



# Mail Server

# MLS - 3700



Nusoft MLS-3700, an easy-to-use, dedicated mail server, presents you with a one-stop email service solution, including AI filter, anti-virus, email auditing, email archiving and DNS resolving, etc. It requires no complex commands and IT expertise, whether for installation, configuration or maintenance. To top it off, it also offers additional survivability with real-time high availability (HA), mailbox disaster recovery, USB disk backup, hot-swappable power redundancy and more to ensure email service continuity.

As for business operating costs, the signatures for spam and viruses (ClamAV) as well as the firmware updates are available for free downloads without user limit, greatly reducing the ownership of a mail server. In addition, its all-in-one design accommodates Web server, Web disk, calendar and other features for facilitating your efforts on network services.

## Product Features

### Full-Featured Embedded Email System

Apart from reliability and stability derived from the embedded hardware design, it comes equipped with features such as Web mail, anti-spam, anti-virus, email auditing, email archiving and DNS resolving, as well as supports the protocols of SMTP(S), POP3(S) and IMAP(S), providing all the necessities for implementing an email system.

### Full IPv6 Compatibility

MLS-3700 is fully compatible with IPv6 addressing, the mainstream Internet protocol in the future. No additional budget is required for implementing another IPv6-based mail server simply for IPv4-to-IPv6 address translation.

### Advanced Email Service Continuity

MLS-3700 ensures email service continuity by employing the following mechanisms:

#### Real-time high availability:

Ensures email service continuity against unexpected hardware failure.

#### Mailbox disaster recovery:

Performs routine backups of a mailbox to a backup server (e.g., NAS) and from which the mailbox is restored in the event of HDD failure.

#### USB Disk Backups:

Performs routine backups of the inbuilt HDD to an external HDD through an USB port. The external HDD can replace the inbuilt HDD in the event of HDD failure.

#### Hot-swappable power redundancy:

Features 1+1 power redundancy to provide sustainability.

### Easy-to-Use Mail Server

#### Simple installation:

Eases you through the installation with a step-by-step wizard, helping you get the job done in no time.

#### Hassle-free migration:

Migrates emails and accounts to MLS-3700 without intervention, avoiding the risk of message loss due to human errors or domain migration.

#### User-friendly UI:

Requires no complex commands and IT expertise for operation; all device operations are done via a Web browser without prior software installation.

#### Effortless maintenance:

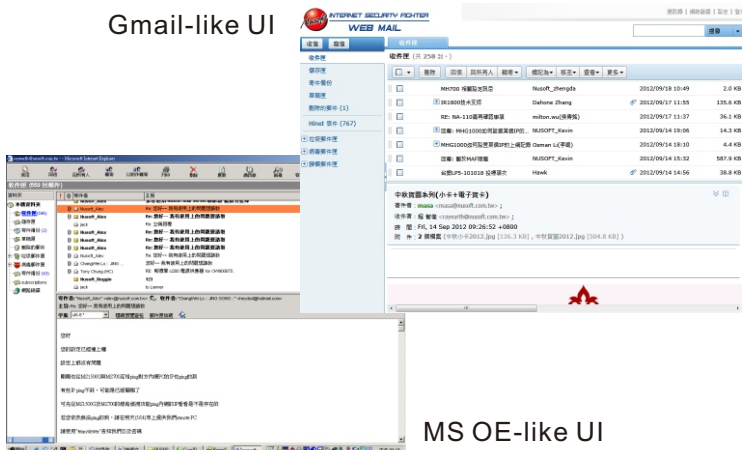
Helps pinpoint failed email deliveries with comprehensive reporting.

#### Easy archival access:

Audits emails for compliance with network policies and archives them to a backup server (e.g., NAS or Samba) for long-term retention; all stored emails can be easily searched by a range of criteria and viewed in multilingual contexts (due to UTF-8 encoding).

#### Habitual Web Mail:

Offers an easy email experience with its MS Outlook Express- / Gmail-like user interface.



## Multi-Layered Email Service Protection

### AI Filter:

By integrating the supervised deep-learning mechanism into the filter and using the daily emails as the big data, MLS-3700 can filter the inbound email using the filter mechanism such as fingerprint, Bayesian, spam signature, etc. and label the email with its type (ham/ spam). And then, transfer them into data by natural language processing (such as word2vec, etc.) and use the machine learning models which is built by Google TensorFlow to predict the mail type. After that, compare the predicted result with the labeled type. If the results are not identical, the machine learning model will be trained by gradient descent iteratively until the predicted result and the labeled type are identical.

The self-learning mechanism enables MLS-3700 to filter out mutated spam based on the detail of emails (such as writing in other words, writing in other languages, changing the page layouts, using the pictures, etc.). In addition, deep learning mechanism is continuously trained by the detail of emails. This enables MLS-3700 to achieve 99% filter accuracy which is much greater than any other anti-spam appliance on the market.

### Anti-virus:

Filters out viruses and malicious code concealed within emails using ClamAV (free signature updates) and Cyren (optional) scan engines.

### Mail notice:

Notifies recipients of quarantined emails as well as allows them to retrieve those without the intervention of network administrator.

### Anti-email attack:

Protects mail server from DoS attacks, dictionary harvest attacks, etc.

## Cloud-based Attachment Solution

The Web Disk feature allows large attachment to be sent by hooking up your message with a hyperlink to the file stored in the Web disk, efficaciously preventing bounces due to the size.

## Synchronization between Mail Server and Outlook

MLS-3700 provides users with an easy-to-use calendar and address book to simplify their activity and appointment scheduling with its practical features such as shared calendar, shared address book, synchronization with Google calendar, etc. In addition, the calendar and address book can be synchronized with Outlook.

## Mobile Web Mail (email client app)

A dedicated email client app (available on iOS and Android) is provided to offer you a timely and handy email access through multitasking gestures (e.g., check, move, delete, etc.), audio and video messages, and push notifications.



## Multi-Domain / Domain Alias

Two domain planning approaches are provided as following: (Assuming there are two domains in your plan, namely "abc.com" and "123.com".)

### Multi-Domain:

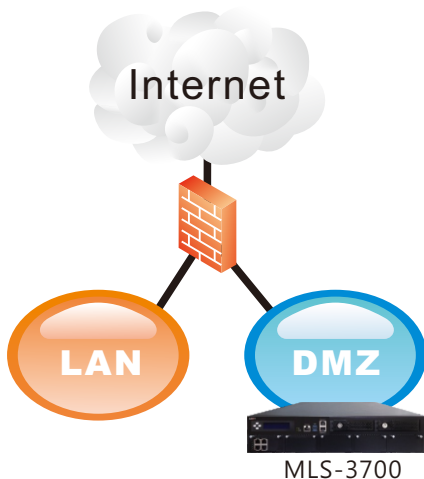
Accommodates multiple domains on MLS-3700 to provide non-interconnected email systems, e.g., a@abc.com ≠ a@123.com.

### Domain Alias:

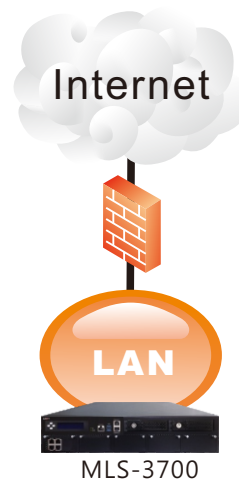
Entitles a domain with a number of aliases; each alias is interconnected with the domain name, e.g., a@abc.com = a@123.com.

## Deployment

1. Deployed in DMZ (using public IP)



2. Deployed in LAN (using private IP)



## Product Highlights

Highlight	Benefit	Third-Party Product
AI Filter	Filters out all the mutated spam at the first moment.	Unable to maintain the accuracy of spam filter when there is a new mutated spam email.
Email security filtering	Avoids email abuse due to compromised email accounts, computer viruses, etc.	Unable to prevent the exploitation of local email accounts for spamming, which leads to failed email deliveries due to being listed on RBL.
Email auditing / archiving	Audits emails for compliance with network policies and archives them to a backup server (e.g., NAS) for long-term retention.	Not available. It requires additional equipment to audit and archive email messages.
Remote backup access	Provides around-the-clock access (search, browse and retrieval) to email backups simply via a Web browser.	The access to nearline email archives is limited and no remote access is provided.
Filtered email archiving	Saves disk space by archiving only the legitimate emails rather than unsolicited or virus-infected ones.	Archives emails without preliminary spam filtering, wasting a huge amount of disk space.
Multi-domain / Domain alias	Not only entitles an email domain with several aliases but also accommodates multiple domains on MLS-3700 to meet different business demands.	Not available. It takes as many servers as it needed to achieve the purpose.
Comprehensive email logs	Offers detailed email logs along with contrack logs and queue status to assist in pinpointing the cause of a failed email delivery.	Available but not desirable. It requires extensive analysis to identify the cause of a failed delivery.
Anti-email attack	Protects email system from various email attacks (e.g., DoS attack, dictionary harvest attack, etc.), ensuring service reliability and continuity.	Not available. Email system is vulnerable to attacks, and consequently fails to provide reliable email service.
Real-time high availability	Ensures email service continuity against unexpected hardware failure by using real-time high availability. The standby unit will take over the operations as the active one breaks down.	Only provides basic high availability feature; besides, recent emails might be lost due to the asynchronous operation between two HA units.
Mailbox disaster recovery, USB disk backups	Performs routine backups of a mailbox as well as restores the mailbox in the event of HDD failure.	Not available. Emails will be gone once the inbuilt HDD has failed.
Custom account privileges	Allows email account privileges to be based on network policies, such as limiting the email access to LAN only.	Email account privileges are not configurable.
Hassle-free migration	Automatically migrates emails and accounts to MLS-3700 without intervention.	Requires manual operation to migrate emails and accounts, which is troublesome and risky.
Large attachment delivery	Features Web Disk to prevent email bounces due to the large attachment size.	Not available. Sending a large attachment will result in email bounces.
Mobile Web Mail (email client app)	Email access can be achieved through a dedicated client app, which also allows sending audio and video messages, greatly facilitating email correspondence.	No dedicated user interface designed for mobile devices; besides, messages are only available in the form of text.
TNEF decoding (for Winmail.dat files)	Supports TNEF-encoded messages sent from Outlook.	Not available. Messages encoded in Transport Neutral Encapsulation Format (TNEF) will be unreadable.



Mail Server



Anti-Virus



AI Filter



Email Auditing



Email Archiving



Mail Notice



Web Mail



Mobile Web Mail (email client app)



Web Disk



Calendar



Online Archive Access



Contrack Logs



Anti-Email Attack



E-Paper



Large Attachment Delivery



Real-Time High Availability



Audio/ Video Messages



Web Hosting



MLS Series Product Comparison

Model		MLS-1600	MLS-2600	MLS-2700	MLS-3700
<b>Specifications</b>					
HDD Capacity		1 TB	2 TB	2 TB	2 TB
No. of NIC Ports		4 GbE (RJ45)	4 GbE (RJ45)	4 GbE (RJ45)	4 GbE (RJ45 or mini GBIC)
Fanless Design		✗	✗	✗	✗
Form Factor		1U Rackmount	1U Rackmount	1U Rackmount	2U Rackmount
Power Redundancy		✗	✗	✗	○
<b>Features</b>					
IPv6 Compatibility		○	○	○	○
Multi-Domain / Domain Alias		○	○	○	○
Custom Account Privileges		○	○	○	○
Account/Email Migration		○	○	○	○
Mail Service	SMTP/SMTSP	○	○	○	○
	POP3/POP3S	○	○	○	○
	IMAP/IMAPS	○	○	○	○
	Web-based Mail(HTTP/HTTPS)	○	○	○	○
Email Client App (iOS, Android)	Multitasking Gestures	○	○	○	○
	Audio/ Video Messages	○	○	○	○
	Receive Later	○	○	○	○
	Push Notifications	○	○	○	○
Email Security	Anti-Virus (Free)	ClamAV	ClamAV	ClamAV	ClamAV
	Anti-Virus(Optional)	CYREN	CYREN	CYREN	CYREN
	AI Filter	✗	✗	○	○
	Multi-Layered Spam Filtering	○	○	○	○
	Mail Reports	○	○	○	○
	In-/Outbound Email Filtering	○	○	○	○
	Mail Notice/ Retrieve	○	○	○	○
	Mail Pre-Auditing	○	○	○	○
	Mail Post-Auditing/Archiving	○	○	○	○
	Remote Email Backup	○	○	○	○
	Connection Track & Queue Management	○	○	○	○
Mailbox Disaster Recovery	○	○	○	○	
USB Port	USB Disk Backups	○	○	○	○
	Email and Data Backups	✗	✗	✗	✗
	Printer Server	✗	✗	✗	✗
File Storage		✗	✗	✗	✗
Address Book/Shared Address Book/CardDAV Sync		○	○	○	○
Calendar/Shared Calendar/CalDAV Sync		○	○	○	○
Web Disk (for large email attachment)		○	○	○	○
E-Paper		○	○	○	○
Basic Web Hosting		○	○	○	○
Real-Time HA		○	○	○	○

