Aloaha Mail and Archive

Aloaha Mail and Archive is an email archiving solution that can archive inbound-, internal and outbound emails directly and transparently into a central mailstore. Additionally emails can be pushed into the mail archive via the Exchange and/or POP3 Connector.

Users can connect to their own email library from a web-based user interface. The simple but very powerful user interface allows easy and very fast searches and mail retrievals. Additionally, Aloaha can also be configured to act as a Mail Server/Endpoint itself. Like that you can send all journaling mails to Aloaha.

Aloaha Mail and Archive does NOT depend on any external database or any other propriety technology, which means that Installation, Operation, and the Backup and Disaster Recovery are as simple, reliable and straight forward as possible. This translates into minimal requirements:

Server Requirements:
- Any windows from Windows XP SP3 onwards
- .NET 3.5 Framework
- Windows Search

Not required:
- Aloaha does **NOT** require any dedicated database
- Aloaha does **NOT** require any dedicated web server for the web interface
- Aloaha does **NOT** require any specific mail server or IIS

Client Requirements:
- Web browser only. Ideally with cookies enabled

Download Links:

http://www.aloaha.com/download/aloaha_mail.zip

http://www.aloaha.com/downloader/setup_mail.exe

Features:

- Very fast full text search on archived mails, PDF, TIFF and MS Office Documents **without** dedicated central database.
- Emails are saved in a plain folder structure to eliminate any worries regarding long term archiving or database administration.
- TIFF attachments are automatically passed to the internal OCR Engine and included in the full text index.
- WinWord (docx) documents and emails are internally converted to html and saved as original document and additional as html document. Consequently, users can preview their Word documents in the Aloaha Web Interface without requiring any applications to be installed on the client – ideal for mobile workers accessing the archive via mobile device.
- Multithreaded.
- Highly scalable - ideal for large end customers in private cloud scenarios
- MS Exchange Connector included.
- POP3 Connector included.
- ASP.Net compatible Web Server included.
- Aloaha can act as SMTP Proxy or Mail Server/Endpoint or both.
- Tiny footprint of approx. 6 MB only!
- Archive can be accessed via web interface or mail interface (send an email to search@<yourdomain>)

Contents

How can mails be archived?

There are several ways of getting mails into your archive:

- You can use Aloaha as an **SMTP Proxy** between your perimeter and SMTP Server and archive every mail passing through Aloaha.

- It is possible to configure Aloaha as a **Journaling Endpoint** for MS Exchange or other mail server.

- With the **Exchange Connector** you can define a folder in your exchange Inbox. Every item or subfolder which will be dropped into that folder will be polled into the archive

- You can use the **POP3 downloader** to download emails from a remote server to inject into your local email workflow and archive them.

- You can just mail your items to be archived to archive@<yourdomain>

Installing Aloaha Mail and Archive

Since the installer of Aloaha is very compact (approx. 6 MB) the easiest installation method is using the web installer.

Just run http://www.aloaha.com/downloader/setup_mail.exe and wait for the installation to finish.

YouTube: https://www.youtube.com/watch?v=FEpTVul3lQY

Please note that the only requirement for Aloaha is an installed .NET 3.5 Framework!

In case that your company policy or firewall does NOT allow any web installer you can always request the full setup in .exe or .msi format from info@aloaha.com or aloaha@wrocklage.de
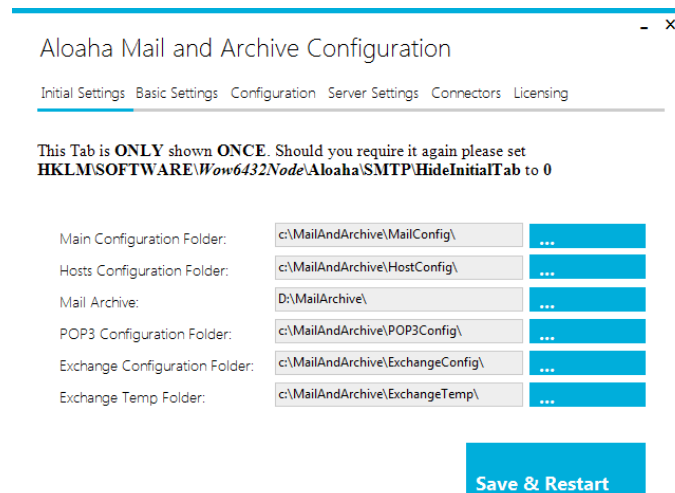
Support and Blog

Due to the initial success of our Aloaha MailAndArchive we decided to dedicate a Blog just for this product. The address is: http://www.MailAndArchive.com

Initial Settings

The first time you launch the Aloaha Configuration you will see the Tab **Initial Settings** - as shown in the screenshot below. You can configure here the data and configuration directories used by Aloaha.

In case you are running into storage limitations you can move those configuration and data directories can ALWAYS to another location.

Nevertheless to make sure that nobody accidentally moves a folder after pressing "Save & Restart" this dialog will NOT show again unless you set HideInitialTab to 0.

Initial SMTP Configuration

In the Tab **Basic Settings** you can configure the ports and IPs Aloaha will listen.
Settings regarding the default relay host can also be found under Basic Settings.
MX stands for DNS **MX** Lookups.

YouTube: https://www.youtube.com/watch?v=Tc48_Y4Cn_A

IP and Domain Configuration

Your local Domains/IPs, Whitelisted Domains/IPs, etc. need to be configured to make
sure that only valid mails reach your archive.

YouTube: https://www.youtube.com/watch?v=cAA_pZiQqjk

Local Domains and Local IPs

In this section you configure your local domains and IPs so that Aloaha is able to decide if an email is incoming, internal or outgoing.

Domain/IP Whitelist and Blacklist

Mails originating from a whitelisted IP or Domain will NEVER be scanned for SPAM. Mails which originate from a blacklisted IP or Domain will be **rejected** immediately.

End Domains

Aloaha can act as an **Endpoint** – better known as **Mailbox Server.** That means that emails addressed to domains configured as End Domain will NOT be relayed further but directly delivered to the internal mailboxes.
YouTube: https://www.youtube.com/watch?v=TS1OeP30uw8
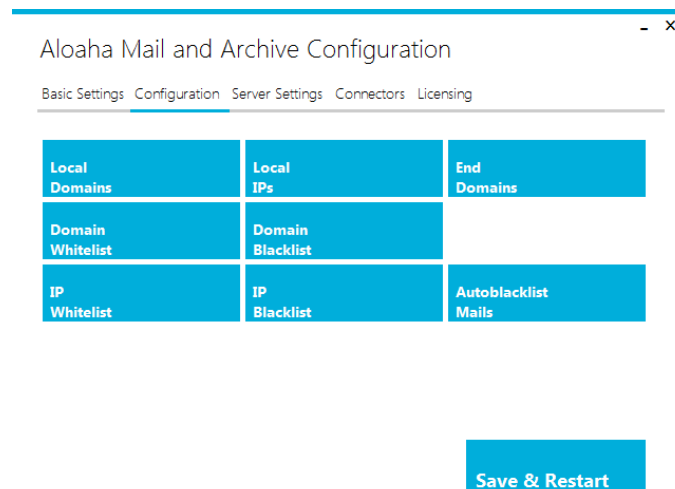
Auto-blacklist Mails

Mails sent to or from a mailbox or domain listed in **Auto-blacklist Mails** will be rejected immediately.

Additionally the originating IP will be added to the IP Blacklist to make sure all mails originating from the sender's host are being rejected.

This is the ideal tool to create your own **Honeypots or SPAMTraps**.

Spamtraps are usually e-mail addresses that are created not for communication, but rather to lure spam. In order to prevent legitimate email from being invited, the e-mail address will typically only be published in a location hidden from view such that an automated e-mail address harvester (used by spammers) can find the email address, but no sender would be encouraged to send messages to the email address for any legitimate purpose. Since no e-mail is solicited by the owner of this spamtrap e-mail address, IPs of e-mail messages sent to this address are immediately considered unsolicited and added to Aloaha's IP Blacklist

Server Settings

In Server Settings you can configure which relay server is responsible for any given user or domain. This way, you can route incoming mails addressed to different users or domains to different back-end servers. This is often referred to as **smart host functionality**.
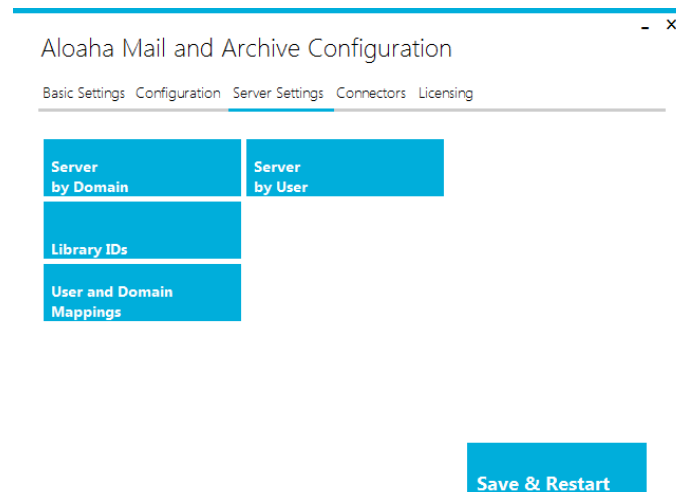
Server by Domain or User

It is possible to configure Aloaha MailAndArchive to use different mail servers to handle mails originating from different domains or different users. Such servers are usually called smart host or SMTP relay.

YouTube: https://www.youtube.com/watch?v=kT3AmD9993Q

User and Domain Mappings

In some cases it might be useful to channel mails from different email addresses or domains to one specific address, archive or domain. This is also known as email and domain aliasing.

For example an organisation might have domains for two different product lines and want people inside the organisation to be able to retrieve the different mails in one mailbox. It could also be that an employee leaves the organisation and his email address needs to be mapped to a different mailbox.

All this can be done with the **User and Domain Mappings**.

Please note that since ONLY the transport field will be changed, the email as such remains untouched. That is very important to make sure that no digital signatures are broken.
YouTube: https://www.youtube.com/watch?v=2pzrE8Gb62c

Library IDs

Library IDs are essential to access the archive web interface. They act as security token to give a user access to the mail archive.
The system supports two types of **Library IDs**. First of all there are the 32 HEX digit IDs automatically generated by the system when the user requests it by the **getid mail**. Additionally you can configure a second static **Library ID** via the configuration. That might be useful for example to generate IDs for public archives (like shared folder) which are easy to remember.
YouTube: https://www.youtube.com/watch?v=TS1OeP30uw8
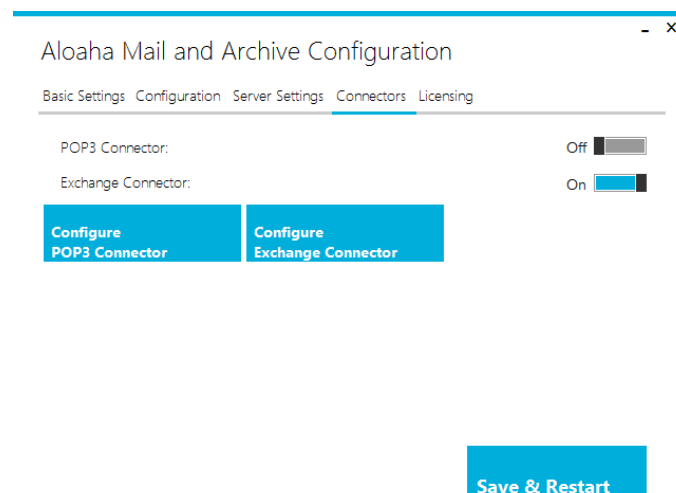
Connectors

Exchange Connector

You would need to configure the Aloaha Exchange Connector in case you want to:

- Pull mails or documents from an Exchange Folder into the Aloaha Archive.
- Store files from the local hard drive into an Exchange Folder.

Usually the Aloaha Exchange Connector is used to pull chosen mails from Exchange into the archive.

Once you configured the Connector and defined the folder, the user can just drag and drop files into that Exchange folder. It is also possible to create subfolders. The subfolders will show in the web interface and will act as an additional search criterion.
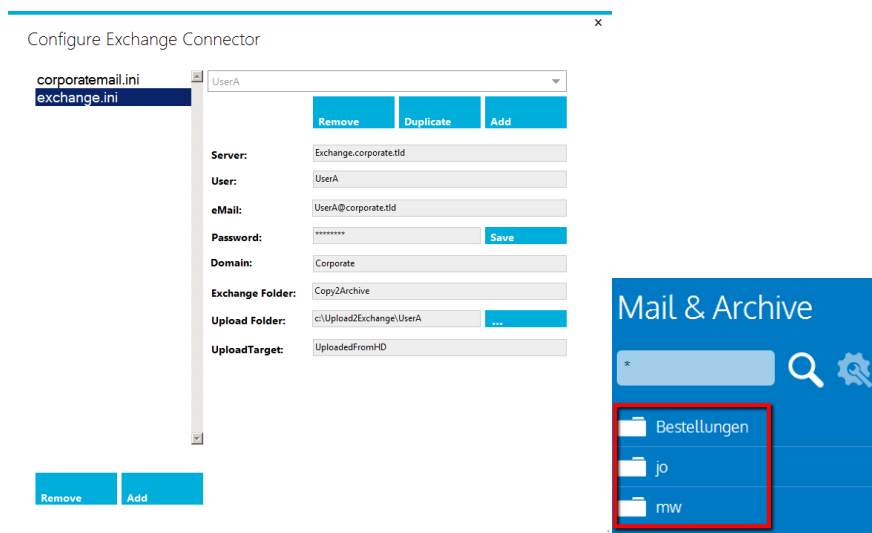
POP3 Connector

Some organisations make use of external mail accounts such as Gmail, GMX, Wet.de, etc. Not only that is useful to bundle all mails into one mailbox, it could be even a legal requirement to archive these external mailboxes.

With the Aloaha POP3 Connector, you can collect mails from your external mailboxes and inject them back into the Mail/SMTP transport layer.

When injecting them into the SMTP stream, Aloaha makes sure that they are stored in the right mailbox.

Registry Settings

Basic configuration settings are saved in the registry under:

HKLM\SOFTWARE\<Wow6432Node>\Aloaha\SMTP

Please note that Aloaha reads its registry settings only during the start-up. That means that whenever you do any configuration changes you need to restart the windows service: "Aloaha Workflow Engine" either with the Services Control Panel or better with the Aloaha Configuration GUI.

Some settings are ONLY accepted in the licensed version of Aloaha. Please make sure you own a valid license or request an evaluation license from info@aloaha.com.

Initial Settings

In the Configuration GUI the Tab "Initial Settings" will ONLY be shown if **HKLM\SOFTWARE\<Wow6432Node>\Aloaha\SMTP\ HideInitialTab** is set to 0.
After EVERY Save & Restart the key is being set back to 1 to make sure nobody re-configures by accident the data- and configuration folder.

Archive Location

Archived files are saved into the directory configured in **AttachmentArchive**.

ArchiveALL

If **ArchiveALL** is set to 1 (default) Aloaha will archive ALL emails passing through. Obviously inbound mails will be archived in the archive library of the recipient and outbound mails will be archived in the library of the sender.

Basic security settings

Aloaha can be configured to automatically remove and delete dangerous email attachments. The list of dangerous attachment types can be configured as a comma separated list in **DangerousExtension**.
Should you run Aloaha as a perimeter server you might have the unfortunate experience of many SPAM emails. For this reason Aloaha includes basic AntiSPAM features. The most important feature being the DNS based Remote Blacklists (RBL). You can configure different RBLs as a comma separated list in **RBLServerList**.

Basic Settings

Enable SMTP Proxy

The SMTP Proxy will ONLY be started if **enabled** in **HKLM\SOFTWARE\<Wow6432Node>\Aloaha\SMTP** is set to 1.

SMTP listen IP

After the initial installation, the SMTP Proxy of Aloaha listens on localhost (127.0.0.1) only. In order to be able to receive mails from machines other than the localhost, you need to configure Aloaha to listen to all IPs.

Once you applied a valid license or an evaluation key, you can change **ProxyListenLocalHostOnly** from 1 to 0 to instruct Aloaha to listen on all IPs and not only at localhost.

SMTP listen port

Some machines might have already a SMTP Server listening on port 25. For that reason Aloaha is installed to listen on port 2525 per default. If you expect Aloaha to receive mails you **must** re-configure it to listen on port 25. To do so please change **ProxyListenPort** to 25.

RelayHost, RelayPort and RelayHostForceSSL

When forwarding mail to other hosts per default Aloaha uses DNS Lookups. If you need to specify a relay host / smart host you can do that here.

In case you want to specify relay hosts / smart hosts based on specific recipients or domains please use the configuration files **ServerByDomain.ini** and **ServerByUser.ini**.

Allowed Domains

Aloaha rejects inbound emails from non-local IP addresses if they are NOT addressed to a local domain or white listed domain. To allow the retrieval to your domain please edit the comma separated list in **AllowedDomains** and add your local domains.

File based configuration settings

Many settings of Aloaha are saved in plain text files so as to make it easier for the customer to save and backup configuration settings together with the mail archive on one backup medium.

The location of the folder holding the configuration settings is configured in the registry in **MailConfigPath**.

LocalDomains.txt

Additional to the comma separated list in **HKLM\SOFTWARE\<Wow6432Node>\Aloaha\SMTP\AllowedDomains** Aloaha evaluates the list in the file LocalDomains.txt to decide if it is responsible for an inbound email or not.

LocalIPs.txt

Some of the Aloaha functions require it to be able to detect if an email is inbound or outbound. Domain names cannot be used since they can easily forged by a potential spammer or intruder. The only reliable sources are the IP addresses.

Aloaha pre-fills the file with local IPs detected. Additional IPs need to be added manually.

BlacklistedIPs.txt

Emails sent from IPs entered here will never make it into your system. They will be already rejected at the connection stage.

WhitelistedIPs.txt

Emails sent from IPs entered here will always make it into your system. They will never be checked by any AntiSPAM Feature of Aloaha.

EndDomains.txt

Per default Aloaha acts as a transparent SMTP Proxy for outbound mails and inbound mails addressed to domains defined in **LocalDomains.txt**.

In some cases it might be useful to configure Aloaha to additionally act as a mail server for some configured domains.

For example:

- The organisation does not operate its own mails server
- The organisation decides to configure its mail server to forward all emails to an internal domain as a copy for archiving reasons.

If Aloaha needs to be configured as a mail server, the domains need to be added to the file **EndDomains.txt**. All mails sent to a domain configured in **EndDomains.txt** will ONLY be archived and NOT be forwarded to any other server.

Creating a mailbox for a user in an EndDomain is very easy and straight forward. Just choose a username and send an email with subject **getid** to username@<enddomain>. Aloaha will create the mailbox and send the Library ID required accessing the mailbox back to the sender. The first sender sending an email with the **getid** as its subject will also be the owner of the mailbox.

Should the owner ever forget the Library ID he can just send an email to his mailbox with subject **getid**. If his sender address matches the mail address of the owner, Aloaha will generate a new ID and send it back via email.

The owner address is saved in the text file **ownermail.txt**. It can always be changed by the system administrator manually.

DomainBlacklist.txt and DomainWhiteList.txt

Aloaha has an inbuilt AntiSPAM Engine. Domains to be actively rejected should be entered into **DomainBlacklist.txt**. Domains which must never be classified as SPAM should be entered in **DomainWhitelist.txt**.

AutoBlackListMails.txt

In **AutoBlackListMails.txt** you can configure email addresses or domains. Any mail **sent to** or **originates from** such a user or domain will trigger Aloaha to enter the originating IP into the IP Blacklist. This mechanism can be used to create your own SPAM Honeypots. One could for example hide an email on a website; if a robot harvests that email and sends SPAM, the robot will be automatically blacklisted.

ServerByDomain.ini and ServerByUser.ini

Per default, Aloaha uses DNS Lookups to deliver emails. In some cases it might be useful to define a fixed server responsible for a specified domain or user. In IIS this is called **SmartHost**.

The server configuration itself is saved in the path specified in

HKLM\SOFTWARE\<Wow6432Node>\Aloaha\SMTP\HostConfigPath

Server Configuration file format

```
[SMTP]
Server=10.14.11.49
UseSSL=1
Port=587
[Generic]
Username=aloaha\JohnDoe
Password=none
encPassword=345fzd3\sfg
```

The "SMTP" section defines Server DNSName or IP, the forced usage of SSL and the port to be used. There is no need to configure and specify all three of those settings. For example you could configure only "Server" and Aloaha will find the best or default values for "Port" and "UseSSL".

In the "Generic" section you can configure any required credentials. If you specify a password in "Password" Aloaha will encrypt it on the first usage, save it encrypted to "encPassword" and overwrite the clear text password with the string "none". Like that it is guaranteed that any possible intruder is not able to read the password.

Archiver Web Interface

Aloaha includes an ASP.NET compatible Web Server so that there is no need for the administrator to configure any other Web Server. By default the Aloaha Webserver listens to Port 8081 on localhost.

After the initial installation it can be changed via the Aloaha Configuration GUI or via the registry key **HKLM\SOFTWARE\<Wow6432Node>\Aloaha\WebServer**. The port can be changed in "**Port**" and the IP binding in "**LocalHostOnly**". If the archive needs to be accessed remotely the setting "**LocalHostOnly**" has to be changed to 0 and the windows service "Aloaha Workflow Engine" needs to be restarted.

Since the Aloaha Web Interface is ASP.NET compatible it can be integrated into any running IIS instance with just a few clicks via the IIS Admin Console.

Usage of Archiver Web Interface

Library ID

To be able to access the Web Interface the user needs the Library ID of his archive. Library IDs can be assigned manually by the system administrator or they can be requested by mail. Internal user can just send an email with subject **getid** to archive@<localdomain> and Aloaha will generate a new random Library ID and send it to the owner of the archive.

Users of an Endpoint domain must send an email with subject **getid** to their own mail address and Aloaha will send back the Library ID.

Keywords

The keywords field is used to search the email library for keywords. It supports logical operators such as: and, or, not, !!, ||, && and of course the wildcard * which retrieves all emails.

Max. search results

The user can limit the maximum search results to speed up the search operation. The default setting is configured by the administrator in **HKLM\SOFTWARE\<Wow6432Node>\Aloaha\SMTP\MaxSearchResults.**

Folder Tree

If the user uses any subfolders in the Exchange Connector, those subfolders are shown as a tree structure in the web interface. With a click on a subfolder the user can limit the search to such a sub folder beneath the keyword input field.