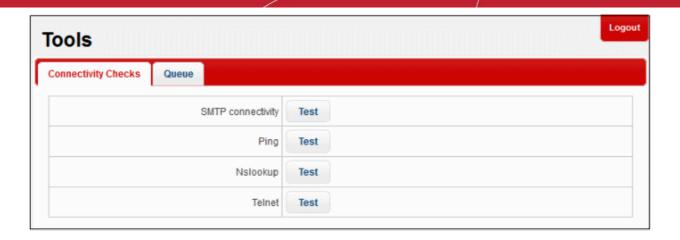
 To open the 'Tools' interface, click the 'System' tab on the left menu and then click 'Tools' from the submenu.











The 'Tools' interface has two tabs:

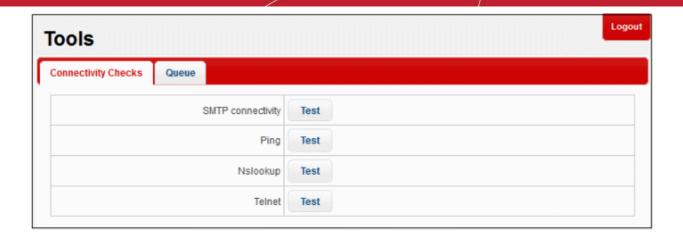
- Connectivity Checks
- SMTP Queue

### 6.5.4 Check Connectivity

Allows administrators to check the connection status of KoruMail to external mail servers and clients, make name server lookups and check telnet connectivity to a remote host.

• To open the 'Connectivity Checks' interface, click the 'System' tab on the left menu then 'Tools' then the 'Connectivity Checks' tab.





You can check for the following:

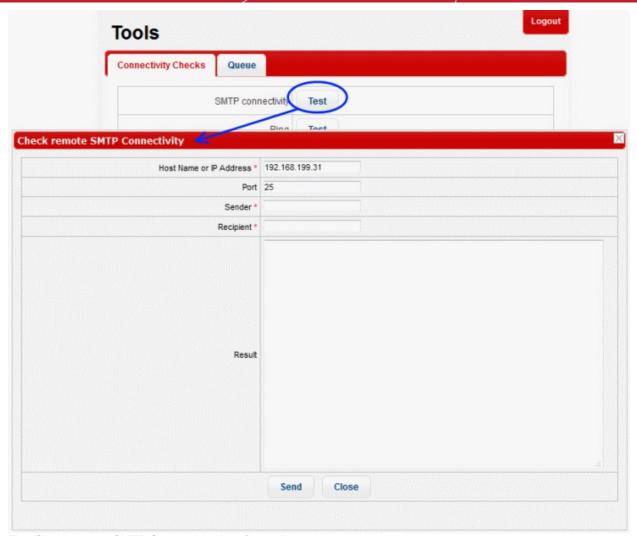
- Connectivity to a remote SMTP server
- Connectivity to a remote host
- Name server lookup for a remote host or a mail server
- Telnet connectivity for a remote host

#### To check connection to a SMTP server

Click 'Test' beside 'SMTP connectivity' from the 'Connectivity Checks' interface.







The 'Check remote SMTP Connectivity' interface will appear.

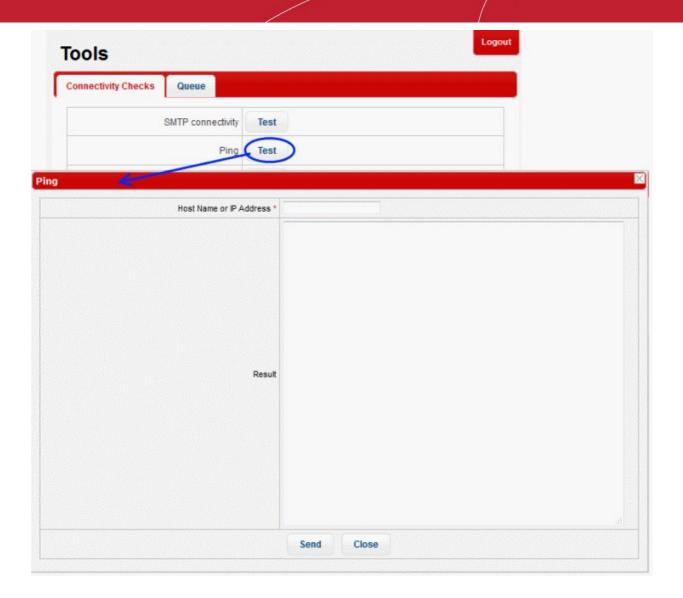
- Enter the details of the external or remote mail server as given below:
  - Host Name or IP Address The hostname or IP address of the remote SMTP server
  - Port The port used by the server for SMTP connections. This depends on whether or not the server uses SSL for SMTP connections (Default = 25)
  - Sender A valid email address at the local SMTP server to send a test mail to the remote server for testing
  - Recipient A valid email address at the remote SMTP server to which the test email needs to be sent
- Click 'Send'

KoruMail will send a test email to check the connectivity and display the results in the 'Result' field.

#### To check connectivity to a remote host

Click 'Test' beside 'Ping' from the 'Connectivity Checks' interface.





The 'Ping' interface will appear.

- · Enter the hostname or IP address of the remote host to check whether it can be reached by KoruMail
- Click 'Send'

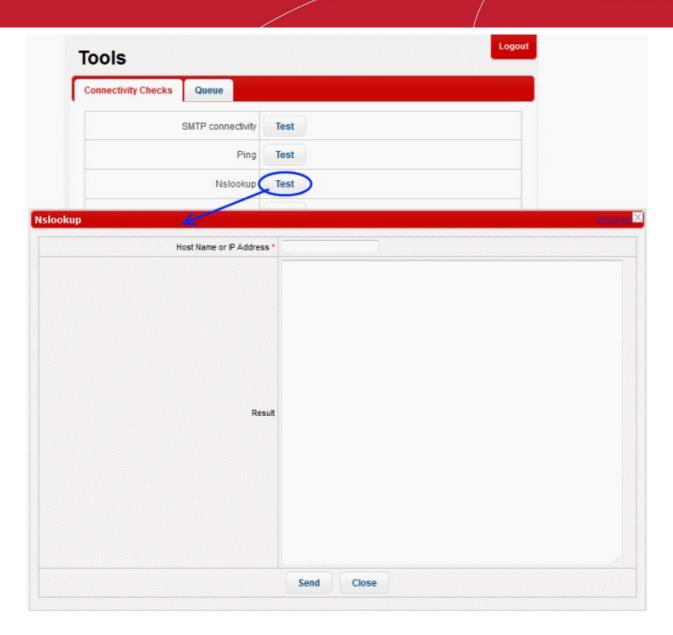
KoruMail will ping the remote host and display the results in the 'Result' field.

#### To lookup name server for a remote host

Click 'Test' beside 'Nslookup' from the 'Connectivity Checks' interface.







The 'Nslookup' interface will appear.

- Enter the hostname or IP address of the remote host to check the domain name associated with it
- Click 'Send'

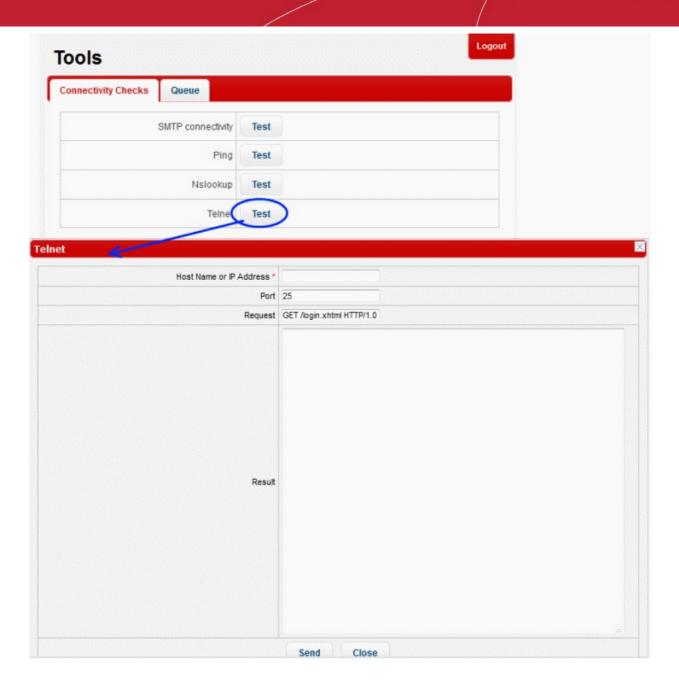
KoruMail will lookup the name server to identify the domain name associated with the IP address or the hostname and display the results in the 'Result' field.

#### To check Telnet connectivity to a remote host

• Click 'Test' beside 'Telnet' from the 'Connectivity Checks' interface.







The 'Telnet' interface will appear.

- Enter the hostname or IP address of the remote host to check whether it is connecting through Telnet protocol
- Enter the port use by the remote host for Telnet connections (Default = 25).
- KoruMail send a request 'GET /login.xhtml HTTP/1.0' to the remote host to check the connectivity, If you wish to send a custom request, edit the same in the 'Request' field.
- · Click 'Send'

KoruMail will send the request to the remote host for checking the Telnet connectivity and display the results in the 'Result' field.

#### 6.5.5 Clear SMTP Queue

The Queue tab under the Tools interface allows the administrator to remove the mails that are in queue for SMTP forwarding.



#### To clear the SMTP queue

· Click the 'System' tab from the left, then 'Tools' and 'Queue' tab.

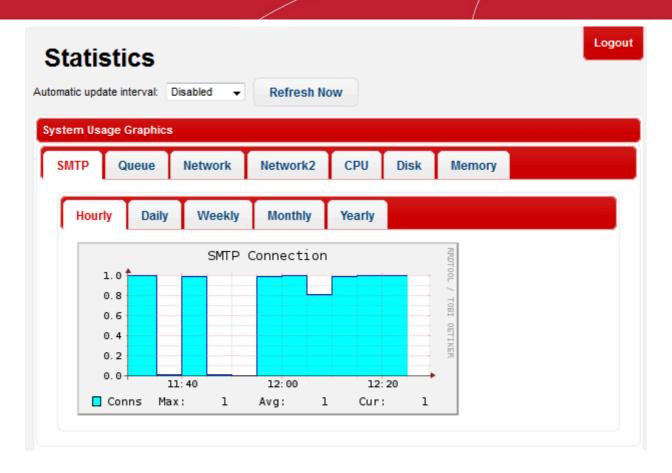


Click the Clear button beside CLEAN SMTP queue.

### 6.6 System Usage Statistics

KoruMail displays SMTP connection statistics, mail statistics and utilization statistics of hardware and software resources like network, CPU, hard disks and system memory as graphs in the 'Statistics' interface.

• To open the 'Statistics' interface, click the 'System' tab and then the 'Statistics' sub tab.



The administrator can set the update interval for the statistics or can instantly update the statistics to view the real-time usage graphs.

• To set the update interval, choose the interval from the 'Automatic update interval' drop-down.



• To instantly update the statistics, click the 'Refresh Now' button.

The 'System Usage Graphics' area displays the connection and usage statistics graphs under the following tabs:

- SMTP: A graphical representation of the number of SMTP connections between KoruMail and different mail servers during the selected time period. Shows data for both for incoming and outgoing mails.
- Queue: Displays the graphical representation of number of mails that were in queue for processing and delivering to the mail servers, during the selected time period.
- Network and Network2: Shows network utilization statistics through various network interfaces for the selected period.
- CPU: Shows the load on the KoruMail CPU over the selected period.
- Disk: Shows disk access levels over the selected period.
- Memory: Shows system memory usage over the selected period.

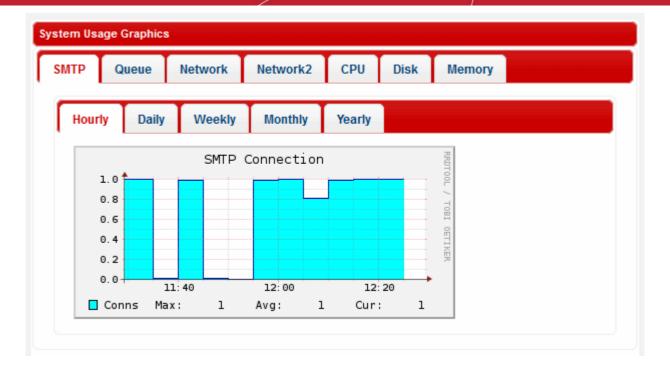


#### **SMTP**

The 'SMTP' tab displays the numbers of SMTP connections made to different mail servers over the period chosen from the sub tabs:





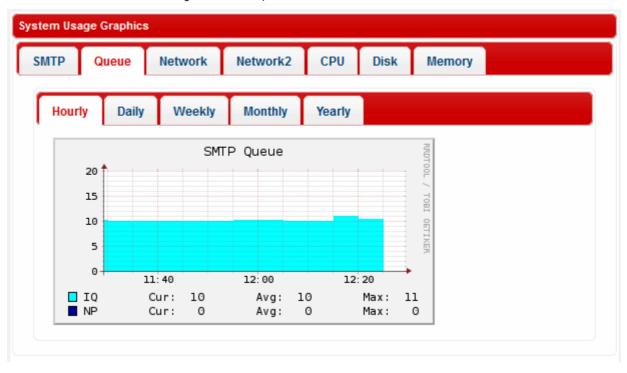


- Hourly Shows the log of connections for the past one hour
- Daily Shows the log of connections for the past 24 hours
- · Weekly Shows the log of connections for the past seven days
- Monthly Shows the log of connections for the past four weeks
- Yearly Shows the log of connections for the past twelve months

The numbers of maximum and average connections within the selected period and the current number of connections are displayed below the graph.

#### Queue

KoruMail receives all the emails and analyzes them for spam filtering, virus scanning, content filtering and so on, before delivering it to the mail servers. The 'Queue' tab displays the log of mails that were under processing and not delivered to the mail servers during the selected period.



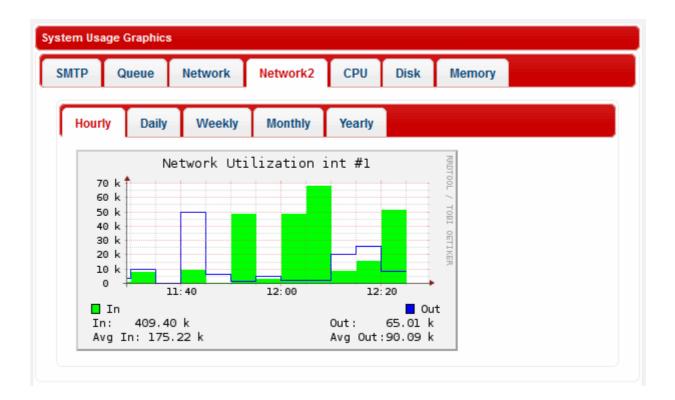


You can choose the time period for which you wish to see the logs from the sub tabs:

- Hourly Shows the log of number of mails in queue for the past one hour
- Daily Shows the log of number of mails in queue for the past 24 hours
- Weekly Shows the log of number of mails in queue for the past seven days
- Monthly Shows the log of number of mails in queue for the past four weeks
- · Yearly Shows the log of number of mails in queue for the past twelve months

#### **Network and Network2**

The Network tabs display the log of network resource utilization through the respective interface, for the period chosen from the sub-tabs.



- Hourly Shows the log of network usage for the past one hour
- Daily Shows the log of network usage for the past 24 hours
- · Weekly Shows the log of network usage for the past seven days
- Monthly Shows the log of network usage for the past four weeks
- Yearly Shows the log of network usage for the past twelve months

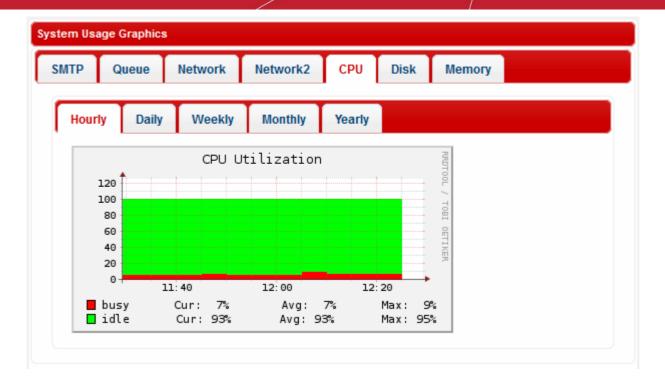
The incoming and outgoing traffic are represented with different colors in the graph.

- Green Incoming traffic
- Blue Outgoing traffic

The current incoming/outgoing traffic and the average incoming and outgoing traffic for the selected period of time are indicated below the graph.

#### **CPU**

The CPU tab displays the log of load on KoruMail CPU, for the period chosen from the sub-tabs.



- Hourly Shows the CPU usage for the past one hour
- Daily Shows the CPU usage for the past 24 hours
- · Weekly Shows the CPU usage for the past seven days
- · Monthly Shows the CPU usage for the past four weeks
- · Yearly Shows the CPU usage for the past twelve months

The processes that are responsible for CPU usage are indicated with different colors.

- · Green Idle, CPU was not used by any of the processes
- Red System processes

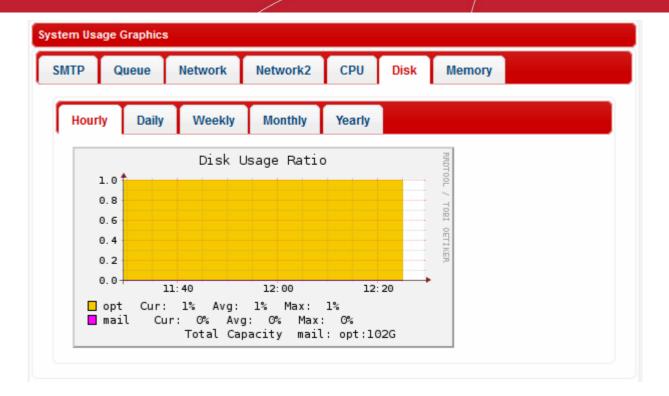
The table below the graph shows the current, average and maximum load of the CPU for the selected period from the respective processes.

#### Disk

The 'Disk' tab displays a graphical representation of the log of the ratio of disk usage with respect to total disk space in KoruMail, for the period chosen from the sub-tabs.







- · Hourly Shows the disk usage for the past one hour
- Daily Shows the disk usage for the past 24 hours
- · Weekly Shows the disk usage for the past seven days
- · Monthly Shows the disk usage for the past four weeks
- Yearly Shows the disk usage for the past twelve months

The disk usage by different types of data are indicated with different colors.

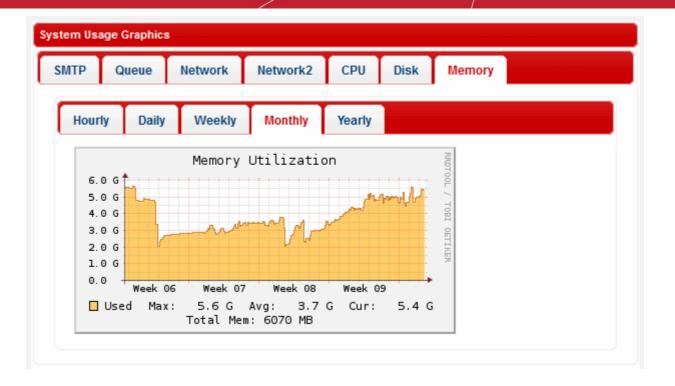
- Yellow Space occupied by system configuration
- · Magenta Space occupied by mail archive

The table below the graph shows the current, average and maximum disk usages for the selected period.

#### **Memory**

The 'Memory' tab displays a graphical representation of the usage of system memory of KoruMail, for the period chosen from the sub-tabs.





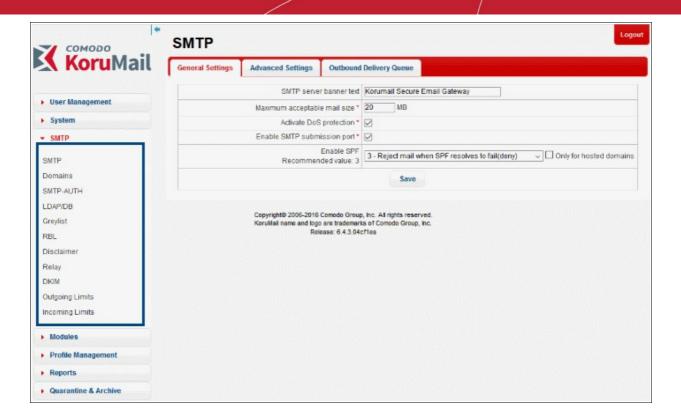
- · Hourly Shows the memory usage for the past one hour
- Daily Shows the memory usage for the past 24 hours
- · Weekly Shows the memory usage for the past seven days
- · Monthly Shows the memory usage for the past four weeks
- · Yearly Shows the memory usage for the past twelve months

The maximum, average and current memory usage statistics are indicated below the graph.

# 7 SMTP Configuration

The 'SMTP' area allow administrators to configure settings for outgoing mails such as SMTP settings, set outgoing limits, manage domains, SMTP-Auth settings, block users and more.





Click the following links for more details:

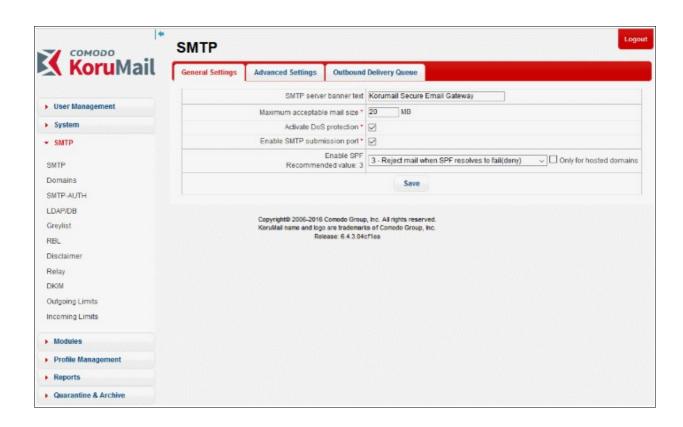
- SMTP Settings
- Manage Domains
- KoruMail SMTP-AUTH Connector
- LDAP/Local DB/MySQL User Database
- Greylisting
- Manage RBL Servers
- Disclaimer
- SMTP Relay
- DomainKeys Identified Mail (DKIM)
- Outgoing SMTP Limits
- Incoming SMTP Limits

### 7.1 SMTP (Send E-Mail Protocol) Settings

The 'SMTP' settings area allow administrators to configure items such as SMTP connection response message, activate DoS protection, configure minimum and maximum number of sub processes the main filtering engine can be utilized. The area also allows you to set the number of mails that can be queued and sent at a time for a particular domain.

To open the 'SMTP' screen, click the 'SMTP' tab on the left menu and click 'SMTP'.





Click the following links for more details:

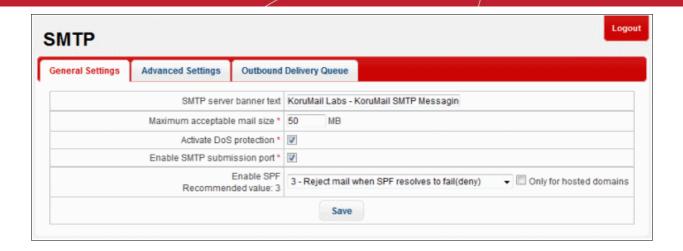
- General Settings
- Advanced Settings
- Outbound Delivery Queue

### 7.1.1 General Settings

The 'General Settings' allow administrators to configure settings such as the maximum size of mails that can be sent by clients and to enable DoS (Denial of Service) protection and SPF.

 To open the SMTP 'General Settings' interface, click the 'SMTP' tab and then the 'SMTP' sub tab > 'General Settings'.





SMTP Settings – General Settings Table of Parameters			
Parameter	Description		
SMTP server banner text	The welcome message displayed on the SMTP server when connection to KoruMail port 25 is established.		
Maximum acceptable mail size (MB)	The maximum permitted size of a single email + attachments. The default value is 20 MB.		
Activate DoS protection	If enabled, KoruMail activates DoS (Denial of Service) protection.		
Enable SMTP submission port	If enabled, KoruMail doesn't accept outgoing messages from unauthenticated sources thus helping to protect your network and users from spam emails.		
Enable SPF	SPF (Sender Policy Framework) is a security standard to block the forgery of sender address.  SPF values		
	Just add received-SPF header		
	Return temporary failure in DNS query error		
	If SPF result fails (ban) then reject it (recommended)		
	4. If SPF result is softfail then reject it		
	5. If SPF result is neutral then reject it		
	6. If SPF result is not passed then reject it		
	You can disable SPF by selecting '0' from the list. If the check box 'Only for hosted domains' is selected, then the SPF check will be performed for outgoing mails for domains that are hosted in the network.		

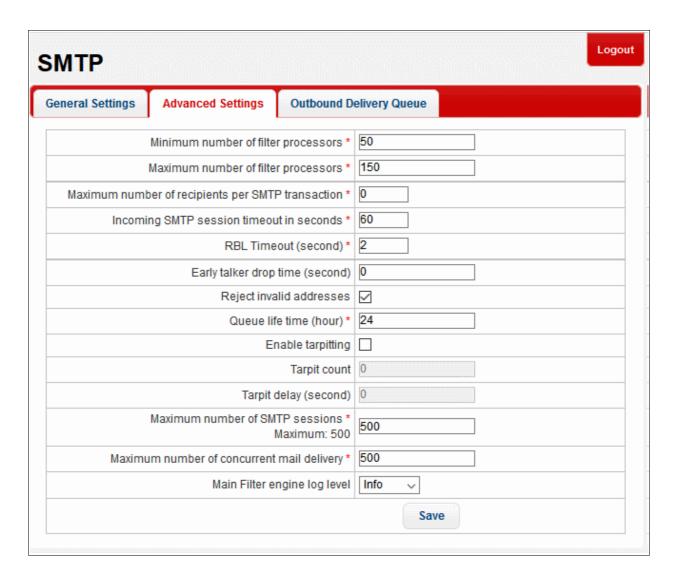
Click the 'Save' button to apply your changes.

### 7.1.2 Advanced Settings

The SMTP 'Advanced Settings' area allows administrators to configure settings such as the minimum and maximum number of processes that the main filtering engine should use, the number of recipients per SMTP transactions and more.



• To open the SMTP 'Advanced Settings' interface, click the 'SMTP' tab and then the 'SMTP' sub tab > 'Advanced Settings'.



SMTP Settings – Advanced Settings Table of Parameters		
Parameter	Description	
Minimum number of filter processors	The minimum number of filter processes that the KoruMail filtering engine should use.	
Maximum number of filter processors	The maximum number of filter processes that the KoruMail filtering engine should use.	
Maximum number of recipients per SMTP transaction	Maximum number of recipients for each incoming SMTP request that comes to KoruMail.	
Incoming SMTP session timeout (seconds)	Timeout duration of each SMTP session.	



RBL Timeout (seconds)	If this time is exceed, the RBL query is canceled and next filter is applied to the e-mail.
Early talker drop time (seconds)	The SMTP server has a waiting time before sending a first greeting message after which the client replys with a HELO or a EHLO command. On receiving this (premature) message before the server sends greetings, then the client could be serving spam. The waiting time of SMTP server to send a greeting message is called Early talker drop time.
Reject invalid addresses	If enabled, outgoing mails with invalid address will be rejected
Queue life time (hour)	Enter the number of hours that a mail can be queued for delivery before it is bounced.
Enable tarpitting	Tarpitting helps thwart spammers by slowing the transmission of bulk emails. If a spammer sends an email to several recipients on your server during one SMTP session, enabling this feature will slow down the communication. Spammers may stop sending emails to your server if the response to their requests is very slow.
Tarpit count	Tarpitting will become active if the number of recipients exceeds the Tarpit count.
Tarpit delay (second)	The number of seconds that Tarpitting will delay the transmission response
Maximum number of SMTP sessions	Maximum number of concurrent SMTP sessions.
Maximum number of concurrent mail delivery	Maximum number of concurrent messages that can be sent by SMTP server.
Main Filter engine log level	Select the level of main filtering engine event that should be logged. Selecting 'Notset' will log all the levels.

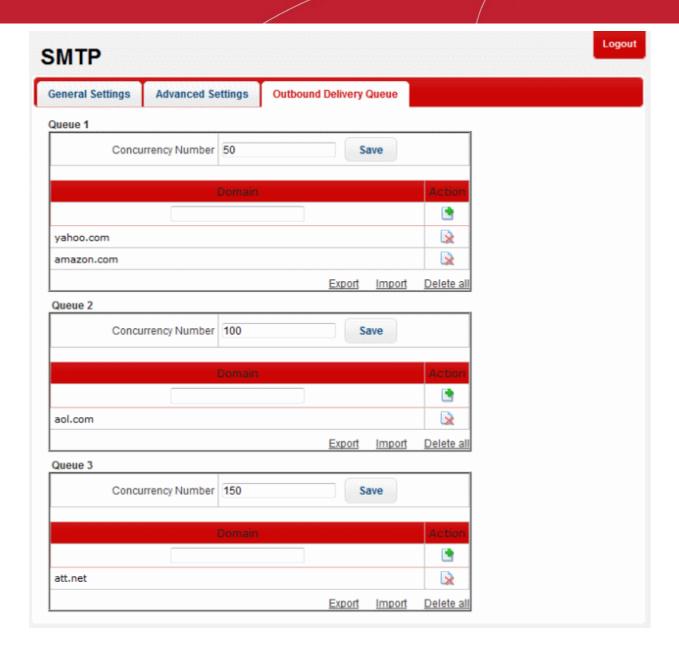
• Click the 'Save' button to apply your changes.

### 7.1.3 Outbound Delivery Queue

Some domains have restrictions on how many email recipients that can be delivered concurrently from a source. KoruMail has the feature to queue outbound mails per domain so that only the specified number of mails will be delivered at a time.

To open the SMTP 'Outbound Delivery Queue' interface, click the 'SMTP' tab and then the 'SMTP' sub tab >
'Outbound Delivery Queue'.

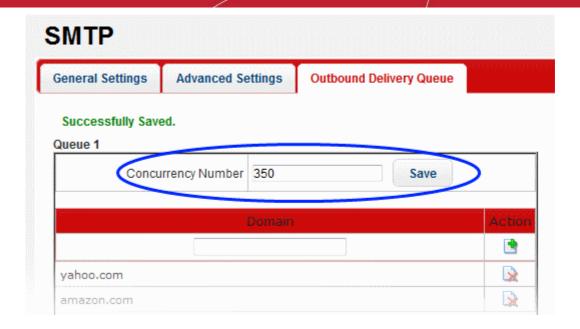




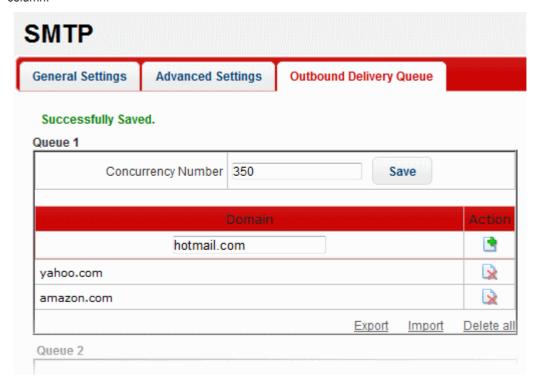
The interface has three preset delivery queue numbers that can be configured according to your organizational needs. The 'Concurrency Number' for each of the queue can be changed.

• To set the number of emails that can be sent at a time, enter the number in the 'Concurrency Number' field and click the 'Save' button.





• To add a domain for which the number of outgoing mails should be restricted and queued depending on the 'Concurrency Number', enter the domain name in the filed and click the button under the 'Action' column.



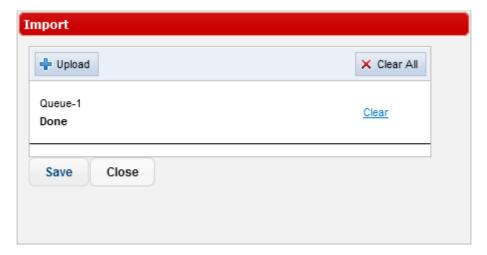
- To remove a domain from the list, click the 🎑 button beside it.
- To remove all domains from the list, click the 'Delete all' link and confirm the removal in the 'Confirmation Dialog'.
- To save the list of domains in a 'Queue', click the 'Export' link and save it to your system.



To import a list of domains, click the 'Import' link. The 'Import' dialog will be displayed:



Click the 'Upload' button, browse to the location where the file is saved and click 'Open'.
 The file will be added.



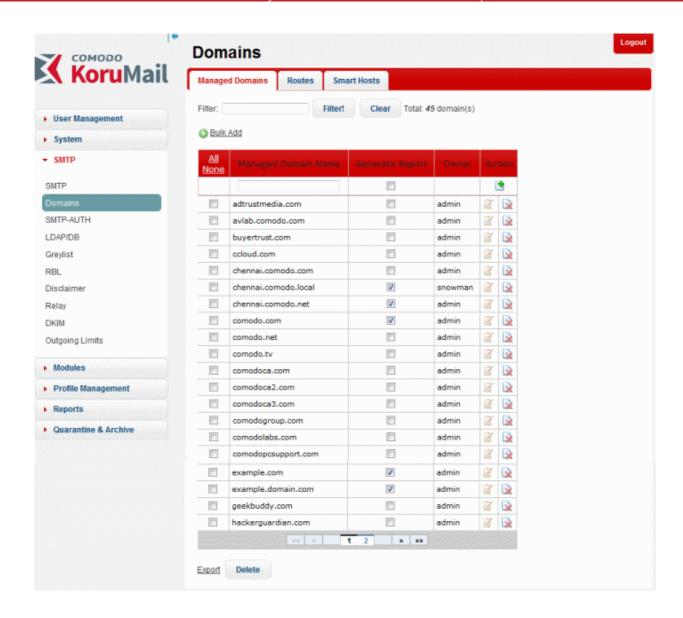
- Repeat the process to add more files.
- To remove a file, click the 'Clear' link beside it.
- To remove all the added files, click the 'Clear All' button at the top right.
- To import the list of domains from the files, click the 'Save' button.

## 7.2 Manage Domains

The 'Manage Domains' area allow administrators to add domains and KoruMail applies all the rules and polices for emails belonging to the domains. The administrators in addition to edit the details of domains can also configure routes and SMTP servers, add 'Smart Hosts' for domains so as to route emails to an intermediate or relay server rather than delivering emails directly to the recipients' server.

• To open the 'Domains' screen, click the 'SMTP' tab on the left side and click 'Domains'.





Click the following the links for more details:

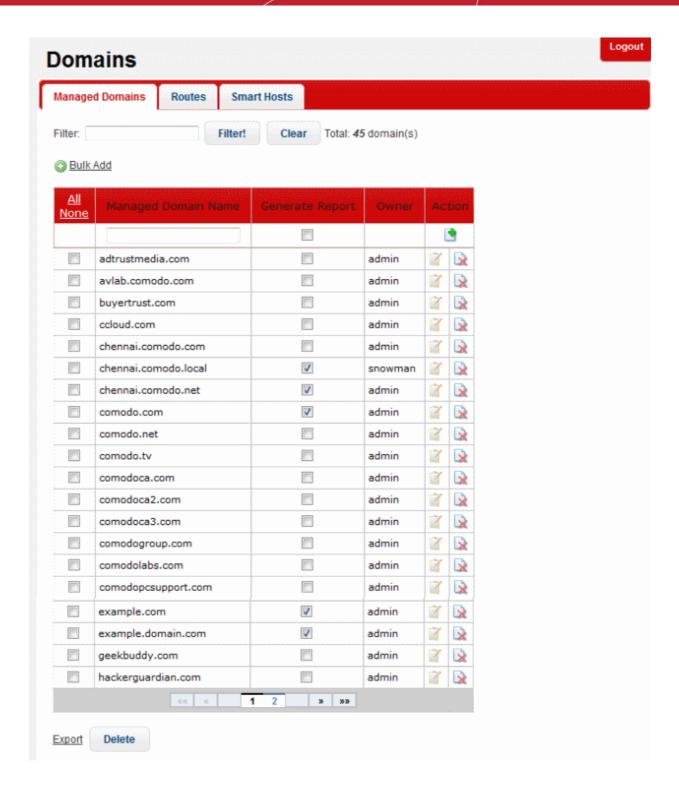
- Managing domain names
- Managing domain routes
- Managing smart hosts
- Default domain routing

## 7.2.1 Managing Domain Names

Administrators with appropriate privileges can add domain names that are to be managed and protected by KoruMail Messaging Gateway.

 To open the 'Managed Domains' screen, click the 'SMTP' tab on the left menu, click 'Domains' and then 'Managed Domains'.





Managed Domains – Table of Column Descriptions		
Column Header	Description	
Managed Domain Name	The name of the domain added to KoruMail	
Generate Report	If enabled, KoruMail displays related email statistics of the selected domain name in 'Domain Reports'	



Owner	The name of the administrator who added the domain.	
Actions	•	To add a domain, click this button after entering the details in the field under 'Managed Domain Name' column.
	×	Allows the administrators to delete a domain from the list.
	Ì	Allows the administrators to change the name of the 'Owner'

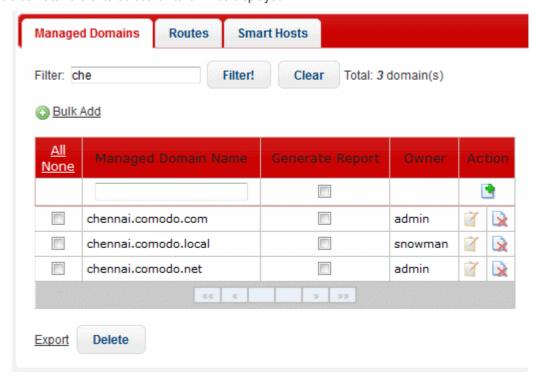
## **Search Options**

You can search for a particular domain(s) by using the filter.



• Enter the name of the domain fully or partially in the filter field and click the 'Filter' button.

Domains that match the entered search text will be displayed.





To display all the managed domains, click the 'Clear' button.

The interface allow administrators to:

- Add a domain name
- Add multiple domain names
- Edit a domain owner
- Delete domain names
- Export domain names

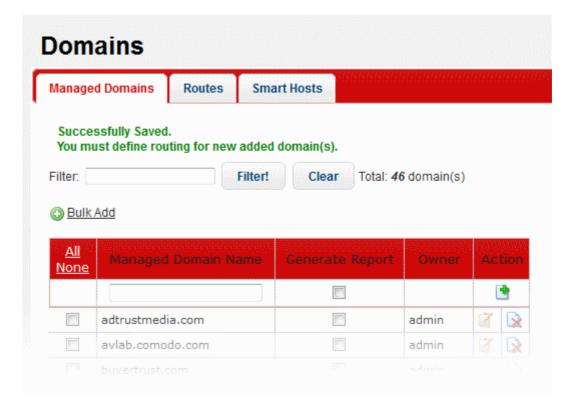
### To add a domain name

Enter the domain name in the field under 'Managed Domain Name' column



- Select the 'Generate Report' check box if you want to display email statistics of the domain name in 'Domain Reports'
- Click the button under the 'Action' column.

The domain will be added and the next step is to define route for the added domain. If left undefined, then the default route will apply for the domain.





Refer to the section 'Managing Routes' on how to add routes.

### To add multiple domain names

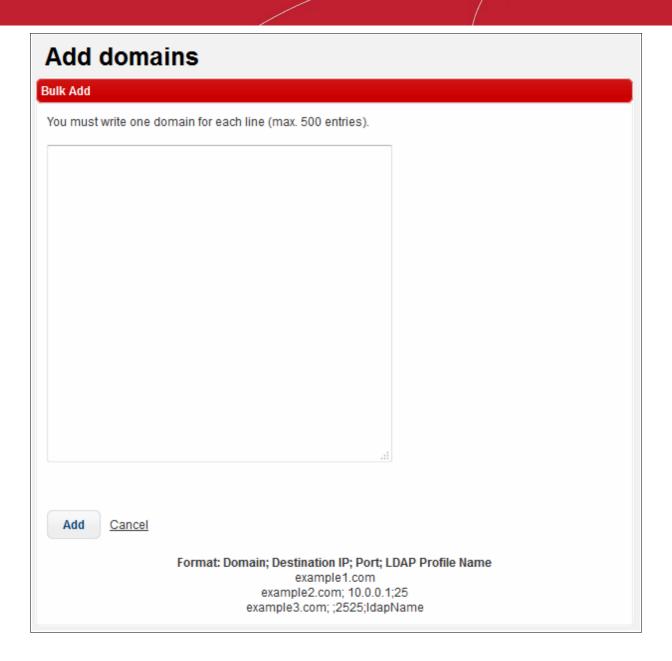
The most significant feature of this menu is when you add the domain name you can route the domain name at the same time. For doing this lines must be written in Domain Name; Target IP Address; Port; LDAP name format. If target IP address is left blank no routing is done for this domain name. If port field left blank, port 25 is used as default.

Click the 'Bulk Add' link in the 'Managed Domains' screen



The 'Bulk Add' screen will be displayed.





- Enter the domain names each per line.
- You can also define routes, port number and LDAP profile name here for the domains. The items should be separated by a semicolon as shown in the screen.
- Click the 'Add' button.

The domains will be added and the next step is to define routes for the added domains if not defined while entering the domain names. If left undefined, then the default route will apply for the domains.





#### To edit a domain owner

When an administrator adds a domain name, his/her user name will be displayed in the screen under the 'Owner' column header.

• To change the name of domain owner, click the button beside the 'Owner' name.

The 'Edit Managed Domain' screen will be displayed.

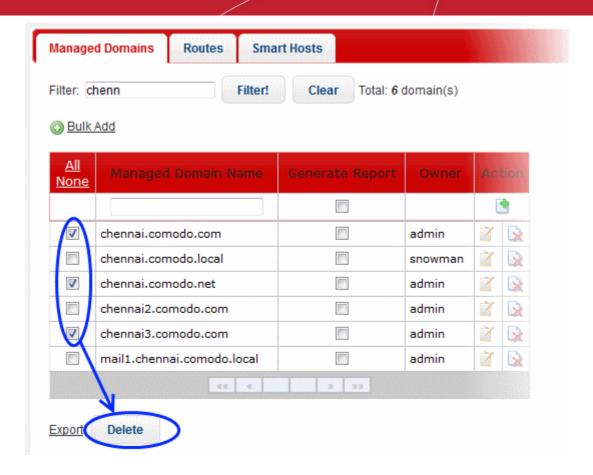


- · Select the name that you want to change as the owner from the 'Owner' drop-down
- Click the 'Save' button

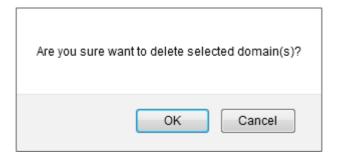
## To delete domain names

- To delete domain names one at a time, click the button under the 'Action' column header and confirm the deletion in 'Confirmation' dialog.
- To delete multiple domain names, select the check boxes beside them and click the 'Delete' button at the bottom.





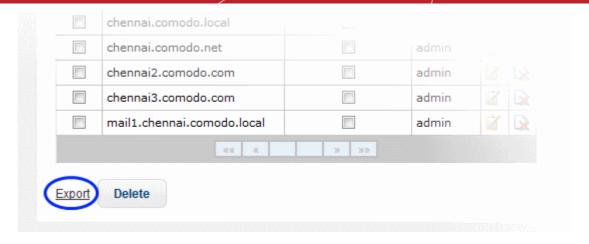
Click 'OK' to confirm the deletion of the selected domains.



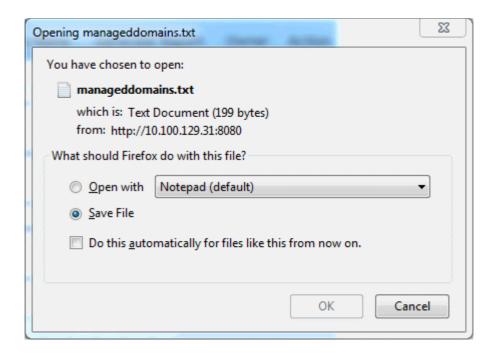
### To export the domain names to a file

· Click the 'Export' link at the bottom of the screen





Click 'OK' to download and save the domains list as a text file to your system.



## 7.2.2 Managing Domain Routes

Once you have added the domains you wish to manage as explained in the previous section, you can define the route each domain should use to deliver mail after KoruMail has filtered them. If no route is defined, then the default domain route will apply. Refer to the section 'Default Domain Routing' for more details.

• To open the 'Routes' screen, click the 'SMTP' tab on the left menu, click 'Domains' and then 'Routes'.





	Domain Route – Table of Column Descriptions			
Column Header	Description			
Managed Domain Name	The name of the domain added to KoruMail			
Routing Type	Select the routing type that should be used to send mail to the SMTP server. The options available are:			
	• IPv4			
	IPv6 Hostname			
	MX Record			
	• LDAP			
SMTP Server	Enter the IP address or the SMTP server name			
Port Number	The port number to which the KoruMail should forward the mail			
User Verification	The type of user verification that KoruMail should use before forwarding the mails. The options available are:			
	None			
	Local User DB			
	My SQL			
	• LDAP			
LDAP/DB Profile	This field will be populated depending on the type of 'User Verification' selected. If 'LDAP' is chosen, then the option to choose the LDAP type will be available from the drop-down.			
Action	To add the domain route, click this button after entering/selecting all the routing details.			
	Click this button to check the connectivity between KoruMail and the SMTP server.			
	Allows the administrators to delete a domain route from the list.			
	Allows the administrators to edit the domain route.			

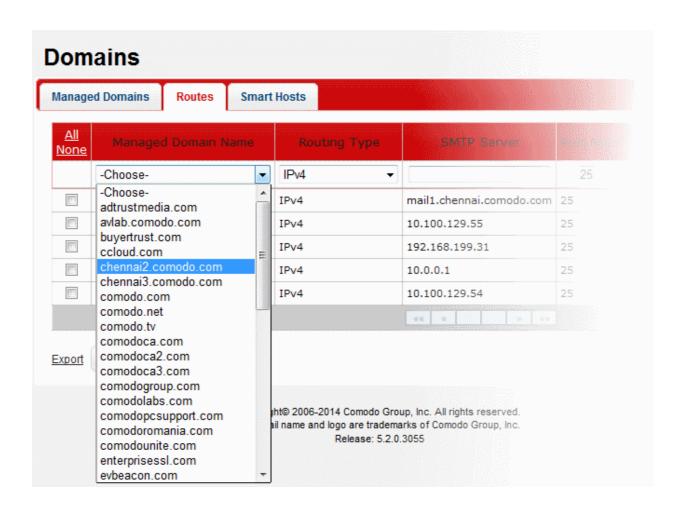


The interface allow administrators to:

- · Configure domain route for the added domains
- · Edit a domain route
- Delete domain routes
- Export domain routes

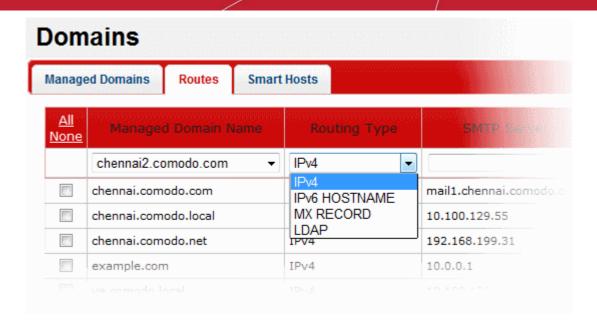
### To configure a domain route

Click the 'Choose' drop-down and select the added domain for which you want to configure the route.

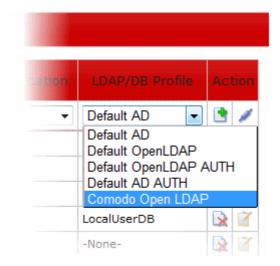


Select the routing type that should be used to send mail to the SMTP server.





- Enter the server name or IP address of the SMTP server to which KoruMail should forward the mails to in the filed under 'SMTP Server'
- Enter the port number to which the KoruMail should forward the mail
- Select the verification type that the KoruMail should use before forwarding the mails. The options available are: Local User DB, My SQL and LDAP. These are configured in LDAP/DB section.
- Depending on the 'User Verification' type chosen, the 'LDAP/DB Profile' column will be populated. If 'LDAP' is chosen as 'User Verification' then the LDAP profiles added in LDAP/DB section will be displayed from the drop-down. Select the LDAP profile from the options.



- To check the connectivity between KoruMail and the configured remote server, click the button under the 'Action' column header. The connection will be checked and the result displayed at the top.
- To add a domain route to the list, click the button under the 'Action' column header.

The configured domain route will be added for the domain and displayed in the list.

### To edit a domain route

Click the button under the 'Action' column header for the domain route that you want to edit.



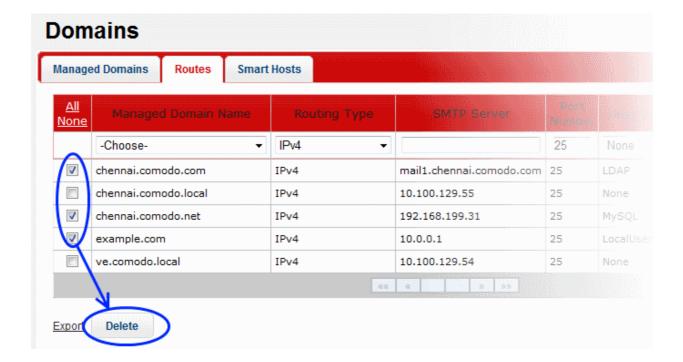
The 'Edit domain route' screen will be displayed.



- Edit the required parameters. This is similar to the method explained in the 'Add' section.
- Click the 'Save' button to apply your changes.

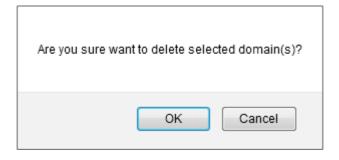
### To delete domain routes

- To delete domain routes one at a time, click the button under the 'Action' column header and confirm the deletion in the 'Confirmation' dialog.
- To delete multiple domain routes, select the check boxes beside them and click the 'Delete' button at the bottom.



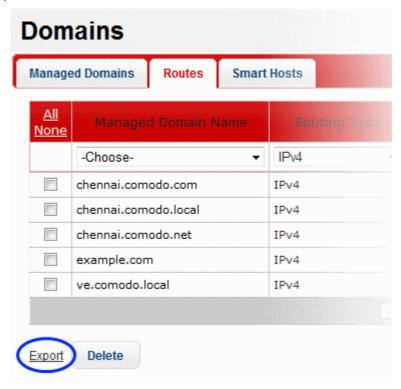
· Click 'OK' to confirm the deletion of the selected domain routes





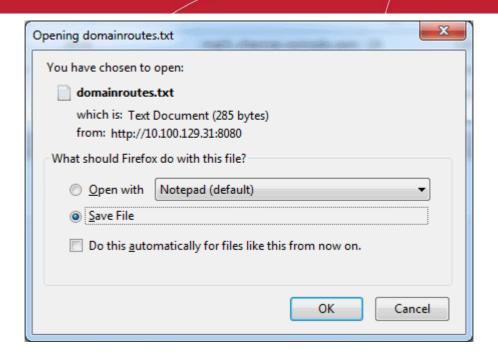
## To export the domain routes to a file

· Click the 'Export' link at the bottom of the screen



• Click 'OK' to download and save the domain routes list as a text file to your system.





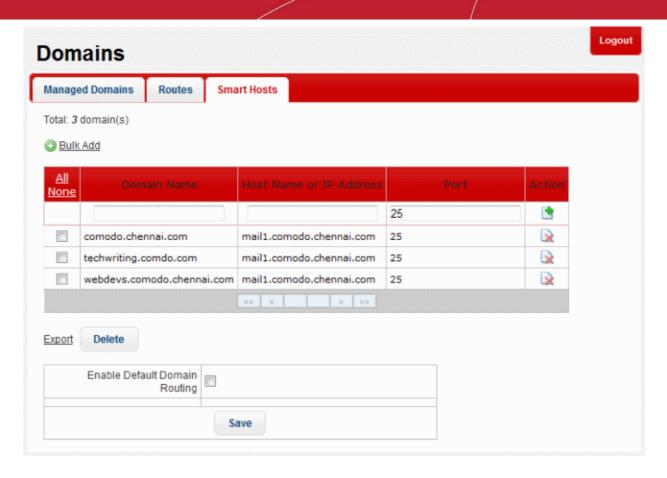
## 7.2.3 Managing Smart Hosts

Smart Hosts serve as an intermediate mail server that receive mail from an SMTP server and, after applying their own policy, forward them to end user mail boxes. KoruMail has the ability to route emails to 'Smart Hosts'. Please note that a domain added under 'Managed Domains' cannot be added for 'Smart Host' routing.

The interface also allows administrators to configure default domain routing. This applies to 'Manged Domains' whose routing has not been configured. Refer to the 'Default Domain Routing' section for more details.

 To open the 'Smart Hosts' screen, click the 'SMTP' tab from the left menu and click 'Domains' > 'Smart Hosts'.





Smart Hosts – Table of Column Descriptions				
Column Header	Description			
Domain Name	The name	The name of the domain added to KoruMail		
Host Name or IP Address	Host Name	Host Name or IP address of the 'Smart Host'		
Port	The port n	The port number to which the KoruMail should forward the mail		
Action		To route the domain to a 'Smart Host', click this button after entering all the routing details.		
	<b>□</b>	Allows the administrators to delete a domain 'Smart Host' route from the list.		

The interface allow administrators to:

- Configure 'Smart Host' route for domains
- · Delete 'Smart Host' routes for domains
- Export 'Smart Host' routes list for domains

## To configure 'Smart Host' route for domains

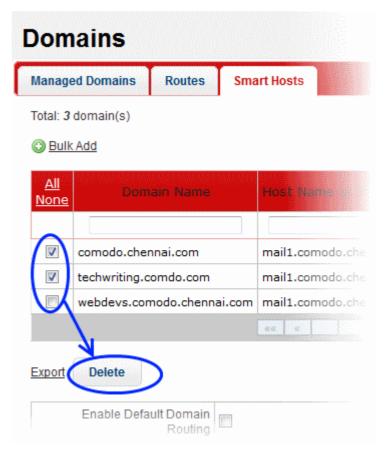
- Enter the domain whose mail you wish to route to a Smart Host in the 'Domain Name' column
- Enter the host name or IP address of the 'Smart Host' you wish to use for that domain
- Add the port number to which KoruMail should forward the mail



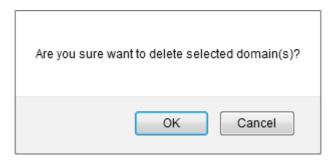
• To add the 'Smart Host' route to the list, click the 📑 button under the 'Action' column header.

### To delete 'Smart Host' route for domains

- To delete 'Smart Host' routes one at a time, click the button under the 'Action' column header and confirm the deletion in 'Confirmation' dialog.
- To delete 'Smart Host' routes, select the check boxes beside them and click the 'Delete' button at the bottom.



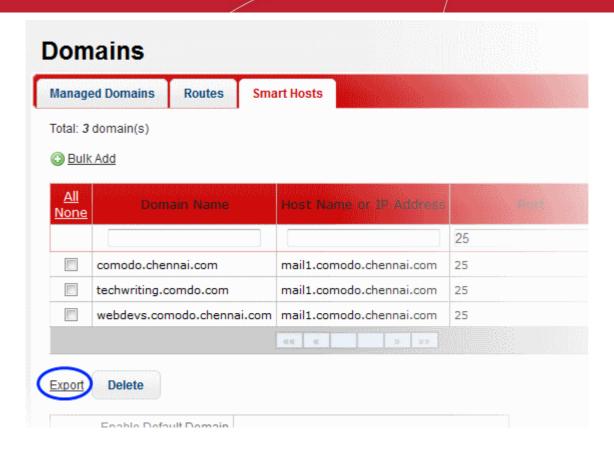
· Click 'OK' to confirm the deletion of the selected 'Smart Host' routes



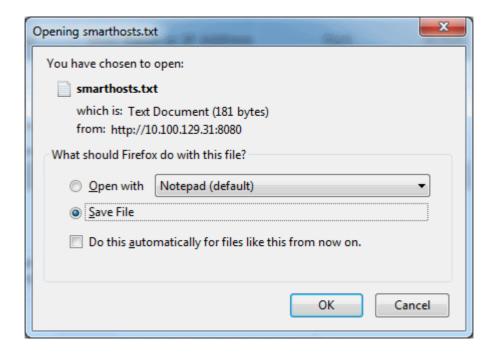
### To export 'Smart Host' routes list for domains

Click the 'Export' link at the bottom of the screen





Click 'OK' to download and save the 'Smart Host' routes list as a text file to your system.

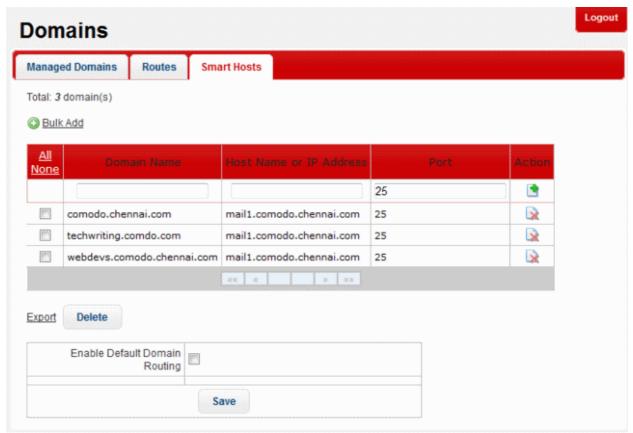




## 7.2.4 Default Domain Routing

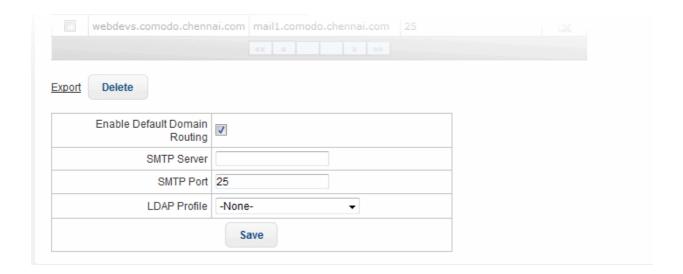
KoruMail allows administrators to configure routing for 'Managed Domains' that are protected by its filtering engine. Refer to the section 'Managing Domain Routes' to find out how to configure routing for managed domains. If no routing is configured, then the default domain routing will apply for these domains. The default settings can be configured in the 'Smart Hosts' section.

• To open the 'Smart Hosts' screen, click the 'SMTP' tab on the left and click 'Domains' then 'Smart Hosts'.



Select the 'Enable Default Domain Routing' check box

The fields for entering/selecting the routing details will be displayed.



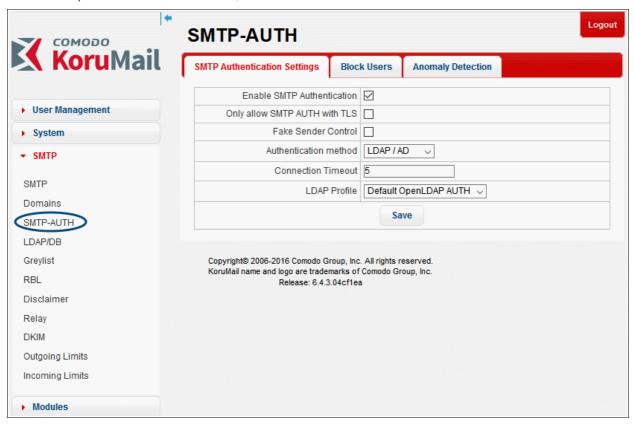


- SMTP Server: Enter the server name or IP address of the SMTP server to which KoruMail should forward the mails
- SMTP Port: Enter the port number to which KoruMail should forward the mails
- LDAP Profile: Select the LDAP Profile that KoruMail should use for user verification before forwarding the mails. The LDAP Profiles are configured in LDAP/DB section.
- Click the 'Save' button to apply your changes.

## 7.3 KoruMail SMTP AUTH Connector

The 'SMTP-AUTH' section allows administrators to configure authentication settings for outgoing mails, block users and configure 'Anomaly Detection' (track the number of different IP addresses that are used for sending out mails for an email address).

To open the 'SMTP-AUTH' screen, click the 'SMTP' tab on the left menu and click 'SMTP-AUTH'.



Click the following links for more details:

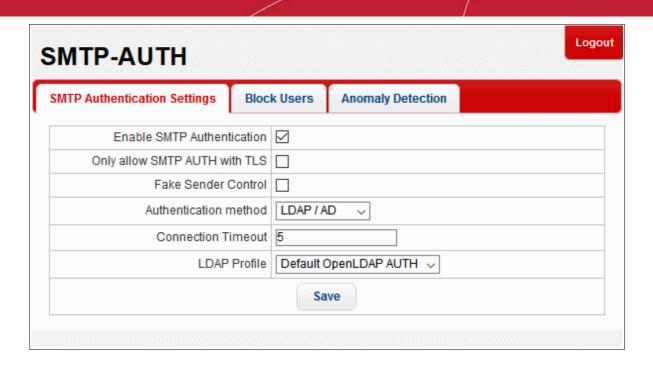
- SMTP Authentication Settings
- Block Users
- Anomaly Detection

## 7.3.1 SMTP Authentication Settings

The 'SMTP Authentication Settings' screen allows administrators to configure the user authentication type for outgoing mails.

• To open the 'SMTP Authentication Settings' screen, click the 'SMTP' menu item on the left then 'SMTP-AUTH' then open the 'SMTP Authentication Settings' tab.





	SMTP A	authentication Settings – Table of Parameters	
Parameter	Description		
Enable SMTP Authentication	If enabled, admins can use this interface to configure an SMTP authentication method for senders.		
Only allow SMTP AUTH with TLS	If enabled,	authentication must be conducted over a secure TLS connection.	
Fake Sender Control	Will block fa	ake senders	
Authentication Method	Select the user authentication method from the drop-down. The options available are POP3/IMAP and LDAP/AD. The settings fields depend on the options chosen. Refer to 'POP3/IMAP Authentication Method' and 'LDAP Authentication Method' for details on the respective settings.		
Connection Timeout	Enter the time in seconds during which authentication between the client and the POP3/IMAP/LDAP server must be completed. The user will be prompted to enter credentials again if the time elapses.		
POP3/IMAP Authentication Method			
SMTP-AUTH server list	Authentica tion method	Select authentication method - either POP3 or IMAP.	
	Connectio n type	Select the type of connection (clear text or encrypted SSL/TLS).	
	Hostname	Enter the server name or IP address of the SMTP-AUTH server.	
	Port	Enter the port of the server to which KoruMail should connect to.	
	Enabled	Activate or disable the server.	
	Action	Click this button to add an SMTP-AUTH server to the list after	



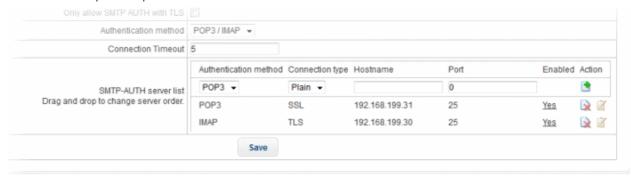
			configuring all parameters.
		×	Allows administrators to delete an auth server from the list.
		Ì	Allows administrators to edit the parameters of an auth server.
LDAP/AD Authentication Method			
LDAP Profile	Select the type of LDAP profile from the drop-down. The profiles available are configured in LDAP/DB section.		

### To configure SMTP authentication settings

- Select the 'Enable SMTP Authentication' check box
- Select the 'Only allow SMTP AUTH with TLS' check box to allow only encrypted SMTP AUTH sessions
- Select the 'Fake Sender Control' to block fake sender email address in the SMTP Server.
- Select the type of authentication method from the 'Authentication method' drop-down. The options available are POP3 / IMAP and LDAP. Refer to 'POP3/IMAP Authentication Method' and 'LDAP Authentication Method' for details on the respective settings.
- Enter the time in seconds after which the SMTP Auth session will end.

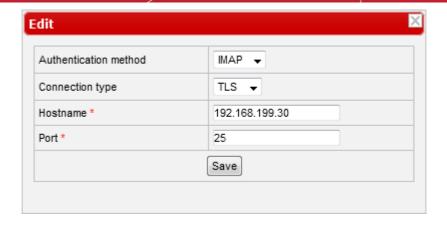
#### POP3/IMAP Authentication Method

- Authentication method Select the POP3 or IMAP type of authentication method from the drop-down.
- Connection type Selection the type of connection, whether it should clear text or encrypted. The
  options available are 'Plain', 'SSL' and 'TLS'.
- Hostname Enter the IP address or the server name of the SMTP AUTH server.
- Port Enter the port of the server to which KoruMail should connect to.
- Click the button to add the server to the list.
- Repeat the process to add more auth servers.



- You can change the server order by dragging and dropping them.
- To edit the details of an auth server, click the button.

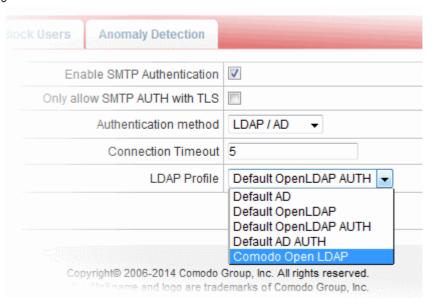




- · Edit the parameters as required and click the 'Save' button.
- To delete an auth server from the list, click the key button and click 'OK' in the confirmation dialog.
- Click the 'Save' button to apply your changes.

### **LDAP Authentication Method**

 LDAP Profile – Select the type of LDAP profile from the drop-down. The profiles available here are configured in LDAP/DB section.



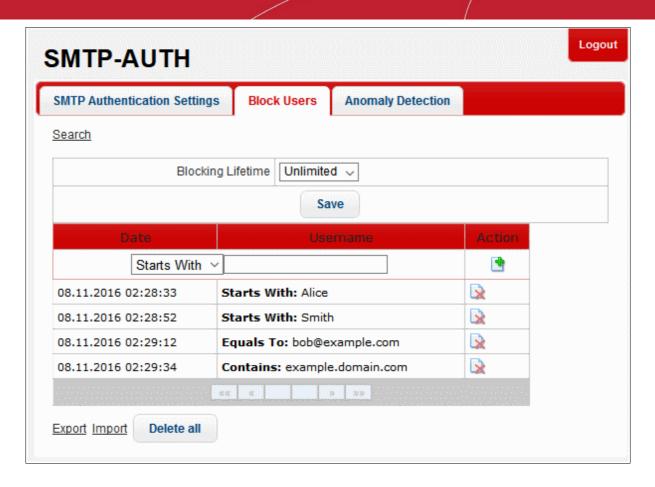
Click the 'Save' button to apply your changes.

## 7.3.2 Block Users

Administrators can block outgoing mails from users that are routed via KoruMail. The 'Block Users' interface also allows you to search for blocked users and domains.

• To open the 'Block Users' screen, click the 'SMTP' tab on the left and click 'SMTP-AUTH' then 'Block Users'.





The interface allow administrators to:

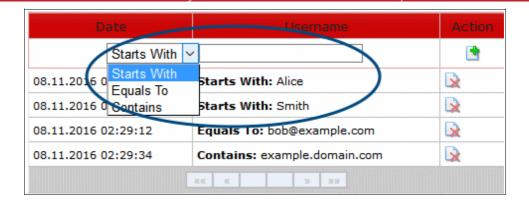
- Add blocked users
- Blocking Lifetime
- Remove users from the blocked list
- Search for blocked users
- Export lists of blocked users
- Import lists of blocked users from file

#### To Add a Blocked User

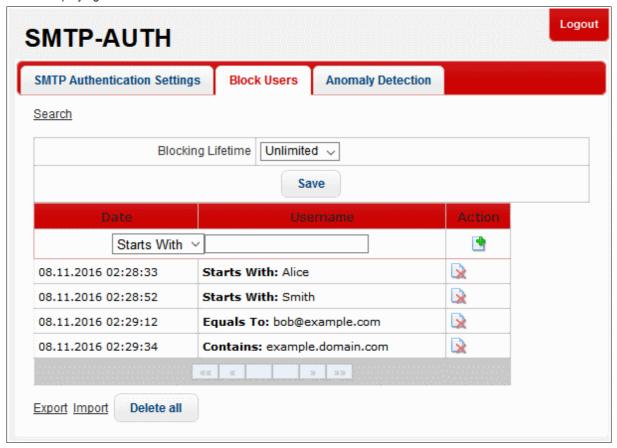
Type the username (or part of the username) of the user you wish to block in the 'Username' field. You can then set how the rule should be applied using the drop-down menu:

- Starts With Blocks users whose names begin with the entered text
- Equals To Blocks users whose names exactly match the entered text
- Contains Blocks users whose names contain the entered text somewhere in their name. Will also block exact matches





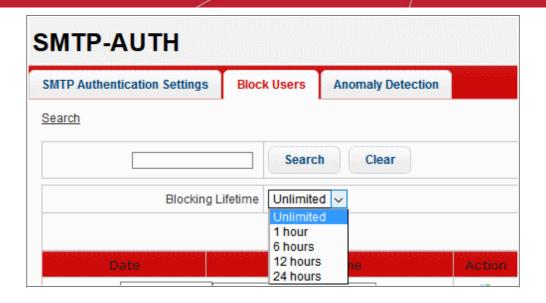
• Click the 'Add' button to apply your choice. The item will be added to the list with the category type displaying on the left side.



## **Blocking Lifetime**

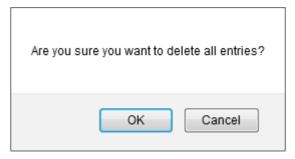
The 'Blocking lifetime' refers to the number of hours the email address will remain blocked at the SMTP Server. The available intervals are 'Unlimited', '1 hour', '6 hours', '12 hours' and '24 hours'.





### To remove users from the blocked list

- To remove users one at a time, click the button under the 'Action' column header and confirm the deletion in the 'Confirmation' dialog.
- To delete all the blocked users in the list, click the 'Delete all' button at the bottom.

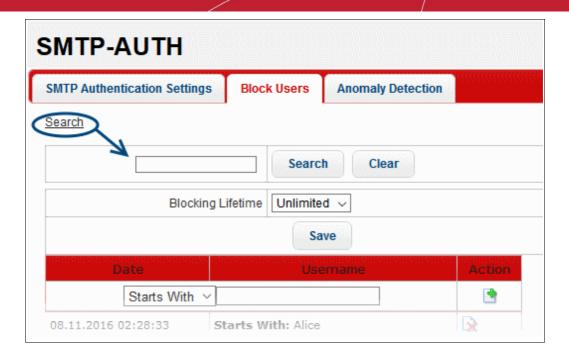


Click 'OK' to confirm the deletion of all blocked users.

### To search for blocked users

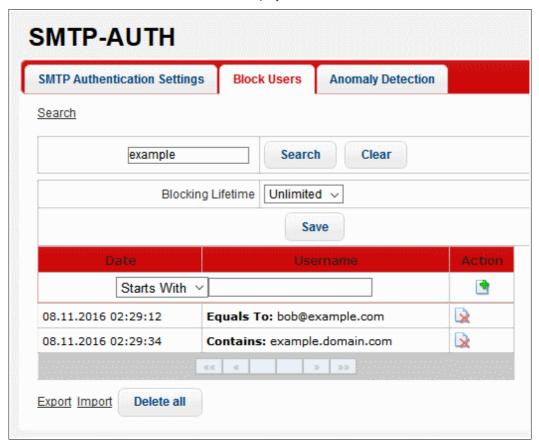
Click the 'Search' link at the top of the interface





In the search field, enter a full or partial name and click the 'Search' button.

The items that contain the entered search text will be displayed.

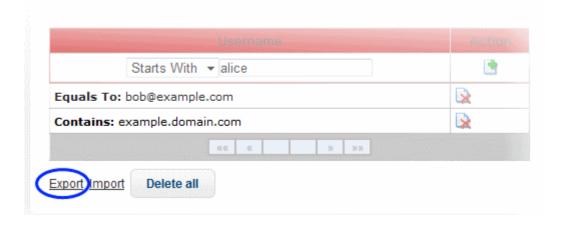


- To display all the items again, click the 'Clear' button.
- To remove the search field, click the 'Search' link again.

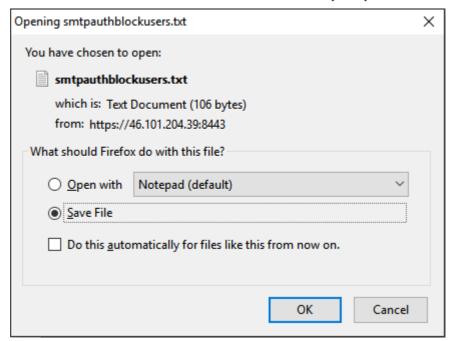
### To export blocked users to file

Click the 'Export' link at the bottom of the screen



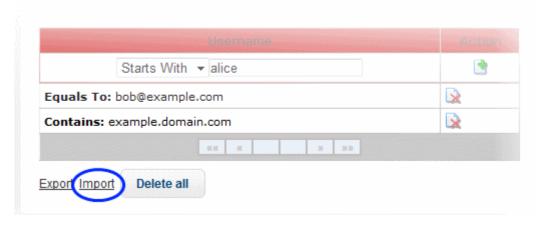


Click 'OK' to download and save the blocked user list as a text file to your system.



### To import blocked users from file

Click the 'Import' link at the bottom of the screen

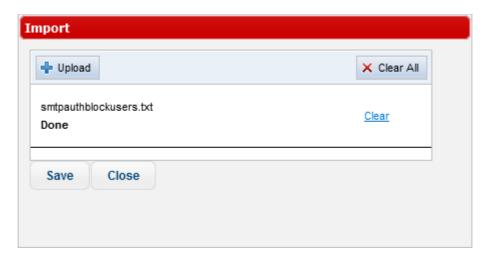


The 'Import' dialog will be displayed.





• Click the 'Upload' button, navigate to the the location where the file is saved, select it and click 'Open'.



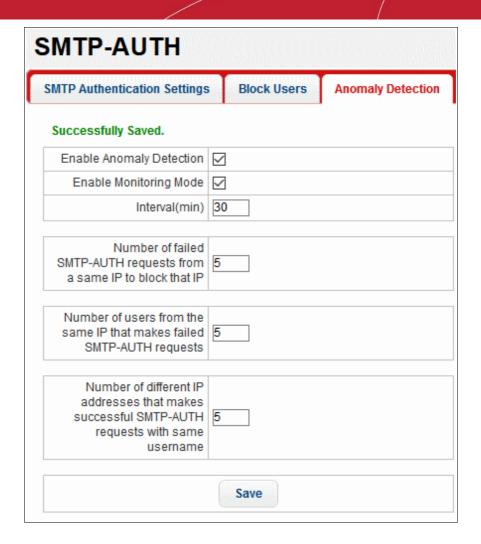
- · Repeat the process to add more files.
- · To remove a file, click the 'Clear' link beside it.
- To remove all added files, click the 'Clear All' button at top right.
- To finalize the import, click the 'Save' button.

## 7.3.3 Anomaly Detection

Allows admins to receive alerts when KoruMail detects a user/email address has sent messages from multiple IP addresses within a set time interval. Administrators can choose to block these users if the outgoing mail IP addresses exceed the number set in this tab. This value can not be '0', therefore administrators are expected to set a value between 1 and 10,000 to block users, IP addresses or SMTP Auth requests.

• To open the 'Anomaly Detection' screen, click the 'SMTP' menu item on the left menu, then 'SMTP-AUTH' and then open the 'Anomaly Detection' tab.





Anomaly Detection Settings – Table of Parameters		
Parameter	Description	
Enable Anomaly Detection	Enables anomaly detection with the parameters listed directly below this setting.	
Enable monitoring mode	If enabled, the SMTP-AUTH controller monitors authorization requests from the specified IP addresses.	
Interval (min)	The auditing time period for anomaly detection. To use the default settings as an example, a user will be blocked if detected IP addresses exceed 100 in any 30 minute period. Administrators will receive an alert if more than 30 IPs are detected in 30 minutes.	
Number of failed SMTP- AUTH requests from a same IP to block that IP	Number of failed SMTP-AUTH requests from a particular IP before it is rejected.	
Number of users from the same IP that makes failed SMTP-AUTH requests	The minimum number of users with same IP address that can make failed SMTP-AUTH requests. Any request beyond the threshold set will not be processed	
Number of different IP addresses that makes successful SMTP-AUTH requests with same	The minimum number of different IP addresses that can make successful SMTP-AUTH requests with the same username. Any request beyond the threshold set will not be processed	



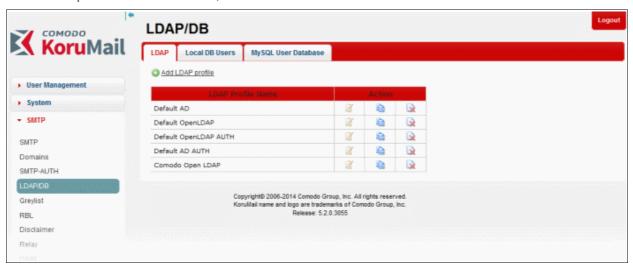
username

Click the 'Save' button to apply your changes.

## 7.4 LDAP/Local DB/My SQL User Database

KoruMail can be configured to check the validity of a recipient before filtering begins so that resources are not wasted on invalid recipients. If the email servers behind KoruMail are integrated with LDAP, Local DB and/or MY SQL Database, then KoruMail will check the validity of recipients and if not valid, reject the emails at SMTP level.

To open the 'LDAP/DB' screen, click the 'SMTP' tab on the left menu and click 'LDAP/DB'.



Refer to the following sections for more details:

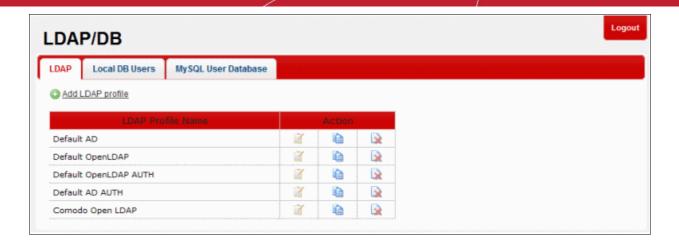
- LDAP (Lightweight Directory Access Protocol)
- Local DB Users
- MySQL User Database

## 7.4.1 LDAP Profile

The Lightweight Directory Access Protocol, or LDAP, is an application protocol for querying and modifying data using directory services running over TCP/IP. If the email servers behind KoruMail are integrated with a directory service via an LDAP profile, KoruMail can check whether the recipient is a valid user in the directory. If the recipient is not a valid user then the email is rejected at the SMTP level. This avoids wasting resources by filtering mail for for invalid recipients. The LDAP profiles added here are available for selection in interfaces such as 'Managed Domains' Routes' and 'SMTP AUTH > SMTP Authentication Settings'.

To open the 'LDAP' screen, click the 'SMTP' tab on the left and click 'LDAP/DB' then 'LDAP'.





LDAP Profile – Table of Column Descriptions				
Column Header		Description		
LDAP Profile Name	The name	of the LDAP profile added to KoruMail		
Action	ď	Allows the administrators to edit the details of a LDAP profile		
		Allows administrators to copy a LDAP profile so it can be used as the basis for a new profile.		
		Allows the administrators to delete a LDAP profile from the list.		

From this screen administrators can:

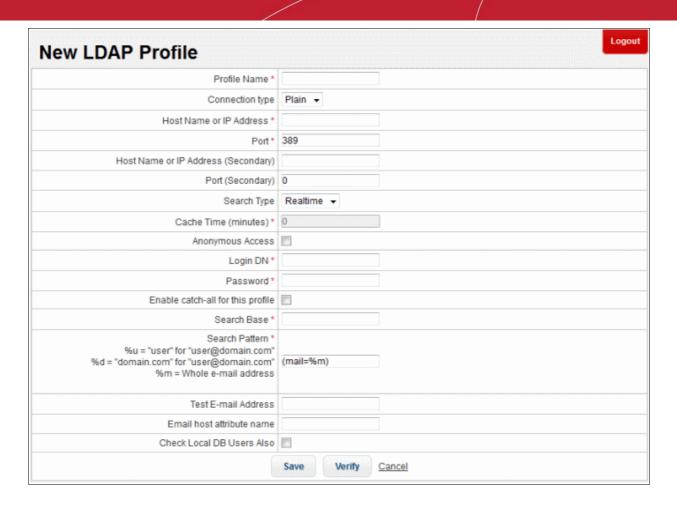
- Create and add a new LDAP profile
- Edit a LDAP profile
- Delete a LDAP profile

## To create a new LDAP profile

You can create a new LDAP profile in two ways:

- By clicking the copy button beside an LDAP profile. This will open the 'New LDAP Profile' screen with details pre-populated for the copied profile.
- · By clicking the 'Add LDAP profile' link at the top





LDAP Profile -Table of Parameters			
Parameter	Description		
Profile Name	Enter the name of the new LDAP profile		
Connection type	Determines how KoruMail should connect to the LDAP server. The options available are:  Plain (Not encrypted)		
	TLS (Encrypted with the TLS protocol. Recommended)		
	SSL (Encrypted using the SSL protocol. Use if your systems have compatibility issues with TLS)		
Host Name or IP Address	Enter the hostname or IP address of the LDAP/Active Directory. KoruMail will first check the primary server and will check the secondary server if the primary is not available.		
Port	Specify the LDAP server port number. If you use 'Active Directory' then, instead of the default LDAP port 389, port 3826 must be used as Active Directory Catalog port.		
Search Type	Select the type of search from the drop-down. The options available are:		
	Realtime – Checks the AD server each time for user validity		
	Cache – Checks the user validity from the system's cache memory and if not available checks the AD server.		
Cache Time (minutes)	If the 'Cache' option is enabled as 'Search Type', this field becomes active. Enter the time in minutes the details of users are cached after which they are wiped out.		
Anonymous Access	If this feature is enabled, the connection to LDAP server will be created anonymously so		



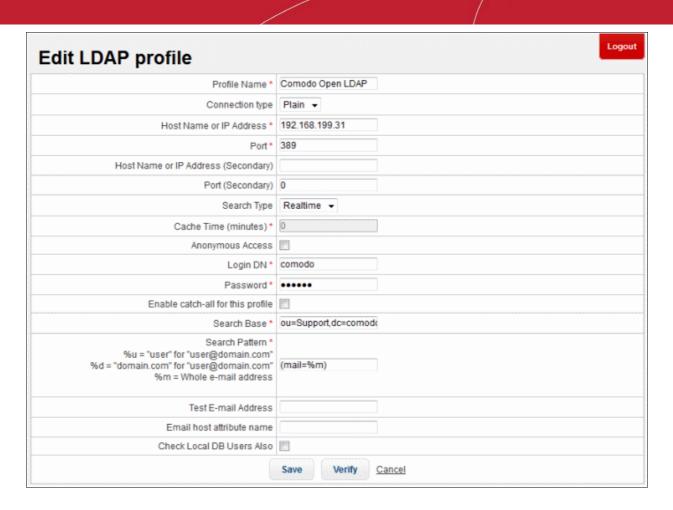
	that username and password are not required.
Login DN	LDAP username to connect LDAP / Active Directory server.
Password	Enter the LDAP user password.
Enable catch-all for this profile	When this feature is enabled, if the recipient's address is value1-value2-value3@domain.com then KoruMail first checks whether this address is registered in LDAP. If it does not find it, it deletes value1 and checks the remaining value2-value3@domain.com address. If it does not find it again then it delete value2 and checks value3@domain.com
Search Base	Specify the search starting criteria to be used in LDAP tree.
Search Pattern	Determines which LDAP attributes will be searched in search base.
Test E-Mail Address	Enter the email address to test the LDAP connection.
Email host attribute name	Enter the mail host attribute name for the LDAP / Active Directory server.
Check Local DB Users Also	Checks for users in Local Data base users list as well.

- Click the 'Verify' button to check the entered parameters and connectivity are correct. If verification fails, the error message will be displayed.
- · Click the 'Save' button to apply your changes.

## To edit a LDAP profile

• Click the ditution beside a LDAP profile that you want to edit.

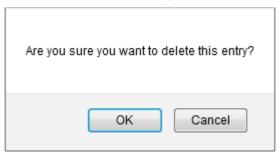




- Edit the required parameters. This is similar to the method explained in the 'Add' section.
- Click the 'Save' button to apply your changes.

#### To delete a LDAP profile

Click the delete button keeping beside a LDAP profile that you want to remove.



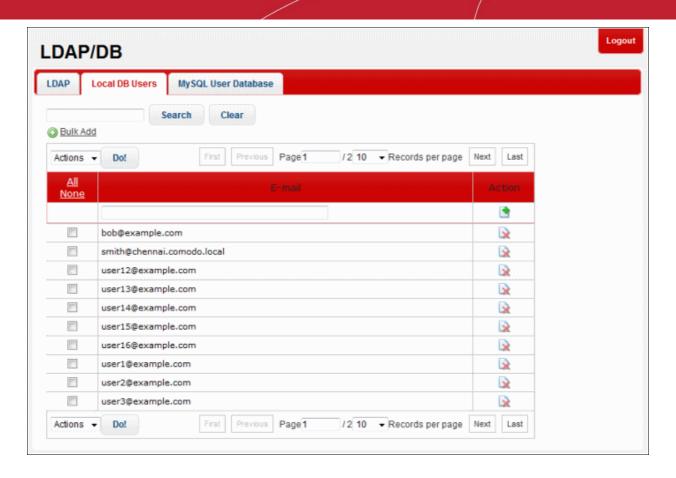
· Click 'OK' to confirm the deletion.

### 7.4.2 Local DB Users

KoruMail allows administrators to add users locally in its database for the managed domains so that fake emails or mails to invalid recipients will be rejected before the filtering processes is initiated. This helps to conserve the system's resources for better utilization. The users added here are available for selection in interfaces such as 'Managed Domains > Routes'.

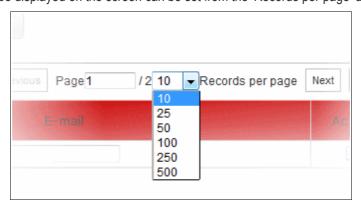
• To open the 'Local DB Users' screen, click the 'SMTP' tab on the left and click 'LDAP/DB' then 'Local DB Users'.





Local DB Users – Table of Column Descriptions			
Column Header		Description	
Email	The name	The name of the user added to KoruMail	
Actions	To add a user, click this button after entering the details in the field under mail' column.		
		Allows the administrators to delete a user from the list.	

The number of users to be displayed on the screen can be set from the 'Records per page' drop-down field.



Click the 'First, Previous, Next and Last' buttons to view all the items in the list.



The interface allows administrators to:

- Add a user
- Add multiple users
- Search for users
- Delete users
- Export user list

#### To add a user

Enter the user's email address in the field under 'E-mail' column



Click the button under the 'Action' column.

Note: You can add users for managed domains only.

The user will be added and displayed in the list. You can also add multiple users at a time. Refer to the next section 'To add multiple users' for more details.

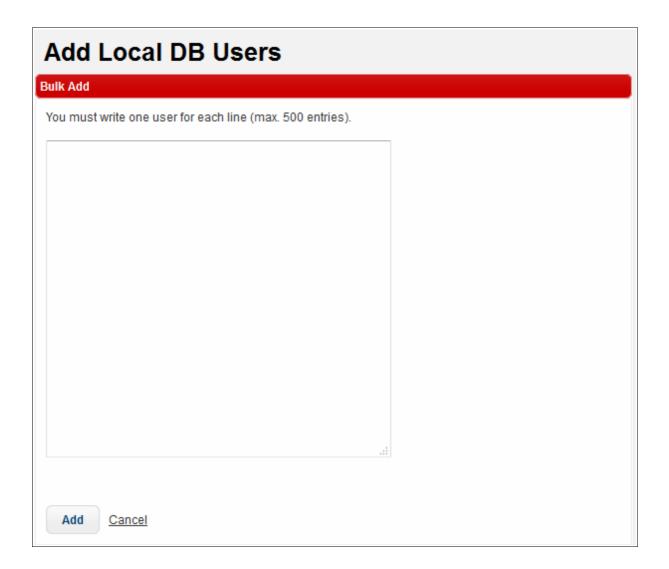
#### To add multiple users

Click the 'Bulk Add' link in the 'Local DB Users' screen





The 'Bulk Add' screen will be displayed.



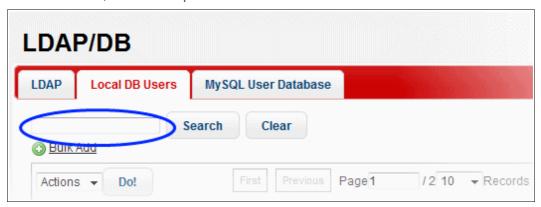
- Enter the users' email addresses each per line. The maximum allowed at a time is 500 users.
- Click the 'Add' button.

Note: You can add users for managed domains only.

The users will be added and displayed in the list.

#### To search for users

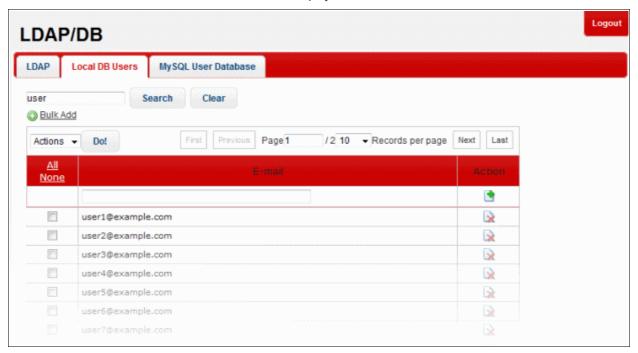
• In the search field, enter a full or partial name.





· Click the 'Search' button.

The items that contain the entered search text will be displayed.



• To display all the items again, click the 'Clear' button.

#### To delete users

- To remove users one at a time, click the button under the 'Action' column header and confirm the deletion in the 'Confirmation' dialog.
- To delete multiple users in the list in one go, select the check boxes beside them.





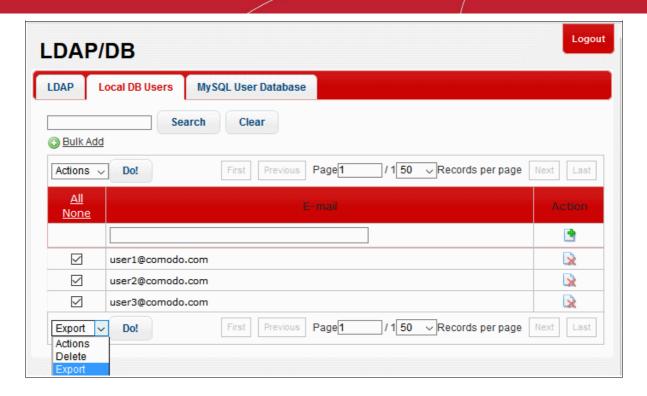
• Select 'Delete' from the 'Actions' drop-down and click the 'Do!' button.

The selected users will be deleted from the list.

#### To export the user list to a file

• To export users one at a time, click the 'Actions' drop down, and select the 'Export' option.



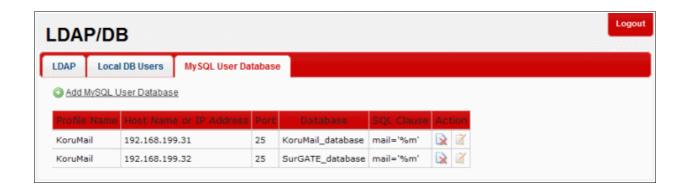


Click 'Do' to download and save the list as a text file to your system.

### 7.4.3 My SQL User Database

KoruMail is capable of verifying the validity of users by referring to a 'MySQL User Database' located in a remote server. If the recipient is not a valid user then email is rejected in SMTP level. Since the sophisticated filtering process is not used for invalid recipients, KoruMail's resources are not wasted. The 'MySQL User Database profiles' added here are available for selection in interfaces such as 'Managed Domains' > Routes'.

 To open the 'MySQL User Database' screen, click the 'SMTP' tab on the left menu and click 'LDAP/DB' then 'MySQL User Database'.





Column Header	Description		
Profile Name	The name	The name of the MySQL User Database profile added to KoruMail	
Host Name or IP Address	Displays th	Displays the address of the system where the 'MySQL User Database' is located.	
Port	Displays th	Displays the port number to which KoruMail connects to.	
Database	The name of the 'MySQL User Database'.		
SQL Clause	The 'SQL clause' used to fetch the users' details.		
Action	Ì	Allows the administrators to edit the details of a 'MySQL' profile	
	R	Allows the administrators to delete a 'MySQL' profile from the list.	

From this screen administrators can:

- Add a new MySQL profile
- Edit a MySQL profile
- Delete a MySQL profile

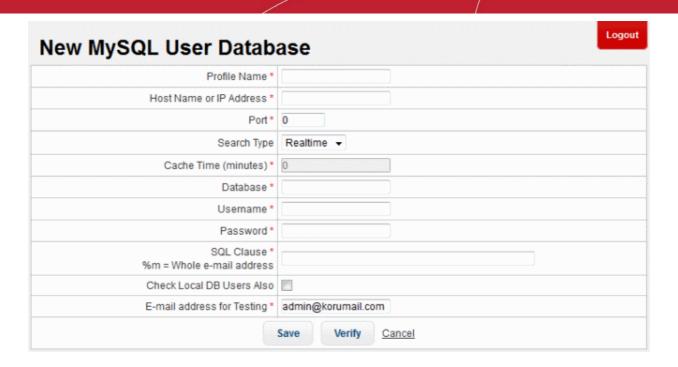
#### To add a new MySQL profile

Click 'Add MySQL User Database' link at the top of the screen.



The 'New MySQL User Database' screen will be displayed.





	MySQL User Database Profile -Table of Parameters
Parameter	Description
Profile Name	Enter the name of the MySQL profile
Host Name or IP Address	Enter the hostname or IP address of the system where MySQL database is located.
Port	Enter the port number to which KoruMail should connect to.
Search Type	Select the type of search from the drop-down. The options available are:
	Realtime – Checks the MySQL server each time for user validity
	Cache – Checks the user validity from the system's cache memory and if not available checks the MYSQL server.
Cache Time (minutes)	If the 'Cache' option is enabled as 'Search Type', this field becomes active. Enter the time in minutes the details of users are cached after which they are wiped out.
Database	Enter the MySQL database name
Username	The username to access the MySQL server
Password	Enter the password to access the MySQL server
SQL Clause	The SQL clause to fetch the users' details
Check Local DB Users Also	Checks for users in Local Data base users list as well.
E-Mail address for testing	Enter the email address to test the MySQL database connection.

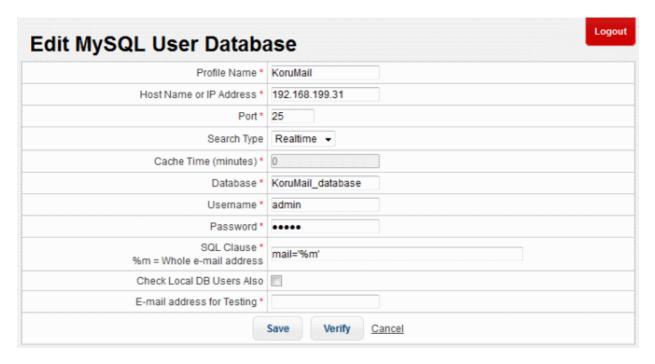
• Click the 'Verify' button to check the entered parameters and connectivity are correct. If verification fails, the error message will be displayed.



Click the 'Save' button to apply your changes.

#### To edit a MySQL profile

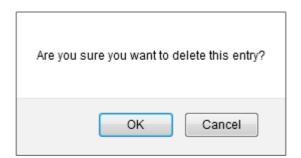
Click the button beside a 'MySQL' profile that you want to edit.



- Edit the required parameters. This is similar to the method explained in the 'Add' section.
- · Click the 'Save' button to apply your changes.

#### To delete a MySQL profile

Click the delete button keeping beside a 'MySQL' profile that you want to remove.



Click 'OK' to confirm the deletion.

### 7.5 Greylist

Greylisting is the name of a method that controls source IP address/domains of each sent email, sender and recipient email addresses. Combination of these three information is named 'hash' and if this value does not exist in KoruMail Database then it acts as 'temporarily out of service' and the email is temporarily rejected.

Since spammers intend to send some millions of emails in a short time, most probably they do not try to send failed emails again. If the sender is Bot-Net client or a software used by spammers then the emails will not be resent. In this way spams are blocked quickly without using any content filtering algorithms. If the sender is a real MTA then it



will send the same email in a short time and message will be received by the recipient. If the same source sends an email again then the email will by-pass greylisting feature. In this way, the real email will be held for the first time only. You have the option to enable or disable this feature.

KoruMail can be configured to ignore the greylist record and accept emails from the sources first time itself without rejecting them.

To open the 'Greylist' screen, click the 'SMTP' tab on the left menu, then click 'Greylist'.



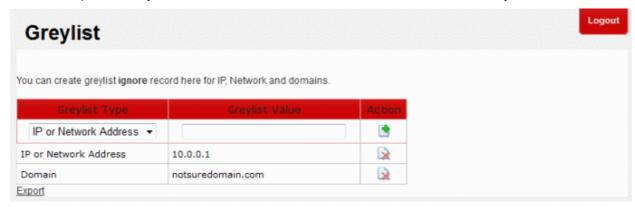
Refer to the next section 'Greylist Ignored IP Addresses/Domains' for how to add domains, networks and IP addresses to Greylist ignored list.

### 7.5.1 Greylist Ignored IP Addresses/Domains

KoruMail creates a Greylist of source IP address/domains from where emails are sent to recipients protected by its filtering engine. The mails received from a source for the first time is rejected by KoruMail and sends a command to the source to resend the email. Generally, spammers do not resend emails. If the email is sent again from the source again, KoruMail accepts the mail and initiates the filtering process. Refer to the previous section 'Greylist' for more details.

KoruMail can be configured to ignore the Grerylist record and accept emails from the sources first time itself without rejecting them.

To open the 'Greylist' screen, click the 'SMTP' tab from the left menu, then click 'Greylist'.



Greylist Ignored Record List – Table of Column Descriptions		
Column Header	Description	
Greylist Type	The type of Greylist whether domain name or IP address added.	
Greylist Value	The domain name or the IP/Network address added.	



Action	•	To add a email source to Greylist ignore record, click this button after selecting and entering the details in the fields under 'Greylist Type' and 'Greylist Value' columns respectively.
	×	Allows the administrators to delete a record from the list.

The interface allows administrators to:

- Add an IP address/domain name to Greylist ignore list
- Delete an IP address/domain name from Greylist ignore list
- Export Greylist ignore list to a file

#### To add a domain name or IP address to Greylist ignore list

· Select the Greylist type that you want to add to the ignored list from the drop-down



- Enter the value, domain name or IP address, in the field under 'Greylist Value'
- Click the button under the 'Action' column.

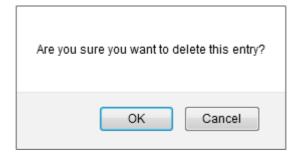
The domain name/IP address will be added and displayed in the list.



#### To delete a domain name or IP address from Greylist ignore list

To delete a domain name/IP address from the Greylist ignore list, click the button under the 'Action' column header.

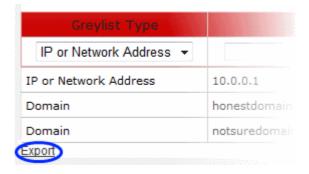




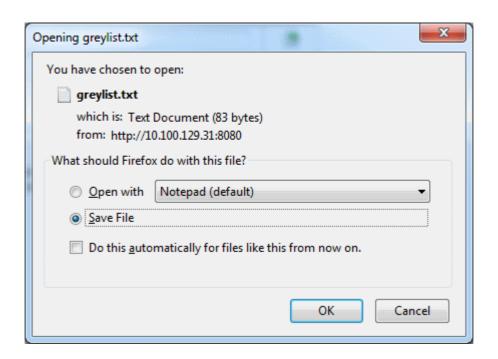
Click 'OK' to confirm the deletion.

#### To export Greylist ignore list to a file

Click the 'Export' link at the bottom of the screen



Click 'OK' to download and save the list as a text file to your system.



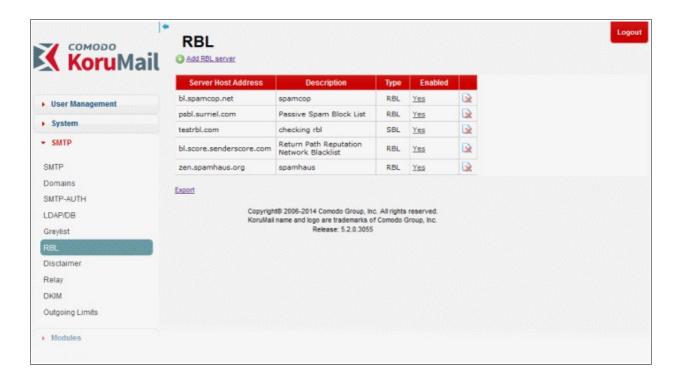
### 7.6 Managing RBL Servers

Realtime Blackhole List (RBL) is one of the best ways to fight spam. RBL servers lists the server IP addresses that



proliferate spam, list of servers that are hijacked for spam relay, virus senders and so on. With RBL, KoruMail blocks SMTP connections that come from the IP addresses available in this database.

To open the 'RBL' screen, click the 'SMTP' tab on the left menu, then click 'RBL'.



RBL Servers – Table of Column Descriptions				
Column Header		Description		
Server Host Address	The addre	The address of the RBL server.		
Description	The descri	The description provided at the time of adding the RBL server.		
Туре	The type of block list selected.			
Enabled	Indicates whether the RBL server is enabled or not for the 'Profiles'.			
Action	<u> </u>	Allows the administrators to delete a RBL server from the list.		

The interface allow administrators to:

- · Add a RBL server
- Enable/disable a RBL server
- Delete a RBL server
- Export RBL server list to a file

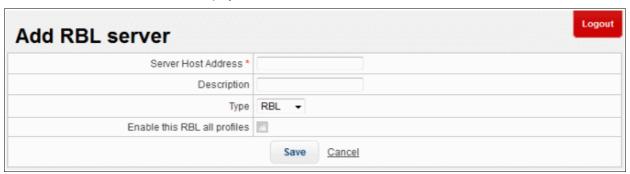


#### To add a RBL server

Click the 'Add RBL Server' link at the top



The 'Add RBL server' screen will be displayed:



- Server Host Address: Enter the address of the RBL server
- Description: Enter an appropriate description for the server
- Type: Select the type of block list from the options.
  - RBL Realtime Black Hole Lists
  - SBL Spamhaus Block List
  - · XBL Spamhaus Exploits List
  - SMTP Email server List
- Enable this RBL for all profiles: If selected, the server will be enabled for all the profiles in KoruMail. Refer to the section 'Profile Management' for more details about profiles.
- Click the 'Save' button to add the new RBL server.

#### To enable/disable a RBL server

· Click the 'Yes/No' link under the 'Enabled' column



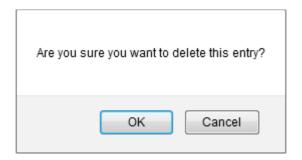


- Click 'Yes' to enable the server for all the profiles.
- Click 'No' to enable the server for the current profile.

The RBL servers can be enabled/disabled independently also for the profiles available in KoruMail. Refer to the section 'Profile Management' for more details.

#### To delete a RBL server

To delete a RBL server from the list, click the kind button.



· Click 'OK' to confirm the deletion.

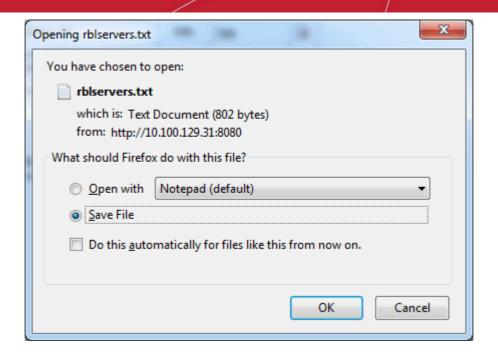
#### To export RBL server list to a file

Click the 'Export' link at the bottom of the screen



• Click 'OK' to download and save the list as a text file to your system.





### 7.7 Disclaimer

KoruMail allows administrators to insert disclaimers in outgoings mails for the managed domains. The screen has two sections. 'Text Footer' and 'HTML Footer'. The 'Text Footer' is used to enter the disclaimer content for the selected domain and the 'HTML Footer' can be used to enter corporate messages.

• To open the 'Disclaimer' screen, click the 'SMTP' tab on the left menu, then click 'Disclaimer'.





- Managed Domain Name: Select the managed domain from the drop-down for which you want to add a
  disclaimer.
- **Enabled:** If selected, the messages will be inserted in the outgoing mails of the domain.
- Text Footer: Enter the disclaimer content in this field.
- HTML Footer: Enter content such as corporate message and so on in this field.
- Click the 'Save' button

To edit the disclaimer, open the screen, select the domain from the drop-down, edit the messages and click the 'Save' button to apply your changes.

### 7.8 SMPT Relay

KoruMail allows administrators to define IPs from which mails can be sent by users who are not available on the mail server.

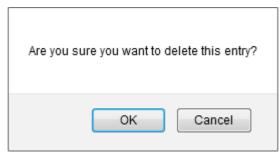
To open the 'Relay' screen, click the 'SMTP' tab on the left menu then click 'Relay'.



The screen allows you to add a single IP address, a range of IP addresses or a IP address class range.

• To add an IP address, range or class, enter the details in the field under 'IP Range' and click the button. The IP address will be added and displayed.

To remove an address, click the click the 
 button.



Click 'OK' to confirm the deletion.

### 7.9 DomainKeys Identified Mail (DKIM)

DomainKeys Identified Mail (DKIM) is another method of authenticating an outgoing mail that allows senders to associate a domain with an outgoing mail. It is an electronic signature that is inserted into the header of an outgoing mails identifying the source from where the message is sent. KoruMail allows administrators to create a new domain



key for managed domains in order to authenticate mails that are sent from the domain. After the domain key is generated, it has to be entered in the DNS record. Please refer to your domain or web hosting documentation to add DKIM records for your domain.

• To open the 'DKIM' screen, click the 'SMTP' tab on the left menu, then click 'DKIM'.

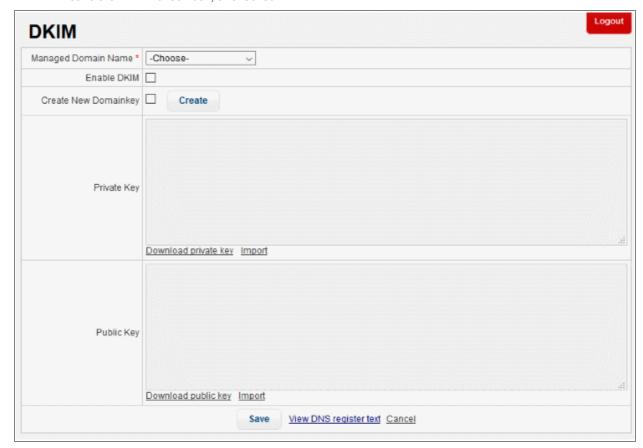


Select the domain from the drop-down for which you authenticate with DKIM



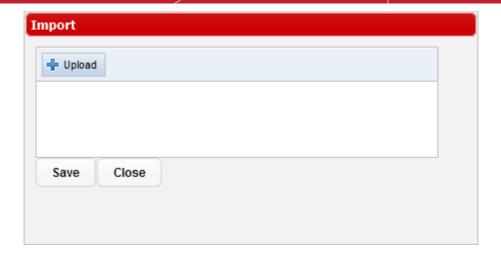
If you have the domain key that needs to be associated with your mails, then follow the steps below:

· Leave the 'DKIM' check box, unchecked.

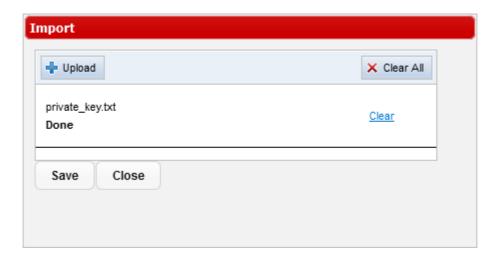


Click the 'Import' link





 Click the 'Upload' link, navigate to the location where the private key for the selected domain is saved and click 'Open'

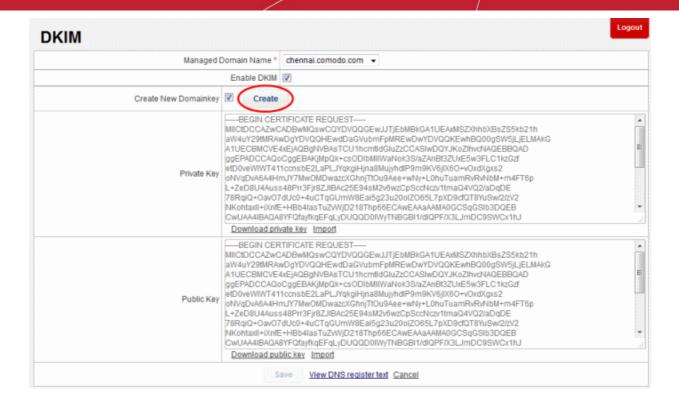


- To remove the selected file from the field, click 'Clear'
- To upload the private key, click the 'Save' button.
- Repeat the above steps to upload the public key.
- To download and save the private and public keys, click the respective download links.

If you do not have the domain key, then follow these steps:

- Select the 'Create New Domainkey' check box.
- Click the 'Create' button to generate a new domain key for the selected domain.





The domain key will be generated and the same must be entered in the DNS register for authenticating the domain.

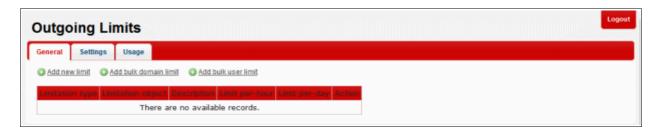


You can view and copy the details of domain key anytime by clicking the 'View DNS register text' link at the bottom. For more details about how to update the DNS record, refer to your domain or web hosting documentation.

### 7.10 Outgoing SMTP Limits

KoruMail allows administrators to set limits for outgoing mails for users as well as for domain names. KoruMail can be configured to allow only a certain number of outgoing mails per hour and per day. The interface allows you to add domains or usernames individually or in bulk.

To open the 'Outgoing Limits' screen, click the 'SMTP' tab on the left menu, then click 'Outgoing Limits'.





The interface allows administrators to:

- Set outgoing limits for domains and users
- Configure outgoing limits settings
- View outgoing mail usage details for domains and users

#### Configuring outgoing limits for domains and users

To configure outgoing limits for domains and users:

Click the 'General' tab



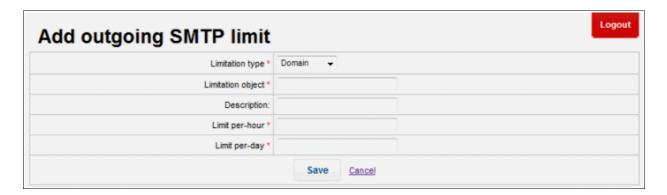
Outgoing Limits: General – Table of Column Descriptions			
Column Header	Description		
Limitation Type	Indicates v	whether the limitation is for a domain or user	
Limitation Object	The details of the domain or the user		
Description	The description for the limitation		
Limit per-hour	Indicates the number of outgoing mails allowed per hour		
Limit per-day	Indicates the number of outgoing mails allowed per day		
Action		Allows administrators to delete a limitation set for a domain or user	
	₽ P	Allows administrators to edit a limitation set for a domain or user	

• To set a limitation for a domain or user individually, click the 'Add new limit' link at the top





The 'Add outgoing SMTP limit' screen will be displayed.



- Limitation type: Select whether you want to configure the limit for a domain or user from the drop-down
- Limitation object: Enter the name of the domain or username depending on your 'Limitation type' selection
- **Description:** Enter an appropriate description for the limitation
- · Limit per-hour: Enter the number of outgoing mails allowed per hour for a domain or user
- · Limit per-day: Enter the number of outgoing mails allowed per day for a domain or user

Click the 'Save' button. The newly added limitation will be displayed in the list.

To set a limitation for multiple domains at a time, click the 'Add bulk domain limit' link at the top



The 'Add Bulk outgoing SMTP limit' screen will be displayed.





- Enter the limitation for each domain per line as per the format shown in the screen..
- · Click the 'Save' button.

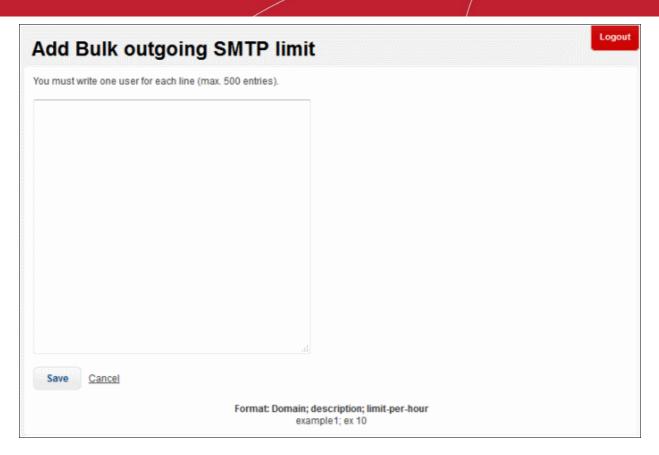
The limitations for the added domains will be displayed in the 'General' screen.

· To set a limitation for multiple user at a time, click the 'Add bulk user limit' link at the top



The 'Add Bulk outgoing SMTP limit' screen will be displayed.



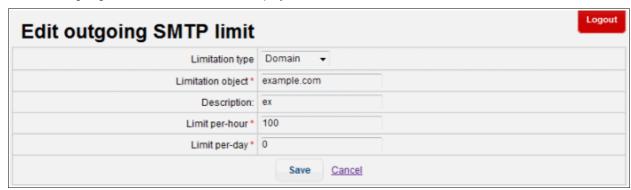


- Enter the limitation for each user per line as per the format shown in the screen.
- Click the 'Save' button to apply your changes.

The limitations for the added users will be displayed in the 'General' screen.

- To delete a limitation from the list, click the button under the 'Action' column and confirm it in the confirmation screen.
- To edit a limitation, click the button under the 'Action' column.

The 'Edit outgoing SMTP limit' screen will be displayed.



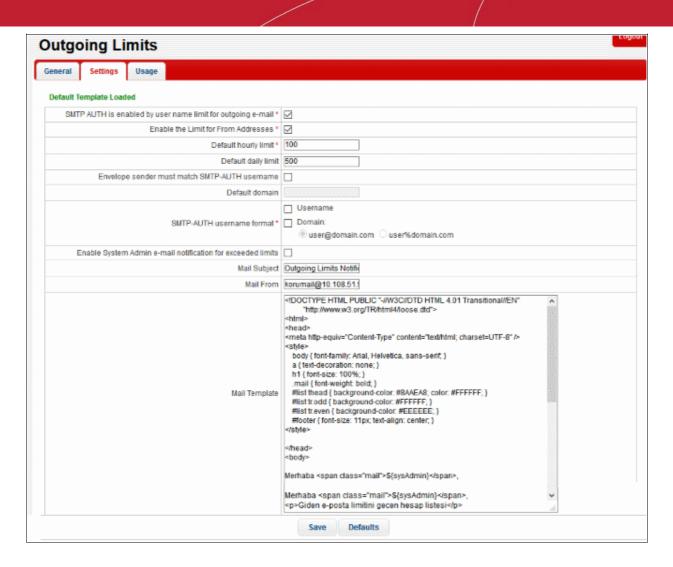
The screen is similar to the 'Add outgoing SMTP limit' interface. Refer to the section for 'Configuring outgoing limits for domains and users' for more details.

#### Configuring outgoing limits settings

The 'Settings' tab allows administrators to customize the limitations added in the 'General' tab.

To configure outgoing limit settings, click the 'Settings' tab





Outgoing Limits: Settings – Table of Parameters		
Parameter Description		
SMTP AUTH is enabled by user name limit for outgoing email	If enabled, SMTP AUTH is required for outgoing mails sent by users who are configured in the 'General' tab to send limited mails.	
Enable the Limit for From Addresses	If enabled, the limit configured in the 'General' tab will apply. Otherwise, the default hourly and daily values below will apply.	
Default hourly limit	The maximum number of outgoing mails that can be sent by users per hour	
Default daily limit	The maximum number of outgoing mails that can be sent by users per day	
Envelope sender must match SMTP-AUTH username	If enabled, the address of the sender must match the SMTP-AUTH username	
Default domain	The default domain of the outgoing emails.	
SMTP-AUTH username format	Method of authenticating the user. Choose from username or domain methods.	

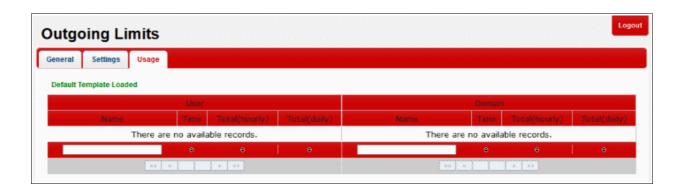


Enable System Admin e- mail notification for exceeded limits	Will send a notification if the number of mails sent by users who are configured in the 'General' tab exceeds the limit.
Mail subject	Subject of the notification mail mentioned above.
Mail From	The email address from which the notification mail is sent
Mail Template	The template of the notification mail.

• Click the 'Save' button to apply your changes.

### Viewing outgoing mail usage details for domains and users

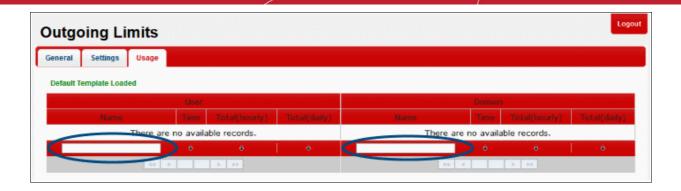
The 'Usage' tab allows administrators to view outgoing mails from users and domains covered by outgoing limits.



	Outgoing Limits: Usage – Table of Parameters		
	Parameter	Description	
User	Name	Displays the email address of the sender	
	Time	The time at which the mail was sent.	
	Total (Hourly)	The total number of mails sent in an hour.	
	Total (Daily)	The total number of mails sent in a day.	
Domain	Name	Displays the email address of the sender on the limited domain	
	Time	The time at which the mail was sent.	
	Total (Hourly)	The total number of mails sent in an hour.	
	Total (Daily)	The total number of mails sent in a day.	

To search for a particular recipient, enter the first few letters of the recipient's name in either the 'User' or 'Domain' search field:



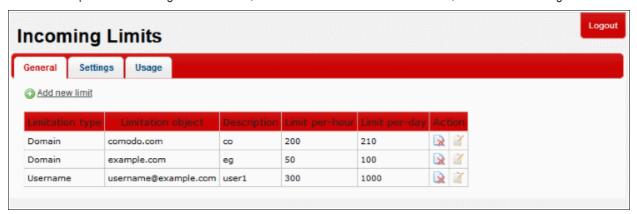


• Clicking the button in a column header will sort the table in ascending or descending order of the items in the column.

### 7.11 Incoming SMTP Limits

KoruMail allows administrators to set limits for incoming mails for users as well as for domain names. KoruMail can be configured to allow only a certain number of incoming mails per hour and per day. The interface allows you to add domains or usernames individually or in bulk.

• To open the 'Incoming Limits' screen, click the 'SMTP' tab on the left menu, then click 'Incoming Limits'.



The interface allows administrators to:

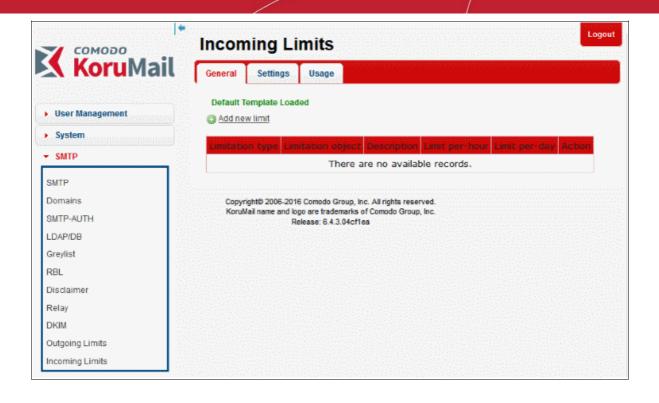
- Configuring Incoming limits for domains and users
- Configure Incoming limits settings
- View Incoming mail usage details for domains and users

#### Configuring Incoming limits for domains and users

To configure incoming limits for domains and users:

Click SMTP > Incoming Limits and then click the 'General' tab





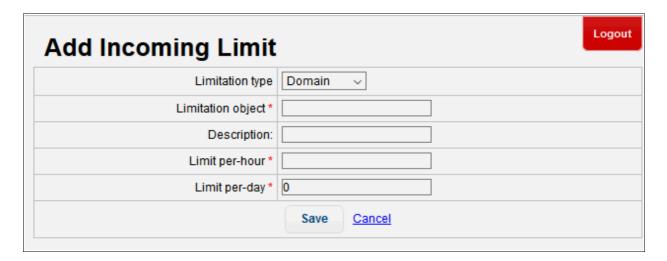
Incoming Limits: General – Table of Column Descriptions				
Column Header	Description			
Limitation Type	Indicates v	vhether the limitation is for a domain or user		
Limitation Object	The details	The details of the domain or the user		
Description	The description for the limitation			
Limit per-hour	Indicates the number of incoming mails allowed per hour			
Limit per-day	Indicates the number of incoming mails allowed per day			
Action	R	Allows administrators to delete a limitation set for a domain or user		
	Ì	Allows administrators to edit a limitation set for a domain or user		

To set a limitation for a domain or user individually, click the 'Add new limit' link at the top





The 'Add Incoming Limit' screen will be displayed.



- Limitation type: Select whether you want to configure the limit for a domain or user from the drop-down
- Limitation object: Enter the name of the domain or username depending on your 'Limitation type' selection
- **Description:** Enter an appropriate description for the limitation
- Limit per-hour: Enter the number of outgoing mails allowed per hour for a domain or user
- Limit per-day: Enter the number of outgoing mails allowed per day for a domain or user

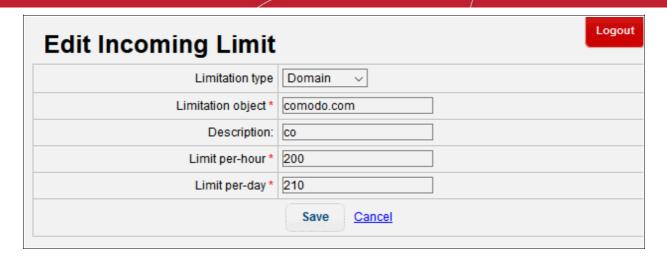
Click the 'Save' button. The newly added limitation will be displayed in the list.

The limitations for the added users will be displayed in the 'General' screen.

- To delete a limitation from the list, click the button under the 'Action' column and confirm it in the confirmation screen.
- To edit a limitation, click the button under the 'Action' column.

The 'Edit Incoming Limit' screen will be displayed.





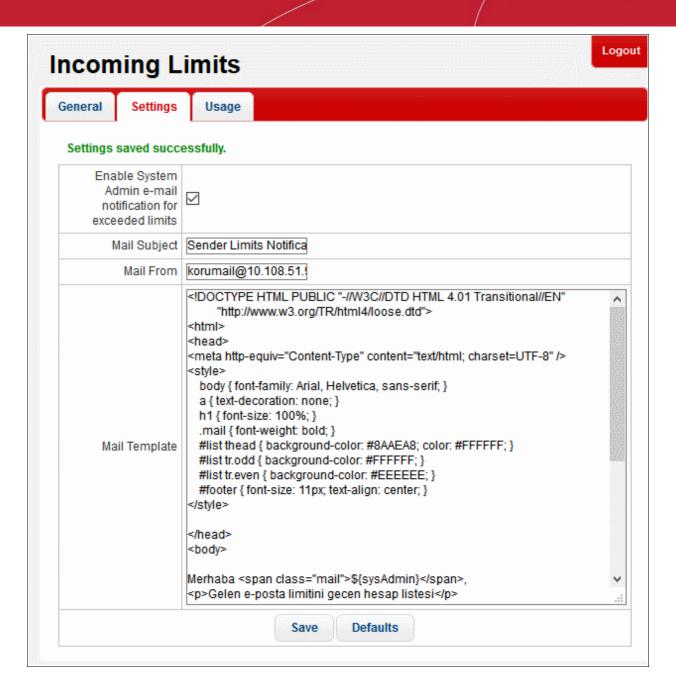
The screen is similar to the 'Add Incoming Limit' interface. Refer to the section for 'Configuring incoming limits for domains and users' for more details.

### **Configuring Incoming limits settings**

The 'Settings' tab in the 'Incoming Limits' screen allows administrators to configure the settings such that the Korumail server sends an automated email when the incoming limits exceed the set limitations added in the 'General' tab. Please note that the email content will be available in the Korumail console by default.

To configure incoming limit settings, click the 'Settings' tab





Incoming Limits: Settings – Table of Parameters		
Parameter Description		
Enable System Admin e- mail notification for exceeded limits	Will send a notification if the number of mails sent by users who are configured in the 'General' tab exceeds the limit.	
Mail subject	Subject of the notification mail mentioned above.	
Mail From	The email address from which the notification mail is sent	
Mail Template	The template of the notification mail.	

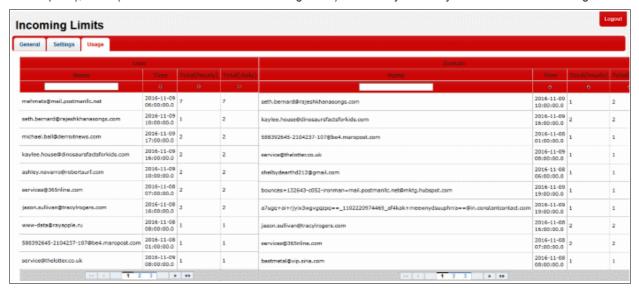
Click the 'Save' button to apply your changes.

#### Viewing incoming mail usage details for domains and users

The 'Usage' tab in the 'Incoming Limits' screen allows administrators to view the emails details of the 'Users' and



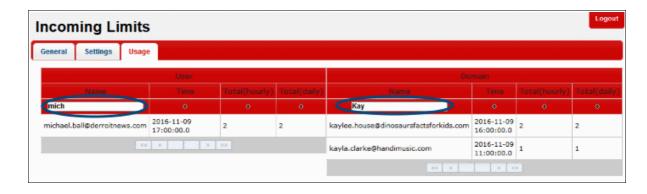
'Domains'. The parameters that can be viewed via the usage screen for 'Users' and 'Domains' are 'Name'(Name of the recipient), 'Time'(The time and date of the incoming email) and Hourly and daily based count of incoming emails.



Incoming Limits: Usage – Table of Parameters			
Parameter		Description	
User	Name	Displays the email address of the recipient.	
	Time	The time at which the mail is received.	
	Total(Hourly)	The total number of emails received in an hour.	
	Total(Daily)	The total number of emails received in a day.	
Domain	Name	Displays the email address of the recipient on the limited domain.	
	Time	The time at which the mail is received.	
	Total(Hourly)	The total number of emails received in an hour.	
	Total(Daily)	The total number of emails received in a day.	

To 'Search' for a particular incoming recipient,

Enter the first few alphabets of the recipient's name, in the usage details of 'User' and 'Domain'.



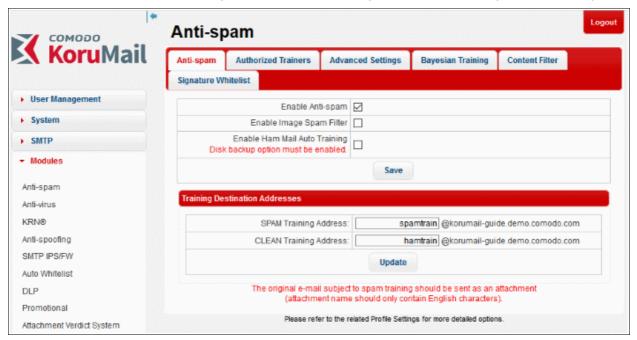
The intended recipient name will be displayed.



Clicking the button, administrators can view the bottom-most or top-most recipients.

### 8 Modules

The 'Modules' area allows you to configure the core security components of KoruMail's email defense system. The 'Anti-spam' module allows administrators to configure anti-spam settings, add authorized trainers, add content filters and more. Administrators can also configure other modules including anti-virus, anti-spoofing and anti-phishing.



Click the following links for more details:

- Anti-spam
- Anti-virus
- KRN® KoruMail Reputation Network® Servers
- Anti-spoofing
- SMTP IPS/FW
- Auto Whitelist
- Data Loss Prevention (DLP)
- Promotional
- Attachment Verdict System

### 8.1 Anti-spam

The Anti-spam module allows administrators to configure general and advanced settings, define authorized persons who can submit mail for spam training, upload material for Bayesian Spam and HAM training, and add content filters.

Bayesian spam filtering is a statistical technique of email filtering. It makes use of a naive Bayes classifier to identify spam emails. KoruMail uses our huge anti-spam database to accurately assign a spam-probability score to each message. Depending on this score the email is categorized as 'OK' (default = 40 points or below), 'Probable Spam' (default = 40-50 points), 'Spam' (default = 50-100 points) or 'Certainly Spam' (default = 100 points and above).

The anti-spam module must be enabled in order to activate the anti-spam parameters specified in profile settings. Refer to the 'Profile Management' section for more details about profile settings.



To open the 'Anti-spam' interface, click the 'Modules' tab on the left, then click 'Anti-spam'.



Refer to the following sections for more details:

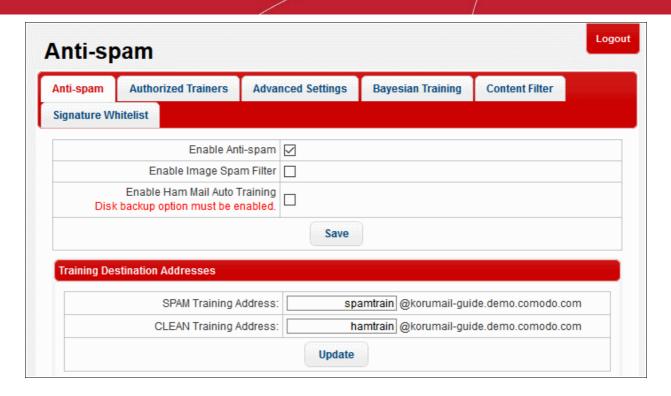
- Anti-spam General Settings
- Authorized Trainers
- Advanced Anti-spam Settings
- Bayesian Training
- Content Filter
- Signature Whitelist

### 8.1.1 Anti-spam General Settings

In the 'Anti-spam' general settings screen, administrators can enable/disable various settings including anti-spam, image spam filter and Ham mail training. The anti-spam module must be enabled in order to activate the anti-spam parameters specified in profile settings. Refer to the 'Profile Management' section for more details about profile settings.

To open the 'Anti-spam' general settings screen, click the 'Anti-spam' tab in the Anti-spam interface.





Anti-spam General Settings – Table of Parameters		
Parameter	Description	
Enable Anti-spam	Select this to active the anti-spam filtering engine. The anti-spam parameters specified in the profile settings will be activated only if this setting is enabled here. Refer to the 'Profile Management' section for more details about profile settings.	
Enable Image Spam Filter	Image based spam mails in which textual spam messages are embedded into images are designed to by pass text based spam analysis engine. KoruMail is capable of filtering image based emails also. Select this check box to activate the image spam filter.	
Enable Ham Mail Auto Training	Ham is opposite of Spam, meaning mails that are categorized as safe are also known as Ham mails. KoruMail's spam filtering engine can be trained to identify safe emails to reduce spam identification processing time. Select this check box to activate the clean email training feature.	
Training Destination Addresses		
SPAM Training Address	Displays the domain address to which spam emails can be sent for training purposes. Enter the username part of the address to whom the spam mails can be sent.	
CLEAN Training Address	Displays the domain address to which safe emails can be sent for training purposes. Enter the username part of the address to whom the safe mails can be sent.	

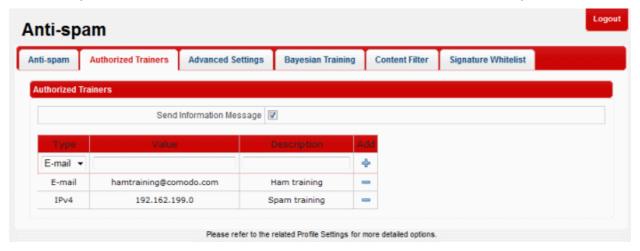
• Click the 'Save' and 'Update' buttons to apply your changes.

### 8.1.2 Authorized Trainers

Allows administrators to define the sources from which spam training emails can be sent. Submitting sample spam emails to KoruMail allows the system to learn, adapt and protect against new spam types. Training content sent from any other source will not be accepted by KoruMail.



To open the 'Authorized Trainers' screen, click the 'Authorized Trainers' tab in the Anti-spam interface.



Authorized Trainers – Table of Column Descriptions			
Column Header	Description		
Туре	Indicates t and IPv6.	Indicates the type of source of authorized trainers. The options available are Email, IPv4 and IPv6.	
Value	The details of the source ID		
Description	The description for the authorized trainer		
Add	+	Allows administrators to add a source ID after filling the fields in the row	
		Allows administrators to delete an authorized trainer from the list	

• Send Information Message: If enabled, will send a notification to the new trainer to inform them they have been added as a trainer.(*Default - Disabled*)

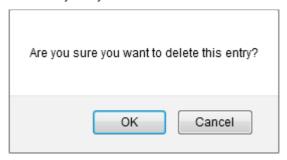
### To add an authorized trainer

- Select the type of source from the options Email, IPv4 or IPv6.
- Enter the source ID in the 'Value' field. This depends on the 'Type' selected.
- Provide an appropriate description for the authorized trainer in the 'Description' field.

The authorized trainer will be added and listed in the table.

#### To remove an authorized trainer

• Click the — button beside an entry that you want to remove.



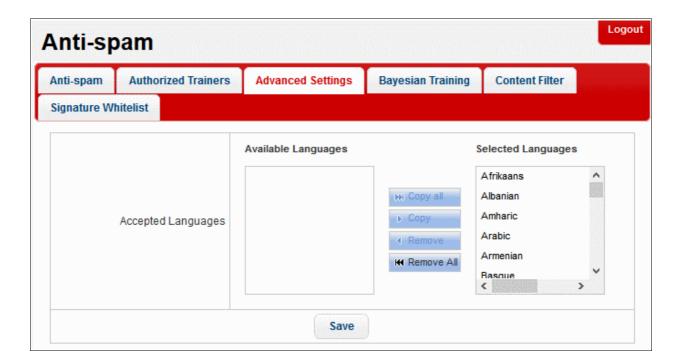


Click 'OK' to confirm the removal of an authorized trainer.

## 8.1.3 Advanced Anti-spam Settings

The 'Advanced Settings' screen allows administrators to configure language settings. It allows to configure the languages for which the emails will be analyzed for spam using the Bayes spam classifier.

To open the 'Advanced Settings' screen, click the 'Advanced Settings' tab in the Anti-spam interface.



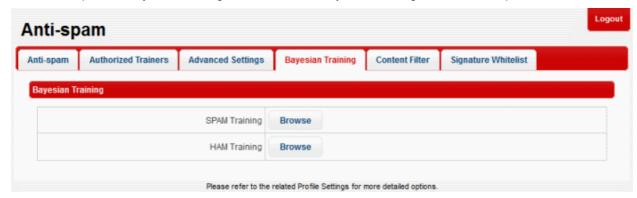
 Accepted Languages: The languages for which the Bayes spam engine should analyze the emails for spam. By default, a set of predefined languages is selected. To remove a language from the list, select it and click the 'Remove' button. To move a language to the right side, select it and click the 'Copy' button.

Click the 'Save' button to apply your changes.

## 8.1.4 Bayesian Training

In order to train the Bayesian spam engine in KoruMail to identify spam and clean emails, administrators can upload content from the 'Bayesian Training' screen. It allows to upload both spam and safe content for training.

• To open the 'Bayesian Training' screen, click the 'Bayesian Training' tab in the Anti-spam interface.



SPAM Training: Allows to upload spam content to train the Bayesian spam engine



• HAM Training: Allows to upload safe content to train the Bayesian spam engine

### To upload content

· Click the 'Browse' button



• Click the 'Upload' button, navigate to the location where the content is saved and click 'Open'. (Note: Only .eml, .gz and .zip file formats are supported)



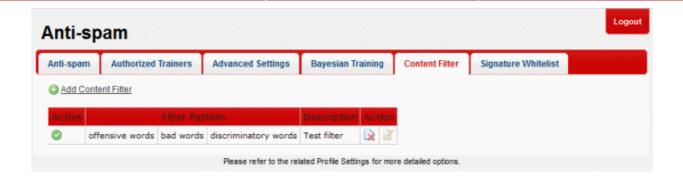
- Repeat the process to add more files
- · To remove a file from the list, click the 'Clear' link beside it
- To remove all the files from the list, click the 'Clear All' button at the top
- To upload the files, click the 'Save' button

### 8.1.5 Content Filter

KoruMail's content filter can detect words or patterns of words in the body of emails then mark those messages as spam.

• To open the 'Content Filter' screen, click the 'Content Filter' tab in the Anti-spam interface.





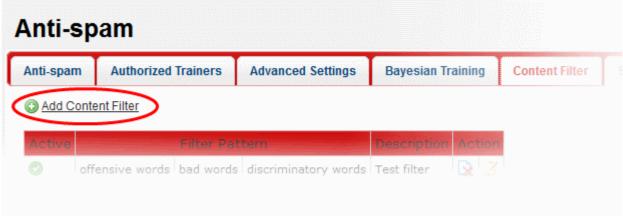
Content Filter – Table of Column Descriptions		
Column Header	Description	
Active	Indicates whether the 'Content Filter' is enabled or disabled	
Filter Pattern	Displays the details of the filter pattern.	
Description	The description for the added 'Content Filter'	
Action	×	Allows administrators to delete a filter
	Ì	Allows administrators to edit a filter

The interface allows administrators to:

- Add a new content filter
- Edit a content filter
- Delete a content filter

### To add a new content filter

Click the 'Add Content Filter' link at the top.



The 'New Content Filter' screen will be displayed.





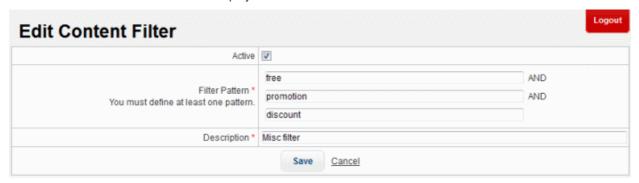
- Active: Select the check box to activate the content filter
- Filter Pattern: Enter the words or combination of words that should be checked and mark the email as spam.
- Description: Enter an appropriate name for the content filter

Click the 'Save' button. The newly added filter will be listed in the screen.

#### To edit a content filter

Click the button beside a filter that you want to edit.

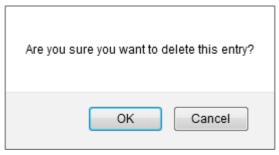
The 'Edit Content Filter' screen will be displayed.



Edit the content filter as required and click the 'Save' button

#### To delete a content filter

Click the button beside a filter that you want to remove



Click 'OK' to confirm the deletion of the filter

## 8.1.6 Signature Whitelist

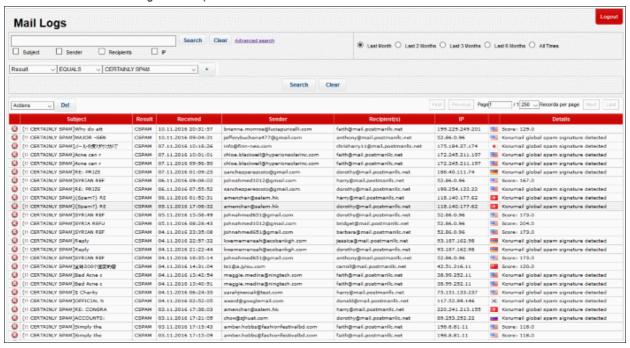


The signature whitelist area is a list of digital signatures that came attached to white-listed emails. Administrators can manually whitelist mails from the 'Mail logs' interface.



### To whitelist emails in 'Mail Logs':

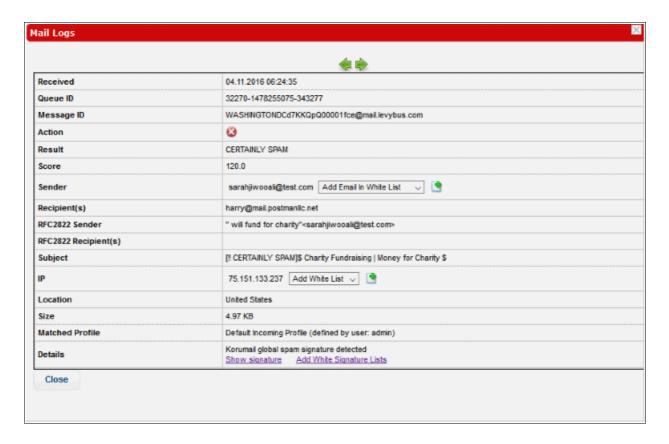
Click 'Mail Logs' from reports menu.



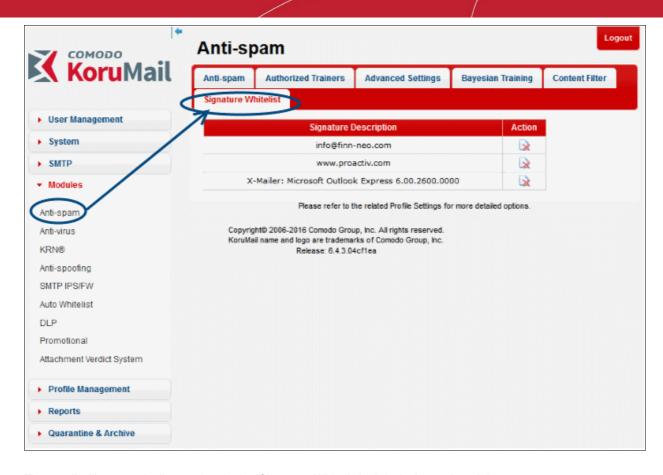
- Click the 'Advanced search' link.
- Select 'Result' from the first drop down.



Select 'EQUALS' from the second drop down and then choose 'CERTAINLY SPAM'.



• Select 'Add email to Whitelist' in sender field and 'Add Whitelist' in IP field in the dialog and then choose the email that you need to whitelist and click the 'Add White Signature Lists' link.

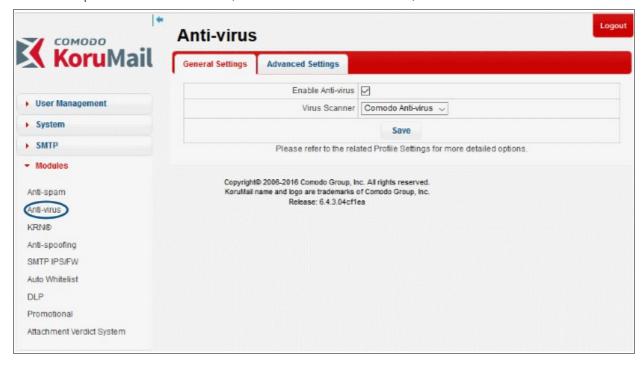


The email will automatically populate in the 'Signature Whitelist' tab in Anti-spam' module.

### 8.2 Anti-Virus

KoruMail is capable of virus scanning of all emails that pass through its engine. KuruMail includes built-in Comodo AntiVirus program and you have the option to select Comodo's AV program. The anti-virus module must be enabled in order to activate the anti-virus parameters specified in profile settings. Refer to the 'Profile Management' section for more details about profile settings.

To open the 'Anti-virus' interface, click the 'Modules' tab on the left, then click 'Anti-virus'.





Refer to the following sections for more details:

- Anti-Virus General Settings
- Advanced Anti-Virus Settings

## 8.2.1 Anti-Virus General Settings

In the 'Anti-virus' general settings screen, administrators can enable/disable the anti-virus module and select the anti-virus program that should be used for AV scanning. The anti-virus module must be enabled in order to activate the anti-virus parameters specified in profile settings. Refer to the 'Profile Management' section for more details about profile settings.

To open the 'Anti-virus' general settings screen, click the 'General Settings' tab in the 'Anti-virus' interface.



Anti-virus General Settings – Table of Parameters		
Parameter	Description	
Enable Anti-virus	Select this to active the anti-virus scanning engine. The anti-virus parameters specified in the profile settings will be activated only if this setting is enabled here. Refer to the 'Profile Management' section for more details about profile settings.	
Virus Scanner	Select the AV program from the drop-down that should be used for scanning the emails. The AV programs available for selection is Comodo AV.	

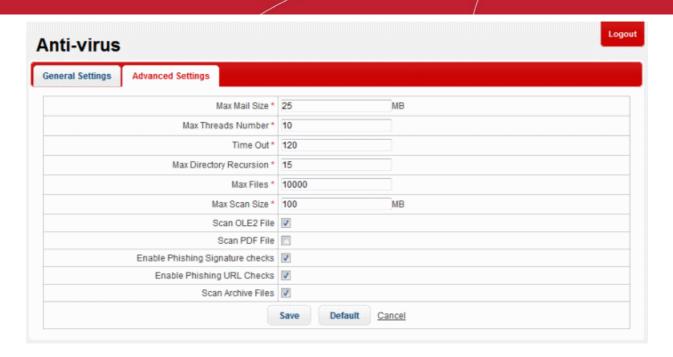
Click the 'Save' button to apply your changes.

## 8.2.2 Advanced Anti-Virus Settings

The 'Advanced Settings' screen allows administrators to set the maximum size of email that should be scanned, the number of mail threads, the maximum number of files and more. Please note that if the maximum size is surpassed then the antivirus filter for the particular email will not be applied.

To open the 'Advanced Settings' screen, click the 'Advanced Settings' tab in the 'Anti-virus' interface.





Anti-virus Advanced Settings – Table of Parameters		
Parameter	Description	
Max Mail Size	The maximum size of email that should be scanned.	
Max Threads Number	The maximum number of email threads in a email that should be scanned.	
Time Out	The AV scanning time in seconds for an email.	
Max Directory Recursion	Maximum number of sub-directories or nested archives that will be scanned. If an archive contains more than this threshold then the attachment will be blocked.	
Max Files	Maximum number of files that can be scanned within an archive or email.	
Max Scan Size	Maximum amount of data (specified value set) scanned for each input file. Archived files are scanned till the Antivirus scanner reaches the set value.	
Scan OLE2 File	If enabled, AV scan is run for OLE2 file formats.	
Scan PDF File	If enabled, AV scan is run for PDF file formats.	
Enable Phishing Signature checks	If enabled, AV scanner checks for phishing emails	
Enable Phishing URL checks	If enabled, AV scanner checks for emails that originated from phishing URLs	
Scan Archive Files	If enabled, archived mails will also be scanned. The type of mails that should be archived and its related settings are configured in profile settings. Refer to the 'Profile Management' section for more details about profile settings.	

- Click the 'Save' button to apply your changes.
- To restore the default 'Anti-viurs Advanced Settings' value, click the 'Default' button.



## 8.3 KoruMail Reputation Network (KRN)

KoruMail Reputation Network is an IP reputation scoring system developed by Comodo. It not only includes traditional features such as real-time IP blacklists (RBL) but also has 'whitelist' and 'greylisting ignore' features. The whitelisting feature means emails that come from trusted sources will be permitted, which helps to reduce false-positive rates.

To open the 'KRN®' interface, click the 'Modules' tab on the left, then click 'KRN®'



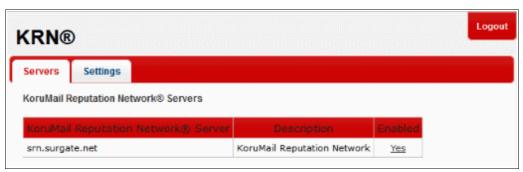
The interfce allows administrators to:

- Enable / disable a KRN server
- Configure KRN settings

### To enable / disable a KRN server

A newly added KRN server will be in enabled status by default.

 To switch a KRN server between enabled and disabled statuses, click the 'Yes' or 'No' link under the 'Enabled' column.





### **KRN Settings**

The KRN settings interface allows administrators to enable / disable KRN Blacklist and Whitelist scan. The KRN Blacklist and Whitelist scan in the KRN module must be enabled in order to activate the KRN scan parameters specified in profile settings. Refer to the 'Profile Management' section for more details about profile settings.

The 'Settings' tab in KRN module allows administrators to:

- Enable / disable KRN blacklist scan
- Enable / disable KRN whitelist scan

#### To enable / disable KRN blacklist scan

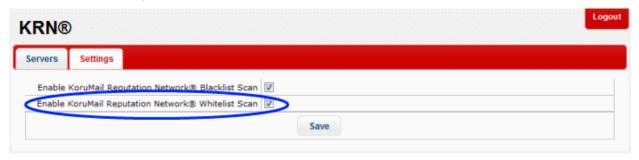
Click the 'Settings' tab in the KRN®' interface



- Select / deselect the 'Enable KoruMail Reputation Network® Blacklist Scan' check box to activate or deactivate the KRN blacklist scan
- Click the 'Save' button to apply your changes.

### To enable / disable KRM whitelist scan

Click the 'Settings' tab in the KRN®' interface



- Select / deselect the 'Enable KoruMail Reputation Network® Whitelist Scan' check box to activate or deactivate the KRN whitelist scan
- Click the 'Save' button to apply your changes.

## 8.4 Anti-Spoofing

Email spoofing is a technique used to forge email headers so that the message appears to originate from a source other than the true sender. Email spoofing is possible because SMTP (Simple Mail Transfer Protocol) being the main protocol used in sending emails, does not include an authentication mechanism. The 'Anti-Spoofing' feature in KoruMail prevents spammers from sending messages with falsified 'From' addresses from your protected domains. It uses SPF records, which is a type of DNS record that identifies which servers are permitted to send emails on behalf of the protected domains. KoruMail allows you to add a range of IP addresses for a protected domain, which an MTA (Mail Transfer Agent) can look up to confirm whether an email is being sent from an authorized server.

To open the 'Anti-spoofing' interface, click the 'Modules' tab on the left, then click 'Anti-spoofing'.





Select the 'Enable Anti-Spoofing' check box to add IP addresses for your domains.

Anti-Spoofing – Table of Column Descriptions		
Column Header	Description	
Domain Name	Displays the name of the protected domain	
IP Address	Displays IP range added for the domain	
Action	R	Allows administrators to delete a domain name
	Ì	Allows administrators to edit the 'IP address' for a domain
	Export	Allows to export the IP address for a domain

The interface allows administrators to:

- Add IP range for a domain
- · Edit IP range for a domain
- Delete a domain name from the list
- · Export the list of IP addresses

### To add an IP range for a domain

- Select the 'Enable Anti-Spoofing' check box
- Select the domain for which you want to add the IP range





Click the button

The 'Anti-spoofing Edit' screen will be displayed.

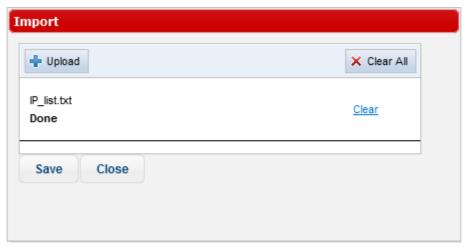


- To add the IP range manually, enter the address each per line in the field and click the 'Save' button.
- · To import from a saved file, click the 'Import' link





· Click the 'Upload' button, navigate to the location where the file is saved and click 'Open'



- · Repeat the process to add more files to the list.
- To remove a file from the list, click the 'Clear' link beside it.
- To remove all the files, click the 'Clear All' button at the top.
- Click the 'Save' button.





- Click 'Delete all' to remove all the addresses and click 'OK' in the confirmation screen.
- Click 'Save' to add the IP addresses for the domain.

### To edit IP range for a domain

Click the button under the 'Action' column beside a domain name that you want to edit the IP addresses.

The 'Anti-spoofing Edit' screen will be displayed.

• Edit the address as required and click the 'Save' button.

### To delete a domain from the list

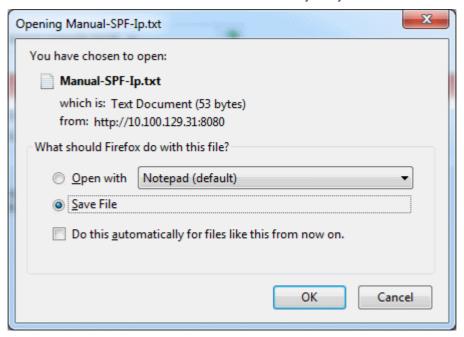
• To delete a domain name from the list, click the button under the 'Action' column and confirm it in the confirmation screen.

### To export the list of IP addresses for a domain

Click the 'Export' link under the 'Action' column



Click 'OK' to download and save the SPF IP list as a text file to your system.



## 8.5 SMTP IPS/FW

KourMail's SMTP Intrusion Prevention System (IPS) and Firewall (FW) module provides protection against Denial of Service (DoS) and SYN attacks. To deal with SYN attacks, KoruMail uses SYN Cookies and SYN Cache features. To manage DoS attacks, it uses various usage limitations. For example, KoruMail is able to limit the number of connections for a specified period. The SMTP IPS/FW module blocks fake IPs that want make connections more than the specified number in a selected security profile.

The module also allows administrators to define Whitelist and Blocked rules to better control the spam mails. The Rate Control feature, a subset of DoS protection system, allows to control how many connections are allowed within the specified time from the same IP address.

To open the 'SMTP IPS/FW' interface, click the 'Modules' tab on the left, then click 'SMTP IPS/FW'.



Refer to the following sections for more details.

- SMTP IPS General Settings
- · Whitelist IP Addresses
- Blocked IP Addresses
- Rate Control

### 8.5.1 SMTP IPS General Settings

The 'General' tab in the SMTP IPS/FW module allows administrators to enable/disable the Intrusion Prevention System (IPS) and configure a security profile for KoruMail. The IPS allows KoruMail to control the number and rate of SMTP connections from any single IP address. This helps to detect and block spam/denial-of-service attacks and aids traffic management.

To open the 'IPS General Settings' interface, click the 'General' tab in the 'SMTP IPS/FW' screen.



 SMTP IPS/FW (Intrusion Prevention) Module: Select the check box to activate the module so as to apply the security profile.

The module has a set of predefined security profiles with different setting levels for each of the profile. The predefined profile can be edited as per the organization's requirement.

IPS General Settings – Table of Column Descriptions		
Column Header	Description	
Status	Indicates whether the security profile is activated	



Security Profile	The name of the security profile. The name cannot be edited. There are four security profiles - 'Permissive', 'Moderate', 'Restrictive' and 'Paranoid'. Each one has default settings provided according to their respective security levels.	
Activate	Click this button to enable a profile. Please note that only one security profile can be active at a time.	
Edit	ď	Allows administrators to edit the parameters of a security profile.

The interface allows administrators to:

- Activate a security profile
- · Edit the parameters of a security profile

### To activate a security profile

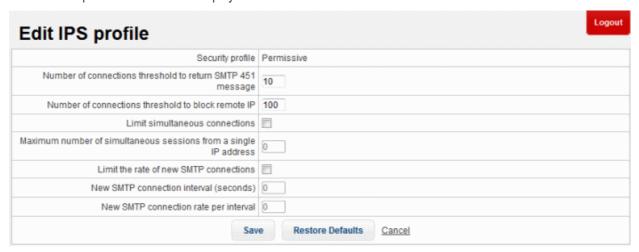
Click the button under the 'Activate' column in a security profile row that you want to enable. Please
note that only one security profile can be active at a time.

The 'Settings saved successfully' message will be displayed at the top.

### To edit the parameters of a security profile

Click the button under the 'Edit' column in a security profile row that you want to edit.

The 'Edit IPS profile' screen will be displayed.



IPS Profile - Table of Parameters		
Parameter	Description	
Security profile	The name of the predefined profile	
Number of connections threshold to return SMTP 451 message	<ul> <li>Maximum number of SMTP connections before KoruMail will refuse further connections and will send out a 451 'bounce-back' email to the sender. If you wish to unblock this sender, please contact support@comodo.com to whitelist or unblock the IP.</li> </ul>	
Number of connections threshold to block remote	Maximum number of remote connections allowed before KoruMail's built in firewall	



IP	blocks the exceeding connections.
Limit simultaneous connections	If enabled, instant SMTP connections are limited from a single IP as per the maximum number of simultaneous sessions allowed.
Maximum number of simultaneous sessions from a single IP address	Maximum number of sessions that can be opened by a single IP address after limiting instant SMTP connections.
Limit the rate of new SMTP connections	If enabled, the parameters 'New SMTP connection interval' and 'New SMTP connection rate' can be specified to set limitations on new SMTP connections.
New SMTP connection interval (seconds)	The time between a new connection and the previous connection.
New SMTP connection rate	Maximum number of new SMTP connections in specified interval.

- Click the 'Save' button to apply your changes.
- · Click the 'Restore Defaults' button to restore the parameters to factory setting.

### 8.5.2 Whitelist IP Addresses

KoruMail allows administrators to add trusted network addresses to the 'Whitelist' so they will not be filtered by the SMTP IPS module.

• To open the 'Whitelist' interface, click the 'Whitelist' tab in the SMTP IPS/FW module.



Whitelist Settings – Table of Column Descriptions		
Column Header	Description	
IP or Network Address	The details of IP or networked addresses that are whitelisted.	
Description	The description provided for the IP/Network address.	
Action	•	Allows administrators to add a Network or IP address after entering the details in the row.
		Allows administrators to delete a whitelisted Network or IP address from the list.



The interface allows administrators to:

- Add a network or IP address to whitelist
- · Delete a whitelisted network or IP address from the list
- Export the whitelisted network or IP address details
- Import lists of whitelisted network or IP addresses from files

#### To add a network or IP address to whitelist

- Enter the IP or Network address details in the first field
- Enter an appropriate description for the address in the field under 'Description'.
- Click the button.

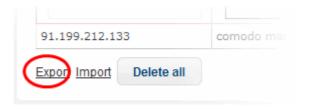
The address will be added and listed as whitelisted.

#### To delete a whitelisted network or IP address from the list

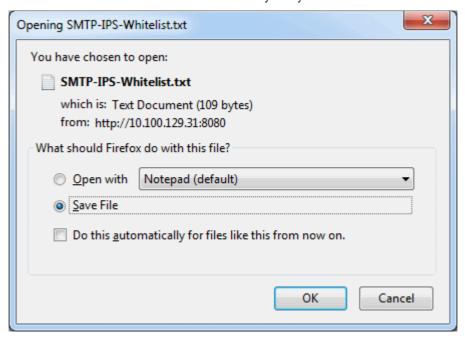
- Click the button beside an address that you want to delete and click 'OK' in the confirmation screen
- Click the 'Delete all' button below to remove all the whitelisted addresses from the list and click 'OK' in the confirmation screen.

#### To export the whitelisted network or IP address details

Click the 'Export' link at the bottom of the screen



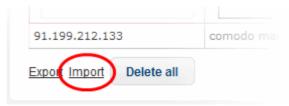
· Click 'OK' to download and save the list as a text file to your system.



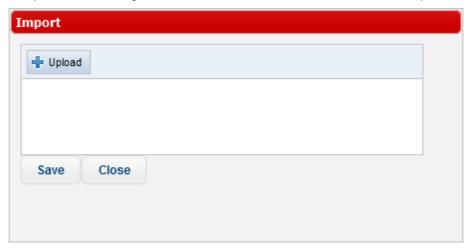


### To import lists of whitelisted network or IP addresses from files

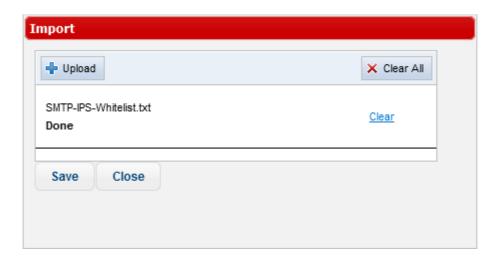
Click the 'Import' link at the bottom of the screen



· Click the 'Upload' button, navigate to the location where the file is saved and click 'Open'



· Repeat the process to add more files to the list.



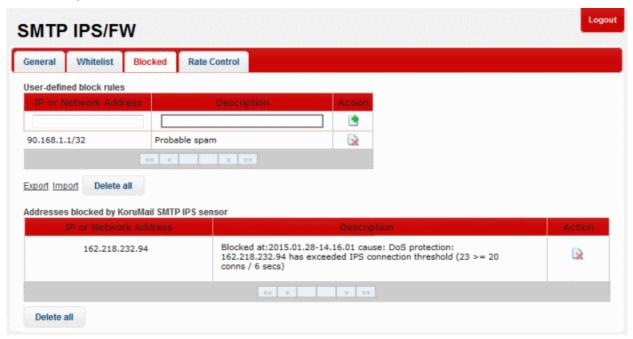
- To remove a file from the list, click the 'Clear' link beside it.
- To remove all the files, click the 'Clear All' button at the top.
- Click the 'Save' button.

### 8.5.3 Blocked IP Addresses

KoruMail allows administrators to add IP addresses to blacklist so that mails from these sources never reach the SMTP level for processing. In addition to manually including the IPs to be blocked, the IPs detected by SMTP IPS module as probable spamming addresses are also added automatically and listed separately below the interface. Administrators can unblock the IP addresses by simply deleting the entry in the respective table.



To open the 'Blocked' interface, click the 'Blocked' tab in the SMTP IPS/FW module.



The table at the top of the interface displays the details of the blocked IPs manually and the table below provides the details of IPs that were blocked automatically by SMTP IP sensor.

The interface allows administrators to:

- Add a network or IP address to be blocked
- · Delete a blocked network or IP address from the list
- Export the blocked network or IP address details
- Import lists of network or IP addresses from files to be blocked
- Delete an automatically blocked network or IP address by SMTP IPS sensor from the list

### To add a network or IP address to be blocked

- Enter the IP or Network address details in the first field
- Enter an appropriate description for the address in the field under 'Description'.
- Click the button.

The address will be added and listed.

#### To delete a blocked network or IP address from the list

- Click the button beside an address that you want to delete and click 'OK' in the confirmation screen
- Click the 'Delete all' button below to remove all the blocked addresses from the list and click 'OK' in the confirmation screen.

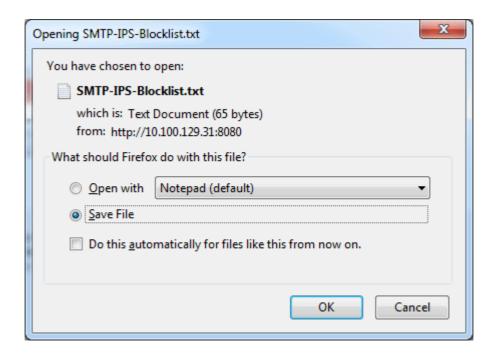
### To export the blocked network or IP address details

Click the 'Export' link at the bottom of the screen



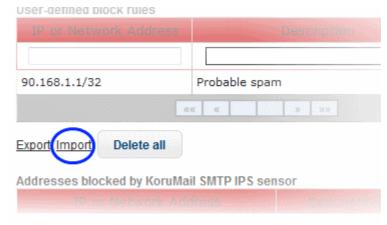


• Click 'OK' to download and save the list as a text file to your system.



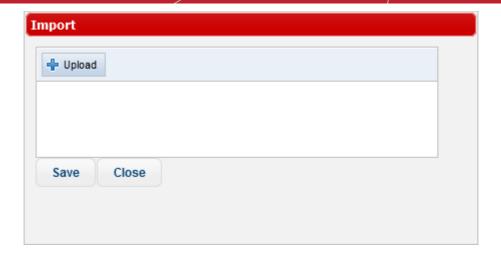
### To import lists of network or IP addresses from files to be blocked

· Click the 'Import' link at the bottom of the screen

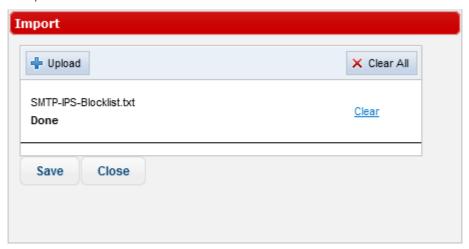


Click the 'Upload' button, navigate to the location where the file is saved and click 'Open'





· Repeat the process to add more files to the list.



- To remove a file from the list, click the 'Clear' link beside it.
- To remove all the files, click the 'Clear All' button at the top.
- Click the 'Save' button.

### To delete an automatically blocked network or IP address by SMTP IPS sensor from the list

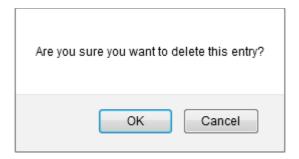
If you know the IP addresses blocked by the SMTP IPS sensor is a trusted source, then you can delete it from the list.

• In the 'Addresses blocked by KoruMail SMTP IPS sensor' table, click the 🔯 button beside an address that you want to delete.





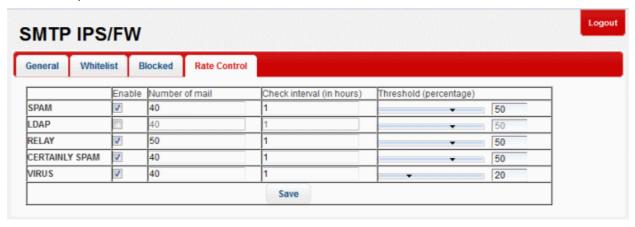
Click 'OK' in the confirmation screen



### 8.5.4 Rate Control

The 'Rate Control' feature is a Firewall component of KoruMail that protects an Organization from spammers that send huge amounts of emails to the server in a small amount of time. The 'Rate Control' mechanism in KoruMail counts the specified number of mails categorized as Spam, Virus, LDAP and Relay originating from a source for a specified amount of time and if the value exceeds the specified threshold percentage, then the IP addresses are automatically added to blacklist.

• To open the 'Rate Control' interface, click the 'Rate Control' tab in the SMTP IPS/FW module.



	Rate Control Settings – Table of Column Descriptions
Column Header	Description
Category	SPAM – Mails that are categorized as spam  LDAP – Verification of LDAP users. When incoming mails are for users that are not in
	LDAP, the originating IP address will be blacklisted. For example, if the number of mails is set as 50, and the threshold percentage as 50%, then if from a source if the number of mails for non LDAP users exceeds 25 within the check interval, then the source will be blacklisted
	RELAY – IPs from which mails can be sent by users who are not available on the mail server.
	CERTAINLY SPAM – Mails that are categorized as definite spam.
	VIRUS – Mails that are categorized as with virus
Enable	Activate or disable the Rate Control for a mail category
Number of mail	Enter the number of mails for a category that will be checked for the specified time in



	'Check interval' column.
Check interval (in hours)	Enter the time in hours for the specified number of mails to be checked for a category.
Threshold (percentage)	Enter or use the slider to set the threshold percentage for the 'Rate Control' to be applied for a category. For example, if the number of email is set as 60 for a category, then a 50% threshold means that when the number exceeds 30, then the originating IP address will be blocked.

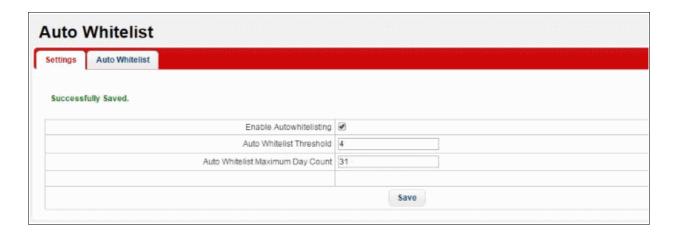
Click the 'Save' button to apply your changes.

## 8.6 Auto Whitelist

Korumail allows administrators to automatically whitelist incoming and outgoing mails to and from specific email addresses. The 'Auto Whitelist' module must be enabled to activate the whitelisting of addresses specified in the profile settings. Refer to the 'Profile Management' section for more details about profile settings.

### **Auto Whitelist Settings:**

To open the 'Auto Whitelist' interface, click the 'Modules' tab on the left, then click 'Auto Whitelist'.



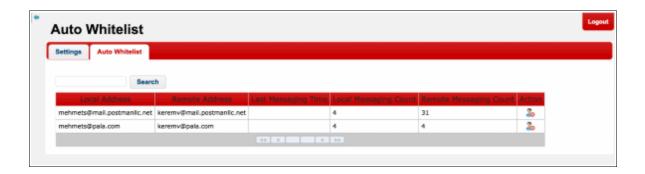
- Enable Autowhitelisting: Enable to allow whitelisting of incoming and outgoing emails
- Auto Whitelist Threshold: The number of mails to sender that will be whitelisted.
- Click 'Save' to apply your changes.

Please note that you can manually whitelist emails from the 'Mail logs' interface.

#### **Auto Whitelist details**

The Auto Whitelist tab displays emails which have been whitelisted by currently active profiles.



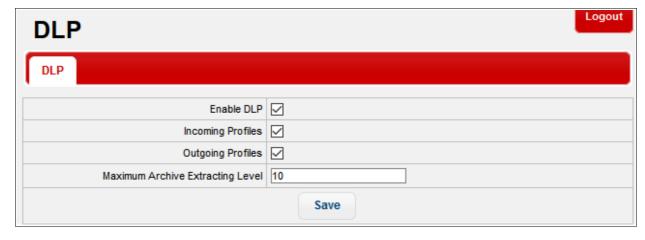


Auto Whitelist - Table of Column Headers		
Column Header	Description	
Local Address	The recipient's email address	
Remote Address	The sender's email address	
Last Messaging Time	The time of the most recent sent or received mail	
Local Messaging Count	The number of mails received	
Remote Messaging Count	The number of messages sent	
Action	Deletes auto-whitelisted items	

## 8.7 Data Leak Prevention (DLP)

KoruMail is integrated with a DLP (Data Leak Prevention) engine that prevents data theft via emails. The engine searches for configured words in incoming and outgoing mails and applies actions as per the settings in the profile. Actions include quarantining the mail and / or notifying the administrator. The DLP module must be enabled in order to activate the DLP parameters specified in the profile settings. Refer to the 'Profile Management' section for more details about profile settings.

To open the 'DLP' interface, click the 'Modules' tab on the left, then click 'DLP'.



- Enable DLP: Select the check box to display the 'Incoming Profiles' and 'Outgoing Profiles' check boxes.
- Incoming Profiles: Select the check box to apply the DLP profile parameters to incoming mails
- Outgoing Profile: Select the check box to apply the DLP profile parameters for outgoing mails



Maximum Archive Extracting Level: Enter the maximum number of nested archives which should be opened
and examined for data-leak infringements. If an archive contains more sub-archives than this threshold then
the entire attachment will be blocked.

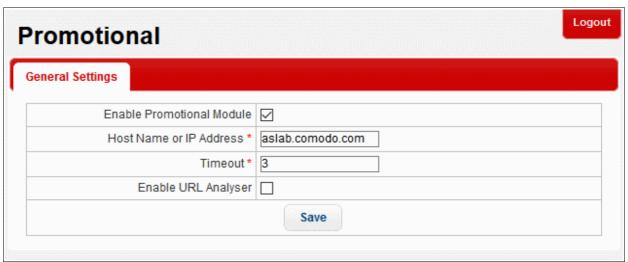
Refer to the 'Profile Management' section for more details about profile settings.

Click the 'Save' button to apply your changes.

## 8.8 Promotional

KoruMail has the ability to block promotional emails sent to users on your network. If the promotional module is enabled, KoruMail will quarantine incoming mails that contain 'unsubscribe' links or contain URLs redirect to different websites.

• To open the 'Promotional' interface, click the 'Modules' tab on the left, then click 'Promotional'.



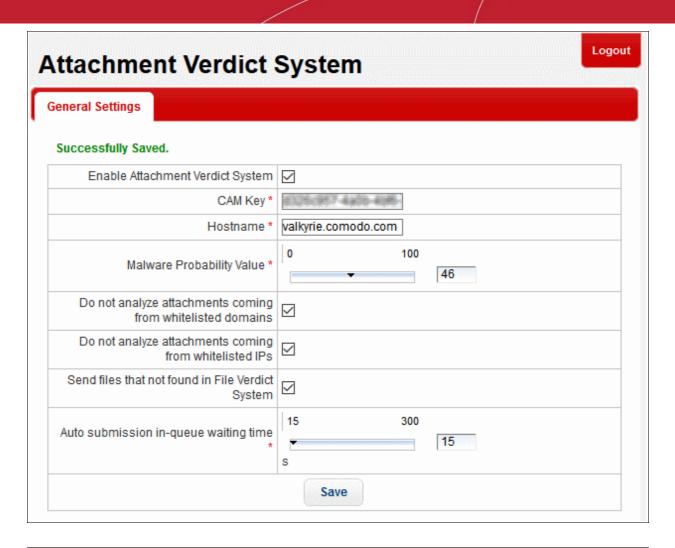
- **Enable Promotional Module:** Select this check box to activate this module. KoruMail will block all promotional emails from various sources if the module is activated.
- Host Name or IP Address: Host name or IP of the server which will check email content to determine whether a mail is promotional or not.
- **Timeout**: Time limit in seconds for checking incoming mails with the promo filter. If the time limit is exceeded, the promotional filter will not be applied.
- Enable URL Analyser: Will check the links in a mail to see if the target web page contains promotional
  or malicious content
- Click the 'Save' button to apply your changes.

## 8.9 Attachment Verdict System

The 'Attachment Verdict System' settings area enables administrators to configure settings related to the analysis of email attachments. If enabled, verdicting system will automatically submit email attachments (windows executable files and pdf files) with an 'unknown' trust rating to Comodo Valkyrie for analysis. Valkyrie will run a series of behavioral tests to find out whether or not the attachment is malicious.

To open the attachment verdict settings area, click Modules > Attachment Verdict System.





Attachment Verdict System - Table of Column Headers		
Column Header	Description	
Enable Attachment Verdict System	If enabled, Korumail will automatically check the trust rating of Windows executables and pdf files in Comodo's file look up server (FLS). The verdict from the FLS can be 'Clean', 'Malware' or 'Unknown'. Clean attachments will be allowed to proceed while malware attachments will be automatically quarantined (providing 'Quarantine mails containing viruses' is enabled in the antivirus section of the profile). 'Unknown' files will be submitted to Comodo's real-time file analysis system, Valkyrie, for behavior testing. Valkyrie's tests will determine whether the unknown file is clean or malware and apply the appropriate action as mentioned above.	
CAM Key	Comodo Accounts Manager License key. The customers must sign up with Comodo Accounts Manager and order the Korumail product to avail a license key.	
Hostname	Hostname of the file attachment verdict system. This is set to the Comodo Valkyrie server by default. Only change this if you have established a different server with Comodo support.	
Malware Probability Value	The threshold at which Korumail will designate an unknown file as 'malware' based on Valkyrie results. Comodo recommend that administrators leave this setting at the default and only move it after consultation with Comodo support.	
	Valkyrie examines the behavior of unknown files and assigns a score indicating how likely it is that the file is malware. Under the default settings, a score of 46+ is classed as malware.	



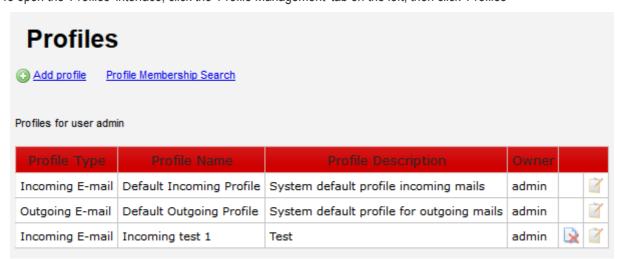
	Raising the value in this slider means KoruMail is more tolerant/less likely to class attachments as malware.	
Do not analyze attachments coming from whitelisted domains	If enabled, Korumail will not analyze attachments coming from white-listed domains	
Do not analyze attachments coming from whitelisted IPs	If enabled, Korumail will not analyze attachments coming from white-listed IPs	
Send files that not found in File Verdict System	If enabled, Korumail will upload files rated 'Unknown', to the attachment verdict system for detailed behavior analysis	
Auto-submission in queue waiting time	Define in seconds how long Korumail should wait before the submission times-out.	

Please note that, if the 'Enable Attachment Verdict System is enabled' and the 'Send files that not found in File Verdict System' is disabled, then the unknown files are not uploaded to Valkyrie for analysis. To view reports of attachment verdict system, refer to **Attachment Verdict Reports**.

# 9 Profile Management

Profiles are collections of settings for KoruMail features such as 'Anti-virus', 'Anti-spam', 'Black List' and White List' which can be applied to added domains and/or users. There are two kinds of profiles that can be created in KoruMail – 'Incoming E-mail' and 'Outgoing E-mail'. This allows administrators the flexibility to apply different profiles for incoming mails and outgoing mails. KoruMail ships with a set of default incoming and outgoing profiles that can be only edited and cannot be deleted.

To open the 'Profiles' interface, click the 'Profile Management' tab on the left, then click 'Profiles'



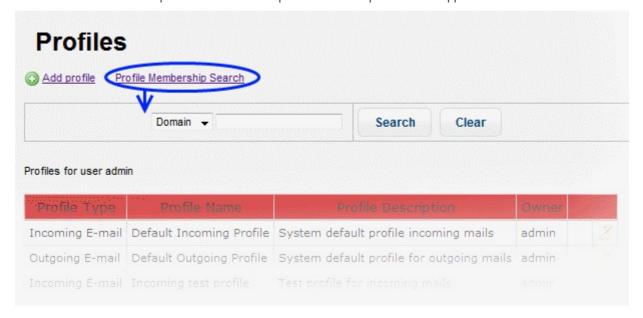
Profiles - Table of Column Headers		
Column Header	Description	
Profile Type	The type of profile whether incoming or outgoing	
Profile Name	The name of the profile. The name of default profiles will be auto filled.	
Profile Description	The description provided for the profile	



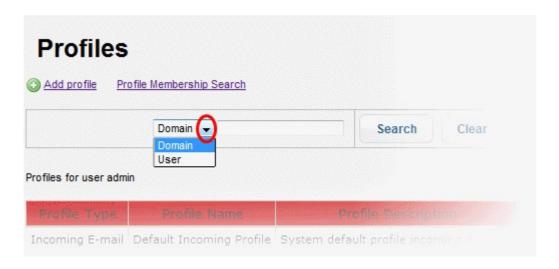
Owner	The name	of the group to which the profile creator belongs
Action	×	Allows administrators to delete a profile. The default incoming or outgoing profile wil apply to the domains and / or users beloning to a profile when it is deleted.
		Allows administrators to edit the settings in a profile.

### **Search Option**

Click the 'Profile Membership Search' link at the top to search for a profile that is applied to domain and / or users.



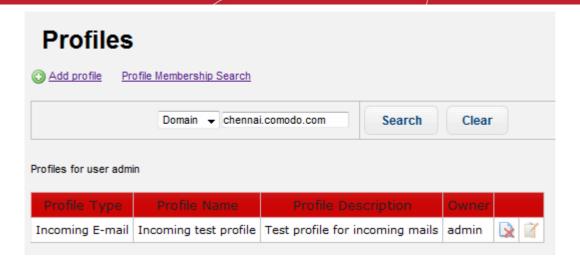
· Select 'Domain' or 'User' from the drop-down for which you want to search the profile



• Enter the domain or user details and click the the 'Search' button.

The profile applied for the entered details will be displayed.





- To remove the details in the search field, click the 'Clear' button.
- To remove the search field, click the 'Profile Membership Search' link again.

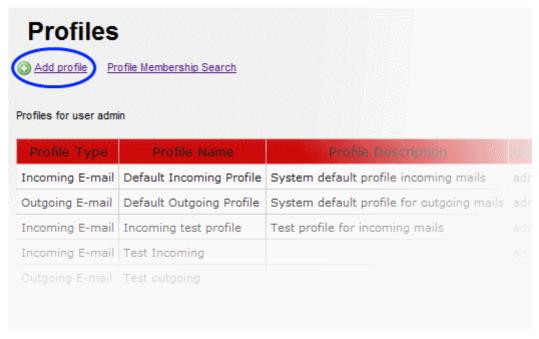
The 'Profiles' interface allows administrators to:

- Add and Confgure a New Profile
- · Edit a Profile
- Delete a Profile

## 9.1 Adding and Configuring a New Profile

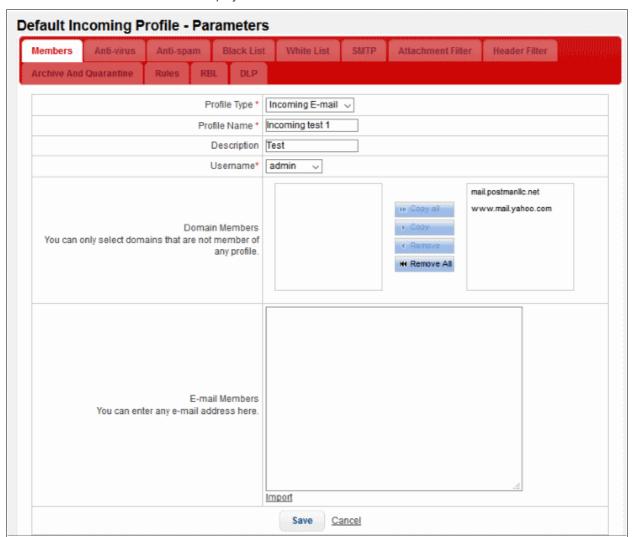
Profiles allow administrators to determine how KoruMail's anti-spam, anti-virus engine and other filtering mechanisms should behave for incoming/outgoing mails belonging to protected domains and/or users. The items that can be set in a profile include Anti-virus, Anti-spam, SMTP, Attachment Filter, Black List, White List, Header Filter, Archive and Quarantine, Data Leak Prevention (DLP) and Realtime Blackhole List (RBL).

To add a new profile, click the 'Add profile' link in the 'Profiles' screen:





The 'Add New Profile' screen will be displayed:



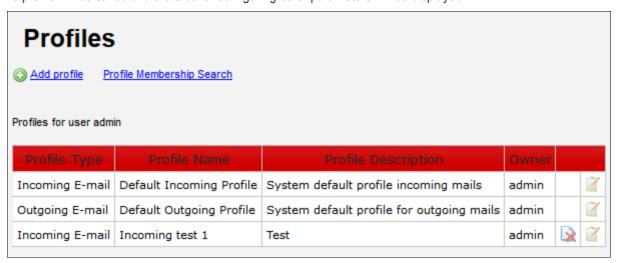
Profiles - Table of Parameters		
Parameter	Description	
Profile Type	Select whether you want the profile to apply to incoming mails or outgoing mails	
Profile Name	Enter a name for the profile	
Description	Provide an appropriate description for the profile	
Username	Select the username of the person who is adding the profile. Only users with appropriate privileges will be listed.	
Domain Members	Allows administrators with appropriate privileges to add domains for the profile. The box in the left side displays the domains that were added in the 'Managed Domains' section. Any domain that is already added to a profile will not be listed. Domains can be added by selecting and clicking the appropriate button (Copy all, Copy, Remove, Remove all) in the middle. All the users in a domain added here will be applied the profile.	
Email Members	Allows administrators with appropriate privileges to add users for the profile who may belong to other domains that are not added for a profile. Please note that for an	



	incoming profile only users belonging to domains added in the 'Managed Domains' section can be added here. For an outgoing profile, you can also add users belonging to domains that are not added in the 'Managed Domains' section.
Import	Allows administrators to add users for the profile by importing them from a saved file. For importing users for an incoming profile the same limitations mentioned in the above row will apply.

· Click the 'Save' button

The profile will be saved and the tabs for configuring other parameters will be displayed.



The interface allows administrators to configure profile parameters for:

- Anti-virus
- Anti-spam
- Black List
- White List
- SMTP
- Attachment Filter
- Header Filter
- Archive and Quarantine
- Rules
- Realtime Blackhole List (RBL)
- Data Leak Prevention (DLP)

#### **Anti-virus**

Click the 'Anti-virus' tab

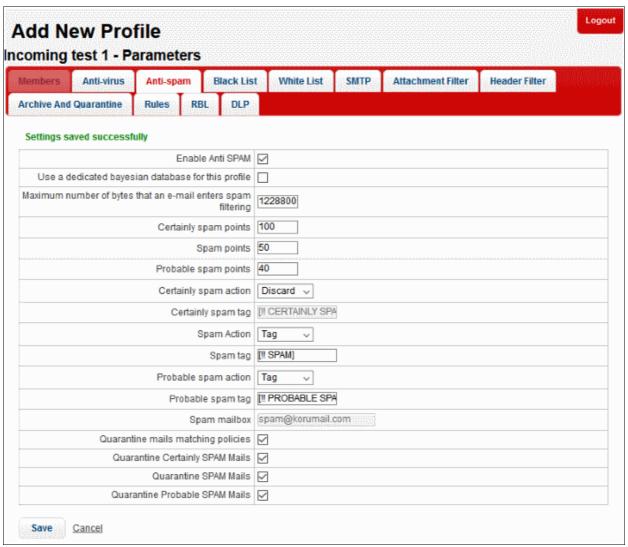




- Enable Anti Virus: Select the check box to enable the anti-virus engine for this profile. Please note the 'Anti-virus' module should be enabled for this parameter to become active.
- Quarantine mails containing virus: Mails detected with viruses will be quarantined. Users can log into the 'Quarantine Webmail' interface to view his/her mails that are quarantined.
- Click the 'Save' button to apply your changes.

#### Anti-spam

Click the 'Anti-spam' tab.





	Profiles: Anti-spam Settings - Table of Parameters	
Parameter	Description	
Enable Anti SPAM	Select the check box to enable the anti-spam engine for this profile. Please note the 'Anti-spam' module should be enabled for this parameter to become active.	
Use a dedicated bayesian database for this profile	Select the check box to enable the anti-spam engine to use Bayesian database also for detecting spam mails. Please note the 'Bayes Spam engine' in the 'Advanced Settings' section of 'Anti-spam' module should be enabled for this parameter to become active.	
Maximum number of bytes that an e-mail enters spam filtering	·	
Certainly spam points	Enter a value between 1 and 100 that will classify an email as definitely spam. Suggested values are between 90 - 100 points.	
Spam points	Enter a value between 1 and 100 that will classify an email as spam. Suggested values are between 51 – 89 points.	
Probable spam points	Enter a value between 1 and 100 that will classify an email as probable spam. Suggested values are between 40 – 50 points.	
Certainly spam action	Select the action that has to be taken for emails that are categorized as definitely spam. The options available are:	
	<ul> <li>Tag – The email will be sent to the recipient with a tag as entered in the next field 'Certainly spam tag'</li> </ul>	
	<ul> <li>Forward – The mail will be forwarded to a mail box defined in the 'Spam mailbox' field</li> </ul>	
	<ul> <li>CC – The mail will be sent to the recipient and a copy will be sent to a mail box defined in the 'Spam mailbox' field</li> </ul>	
	<ul> <li>Discard – The mail will be quarantined. Daily notifications will be sent to user with details of quarantined emails. The user can view the email using the Quarantined Email web interface.</li> </ul>	
	<ul> <li>Reject – The mail will be rejected and a reject command will be sent to the sender mail server.</li> </ul>	
Certainly spam tag	Enter the tag text for emails that are categorized as definitely spam	
Spam Action	Select the action that has to be taken for emails that are categorized as spam. The options available are:	
	<ul> <li>Tag – The email will be sent to the recipient with a tag as entered in the next field 'Spam tag'</li> </ul>	
	<ul> <li>Forward – The mail will be forwarded to a mail box defined in the 'Spam mailbox' field</li> </ul>	
	<ul> <li>CC – The mail will be sent to the recipient and a copy will be sent to a mail box defined in the 'Spam mailbox' field</li> </ul>	
	<ul> <li>Discard – The mail will be quarantined. Daily notifications will be sent to user with details of quarantined emails. The user can view the email using the Quarantined Email web interface.</li> </ul>	
	Reject – The mail will be rejected and a reject command will be sent to the	



	sender mail server.	
Spam tag	Enter the tag text for emails that are categorized as spam	
Probable spam action	Select the action that has to be taken for emails that are categorized as probable spam. The options available are:	
	<ul> <li>Tag – The email will be sent to the recipient with a tag as entered in the next field 'Probable spam tag'</li> </ul>	
	Forward – The mail will be forwarded to a mail box defined in the 'Spam mailbox' field	
	CC – The mail will be sent to the recipient and a copy will be sent to a mail box defined in the 'Spam mailbox' field	
	<ul> <li>Discard – The mail will be quarantined. Daily notifications will be sent to user with details of quarantined emails. The user can view the email using the Quarantined Email web interface.</li> </ul>	
	Reject – The mail will be rejected and a reject command will be sent to the sender mail server.	
Probable spam tag	Enter the tag text for emails that are categorized as probable spam	
Spam mailbox	Enter the email address to which the forwarded and CCed spam emails configured in the 'Spam action' drop-down will be sent.	
Quarantine mails matching policies	If enabled, emails that are matching the configured profile will be quarantined.	
Quarantine Certainly SPAM Mails	If enabled, emails that are categorized as definitely spam will be quarantined.	
Quarantine SPAM Mails	If enabled, emails that are categorized as spam will be quarantined.	
Quarantine Probable SPAM Mails	If enabled, emails that are categorized as probable spam will be quarantined.	

• Click the 'Save' button to apply your changes.

### **Black List**

Click the 'Black List' tab.





Profiles: Black List Settings – Table of Column Descriptions		
Column Header	Description	
Blacklist Type	Select the type of source that has to be blacklisted. The options available are:  • IPv4 Address  • IPv6 Address  • E-mail  • Domain  • IPv4 Network  • IPv6 Network	
Blacklist Value	Enter the details for the type of blacklist selected in the first column.	
Comment	Provide an appropriate description for the blacklisted source	
Action	•	Allows administrators to add a blacklist type after filling the fields in the row  Allows administrators to delete a blacklist type from the list

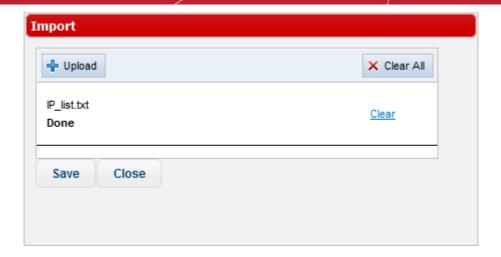
- To save the list of blacklisted sources, click the 'Export' link and save it to your system.
- · To import a list of sources to be blacklisted, click the 'Import' link



• Click the 'Upload' button, browse to the location where the file is saved and click 'Open'.

The file will be added.





- · Repeat the process to add more files.
- To remove a file, click the 'Clear' link beside it.
- To remove all the added files, click the 'Clear All' button at the top right.
- To import the list from the files, click the 'Save' button.
- To delete a blacklist type from the list, click the button under the 'Action' column header and click 'OK' in the confirmation screen.
- To remove all the blacklisted sources, click the 'Delete all' link and click 'OK' in the confirmation screen.

### White List

· Click the 'White List' tab.



Profiles: White List Settings – Table of Column Descriptions		
Column Header	Description	
Whitelist Type	Select the type of source that has to be whitelisted. The options available are:  • IPv4 Address  • IPv6 Address  • E-mail	



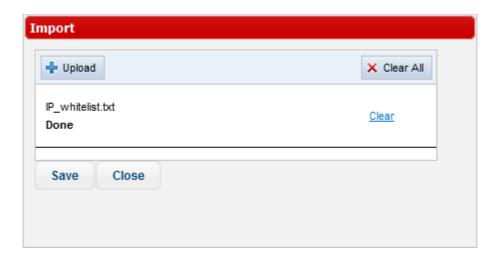
	• IF	Pomain Pv4 Network Pv6 Network
Whitelist Value	Enter the	details for the type of whitelist selected in the first column.
Comment	Provide an appropriate description for the blacklisted source	
Action	•	Allows administrators to add a whitelist type after filling the fields in the row
		Allows administrators to delete a whitelist type from the list

- To save the list of whitelisted sources, click the 'Export' link and save it to your system.
- · To import a list of sources to be whitelisted, click the 'Import' link



• Click the 'Upload' button, browse to the location where the file is saved and click 'Open'.

The file will be added.



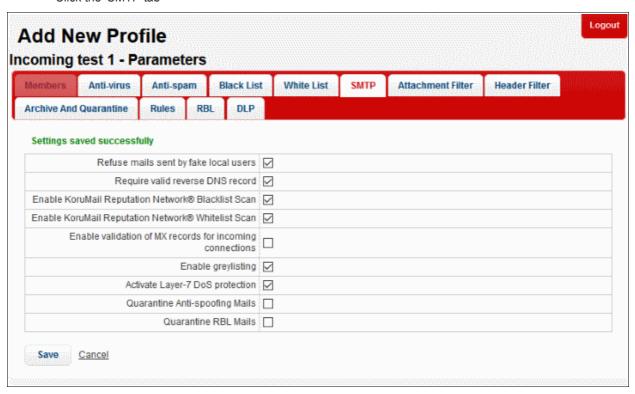
- · Repeat the process to add more files.
- To remove a file, click the 'Clear' link beside it.



- To remove all the added files, click the 'Clear All' button at the top right.
- To import the list from the files, click the 'Save' button.
- To delete a whitelist type from the list, click the button under the 'Action' column header and click 'OK' in the confirmation screen.
- To remove all the whitelisted sources, click the 'Delete all' link and click 'OK' in the confirmation screen.

### **SMTP**

Click the 'SMTP tab



Profiles: SMTP Settings - Table of Parameters		
Parameter Description		
Refuse mails sent by fake local users	If enabled, KoruMail checks the 'From' details of an outgoing message with that of the added users and rejects if the users' details are not available.	
Require valid reverse DNS record	If enabled, the added domains should have a valid reverse DNS record for the mails to be processed and delivered	
Enable KoruMail Reputation Network® Blacklist Scan	If enabled, mails are scanned for blacklist sources listed in the KoruMail Reputation Network® (KRN) servers. Please note the KRN server setting should be <b>enabled</b> in the <b>KRN</b> module.	
Enable KoruMail Reputation Network® whitelist Scan	If enabled, mails are scanned for whitelist sources listed in the KoruMail Reputation Network® (KRN) servers. Please note the KRN server setting should be <b>enabled</b> in the <b>KRN</b> module.	
Enable validation of MX records for incoming connections	MX records maintain the entries of email server details to which the received emails for the protected domains are sent. If this check box is enabled, MX records for the protected will be checked and validated.	



Enable greylisting	If enabled, KoruMail creates a Greylist of source IP address/domains from where emails are sent to recipients protected by its filtering engine. Mails received from a source for the first time is rejected by KoruMail and sends a command to the source to resend the email. Generally, spammers do not resend emails. If the email is sent again from the source again, KoruMail accepts the mail and initiates the filtering process.
Activate Layer-7 DoS protection	If enabled, KoruMail will activate the Layer 7 Denial of Service protection feature.
Quarantine Antispoofing Mails	If enabled, the spoofing mails will be Quarantined.
Quarantine RBL Mails	If enables, the RBL mails will be Quarantined.

• Click the 'Save' button to apply your changes.

### **Attachment Filter**

Click the 'Attachment Filter' tab



Profiles: Attachment Filter Settings – Table of Column Descriptions		
Column Header	Description	
Addition	Enter the keyword that should be scanned for the attachments	
Condition	Select the condition from the drop-down. The options available are:	
Action	Select the action to be performed when the condition is met for an attachment in a mail. The options available are:  Reject – The mail will be rejected and a reject response will be sent to the sender's mail server.  Discard – The mail will be quarantined. Daily notifications will be sent to user with details of quarantined emails. The user can view the email using the	



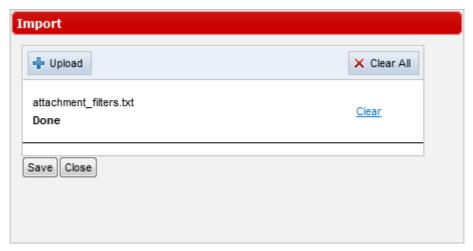
• R	duarantined Email web interface.  The mail will be delivered to the recipient without the tachment.
•	Allows administrators to add an attachment filter rule after filling the fields in the row
×	Allows administrators to delete attachment filter rule from the list

- To save the list of 'Attachment Filter' rules, click the 'Export' link and save it to your system
- To import a list of 'Attachment Filter' rules from a saved file, click the 'Import' link



• Click the 'Upload' button, browse to the location where the file is saved and click 'Open'.

The file will be added.



- · Repeat the process to add more files.
- To remove a file, click the 'Clear' link beside it.
- To remove all the added files, click the 'Clear All' button at the top right.
- To import the list from the files, click the 'Save' button.
- To delete an 'Attachment Filter' rule from the list, click the 🔯 button under the last column and click 'OK' in



the confirmation screen.

• To remove all the 'Attachment Filter' rules, click the 'Delete all' link and click 'OK' in the confirmation screen.

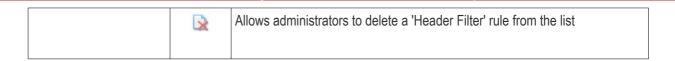
### **Header Filter**

· Click the 'Header Filter' tab

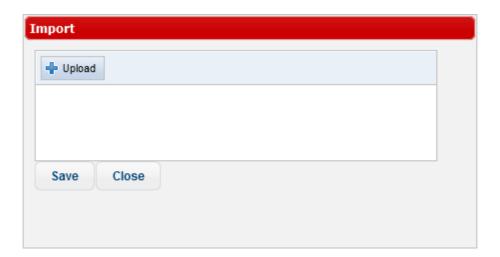


	Profiles: Header Filter Settings – Table of Column Descriptions	
Column Header	Description	
Header	Select the header type that you want to add a 'Header Filter' rule for. The choices available are:  • Subject  • Received  • To  • From	
Value	Enter the keyword that should be scanned for the selected header type.	
Туре	Select the condition from the drop-down. The options available are:	
Action	Select the action to be performed when the condition is met for a 'Header Filter' rule in a mail. The options available are:  Reject – The mail will be rejected and a reject command will be sent to the sender mail server.  Discard – The mail will be quarantined. Daily notifications will be sent to user with details of quarantined emails. The user can view the email using the Quarantined Email web interface.	
Action	Allows administrators to add a 'Header Filter' rule after filling the fields in the row	





- · To save the list of 'Header Filter' rules, click the 'Export' link and save it to your system
- To import a list of 'Header Filter' rules from a saved file, click the 'Import' link



• Click the 'Upload' button, browse to the location where the file is saved and click 'Open'.

The file will be added.

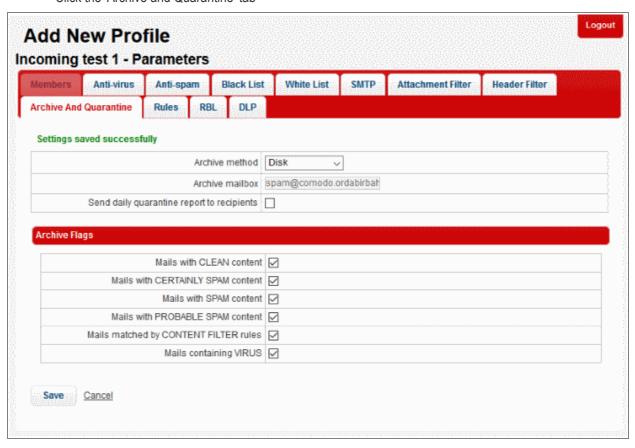


- Repeat the process to add more files.
- To remove a file, click the 'Clear' link beside it.
- To remove all the added files, click the 'Clear All' button at the top right.
- To import the list from the files, click the 'Save' button.
- To delete a 'Header Filter' rule from the list, click the button under the last column and click 'OK' in the confirmation screen.
- To remove all the 'Header Filter' rules, click the 'Delete all' link and click 'OK' in the confirmation screen.



### **Archive and Quarantine**

· Click the 'Archive and Quarantine' tab



Profiles: Archive and Quarantine Settings - Table of Parameters		
Parameter	Description	
Archive method	Select how the mails should be archived from the drop-down. The options available are:	
	None – The mails are not archived	
	<ul> <li>Forward – The mails are forwarded to the mail address entered in the next row 'Archive mailbox'</li> </ul>	
	Disk – The mails are stored in local disk	
	<ul> <li>Disk + Forward – The mails are stored in local disk and a copy is forwarded to the mail address entered in the next row 'Archive mailbox'</li> </ul>	
	Please note the archived and quarantined mails are removed from the disk as per the configuration done in the 'Quarantine & Archive Settings' interface.	
Archive mailbox	This field becomes active only when an archive method is selected in the first row.  Enter the mail address to which the archived and quarantined mails will be sent.	
Send daily quarantine report to recipients	If enabled, the users will receive daily reports of their quarantined mails. Users can view their quarantined mails in the 'KoruMail Quarantine Webmail' interface by clicking the 'Quarantine Webmail' link in the 'Login' screen.	
Archive Flags		

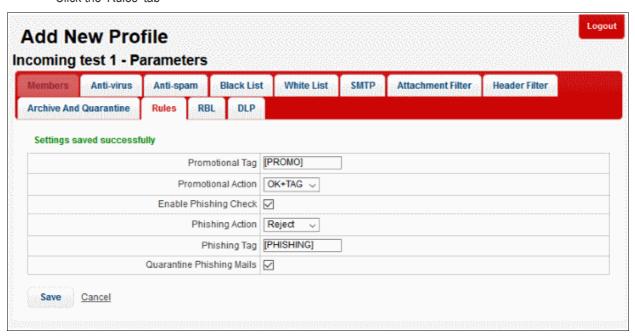


Mails with CLEAN content	If enabled, mails that are categorized as safe will be archived as per the 'Archive method' setting done in the first row.
Mails with CERTAINLY SPAM content	If enabled, mails that are categorized as 'Certainly Spam' will be archived as per the 'Archive method' setting done in the first row.
Mails with SPAM content	If enabled, mails that are categorized as 'Spam' will be archived as per the 'Archive method' setting done in the first row.
Mails with PROBABLE SPAM content	If enabled, mails that are categorized as 'Probable Spam' will be archived as per the 'Archive method' setting done in the first row.
Mails matched by CONTENT FILTER rules	If enabled, mails that are filtered for content per the settings done in 'Content Filter' in the 'Anti-spam' module will be archived as per the 'Archive method' setting done in the first row.
Mails containing VIRUS	If enabled, mails that are categorized are with virus will be archived as per the 'Archive method' setting done in the first row.

• Click the 'Save' button to apply your changes.

### **Rules**

· Click the 'Rules' tab



Rules Settings - Table of Parameters		
Parameter	Description	
Promotion Tag	Promotional emails will be sent to the recipient with the a tag as entered in this field.	
Promotional Action	Select the action to be performed when the condition is met for a 'Rules' setting in a promotional mail. The options available are:	
	OK + TAG – The tagged mail will be sent to the recipient.	
	Reject – The mail will be rejected and a reject response will be sent to the	

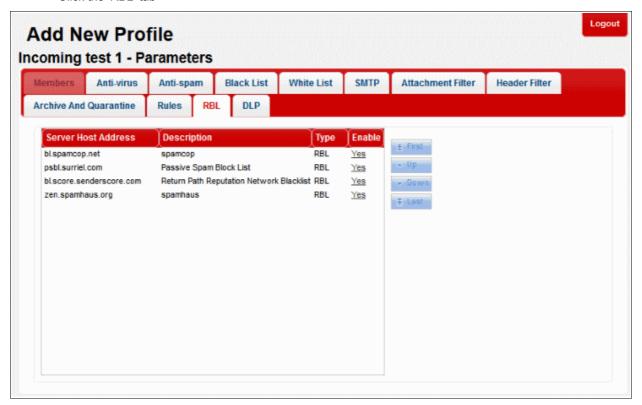


	<ul> <li>sender mail server.</li> <li>Discard – The mail will be quarantined. Daily notifications will be sent to user with details of quarantined emails. The user can view the email using the Quarantined Email web interface.</li> </ul>	
Enable Phishing Check	If enabled, checks for phishing emails.	
Phishing Action	Select the action to be performed when the condition is met for a 'Rules' setting in a phishing mail. The options available are:	
	OK + TAG – The tagged mail will be sent to the recipient.	
	<ul> <li>Reject – The mail will be rejected and a reject response will be sent to the sender mail server.</li> </ul>	
	<ul> <li>Discard – The mail will be quarantined. Daily notifications will be sent to user with details of quarantined emails. The user can view the email using the Quarantined Email web interface.</li> </ul>	
Phishing Tag	Phishing emails will be sent to the recipient with the a tag as entered in this field.	
Quarantine Phishing Emails	If enabled, phishing mails will be Quarantined.	

• Click the 'Save' button to apply your changes.

### Realtime Blackhole List (RBL)

Click the 'RBL' tab



The screen displays the RBL servers that are available by default and added manually. Refer to the section 'Managing RBL Servers' for more details.

RBL Servers - Table of Column Descriptions



Column Header	Description
Server Host Address	The address of the RBL server.
Description	The description provided at the time of adding the RBL server.
Туре	The type of block list selected.
Enable	Allows administrators to activate or deactivate a RBL server in the list. If a server is disabled, KoruMail skips it and refers to the next server in the line.

The control buttons next to the table allows to reorder the RBL server list for checking the blacklisted IP addresses available in the servers. The enabled RBL server listed first will be checked first and move down the order. Use the control buttons to move a server up or down the order.



### **Data Leak Prevention (DLP)**

The DLP feature is capable of scanning mails for important key words such as credit card, social security numbers, attachments and takes action as per the settings. Please note that the DLP module should be enabled for the settings configured here to take effect. Refer to the section 'Data Leak Prevention' for more details.

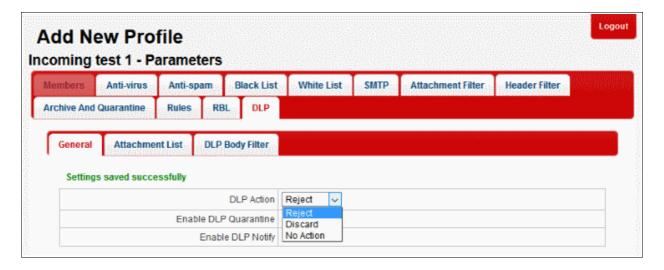
Click the 'DLP' tab





#### **DLP Action**

These settings determine what action should be taken if KoruMail detects a message that could present a data leak.



The options available are:

- No Action The mail will be allowed and the system admin will be notified if 'DLP Notify' is enabled.
- Reject The mail will be rejected and a reject warning will be sent to the sender's email address.
- Discard The mail will be deleted and if 'DLP Quarantine' is enabled, it will be quarantined and the system
  admin will be notified.

#### **DLP Quarantine**

- · Click the 'DLP Quarantine' bar
- Select the check box beside 'Enable DLP Quarantine' to quarantine mails with data leak. Please note the setting in 'DLP Action' should be 'Discard' for mails to quarantined.

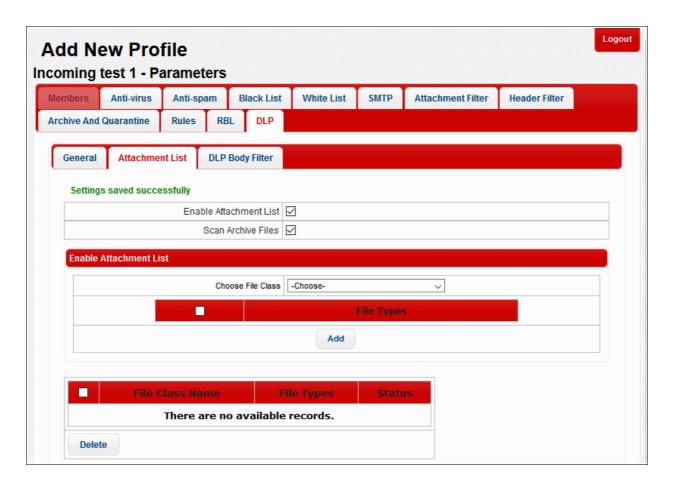
#### **DLP Notify**

- Click the 'DLP Notify' bar
- Enable DLP Notify Select the check box to keep the system admin informed about DLP breaches.



### **Attachment List**

Click the 'Attachment List' bar

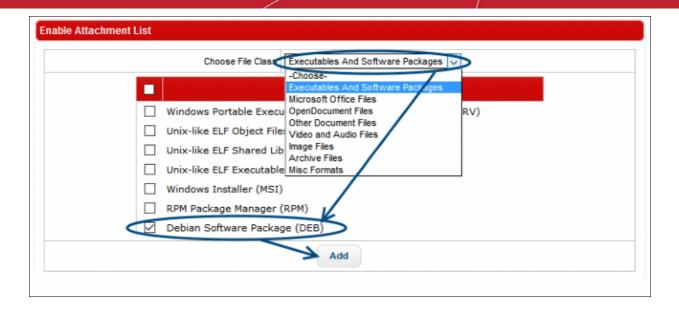


- Enable Attachment List Select the check box to block emails with attachment file class defined below in the table.
- Scan Archive Files Select the check box to scan the attached zip files and block emails with attachment file class defined below in the table.

### To add a file class

• Select the file class from the 'Choose File Class' drop-down

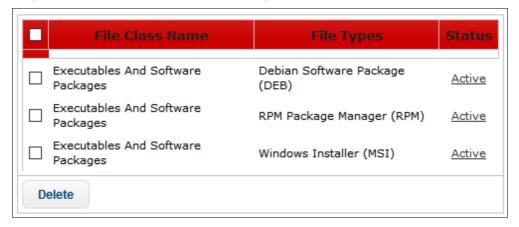




The file types for the selected file class will be displayed on the right side table.

Select the file type or the check box above to select all the file types and click the 'Add' button beside it.

The added file types for the selected file class will be displayed in the table below the first table.



- Clicking the link beside a file type under the 'Status' column header toggles the status between 'Active' and 'Passive'. 'Active' status indicates emails with attached file type will be blocked.
- To delete a file type from the list, select it and click the 'Delete' button. To delete all file types, select the check box beside 'File Class Name' column header and click the 'Delete button.

#### **DLP Body Filter**

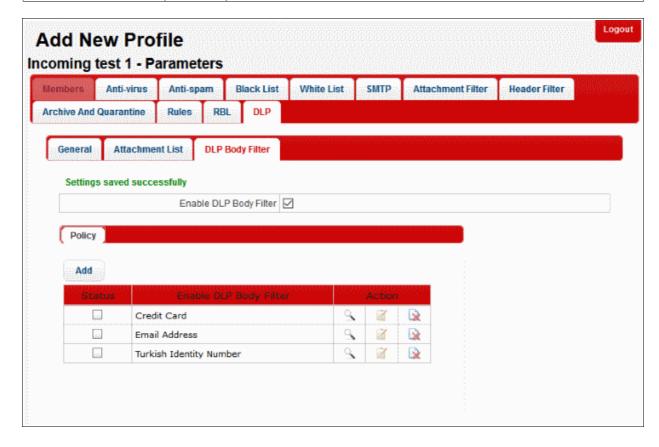
The 'DLP Body Filter' feature searches the content of an email for sensitive information such as credit card details, email address and so on and take action as per the settings done in 'DLP Action'. KoruMail comes with three predefined DLP Body Filters and allows the administrators to add more filters as required.

Enable DLP Body Filter: Select the check box to apply the configured body filters

Profiles: DLP Body Filter Settings – Table of Column Descriptions	
Column Header	Description

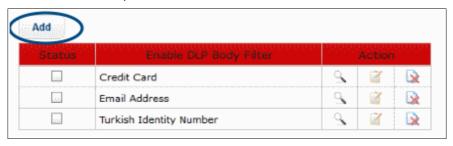


Status	Select the	check box to enable the filter
Enable DLP Body Filter	The name	of the filter
Action	٩	Allows to view the details of the body filter
	Ì	Allows to edit a body filter
	×	Allows to delete a body filter



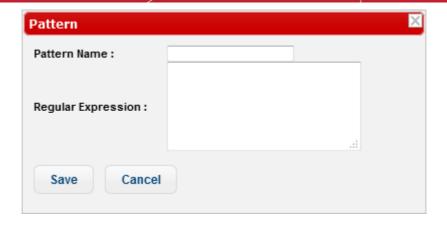
### To add a new DLP body filter

· Click the 'Add' button at the top of the table



The filter 'Pattern' screen will be displayed.





- Pattern Name: Enter the name of the filter pattern
- Regular Expression: Enter the regular expression to define the search pattern. To know more about Regular
  Expression, refer to Wikipedia at <a href="http://en.wikipedia.org/wiki/Regular\_expression">http://en.wikipedia.org/wiki/Regular\_expression</a>. You can also enter
  keywords in the field to search and block the email containing it.

### To view the details of a pattern

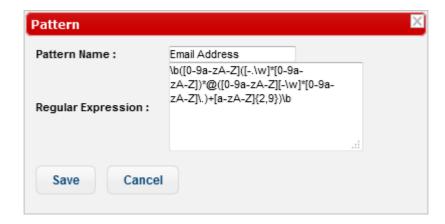
Click the sicon beside a body filter that you want to view the details



• Click the 'Cancel' button or close the dialog to return to main screen.

### To edit a body filter

Click the icon beside a body filter that you want to edit the details

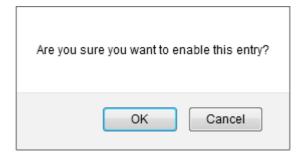


• Edit the details as required and click the 'Save' button



### To delete a body filter

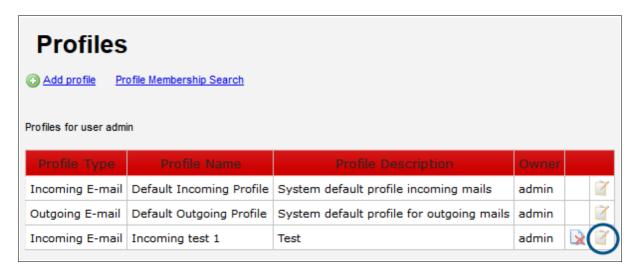
Click the icon beside a body filter that you want to delete



Click 'OK' to confirm the deletion.

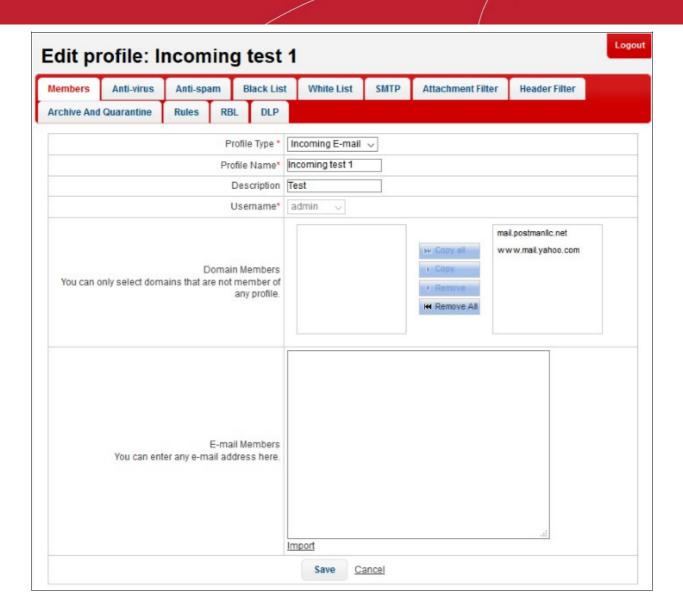
### 9.2 Editing a Profile

Click the icon beside a profile in the 'Profiles' screen that you want to edit the details



The 'Edit Profile' screen will be displayed.



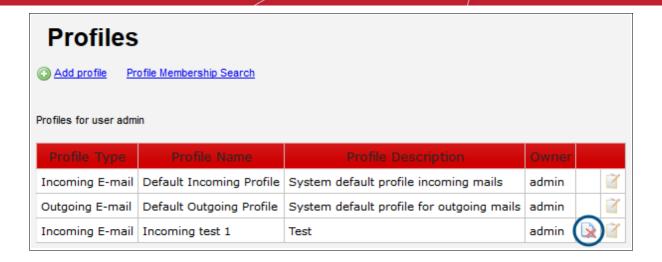


• Edit the parameters as required. The procedure is similar to adding a new profile. Refer to the section 'Adding and Configuring a New Profile' for more details.

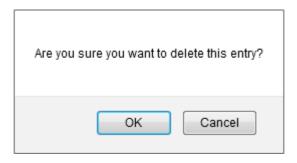
### 9.3 Deleting a Profile

Click the icon beside a profile in the 'Profiles' screen that you want to delete from the list.





Click 'OK' to confirm the deletion.

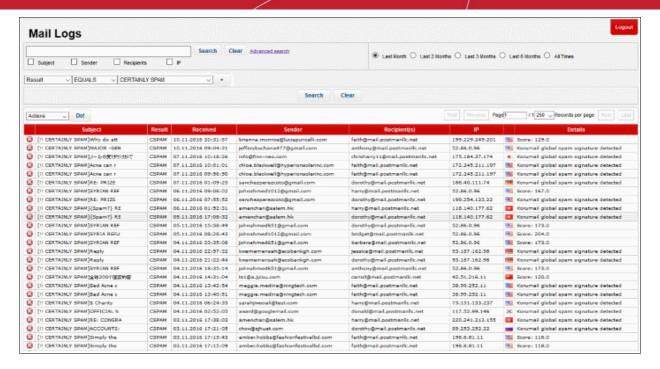


Please note if an incoming or outgoing profile is deleted, the respective default profile will apply for the domains and users.

# 10 Reports

The 'Reports' section in KoruMail provides comprehensive details of all mails for protected domains that were routed via KoruMail. The section is divided into six subsections, Mail Logs, SMTP Queue, Delivery Logs, SMTP-AUTH Logs, Summary Reports, Domain Reports and Attachment Verdict Reports. Each section provides a detailed report of each item, for example, the 'Mail Logs' section displays the details of mails that are categorized as Spam, Blacklisted and so on.





Refer to the following sections for more details:

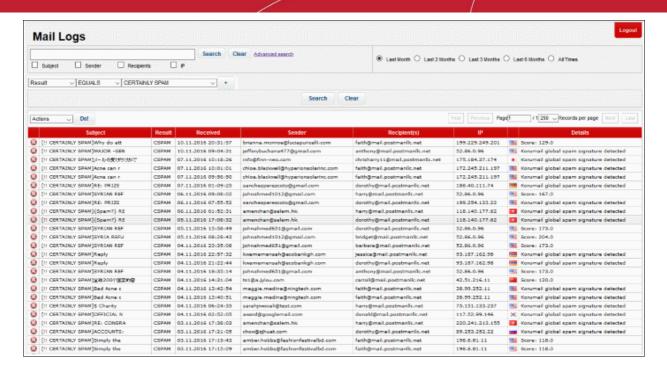
- Mail Logs Report
- SMTP Queue Report
- Delivery Logs Report
- SMTP-AUTH Logs Report
- Summary Report
- Domain Report
- Attachment Verdict Reports

### 10.1 Mail Logs Report

The 'Mail Logs' report provides complete details of incoming and outgoing mails for all domains that have been added to KoruMail. The logs show the subject of the mail, date and time received by KoruMail, the result of the filtering process and more.

To open the 'Mail Logs' interface, click 'Reports' and then click 'Mail Logs'





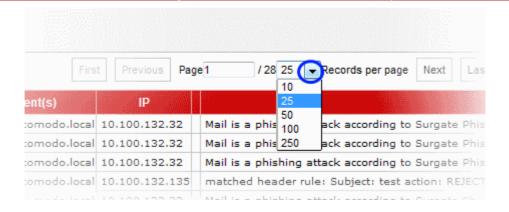
Mail Logs Report – Table of Column Descriptions	
Column Header	Description
Icon	Indicates the status of the mail after the filtering process. Placing your mouse cursor over an icon will show a description of the action.
	- Relayed: Indicates the mail has successfully passed the filtering process and user verified.
	- Rejected: Indicates the mail is rejected by KoruMail after the filtering process and reject message sent to the sender mail server.
	- Discarded: Indicates the mail is quarantined
	- Delayed: Indicates the source is <b>greylisted</b> .
Subject	The content in the 'Subject' line of the mails
Result	The result for a mail after the filtering process.
Received	Date and time of email received by KoruMail
Sender	Domain details of the email sender
Recipient(s)	Domain details of the recipient(s)
IP	The IP address of the system from where the mail was sent. The next column displays the flag of the originating country.
Details	Provides the reasons why a mail is rejected, delayed and so on.

At the top and bottom of the screen, you have the option to set the number of records to be displayed per page and export the report in CSV format.

### To configure the number of records to be displayed per page

Click the 'Records per page' drop-down

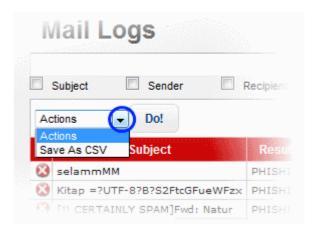




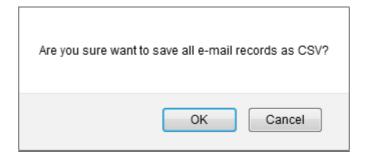
- Select the number of records per page to be displayed from the options.
- Click the 'First', 'Previous', 'Next' and 'Last' buttons to navigate to the respective pages.

### To export the report to a CSV file

· Click the 'Actions' drop-down

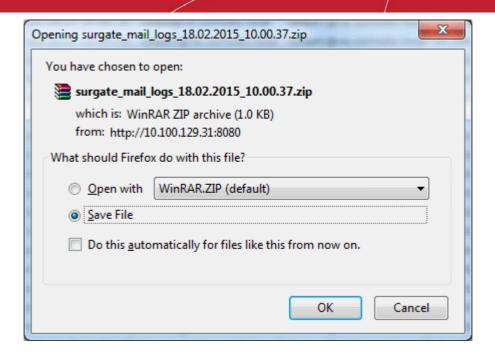


Select 'Save As CSV' and click the 'Do!' button



Click 'OK' in the confirmation dialog.





Click 'OK' to save the report in your system.

### **Search Options**

You can search for a particular record or records in the report by using simple or advanced search feature.

- Simple Search
- Advanced Search

#### Simple Search

The simple search options allows you to search for a particular record or records based on 'Subject', 'Sender', 'Recipients' and / or 'IP' details only.



- To search for records based on the entries under 'Subject', 'Sender', 'Recipients' and / or 'IP' columns, enter the text or number fully or partially in the field and click the 'Search' button
- To search for records based on the entries under a particular column or columns, select the respective check boxes, enter the text or number fully or partially in the field and click the the 'Search' button. For example, if you want to search for a particular record for sender and recipients, select the 'Sender' and 'Recipients' check boxes, enter the text fully or partially in the field and click the 'Search' button.

#### **Advanced Search**

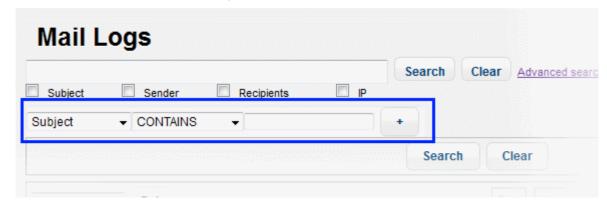
The 'Advanced Search' option allows you a more granular search by including rules and filters.



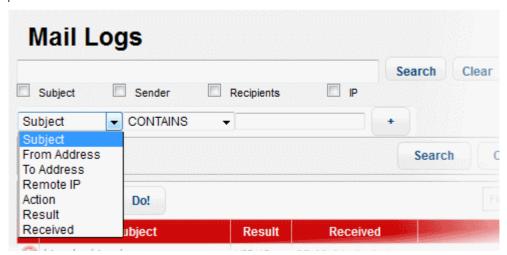
· Click the 'Advanced Search' link at the top of the screen.



The 'Advanced Search' option will be displayed.

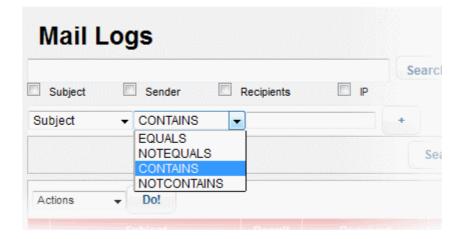


The first drop-down contains the column headers that can be selected for an advanced search.

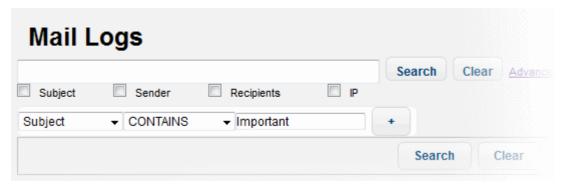


The second column contains the condition for a search, which depends on the item selected in the first column and text/number entered or options selected in the third column.

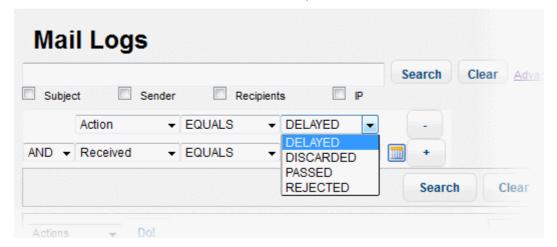




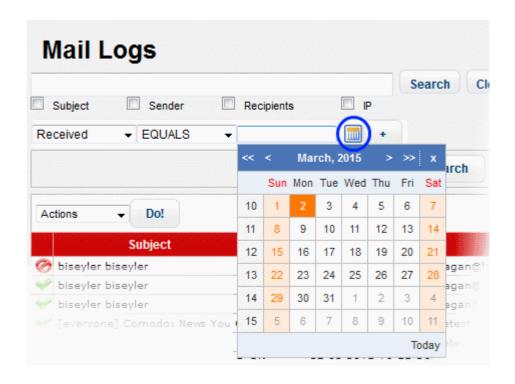
The third column allows you to enter the text/number or select from the options depending on the selection in the first column. For example, choosing 'Subject', 'From Address' or 'Remote IP' allows you to enter the text in the third column



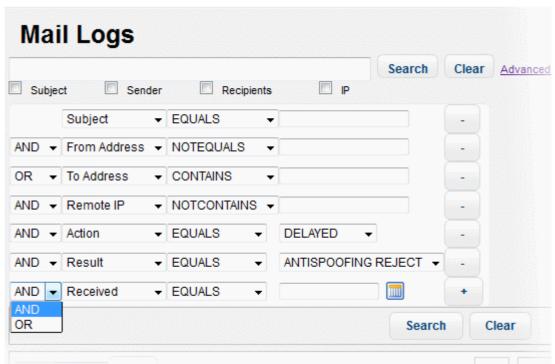
If you select 'Action' or 'Result' in the first column, then further options can be selected from the third column.



If you select 'Received' in the first column, then you can enter a date or select from the calendar.



You can add more filters by clicking for narrowing down your search.



You can remove a filter by clicking the \_\_\_\_ button beside it.

You can create a filter rule by selecting 'AND' or 'OR' option beside each of the added filter.

- Click the 'Clear' button to remove the advanced search rules.
- Click the 'Search' button to start the search per the filter rule.



The items will be searched for in the ascending order and results displayed.

To remove the advanced search field, click the 'Advanced search' link again.

Administrators can filter results on monthly basis. The filters available are 'Last Month', 'Last 2 Months', 'Last 3 Months', 'Last 6 Months' and 'All Times'.



### **Details of a Log Entry**

Clicking anywhere on the row of a log record will display the details of the mail log.



The details screen allows you to mark the mail log as 'Spam' or 'Not spam' depending the mail category. You can also add the sender, sending domain and IP to blacklist or whitelist.

To mark an email as 'Spam' or 'Not spam', click the relevant button at the bottom of the screen.

The changes will be saved and mails from the sender will be applied the new settings by KoruMail.

To add the sender or domain to blacklist/whitelist, click the drop-down in the 'Sender' row.





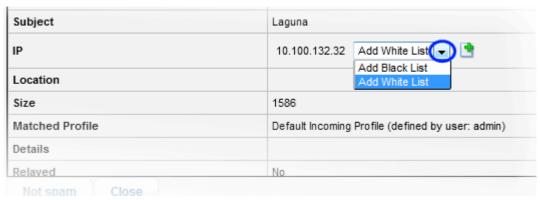
Select the category from the options that you want to add the email and click the button beside it.



• Enter the reason for changing the category and click the 'Save' button.

The changes will be saved and mails from the sender will be applied the new settings by KoruMail.

• To add the originating IP to blacklist/whitelist, click the drop-down in the 'IP' row.



Select the category from the options that you want to add the IP and click the button beside it.



• Enter the reason for changing the category and click the 'Save' button.

The changes will be saved and mails from the IP will be applied the new settings by KoruMail.

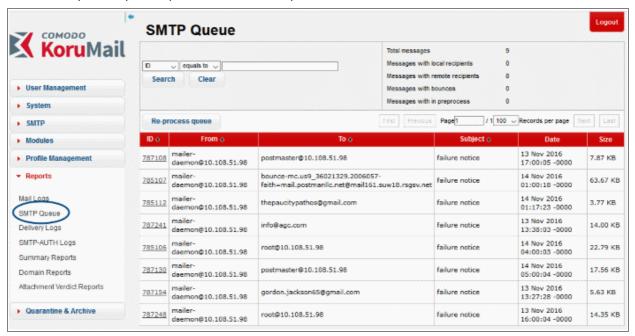
You can view the previous or next record by click the 💝 🕪 buttons at the top of a details screen.



### 10.2 SMTP Queue Report

The 'SMTP Queue' report provides details of mails that are queued for delivery.

To open the queue report interface, click 'Reports' then click 'SMTP Queue'.

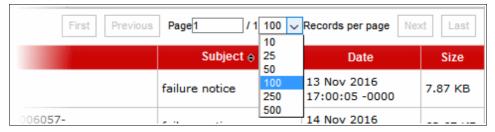


SMTP Queue Report – Table of Column Descriptions	
Column Header	Description
ID	The identification number of the email queue that holds the status or message of the queue.
From	Sender's email address
То	Recipient's email address
Subject	Subject of the email in SMTP queue
Date	Date and time that the mail was sent
Size	Size of the email in SMTP queue

At the top and bottom of the screen you have the option to set the number of records to be displayed per page.

### To configure the number of records to be displayed per page

Click the 'Records per page' drop-down



- Select the number of records per page to be displayed from the options. The default is 100.
- Click the 'First', 'Previous', 'Next' and 'Last' buttons to navigate through the report.



### **Search Options**

You can search for a particular record by using the search field at the upper left. Use the drop-down menus to specify granular search criteria. This is similar to the advanced search option explained in the 'Mail Logs' section.

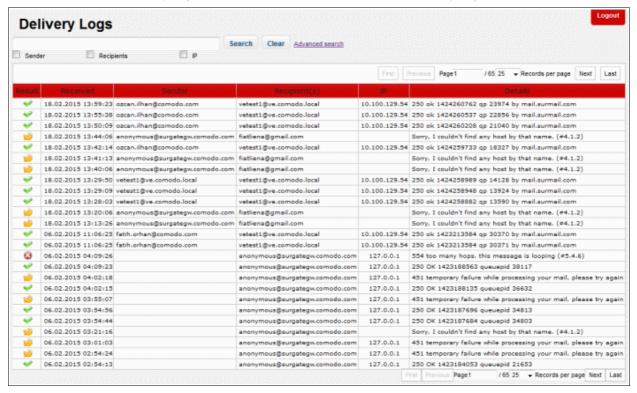
### Message Statuses in SMTP Queue

- Total messages: Displays the total number of messages in the SMTP queue.
- Messages with local recipients: Displays the number of messages with the local recipients.
- Messages with remote recipients: Displays the number of messages with the remote recipients.
- Messages with bounces: Displays the number of mails that are bounced.
- Messages with in preprocess: Displays the number of mails with in preprocess

### 10.3 Delivery Logs Report

While 'Mails Logs' provide a report of all incoming and outgoing mails irrespective of whether mails are accepted by mail servers or not, 'Delivery Logs' provide a report of all incoming and outgoing mails that are only accepted by mail servers.

To open the 'Delivery Logs' interface, click 'Reports' and then click 'Delivery Logs'



Delivery Logs Report – Table of Column Descriptions		
Column Header	Description	
Result	Indicates the status of the mail processed by mail server. The tool tip on hovering the mouse cursor over an icon displays the action.	
	✓ - Success: Indicates the mail has been successfully delivered to the recipient.	
	Permanent Error: Indicates the mail server failed to deliver the mail to the recipient.	

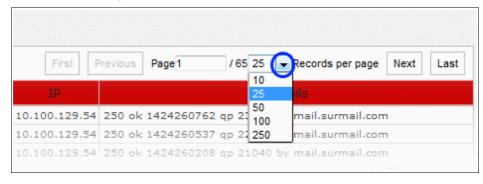


	- Temporary: Indicates it is temporary error and the server will try again to deliver.
Received	Date and time of email received by KoruMail
Sender	Domain details of the email sender
Recipient(s)	Domain details of the recipient(s)
IP	The details of the recipient's IP address
Details	Provides details such as the message ID and reasons for permanent and temporary error

At the top and bottom of the screen, you have the option to set the number of records to be displayed per page.

### To configure the number of records to be displayed per page

· Click the 'Records per page' drop-down



- Select the number of records per page to be displayed from the options.
- Click the 'First', 'Previous', 'Next' and 'Last' buttons to navigate to the respective pages.

### **Search Options**

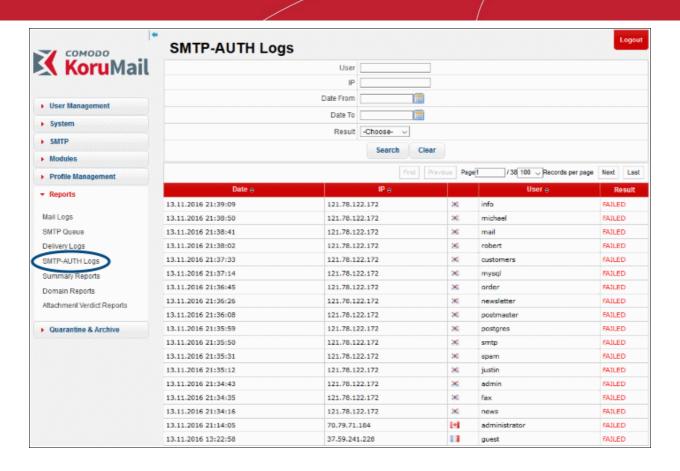
You can search for a particular record or records in the report by using simple or advanced search feature. This is similar to the **search option** explained in the 'Mail Logs' section.

### 10.4 SMTP-AUTH Logs Report

The 'SMTP-AUTH Logs Report' contains logs of every SMTP client log-in that required authentication.

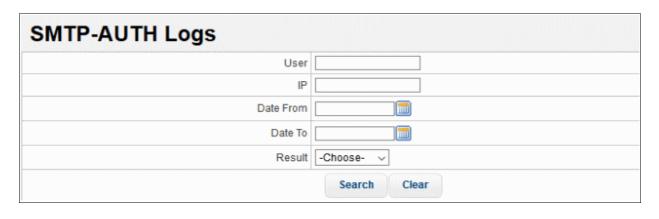
Click reports then 'SMTP-AUTH Logs' to open the interface.





SMTP-AUTH Logs Report – Table of Column Descriptions	
Column Header	Description
Result	Indicates the status of the mail processed by SMTP mail server.
	Success : Indicates that the SMTP client has logged in successfully
	Failed: Indicates that the SMTP client login has failed
User	The name of the SMTP mail client
IP	The IP address of the SMTP mail client
Date	The date and time of the log in event

The 'Search' options allows you to search for a particular record or records based on the 'User', 'IP', 'Date From', 'Date To' or 'Result' of the authentication of SMTP client log-in.



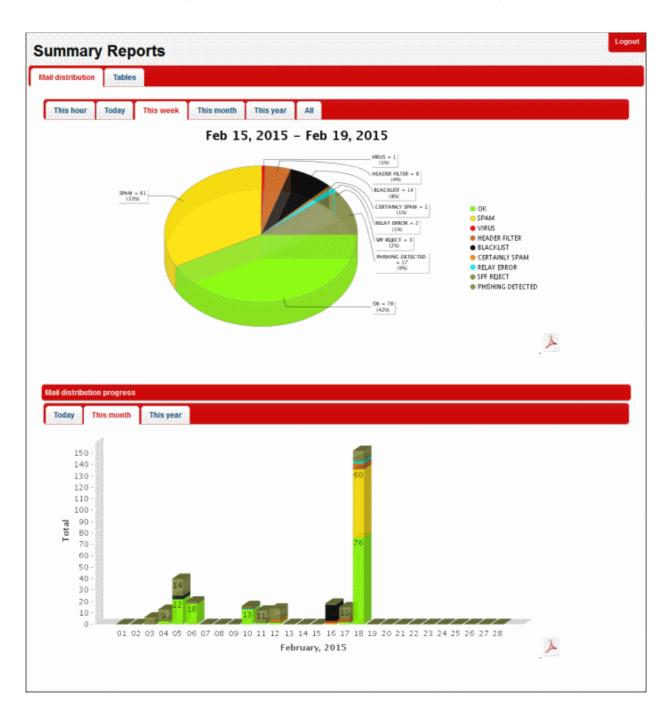


- To search for records based on the entries under 'User', 'IP', 'Date From', 'Date To' or 'Result', enter the text or number fully or partially in the field and click the 'Search' button
- To refresh search, click 'Clear'.

### 10.5 Summary Reports

The 'Summary Reports' screen in KoruMail provides a comprehensive report of filtering results of mails for all domains that are enrolled. The summary report is available as pie chart, bar chart and table formats. The tabs at the top of the interface allows to view and download the reports in graphical or table format. The upper portion of the screen displays the report in pie chart format and is available for hourly, daily, weekly, monthly, yearly and full from the time of installation. The lower portion displays the results in bar chart format and is available on hourly, monthly and yearly basis.

To open the 'Summary Reports' interface, click 'Reports' and then click 'Summary Reports'





You can view and download the reports in graphical as well as in table format.

- Graphical Representation
- Table Representation

#### To view and download the report in graphical format

Click the 'Mail Distribution' tab at the top

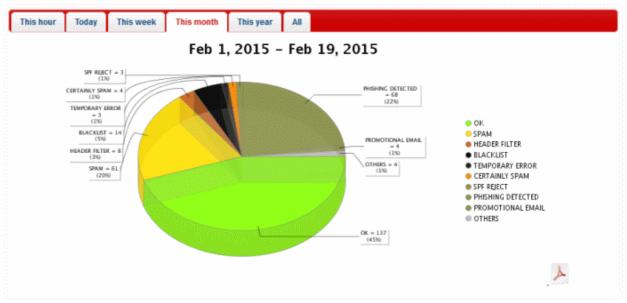
The results in pie chart format at the top and bar chart format at the bottom will be displayed.

To view the results for a particular period, click the relevant tabs at the top.

#### Pie Chart



• Click the desired period for which you want to view and download the report. The available periods are hourly, daily, weekly, monthly, yearly and from the time of KoruMail installation.

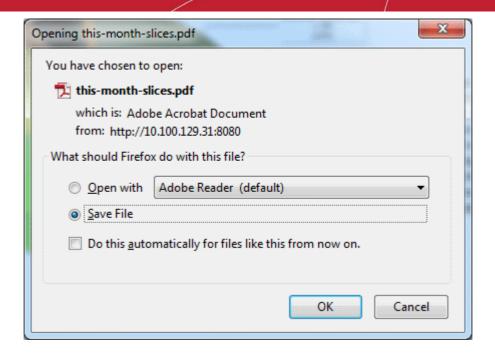


The different segments of the pie chart provides the details of the filtering results for the selected period such as mails categorized as spam, phishing, blacklisted and so on.

• To download the pie chart results, click the PDF icon







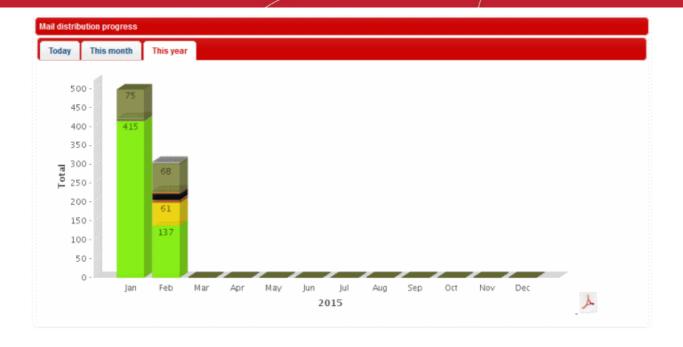
· Click 'OK' to download the report in PDF format.

#### **Bar Chart**

• Click the desired period for which you want to view and download the report in bar chart format. The available periods are daily, monthly and yearly.

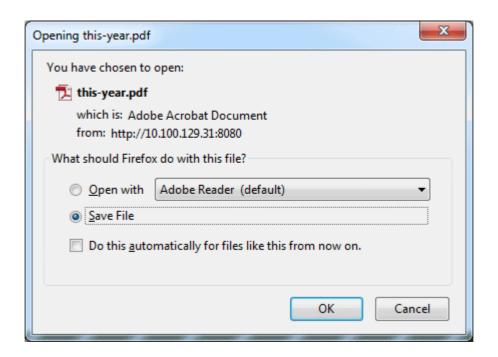


The report for the selected period will be displayed.



The Y-axis displays the number of mails and X-axis displays the hours/days/months for the selected period.

To download the bar chart results, click the PDF icon



Click 'OK' to download the report in PDF format.

#### To view and download the report in table format

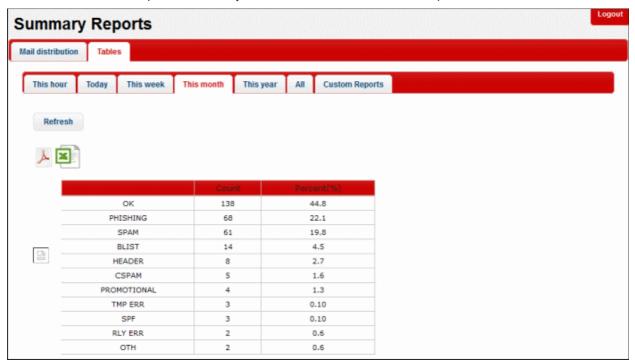
Click the 'Tables' tab at the top of the 'Summary Reports' screen.





The report in table format is available for the periods hourly, daily, weekly, monthly, yearly and from the time of KoruMail installation. You can also define a period and generate a custom report.

Click the desired period for which you want to view and download the report in table format.



The report for the selected period will be displayed. The first column indicates the categorization of mails, the second column displays the number for each category and the third column provides the results in percentage for each category.

• To download the report in PDF format, click the PDF icon



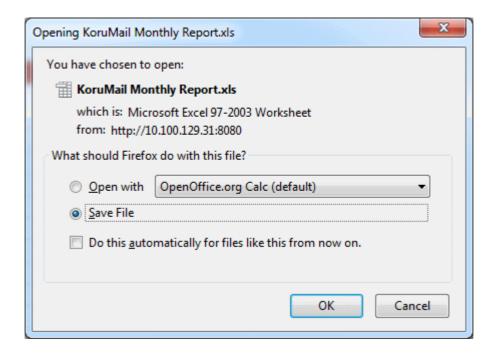




Click 'OK' to download the report in PDF format.



· To download the report in XLS (spreadsheet) format, click the XLS icon



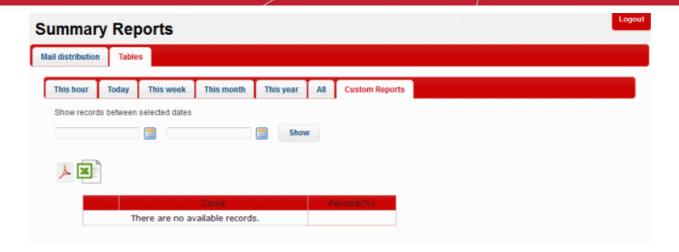
Click 'OK' to download the report in XLS format.

#### To generate a custom report in table format

Click the 'Custom Reports' tab at the top

The fields to select the 'From' and 'To' period will be displayed.





· Click on the fields or calendar icon and select the period from the calendar.



· Click the 'Show' button after selecting the custom period.





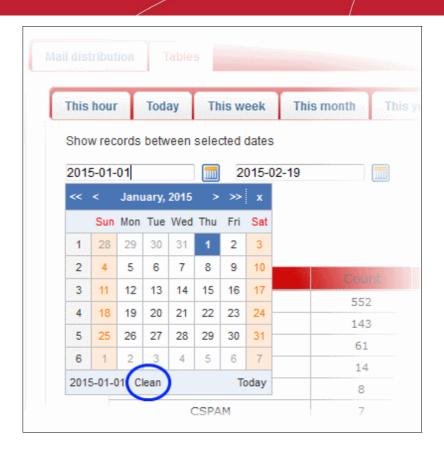
The report for the selected custom period will be displayed. The first column indicates the categorization of mails, the second column displays the number for each category and the third column provides the results in percentage for each category.

• To download the custom report in PDF format, click the PDF icon and click 'OK' in the download dialogue to save the report.



- To download the custom report in XLS (spreadsheet) format, click the XLS icon download dialogue to save the report.
- To clear the custom period, click on the period fields or calendar icon and click the 'Clean' button.



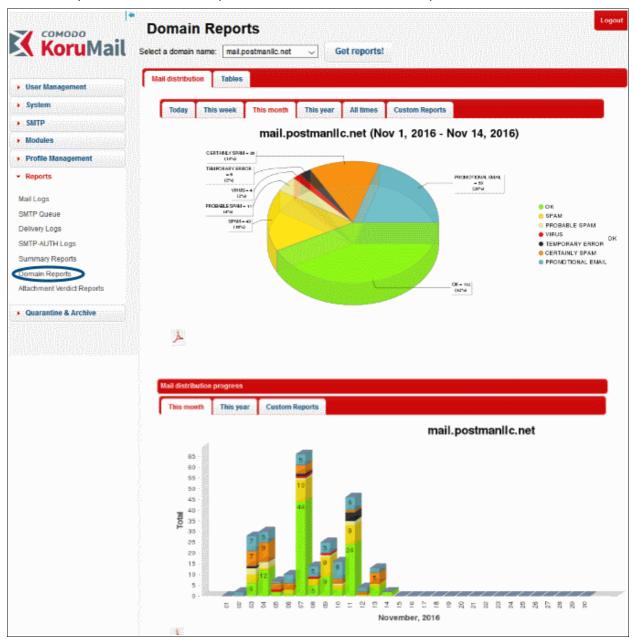




### 10.6 Domain Reports

The 'Domain Reports' interface contains detailed statistics and graphs about your monitored domains.

To open the interface, click 'Reports' on the left then click 'Domains Reports':



You can change the domain shown in the charts by using the drop-down menu at the top of the interface.

You can view and download the reports in graphical or table format.

- Graphical Representation
- Table Representation

#### **Graphical Representation**

#### **Mail Distribution:**

The 'Mail Distribution' chart categorizes mails sent/received on the specified domain according to mail category. Categories include 'OK', 'Spam', 'Probable Spam', 'Virus' etc. Use the tabs above the chart to change the time-period

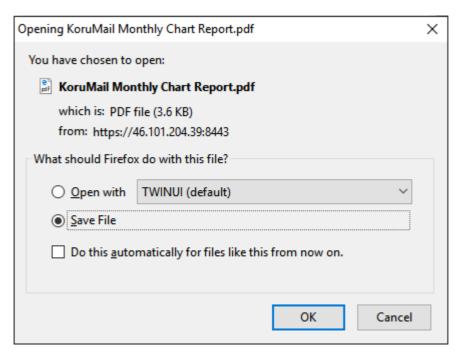


covered by the chart. Choices include 'Today', 'This Week', 'This Month', 'This Year' and 'All Time'.

#### Mail Distribution Progress:

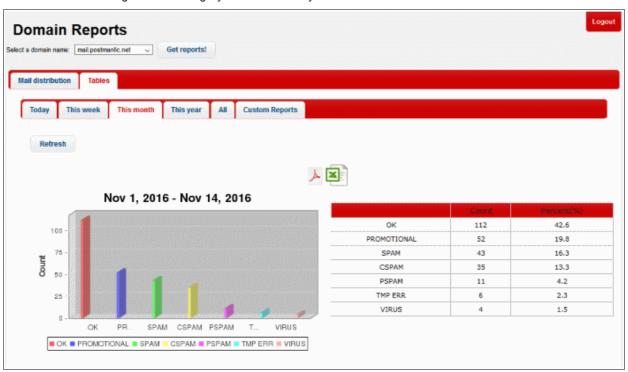
The 'Mail Distribution Progress' bar chart shows how many mails of each category were sent/received on each day. over a period of a month or a year.

To export the report to PDF, click the PDF icon at the bottom-right of either of the two-chart types:



#### Tables:

The 'Tables' report displays the number of mails sent/received in each every mail category. The bar graph displays 'Count' on the x-axis against the category of mails on the y-axis.





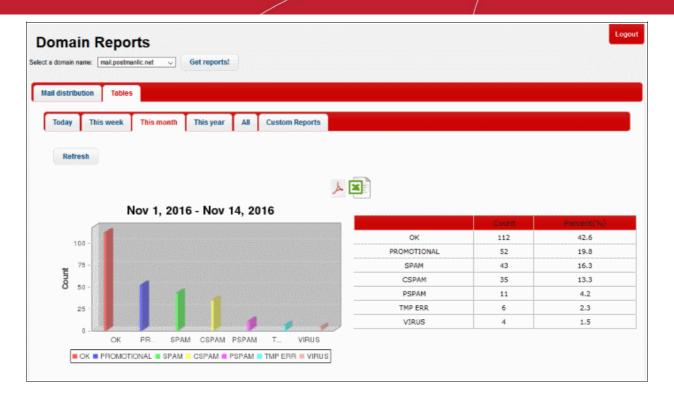
To generate a custom report in table format

Click the 'Custom Reports' tab at the top

The fields to select the 'From' and 'To' period will be displayed.

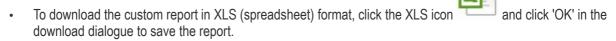


- Click on the fields or calendar icon and select the period from the calendar.
- Click the 'Show' button after selecting the custom period.



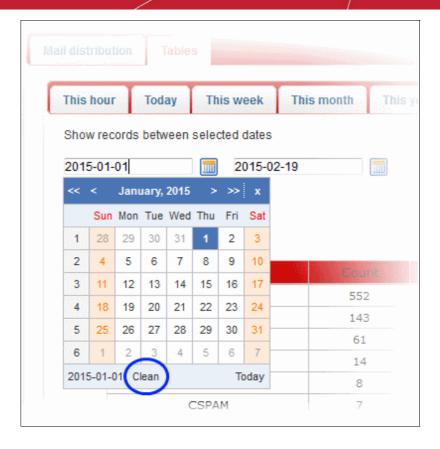
The report for the selected custom period will be displayed. The first column indicates the categorization of mails, the second column displays the number for each category and the third column provides the results in percentage for each category.

To download the custom report in PDF format, click the PDF icon and click 'OK' in the download dialogue to save the report.



• To clear the custom period, click on the period fields or calendar icon and click the 'Clean' button.





### 10.7 Attachment Verdict Reports

The 'Attachment Verdict Reports' interface contains all the email attachment files for which Korumail has returned a verdict and the corresponding actions taken.

• To open the interface, click 'Reports' on the left then click 'Attachment Verdict Reports'.



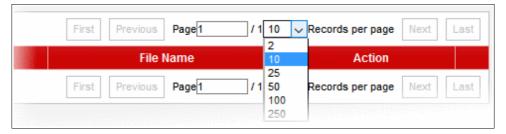
Attachment Verdict Report – Table of Column Descriptions		
Column Header	Description	
Received	Date and time of email received by KoruMail.	
Subject	Content in the 'Subject' line of the mails containing attachment.	
Sender	Domain details of the email sender.	
Recipient(s)	Domain details of the recipient(s).	
File Name	Name of the file that is given a verdict.	



Action Action taken for verdict given.

#### To configure the number of records to be displayed per page

Click the 'Records per page' drop-down



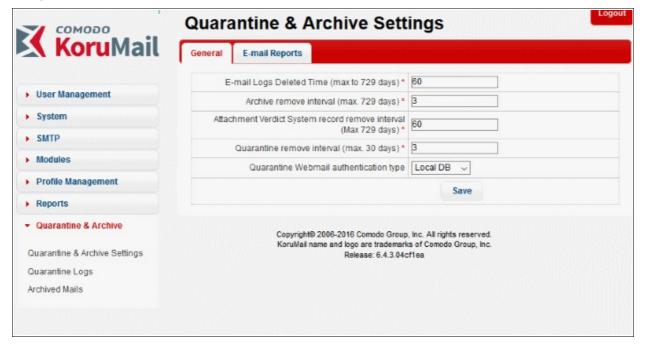
- Select the number of records per page to be displayed from the options. The default is 10.
- Click the 'First', 'Previous', 'Next' and 'Last' buttons to navigate through the report.

The 'Search' options allows you to search for a particular record or records based on the 'Filename', 'Subject', 'Sender' or 'Recipient(s)' of the file with verdict.

- To search for records based on the entries under 'Filename', 'Subject', 'Sender' or 'Recipient(s)' of the file
  with verdict reports, click any one of the radio buttons and enter the text or number fully or partially in the
  text field and then click the 'Search' button
- To refresh search, click 'Clear'.

# 11 Quarantine & Archive

The 'Quarantine & Archive' sections allows administrators to configure the number of days that logs and archived files should be retained in KoruMail. Details of 'Quarantine Logs' and 'Archived Mails' can also be viewed, category changed and records exported to a CSV file.



Click the following links for more details:

Quarantine & Archive Settings

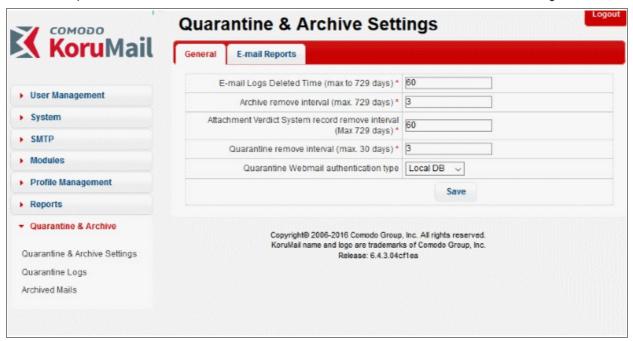


- Quarantine Logs
- Archived Mails

### 11.1 Quarantine & Archive Settings

The 'Quarantine & Archive Settings' interface allows administrators to set the period to retain 'Mail Logs', 'Archived Mails' and 'Quarantine Logs' in KoruMail. You can also set the method of user authentication for accessing their quarantined email at 'Quarantine Webmail' interface. Admins can also create a mail template that is sent to users as notification to access their quarantined mails.

To open the interface, click 'Quarantine & Archive' and then click 'Quarantine & Archive Settings'



Click the following links for more details:

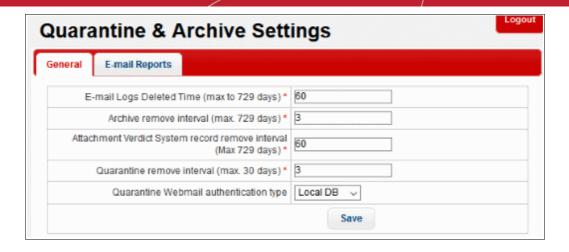
- Quarantine & Archive General Settings
- Email Reports Settings

### 11.1.1 Quarantine & Archive General Settings

The 'General' tab in 'Quarantine & Archive Settings' allows administrators to set the period to retain 'Mail Logs', 'Archived Mails' and 'Quarantine Logs' in KoruMail. Admins also can set the method of user authentication for users that access their quarantined emails at 'Quarantined Webmail' interface.

To open the interface, click the 'General' tab in the 'Quarantine & Archive' screen





Quarantine & Archive General Settings - Table of Parameters		
Parameter	Description	
E-mail Logs Deleted Time	Enter the number of days for which the email logs will be retained. The maximum period is 729 days. Refer to the section 'Mail Logs Report' for more details.	
Archive remove interval	Enter the number of days for which the archived mail records will be retained. The maximum period is 729 days. Refer to the section 'Archived Mails' for more details.	
Attachment Verdict System record remove Interval	Enter the number of days for which the Attachment verdict records will be retained. The maximum period is 729 days. Refer to section 'Attachment Verdict System' for more details.	
Quarantine remove interval	Enter the number of days after which the 'Quarantined Logs' will be removed. The maximum period that can be set is 30 days. Refer to the section 'Quarantine Logs' for more details.	
Quarantine Webmail authentication type	Select the user authentication type from the option for users that access the Webmail interface to check their quarantined mails.	

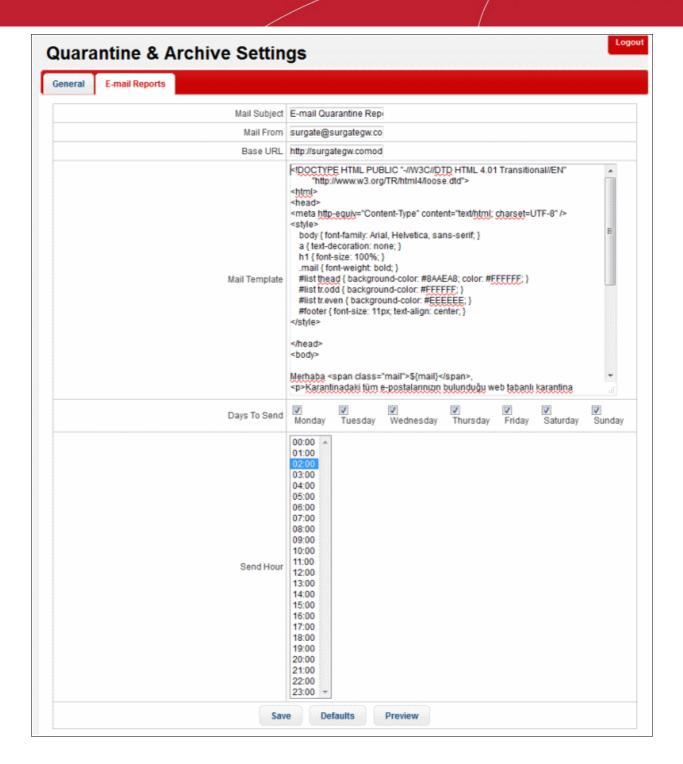
Click the 'Save' button to apply your changes.

### 11.1.2 Email Reports Settings

KoruMail allow users to access their quarantined emails via a separate web based quarantine page that contains all their quarantined messages. The 'Email Report' section allows administrators to configure the URL of the 'Quarantine Webmail' page, the email notification subject line, from address, mail message template and the days and time the email should be sent to users. Please note the users should be added in 'Quarantine Webmail Users' and password set for them to access the 'Quarantine Webmail' page. The 'Send daily quarantine report to recipients' check box should also be enabled in the 'Archive And Quarantine' tab of the profile that is applied to the users.

To open the 'E-mail Reports' interface, click the 'E-mail Reports' tab in the 'Quarantine & Archive' screen.



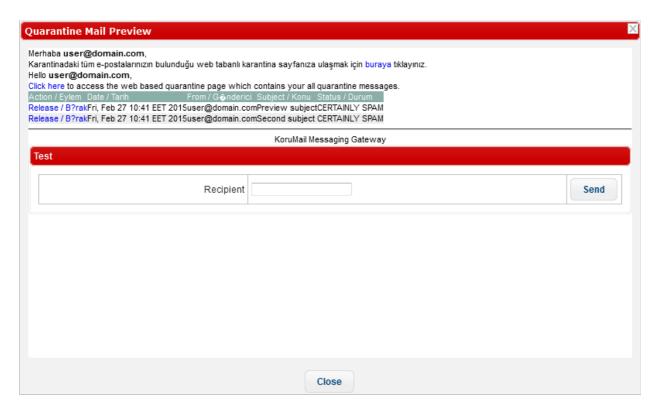


Quarantine & Archive – E-mail Reports Settings - Table of Parameters	
Parameter	Description
Mail Subject	Enter the subject line for the automated email report
Mail From	Enter the address from which the email reports will be sent
Base URL	Enter URL of 'Quarantine Webmail' page that users should access to view their quarantined emails
Mail Template	The message body of the mail.
Days to Send	Select the day(s) to send the email notifications



Send Hour	Select the hour of the day to send the email notifications for the selected days.

- Click the 'Default' button to restore the settings to default values.
- · Click the 'Preview' button to view the mail that will be sent to users



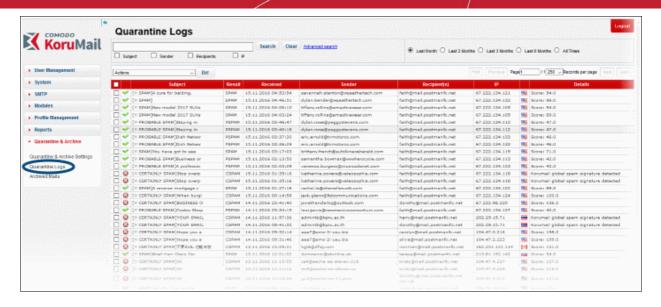
- To test if the mails are delivered successfully, enter the user's email address in the 'Recipient' field and click the 'Send' button
- Click the 'Close' button to return to the 'E-mail Reports' interface.
- Click the 'Save' button to apply your changes.

### 11.2 Quarantine Logs

The 'Quarantine Logs' interface displays the log records of all quarantined mails. The number of days the logs are stored depends on the settings configured in the 'Quarantine & Archive General Settings' screen. The interface allows administrators to take actions such as to delete, mark as not spam and more.

To open the interface, click 'Quarantine & Archive' then 'Quarantine Logs'





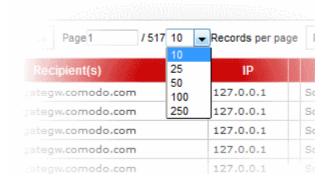
Quarantine Logs - Table of Column Descriptions		
Column Header	Description	
Icon	Indicates the status of action for the mail applied by KoruMail after the filtering process. Placing your mouse cursor over an icon will show a description of the action.	
	- Relayed: Indicates the mail has successfully passed the filtering process and user verified.	
	- Rejected: Indicates the mail is rejected by KoruMail after the filtering process and reject message sent to the sender mail server.	
	Discarded: Indicates the mail is quarantined	
Subject	The content in the 'Subject' line of the mails	
Result	The result for a mail after the filtering process.	
Received	Date and time of email received by KoruMail	
Sender	Domain details of the email sender	
Recipient(s)	Domain details of the recipient(s)	
IP	The IP address of the system from where the mail was sent.	
Details	Provides the reasons why a mail is quarantined and spam score if it is marked as spam.	

At the top and bottom of the screen, you have the option to set the number of records to be displayed per page and take desired actions such as delete, mark as not spam and so on.

#### To configure the number of records to be displayed per page

Click the 'Records per page' drop-down

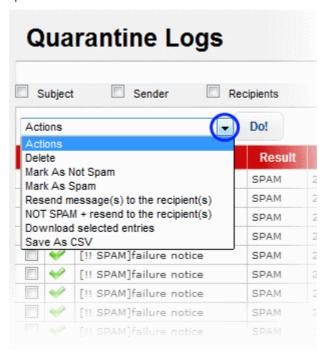




- Select the number of records per page to be displayed from the options.
- Click the 'First', 'Previous', 'Next' and 'Last' buttons to navigate to the respective pages.

#### To act on log entries

Click the 'Actions' drop-down



Select the desired action from the drop-down and click the 'Do' button

#### **Search Options**

You can search for a particular record or records in the quarantine log by using simple or advanced search feature.

- Simple Search
- Advanced Search

#### Simple Search

The simple search options allows you to search for a particular record or records based on 'Subject', 'Sender', 'Recipients' and / or 'IP' details only.



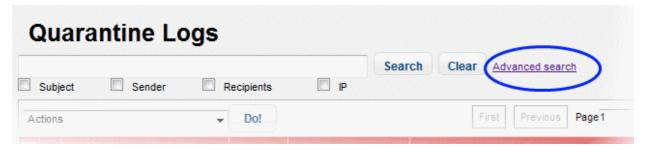


- To search for records based on the entries under 'Subject', 'Sender', 'Recipients' and / or 'IP' columns, enter the text or number fully or partially in the field and click the 'Search' button
- To search for records based on the entries under a particular column or columns, select the respective check boxes, enter the text or number fully or partially in the field and click the the 'Search' button. For example, if you want to search for a particular record for sender and recipients, select the 'Sender' and 'Recipients' check boxes, enter the text fully or partially in the field and click the 'Search' button.

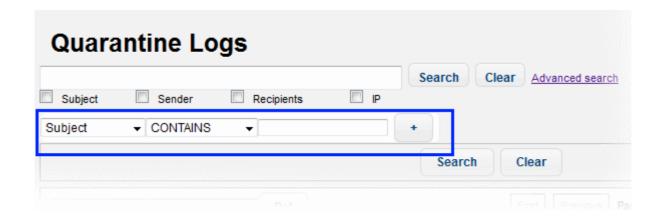
#### **Advanced Search**

The 'Advanced Search' option allows you a more granular search by including rules and filters.

Click the 'Advanced Search' link at the top of the screen.

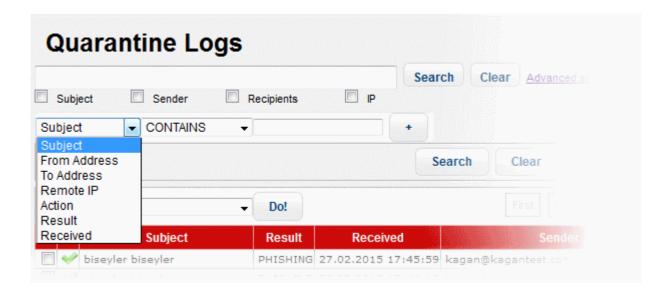


The 'Advanced Search' option will be displayed.

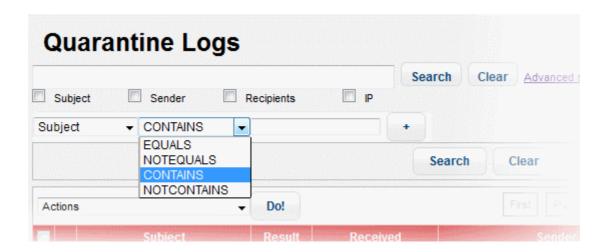


The first drop-down contains the column headers that can be selected for an advanced search.





The second column contains the condition for a search, which depends on the item selected in the first column and text/number entered or options selected in the third column.

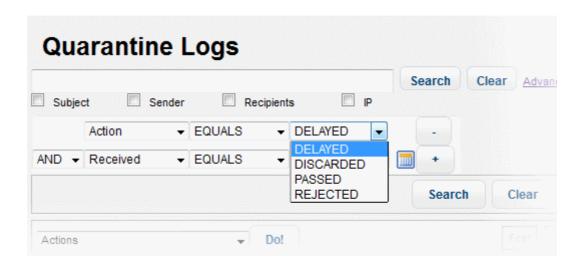


The third column allows you to enter the text/number or select from the options depending on the selection in the first column. For example, choosing 'Subject', 'From Address' or 'Remote IP' allows you to enter the text in the third column

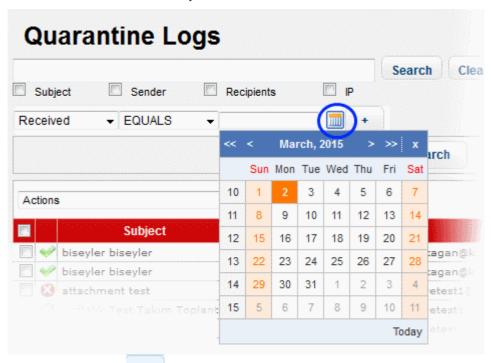


If you select 'Action' or 'Result' in the first column, then further options can be selected from the third column.



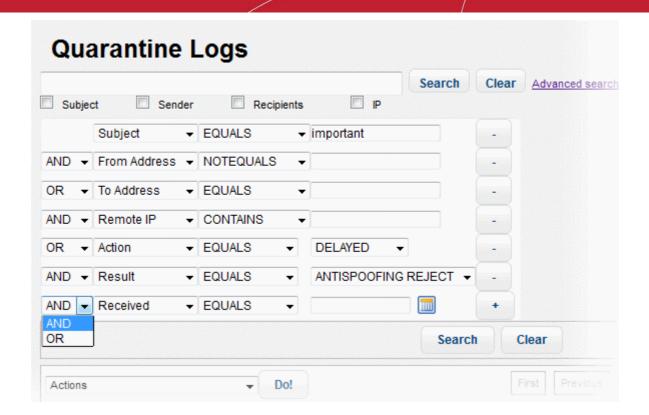


If you select 'Received' in the first column, then you can enter a date or select from the calendar.



You can add more filters by clicking \_\_\_\_\_ for narrowing down your search.





You can remove a filter by clicking the \_\_\_\_ button beside it.

You can create a filter rule by selecting 'AND' or 'OR' option beside each of the added filter.

- Click the 'Clear' button to remove the advanced search rules.
- Click the 'Search' button to start the search per the filter rule.

The items will be searched for in the ascending order and results displayed.

• To remove the advanced search field, click the 'Advanced search' link again.

Administrators can filter results on monthly basis. The filters available are 'Last Month', 'Last 2 Months', 'Last 3 Months', 'Last 6 Months' and All Times.

To view the results of the last month, click the 'Last Month' radio button.



#### **Details of a Log Entry**

Clicking anywhere on the row of a log record will display the details of the quarantined mail log.





The details screen allows you to mark the mail log as 'Spam' or 'Not spam' depending the mail category. You can also add the sender, sending domain and IP to blacklist or whitelist, forward, resend and resend as attachment.

To mark an email as 'Spam' or 'Not spam', click the relevant button at the bottom of the screen.

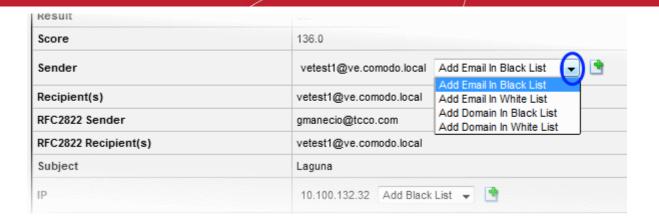
The changes will be saved and mails from the sender will be applied the new settings by KoruMail.

 To forward the mail, click the 'Forward' button, enter the mail ID in the 'Email Forward' dialog and click the 'Send' button.



- Click the 'Resend' button to send the mail again.
- · Click the 'Resend as attachment' button to send the mail as an attachment.
- To save the log record to your computer, click the 'Download' link and save the mail record.
- To add the sender or domain to blacklist/whitelist, click the drop-down in the 'Sender' row.





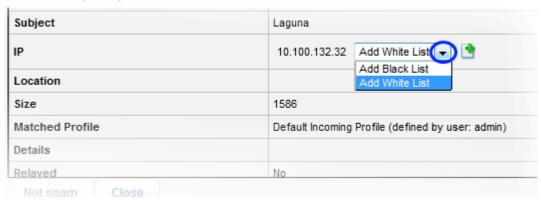
Select the category from the options that you want to add the email and click the button beside it.



• Enter the reason for changing the category and click the 'Save' button.

The changes will be saved and mails from the sender will be applied the new settings by KoruMail.

• To add the originating IP to blacklist/whitelist, click the drop-down in the 'IP' row.



Select the category from the options that you want to add the IP and click the button beside it.



• Enter the reason for changing the category and click the 'Save' button.

The changes will be saved and mails from the IP will be applied the new settings by KoruMail.

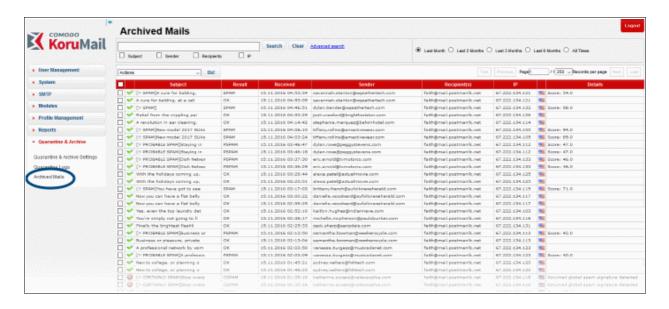
You can view the previous or next record by click the 🔎 🔛 buttons at the top of a details screen.



### 11.3 Archived Mails

The 'Archived Mails' interface displays the log records of all archived mails. The number of days the logs are stored depends on the settings configured in the 'Quarantine & Archive General Settings' screen. The interface allows administrators to take actions such as to delete, mark as spam, mark as not spam and more.

• To open the 'Archived Mails' interface, click 'Quarantine & Archive' then 'Archived Mails'



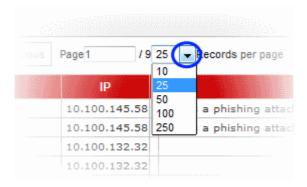
Archived Mails — Table of Column Descriptions		
Column Header	Description	
Icon	Indicates the status of action for the mail applied by KoruMail after the filtering process. Placing your mouse cursor over an icon will show a description of the action.	
	- Relayed: Indicates the mail has successfully passed the filtering process and user verified.	
	<ul> <li>Rejected: Indicates the mail is rejected by KoruMail after the filtering process and reject message sent to the sender mail server.</li> </ul>	
	Discarded: Indicates the mail is quarantined	
Subject	The content in the 'Subject' line of the mails	
Result	The result for a mail after the filtering process.	
Received	Date and time of email received by KoruMail	
Sender	Domain details of the email sender	
Recipient(s)	Domain details of the recipient(s)	
IP	The IP address of the system from where the mail was sent.	
Details	Provides the reasons why a mail is quarantined and spam score if it is marked as spam.	

At the top and bottom of the screen, you have the option to set the number of records to be displayed per page and take desired actions such as delete, mark as not spam and so on.

To configure the number of records to be displayed per page



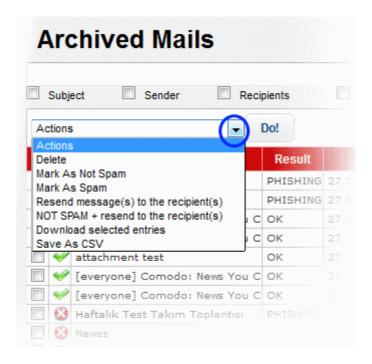
· Click the 'Records per page' drop-down



- Select the number of records per page to be displayed from the options.
- Click the 'First', 'Previous', 'Next' and 'Last' buttons to navigate to the respective pages.

#### To act on log entries

Click the 'Actions' drop-down



Select the desired action from the drop-down and click the 'Do' button

#### **Search Options**

You can search for a particular record or records in the quarantine log by using simple or advanced search feature.

- Simple Search
- Advanced Search

#### Simple Search



The simple search options allows you to search for a particular record or records based on 'Subject', 'Sender', 'Recipients' and / or 'IP' details only.



- To search for records based on the entries under 'Subject', 'Sender', 'Recipients' and / or 'IP' columns, enter the text or number fully or partially in the field and click the 'Search' button
- To search for records based on the entries under a particular column or columns, select the respective check boxes, enter the text or number fully or partially in the field and click the the 'Search' button. For example, if you want to search for a particular record for sender and recipients, select the 'Sender' and 'Recipients' check boxes, enter the text fully or partially in the field and click the 'Search' button.

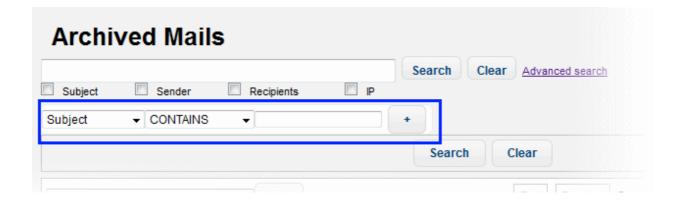
#### **Advanced Search**

The 'Advanced Search' option allows you a more granular search by including rules and filters.

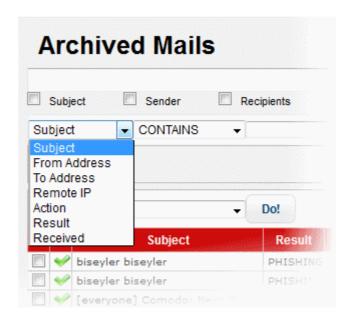
Click the 'Advanced Search' link at the top of the screen.



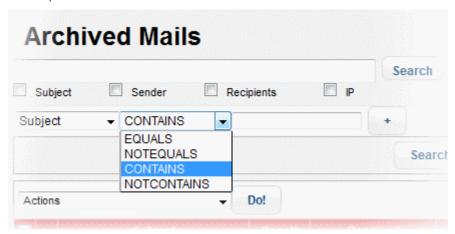
The 'Advanced Search' option will be displayed.



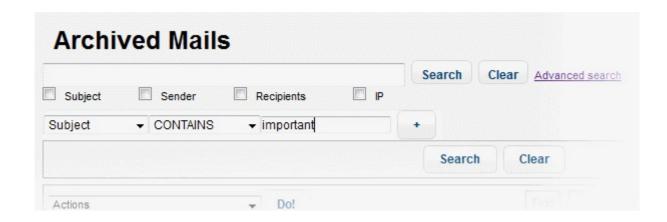
The first drop-down contains the column headers that can be selected for an advanced search.



The second column contains the condition for a search, which depends on the item selected in the first column and text/number entered or options selected in the third column.

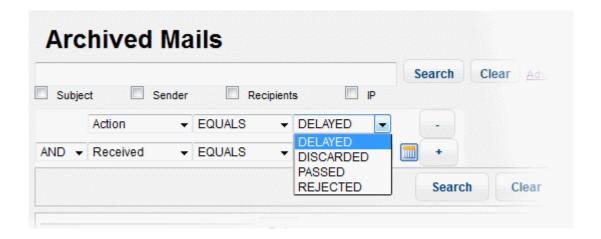


The third column allows you to enter the text/number or select from the options depending on the selection in the first column. For example, choosing 'Subject', 'From Address' or 'Remote IP' allows you to enter the text in the third column

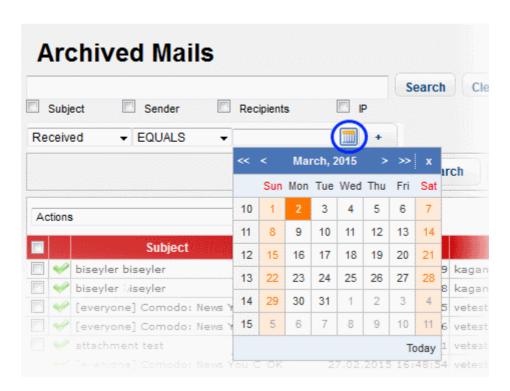




If you select 'Action' or 'Result' in the first column, then further options can be selected from the third column.

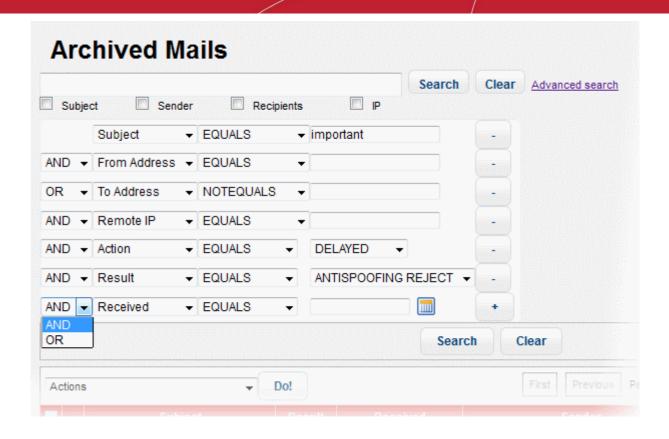


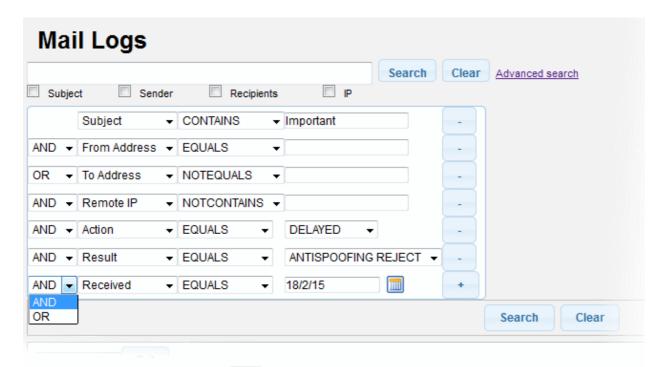
If you select 'Received' in the first column, then you can enter a date or select from the calendar.



You can add more filters by clicking for narrowing down your search.







You can remove a filter by clicking the button beside it.

You can create a filter rule by selecting 'AND' or 'OR' option beside each of the added filter.

- Click the 'Clear' button to remove the advanced search rules.
- Click the 'Search' button to start the search per the filter rule.

The items will be searched for in the ascending order and results displayed.

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Administrators can filter results on monthly basis. The filters available are 'Last Month', 'Last 2 Months', 'Last 3 Months', 'Last 6 Months' and All Times.

To view the results of the last month, click the 'Last Month' radio button.



#### **Details of a Log Entry**

Clicking anywhere on the row of a log record will display the details of the archived mail log.



The details screen allows you to mark the mail log as 'Spam' or 'Not spam' depending the mail category. You can also add the sender, sending domain and IP to blacklist or whitelist, forward, resend and resend as attachment.

• To mark an email as 'Spam' or 'Not spam', click the relevant button at the bottom of the screen.

The changes will be saved and mails from the sender will be applied the new settings by KoruMail.

• To forward the mail, click the 'Forward' button, enter the mail ID in the 'Email Forward' dialog and click the 'Send' button.





- Click the 'Resend' button to send the mail again.
- Click the 'Resend as attachment' button to send the mail as an attachment.
- To save the log record to your computer, click the 'Download' link and save the mail record.
- To add the sender or domain to blacklist/whitelist, click the drop-down in the 'Sender' row.



Select the category from the options that you want to add the email and click the button beside it.



• Enter the reason for changing the category and click the 'Save' button.

The changes will be saved and mails from the sender will be applied the new settings by KoruMail.

To add the originating IP to blacklist/whitelist, click the drop-down in the 'IP' row.



• Select the category from the options that you want to add the IP and click the 📑 button beside it.





• Enter the reason for changing the category and click the 'Save' button.

The changes will be saved and mails from the IP will be applied the new settings by KoruMail.

You can view the previous or next record by click the buttons at the top of a details screen.



### **About Comodo**

The Comodo organization is a global innovator and developer of cyber security solutions, founded on the belief that every single digital transaction deserves and requires a unique layer of trust and security. Building on its deep history in SSL certificates, antivirus and <u>endpoint security</u> leadership, and true containment technology, individuals and enterprises rely on Comodo's proven solutions to authenticate, validate and secure their most critical information.

With data protection covering endpoint, network and mobile security, plus identity and access management, Comodo's proprietary technologies help solve the malware and cyber-attack challenges of today. Securing online transactions for thousands of businesses, and with more than 85 million desktop security software installations, Comodo is Creating Trust Online®. With United States headquarters in Clifton, New Jersey, the Comodo organization has offices in China, India, the Philippines, Romania, Turkey, Ukraine and the United Kingdom.

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For additional information on Comodo - visit <a href="http://www.comodo.com">http://www.comodo.com</a>.