



## **Service description for SUNET mailfilter**

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## Introduction

This service description explains the SUNET mailfilter service. The document is intended for institutions connected to SUNET that wish to outsource their email filtering (spam, virus, phishing, etc.) needs.

In this document the following items are introduced:

1. The architecture of the service
2. The functionality
3. Pricing
4. Information regarding ordering, support and change management

## Glossary

Abbreviation	Description
Spam	Mail messages sent in bulk to recipients that have not requested them.
Virus (mail)	Mail messages that partly consists of an executable file with harmful intentions that installs without authorization of the user.
Phishing (mail)	Mail message intended to scam the recipient. Primarily meant to retrieve personal information or to encourage providing credentials on fake websites.
Quarantine	The possibility to save suspicious mail for further investigation
Institution	An institution connected or to be connected to the SUNET network.
Realm	Domain (ie. umu.se)

## Service description for SUNET mailfilter

### Introduction

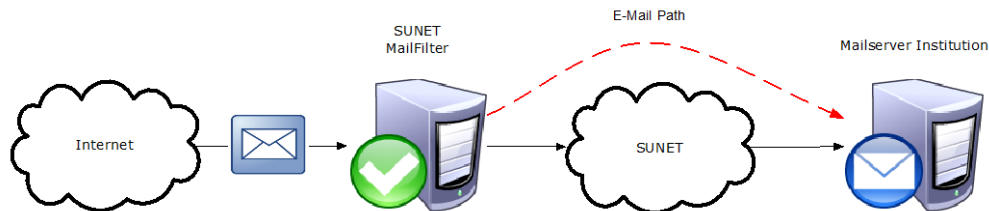
The SUNET mailfilter service allows institutions to have all their incoming mail messages filtered for viruses, phishing and spam before they arrive at their own mail servers. Filtering can imply marking of the mail for example in the subject header or to have it deleted permanently. Incoming mail is verified against the institution to verify that it is for a valid recipient. It is also possible to have outgoing mail filtered in the same way and also to have rate limiting based on the amount of mail any specific user can send per hour!

The institution can configure the filtering preferences and according actions for each domain and sub domain to their specific needs. The solution also allows, if permitted by the institution for end users to alter their personal filter rules.

SUNET mailfilter is based on the CanIt Domain Pro software from the Canadian software company Roaring Penguin Software Inc. This product consists of open-source components complemented with proprietary elements that greatly increase the effectiveness of the filtering. The most important addition is the so called RPTN (Roaring Penguin Training Network). RPTN allows that all CanIt Domain Pro users globally exchange information regarding the detection of spam. For more information, please refer to:  
<http://www.roaringpenguin.com/resources/whitepapers>

## Service architecture

The logical design of the service is based around a black box setup as shown below:

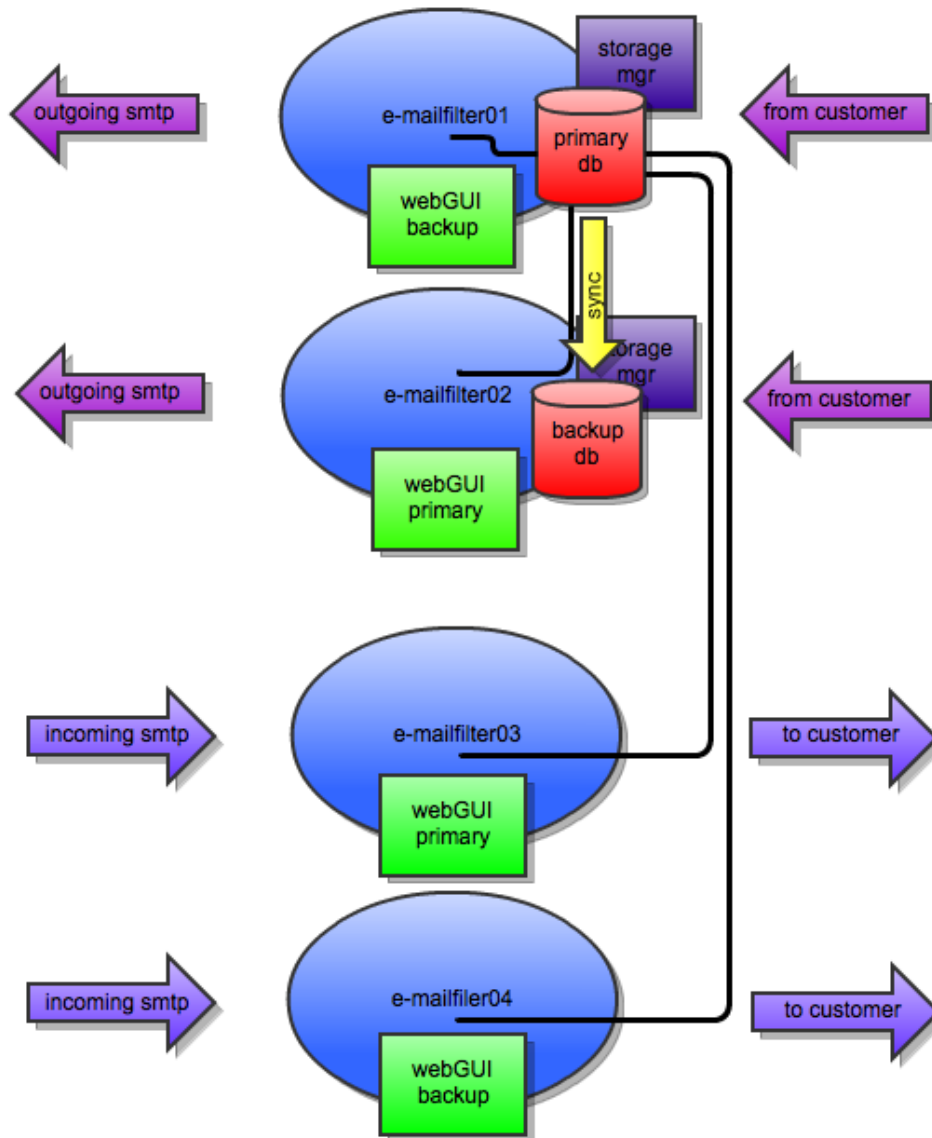


SUNET mailfilter is a centralized service that gives a scaling advantage. Through this approach, connected institutions do not have to purchase and maintain spam-, phishing- and virus filtering applications individually. This saves resources, knowledge, personnel and equipment with regards to mail filtering.

SUNET mailfilter is a powerful, flexible and robust solution:

- The service is built on powerful and easily scalable hardware.
- The service is designed with geographical redundancy: Two disperse locations in the SUNET network; contain identical configurations with sufficient resources to allow for the failure of any other node without service degradation. The hardware resources can be easily scaled to match the amount of mail messages.

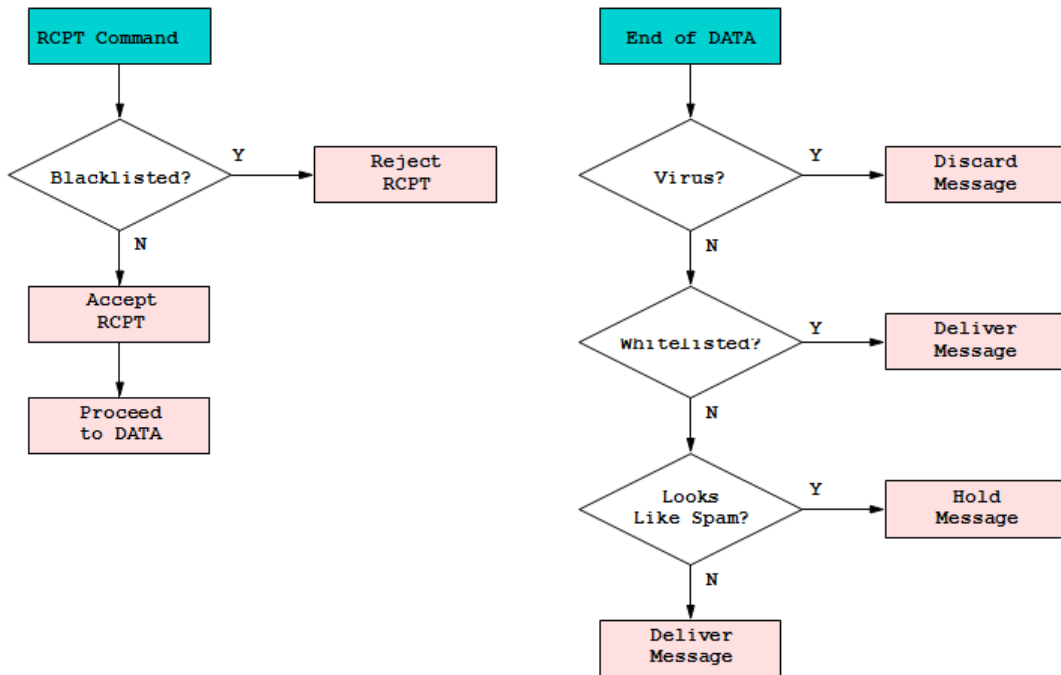
The design architecture of the SUNET implementation provided by NORDUnet can be seen in the below picture.



## Functionality

The filtering preferences of the service can be configured through a web interface. For basic filtering, the following options are available:

- Spam/Virus/Phishing labeling (through subject header or X-header) prior to delivery at the institutions own mail servers.
- Cancel delivery by means of permanent deletion of the email (by the SUNET mailfilter).
- Stored in quarantine for later handling



Simplified flowchart of mail handling in CanIt Domain Pro

The service allows for different configurable options that influence the filtering behavior. Amongst these are: aggressiveness, black & white listing for senders, spam training through means of clickable links and other specific items. The user can optionally add aliases within the realm, so that these are covered by the same filtering preferences.

Authentication and authorization for end-users and administrators is available through the SUNET federation service using SWAMID.

Verification of valid recipients is made against the institution via Ldap, SMTP or via AD.

SUNET mailfilter is intended for all institutions connected to the SUNET network, that wish to have their mail for one or multiple of their (sub)domains, checked/filtered by SUNET for unwanted messages. This includes filtering for spam, phishing and viruses before the mail reaches the institutions own mail infrastructure. The SUNET mailfilter is available for both IPv4 and IPv6.

Separate administrator and user guides are available at the SUNET website.



## Pricing

The SUNET mailfilter service is exclusive for institutions connected to the SUNET network. Starting January first 2011 the pricing levels have been set according to the below table.

Non-educational institutions e.g. museums will be charged as extra small.

Size	Employees	Cost/Year
eXtra Large	> 4000	SEK 180.000
Large	> 2000	SEK 120.000
Medium	> 500	SEK 75.000
Small	< 500	SEK 40.000
eXtra Small	< 100	SEK 12.000

## Ordering, support and failures

- For inquiries regarding ordering or change to the SUNET mailfilter service, the institution can contact SUNET.
- In case of technical failure or Support requirements, the *authorized* person(s) at the institution can contact the NOC.

The following includes the contact details:

Inquiries regarding contracts, ordering, changes or billing:

Börje Josefsson Tel 090-20 59 123

- Phone: +46 (0)90-20 59 123
- Email: bj@sUNET.se

Technical inquiries:

Tomas Liljebergh Tel 019-30 31 67

- Phone: +46 (0)19-30 31 67
- Email: Tomas.Liljebergh@sUNET.se

System Support is available during business hours Monday-Friday via the NORDUnet NOC by phone or email:

- Phone: +46(0)8 20 78 60
- Email: noc@sUNET.se

Fault reporting can be made 24/7 to the NORDUnet NOC by phone or email:

- Phone: +46(0)8 20 78 60
- Email: 247@sUNET.se