



Aloaha Fax Suite Server Manual

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Table of Contents

Foreword	
Chapter 1 Overview	2
1 Introduction	2
2 Configuring with Exchange 2000/2003	3
Support for Outlook Business Fax Contacts	5
3 Configuring with external mail server	6
4 Using the built-in SMTP and POP3 server	8
Chapter 2 Fax devices	12
1 Introduction	12
2 Installing Fax Modems	12
3 Installing Diva Server adapter	15
4 Installing CAPI Compatible Devices	17
5 Integrating with Microsoft Fax	20
Chapter 3 Installation	24
1 System requirements	24
2 Step by step installation	24
3 Entering license key after install	33
4 Upgrading	33
Chapter 4 Configuring the fax server	36
1 The importance of users	36
2 Importing users from LDAP/Exchange server	37
3 Automatic user import from LDAP/Exchange	37
4 The SMTP server	40
5 The POP3 server	41
6 The HTTP server	42
7 Setting up notifications	43
8 Priority and Discount	45
Chapter 5 Inbound routing	48
1 Overview	48
2 Standard routing	49
3 Rules based routing	49
4 SMS Routing	51
Chapter 6 Coverpages	54

1	Overview	54
2	Default coverpage	54
3	Designing coverpages	55
4	Supported coverpage fields	56
5	Custom coverpage fields	57
Chapter 7 Monitoring		60
1	Overview	60
2	Connecting to monitor from clients	60
Chapter 8 Advanced Use		64
1	Archiving	64
2	Reports	65
3	Logging	65
4	POP3 Downloader	66
Chapter 9 Using the TextParser API		70
1	Overview	70
2	Sending	70
3	Reports	71
4	Command reference	71
Chapter 10 HP Digital Sender support		76
1	Overview	76
2	Sending	76
3	Reports	77
Chapter 11 Troubleshooting		80
1	Enabling debug	80
2	Extracting and compressing debug files	80
3	Repairing the Aloaha Printer Driver	81
Chapter 12 SMS		84
1	Overview	84
2	Devices	84
3	Sending options	86
4	More information	87



Foreword

The Aloaha Fax Suite is another step to a paperless office.

Let us keep our planet a great place to live.

Chapter



1

Overview

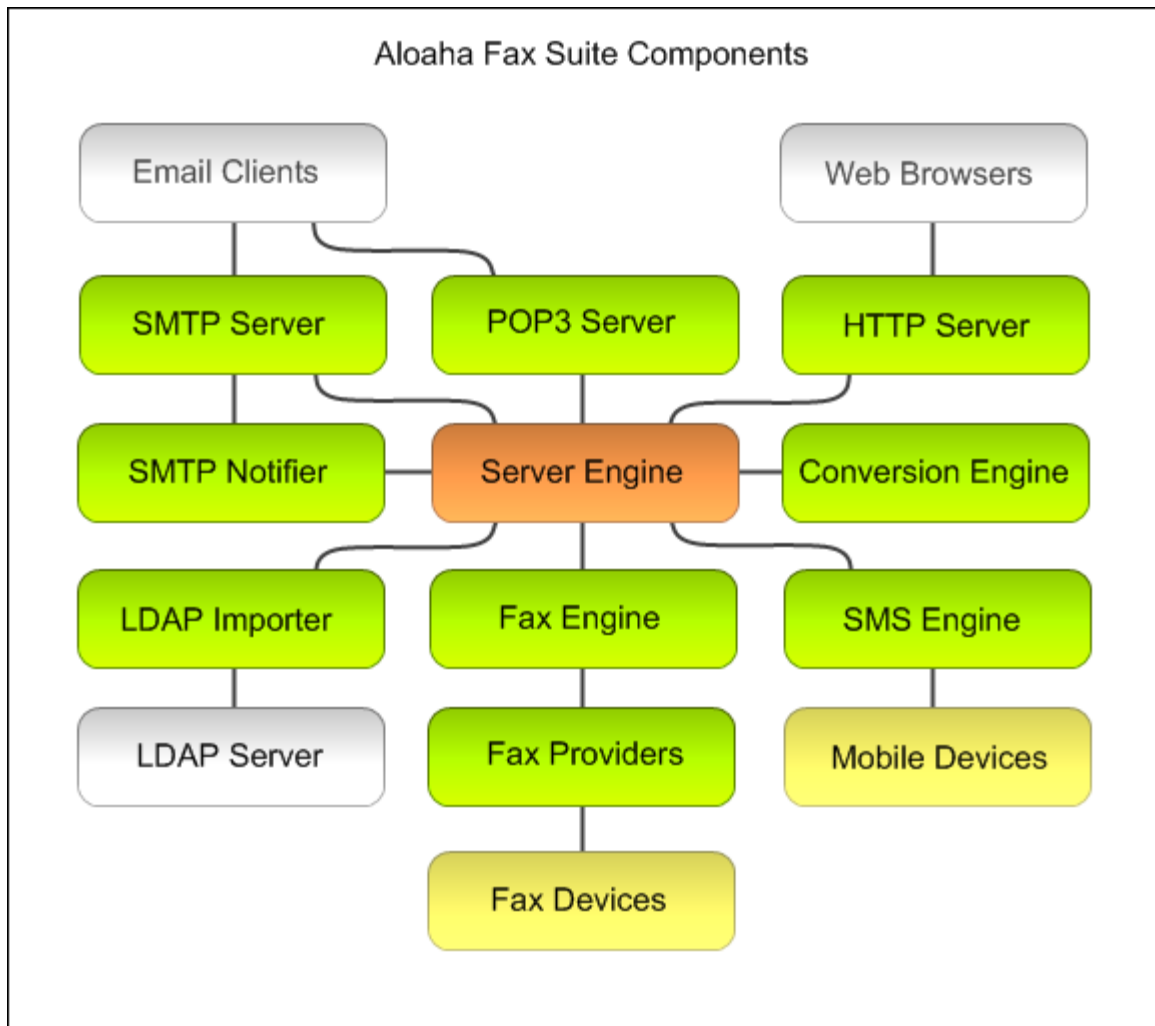
1 Overview

1.1 Introduction

The Aloaha Fax Suite is a server product which can either extend on your existing email messaging infrastructure or even serve as one with the added facility of sending and receiving fax and SMS messages.

Compatible mail systems include Microsoft Exchange, Lotus Notes, MDeamon mail server and any other mail server that can forward mails based on the recipient domain and can accept relaying.

The basic components consist of a fax server that handles all the necessary processing for sending and receiving faxes using a variety of fax hardware. The following diagram illustrates a high-level structural building blocks of the Aloaha Fax Suite server.



Basic building blocks of Aloaha Fax Suite


Avoid the unnecessary queuing at the fax machine. The Aloaha Fax Suite server does all the queuing for you increasing productivity in your enterprise while also enabling you to use less paper in your office thus saving on paper waste and the cut down of trees.

The Aloaha Fax Suite needs minimal administrator intervention once set up correctly. Even the first-time setup has been made easy for the administrator.

1.2 Configuring with Exchange 2000/2003

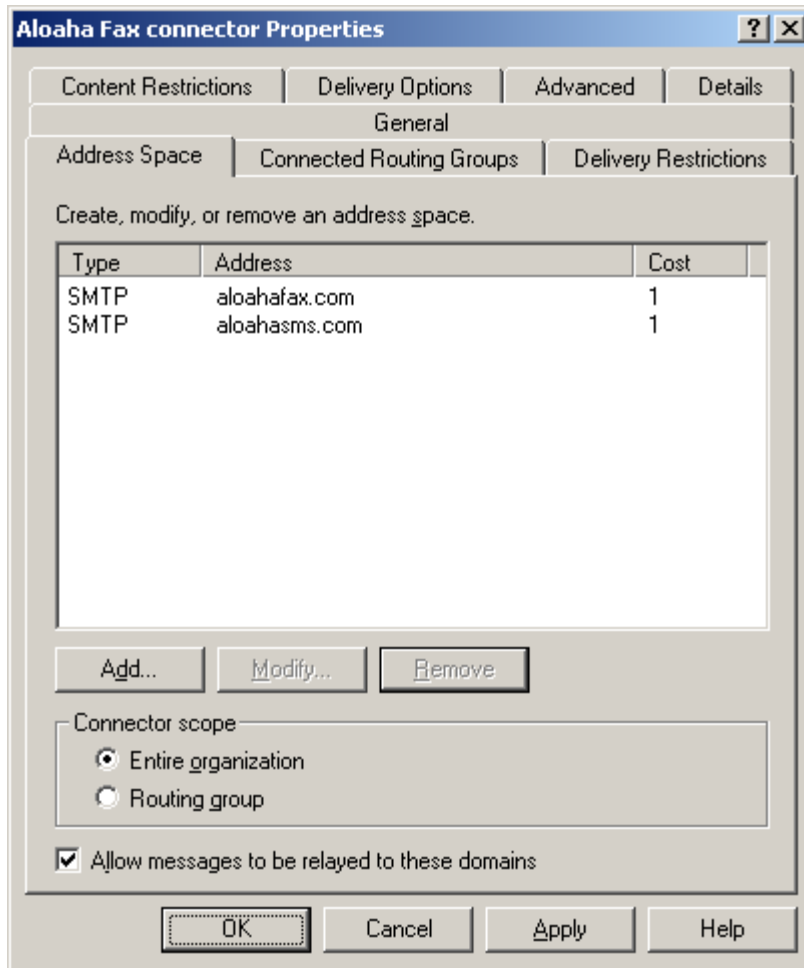
You can install the Aloaha Fax Suite server with Exchange 2000 or 2003 on a separate machine.

In this scenario, the built-in SMTP server must be enabled. The SMTP server port must be 25. (The built-in SMTP server is pre-configured as port 8025 by default)

 Always make sure that there are no port conflicts on the machine.

Now the Exchange server must be configured so that all messages sent to '@aloahafax.com' and '@aloahasms.com' will be relayed/forwarded to the built-in SMTP server. To do this you need to add an SMTP connector to the Exchange server. The SMTP connector is a standard Exchange SMTP connector which can be added as follows:

1. Open Exchange System Manager and go to the following node: *Administrative Groups / Routing Groups*.
2. Right-click on the '*Connectors*' node and a menu will show up. Click on '*New*' and then on '*SMTP Connector*'.
3. Click on the '*Forward all mail through this connector to the following smart host*' and enter the IP address of the Aloaha Fax Suite server machine enclosed in square brackets. (e.g. [192.168.0.140])
4. Click on the '*Add*' button in the local bridgeheads section and select the default virtual SMTP Server instance.
5. In the '*Address Space*'; tab click '*Add*' to pop up the '*Address Space*' dialog. Select '*SMTP*' and click on the '*OK*' button thus popping up the '*Internet Address Space properties*' dialog.
6. In the '*Internet Address Space properties*' dialog enter '**aloahafax.com*' so that all mails sent to @aloahafax.com will be forwarded to the Aloaha Fax Suite server.
7. For SMS, repeat steps 5 and 6 while replacing '*aloahafax.com*' with '*aloahasms.com*' in step 6.
8. Click OK and the connector will take immediate effect.



Connector properties with SMTP domains

This is how the Address Space tab will look like after the addition of the aloahafax.com and aloahasms.com internet address spaces.

Now you need to set up the Aloaha Fax Suite notification system to send to Exchange instead of the built-in SMTP server. This can be done from the Aloaha Fax Suite configuration under the '*SMTP Mail Notifier*' category by setting the '*SMTP Mail server host name or IP address*' entry to the IP of the Exchange server machine. Then the '*SMTP Mail server port*' should be set to 25 since it is the Exchange SMTP server default.

SMTP Mail Notifier
Configure options for all notification and email delivery.

Notification global options

Number of retries on notification delivery failure:
10

Interval between retries: (in minutes)
2

SMTP General Options


SMTP Mail server host name or IP address:
127.0.0.1

Test

SMTP Advanced Options

SMTP Mail server port: (default: 25)
25

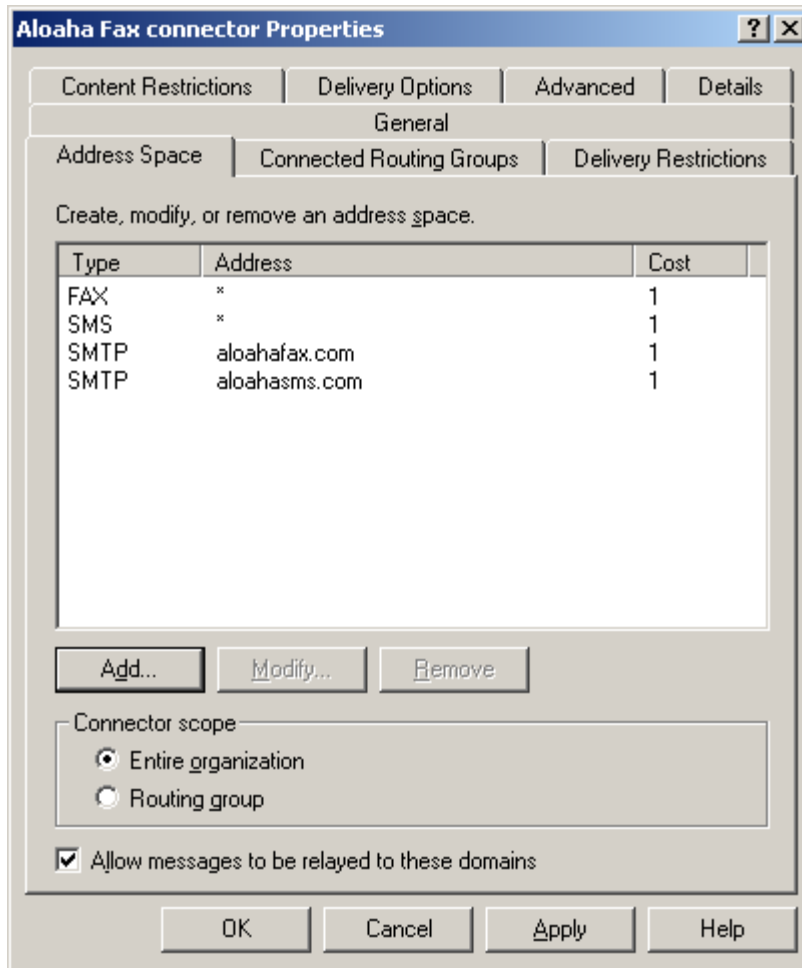
Aloaha SMTP Notification options

 Now you will be able to send a fax or SMS by sending a mail to a 'number@aloahafax.com' email address (replacing the 'number' part with the actual fax number)

1.2.1 Support for Outlook Business Fax Contacts

To support the business fax contacts in Outlook you can also add the FAX and SMS addresses in the Exchange connector as follows:

1. After step 4 above, click on the 'Add' button in the local bridgeheads section and select the default virtual SMTP Server instance.
2. In the 'Address Space' tab click 'Add' to pop up the 'Address Space' dialog. Select 'Other' and click on the 'OK' button thus popping up the 'Other Address Space properties' dialog.
3. In the 'Other Address Space properties' dialog enter 'FAX' in the 'Type' field and '*' in the 'Address' field so that all mails sent to one off [FAX:] addresses will be forwarded to the Aloaha Fax Suite server.
4. For SMS, repeat steps 2 and 3 while replacing 'FAX' with 'SMS' in step 3.
5. Click OK and the connector will take immediate effect.




Connector properties with one-off domains

This is how the Address Space tab will look like after the addition of the FAX and SMS address spaces.

1.3 Configuring with external mail server


You can install the Aloaha Fax Suite server with any mail server provided that the mail server has the ability to relay/forward emails addressed to specific domain names to another SMTP server.

 If your mail server is unable to relay/forward email addresses to another SMTP server, you can use the **POP3 Downloader** feature later on in the manual.

In this scenario, the built-in SMTP server must be enabled. If installed on the same machine as the mail server, the SMTP server port must not be 25. (The built-in SMTP server is pre-configured as port 8025 by default)

Now your mail server must be configured to relay/forward any emails sent to domains '@aloahafax.com' and '@aloahasms.com' to the Aloaha Fax Suite server machine. Refer to the user manual of your mail server for instructions on how to do this.

Now you need to set up the Aloaha Fax Suite notification system to send to your mail server instead of the built-in SMTP server. This can be done from the Aloaha Fax Suite configuration under the 'SMTP Mail Notifier' category by setting the 'SMTP Mail server host name or IP address' entry to the IP of your mail server machine or the loopback IP address '127.0.0.1' if your mail server is on the same machine. Then the 'SMTP Mail server port' should be set to 25 since it should be the SMTP mail server default.



SMTP Mail Notifier

Configure options for all notification and email delivery.

Notification global options

Number of retries on notification delivery failure:

Interval between retries: (in minutes)


SMTP General Options

SMTP Mail server host name or IP address:

SMTP Advanced Options

SMTP Mail server port: (default: 25)

Aloaha SMTP Notification options


 Now you will be able to send a fax or SMS by sending a mail to a 'number@aloahafax.com' email address (replacing the 'number' part with the actual fax number)

1.4 Using the built-in SMTP and POP3 server

The Aloaha Fax Suite server has a built in mail server consisting of both an SMTP and a POP3 server which together make a comprehensive email server which can be used by your company as your central email infrastructure.

SMTP Server
Configure in-built SMTP server to support 'number@domain' addressing for sending.

Enable in-built SMTP server.

 Changes to this form will take effect on restart of the fax server.

General


Domain name reported to email clients:

Port for listening to email client requests:

Domains

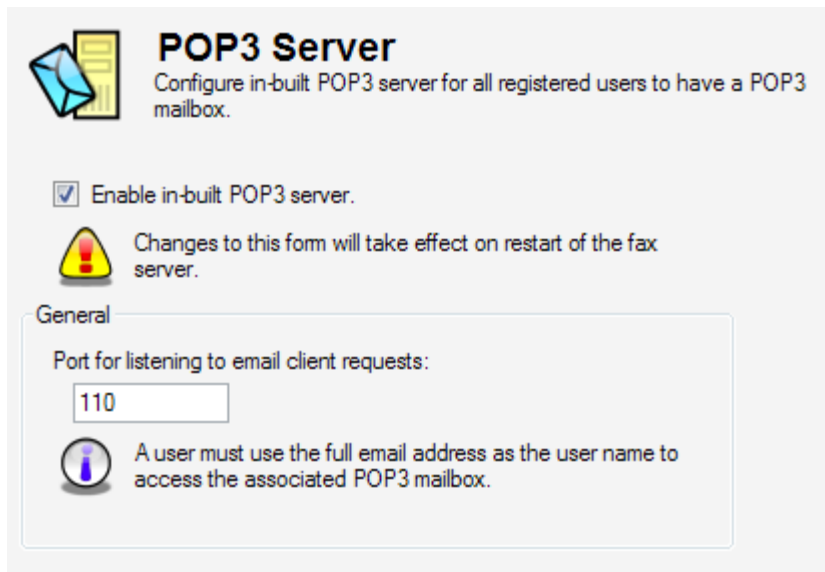
Email address domains for Fax:

Email address domains for SMS:

 Multiple email address domains must be separated by semicolons (;)


Aloaha SMTP Server options

The built-in mail server is not domain oriented but email address oriented. Thus all the users added to the registered users list of the fax server configuration will automatically have access the SMTP server, and if a password is specified, access to a mailbox in the POP3 server is also given. Users wanting to log in to their respective POP3 server mailbox will need to use their full email address as the user/login name.




POP3 Server
Configure in-built POP3 server for all registered users to have a POP3 mailbox.

Enable in-built POP3 server.

 Changes to this form will take effect on restart of the fax server.


General

Port for listening to email client requests:

 A user must use the full email address as the user name to access the associated POP3 mailbox.

Aloaha POP3 Server options

In addition to having access to a mailbox, all registered users will also have access to the fax and SMS capabilities of the Aloaha Fax Suite server. So sending to 'number@aloahafax.com' will automatically send a fax to the number specified.

 After first installation, the Aloaha Fax Suite server is pre-configured with both the SMTP server and the POP3 server enabled with the SMTP port set at 8025 and the POP3 port set at 8110.

Chapter



2

Fax devices

2 Fax devices

2.1 Introduction

The Aloaha Fax Suite server interfaces with a multitude of fax adapters to send and receive faxes with. These include fax boards and fax modems supporting ISDN, POTS and Fax over IP (FoIP)

Fax modems, multi-fax-modem interface boards and Dialogic/Eicon Diva Server adapters are supported natively. Modems could also be used by the Microsoft Fax Service support that comes integrated with Windows XP, Windows 2003, Windows Vista Business and Windows Vista Ultimate. Since Windows Vista Basic and Premium do not have the Microsoft Fax Service, the Aloaha Fax Suite modem driver can be used instead.

2.2 Installing Fax Modems

The Aloaha Fax Suite can interface directly to your **fax modem** or **multi-fax-modem interface boards**. All modems supporting the Fax Class 1/1.0 ITU T.31 standard are supported by the fax server.

Single cheap internal modems could work but are not supported. These devices are software based and emulate a real COM port thus using lots of CPU time. Non-USB external modems on the other hand are better supported since all the processing is done on their own circuitry and use a **real** COM port.

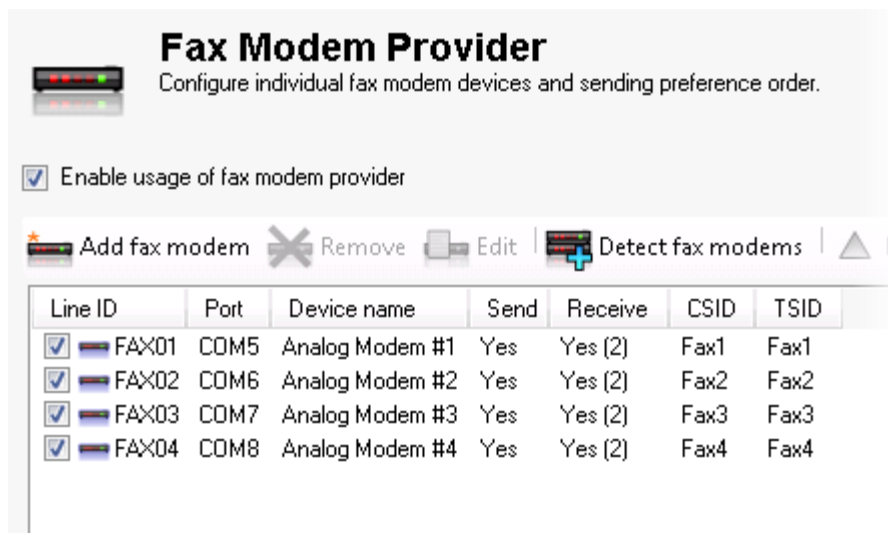
Professional grade multi-fax-modem boards are best supported since these are designed specifically for fax servers. These boards are best suited since they are adequately priced and the Aloaha Fax Server fax modem driver is designed specifically for these boards.

1. To install a fax modem simply plug it in to your machine. If it is an external model, plug it into an available COM port while if it is an internal multi-fax-modem model, you will have to open up your machine and plug it into an available slot.

 Please follow the installation instructions given by the board manufacturer.

Make sure that you have installed the necessary drivers for your modem if needed or provided by the manufacturer.

2. After installing your devices, open the Aloaha Fax Suite configuration and go to the 'Fax Modem Provider' category.




Line ID	Port	Device name	Send	Receive	CSID	TSID
<input checked="" type="checkbox"/> FAX01	COM5	Analog Modem #1	Yes	Yes (2)	Fax1	Fax1
<input checked="" type="checkbox"/> FAX02	COM6	Analog Modem #2	Yes	Yes (2)	Fax2	Fax2
<input checked="" type="checkbox"/> FAX03	COM7	Analog Modem #3	Yes	Yes (2)	Fax3	Fax3
<input checked="" type="checkbox"/> FAX04	COM8	Analog Modem #4	Yes	Yes (2)	Fax4	Fax4

Aloaha fax modem provider modem list

3. If not yet enabled, click on the 'Enable usage of fax modem provider' check box to enable the fax

modem provider.

4. At this point the easiest way to install your modems is to click on the toolbar button named '*Detect fax modems*' and all installed, and powered on, fax modems will be added to the list. If the configuration seems to hang while detecting, this is normal, just wait for it to finish. A number of COM ports are detected starting from COM1 to COM32 which is a large number of ports and can take a while to detect.

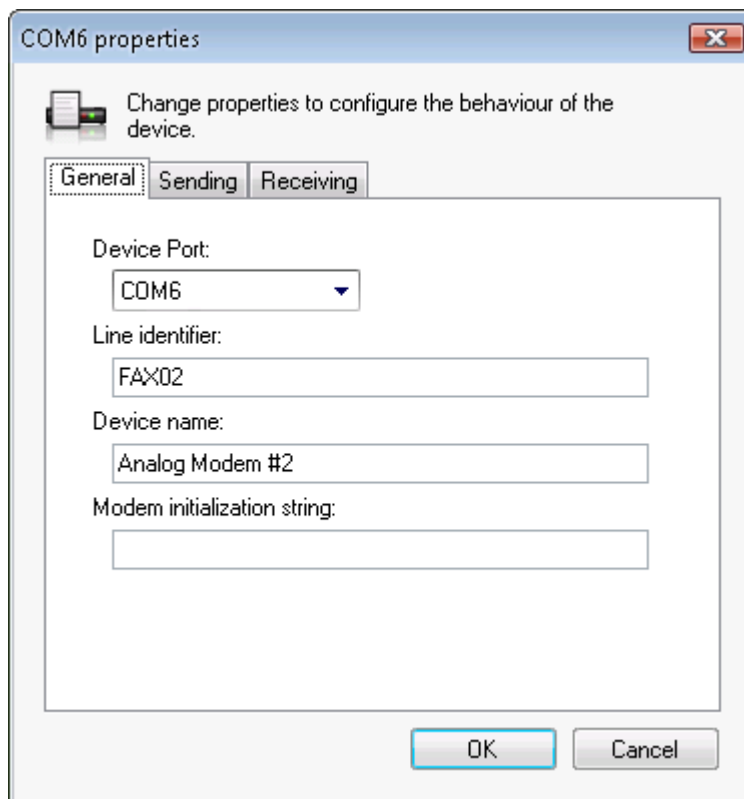
 If you are using the SMS feature of Aloaha Fax Suite make sure that after fax modem detection you remove any GSM modems detected as fax modems since GSM modems can also be fax modems but which send through the GSM network.

5. If you do not wish to detect your modems and know exactly on which COM ports your fax modems are installed, you may go ahead and install these one by one using the 'Add fax modem' toolbar button where you will be presented by the fax modem properties dialog.

6. Configure the general options. Select the COM port where the modem is connected to and assign a line identifier. If you leave this empty, one will be assigned for you when you press the OK button. The line identifier can be used for inbound routing so you may want to set it up to your needs.

Fill in the device name so that you can identify the device. This field can also be used for inbound routing.

The modem initialization string, if left empty, will be set to AT&F which is a standard initialization string that any modem should handle. Should your modem need a different initialization string, you may put it here.



Aloaha fax modem general options

7. Set up the sending options. You may select not to send faxes via this fax modem and so you can disable the 'Send faxes from this device' check box option.

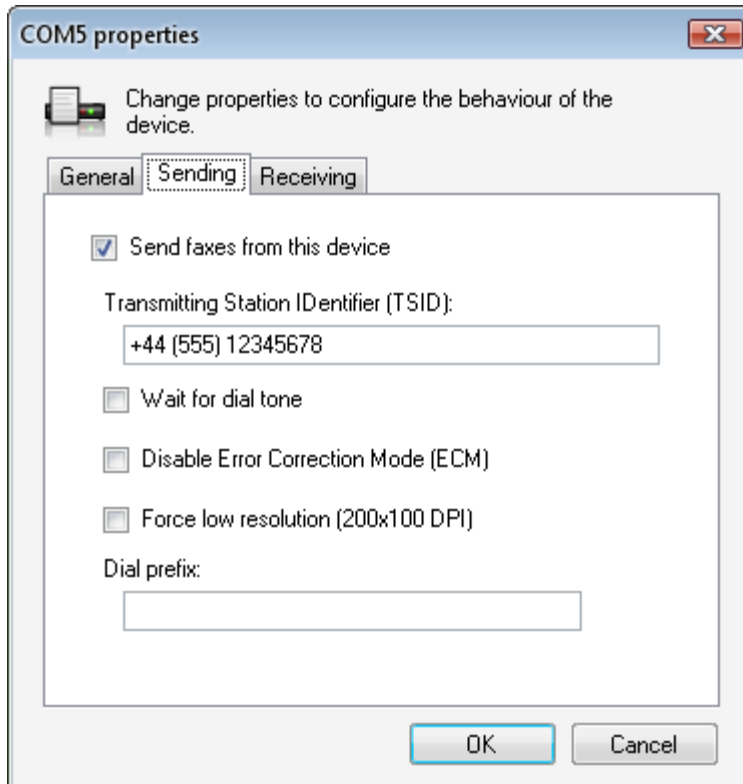
In the case that you want to send faxes from this device it is recommended to set the 'Transmitting Station Identifier (TSID)' to the phone number of the line that you will be connecting your modem to. The TSID is used to identify the sending fax machine (in this case a fax modem) to the receiving fax machine.

In some areas a non-standard dial-tone is used or the fax modem does not detect this. In these cases you can disable your fax modem from detecting a dial-tone by disabling the 'Wait for dial tone' check box option.

If you do not wish to use Error Correction Mode for sending, you can do so by clicking the 'Disable Error Correction Mode (ECM)' check box option.

The 'Force low resolution (200x100 DPI)' check box option is used to allow sending of faxes only in fax lowest resolution at 200x100 DPI. This reduces the time needed to send a fax by half but also reduces fax quality.

The Dial Prefix is added before the dial string. This can be used when using a PABX and a prefix is needed to get an outside line.



Aloaha fax modem sending options

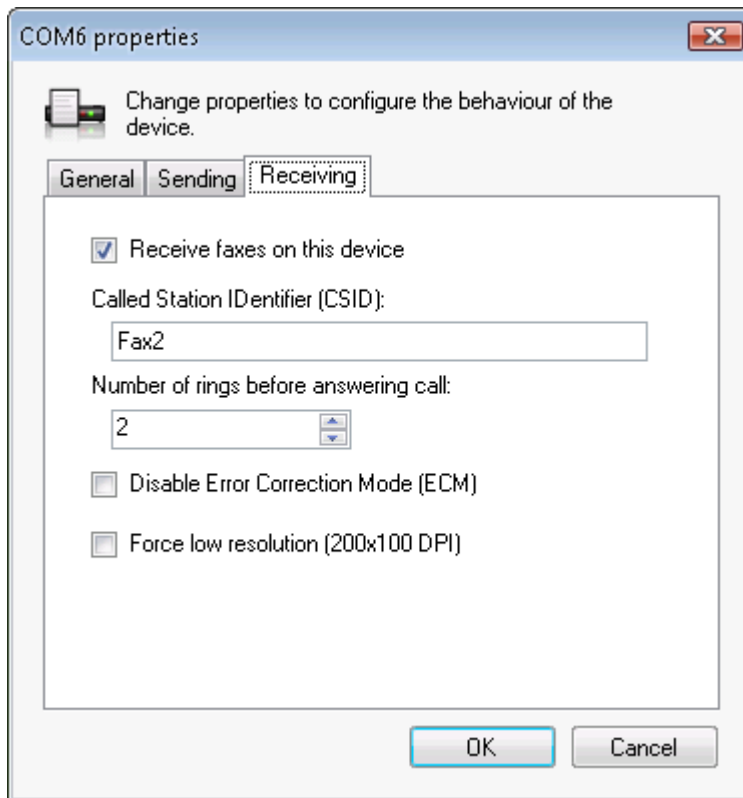
8. Set up the receiving options. You may select not to receive faxes via this fax modem and so you can disable the 'Receive faxes on this device' check box option.

In the case that you want to receive faxes from this device it is recommended to set the 'Called Station Identifier (CSID)' to the phone number of the line that you will be connecting your modem to. The CSID is used to identify the receiving fax machine (in this case a fax modem) to the transmitting fax machine.

You may also control how many rings are needed before the fax modem answers the call as a fax machine. A recommended value would be 2 or 3 but this can be set to your needs.


If you do not wish to use Error Correction Mode when receiving, you can do so by clicking the 'Disable Error Correction Mode (ECM)' check box option.


The 'Force low resolution (200x100 DPI)' check box option is used to allow the receiving of faxes only in the fax lowest resolution at 200x100 DPI. This reduces the time needed to receive a fax by half but also reduces fax quality.



Aloaha fax modem receiving options

9. Press the OK button to apply the settings. Repeat from step 5 to 9 for each fax modem you wish to add.


 The fax modem list is prioritized, which means that you can configure the priority on which fax modem a fax is sent first by moving the fax modems up and down at your own discretion.

 All changes done to the modem list while the Aloaha Fax Suite service is started will be changed at runtime. There is no need to restart the Aloaha Fax Suite service. If a fax is being sent or received by a device that has been just removed or disabled, the fax session will continue and the change will be effected on end of transmission.

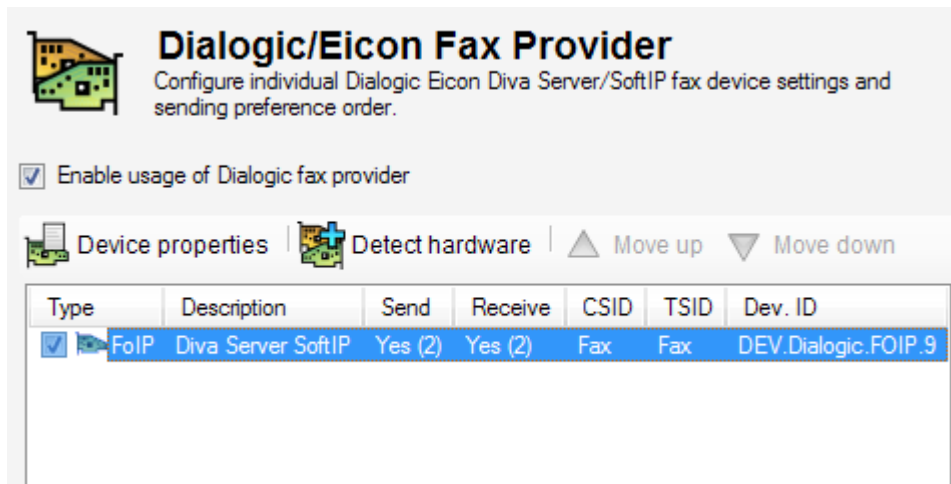
2.3 Installing Diva Server adapter

Installing a Diva Server adapter in Aloaha Fax Suite is very easy. Just follow these simple steps.

1. Make sure that your Diva Server hardware and software drivers are installed. Also make sure that the hardware is visible in the Windows Hardware Manager.

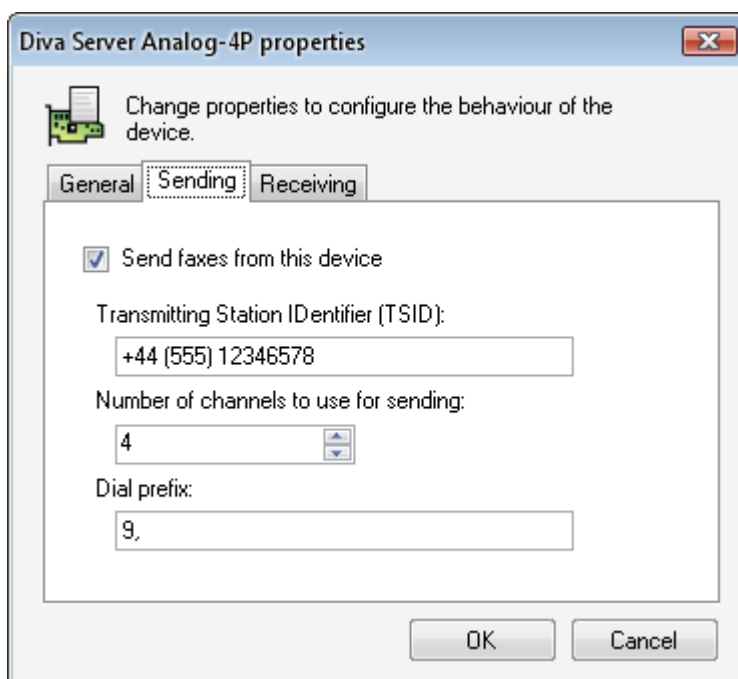
 In case of Diva Server SoftIP Fax over IP solution, no hardware is involved.

2. Open the Aloaha Fax Suite configuration and go to the '*Dialogic/Eicon Fax Provider*' category.



Aloaha Dialogic/Eicon fax provider device list

3. If not yet enabled, click on the '*Enable usage of Dialogic fax provider*' check box to enable the Dialogic fax provider.
4. Click on the toolbar button named '*Detect hardware*' and all installed Diva Server adapters are added to the list.



Aloaha Dialogic/Eicon device options

You can then configure the priority on which adapter the fax is sent first by moving the adapters up and down at your own discretion.

You can also configure the individual adapter's settings by using the '*Device properties*' toolbar button with an adapter selected. This will pop up the device properties dialog.


 Details on how to configure the options for the Diva Server adapter is described later on in this manual.

2.4 Installing CAPI Compatible Devices

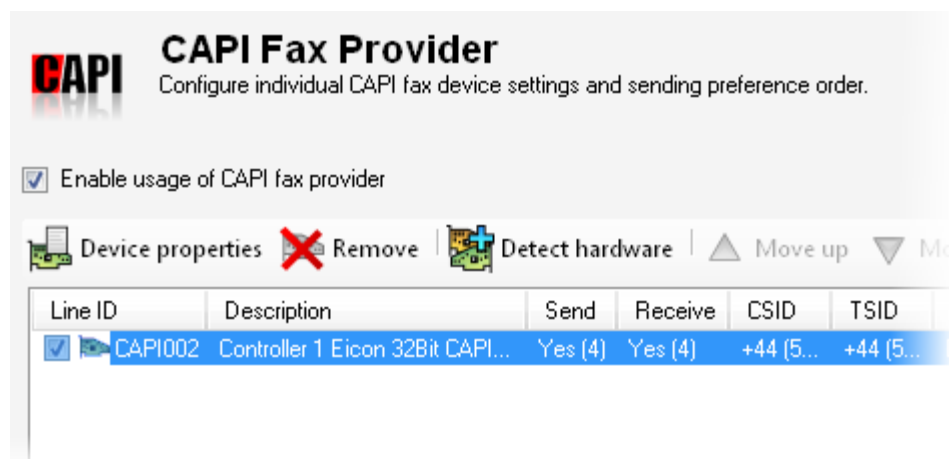
The Aloaha Fax Suite can interface directly with CAPI compatible devices. CAPI compatible devices include boards and/or software from the following vendors:

- AVM GmbH
- TE-SYSTEMS GmbH
- Dialogic/Eicon Diva Server line of products which **should be used with the Dialogic Fax Provider** mentioned above.

Each CAPI compatible hardware board comes with its own installation instructions but most importantly you have to make sure that the board drivers are installed. For software solutions, mostly Fax over IP solutions, the CAPI driver is included with the software installation.

 Since there can be only one CAPI driver from a single vendor installed on one system, you cannot have multiple hardware boards/software from different vendors installed on one system.

1. After you have installed your CAPI compatible board or software, open the Aloaha Fax Suite configuration and go to the 'CAPI Fax Provider' category.



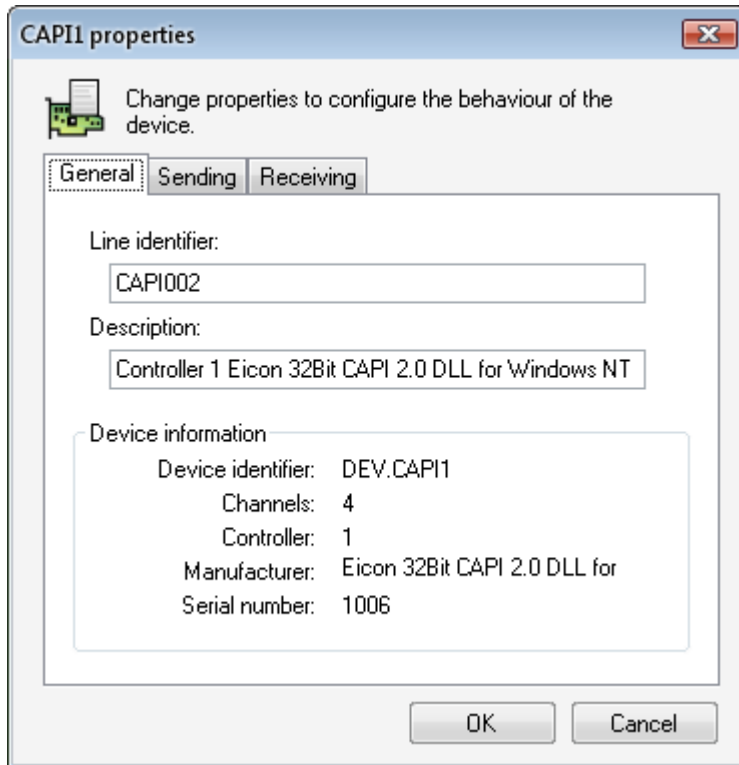
Aloaha CAPI fax provider device list

2. If not yet enabled, click on the 'Enable usage of CAPI fax provider' check box to enable the CAPI fax provider.

3. Click on the toolbar button named 'Detect hardware' and all installed CAPI compatible boards or software are added to the list as controllers.

A 'Controller' is what CAPI describes each installed board or software. The default options for each detected CAPI controller should work but you would want to change the settings.

4. Configure the general options. In this case a line identifier used for inbound routing is provided automatically but you can change it to your needs. The description field should be changed to the type of device or software referring to the controller if this is known.



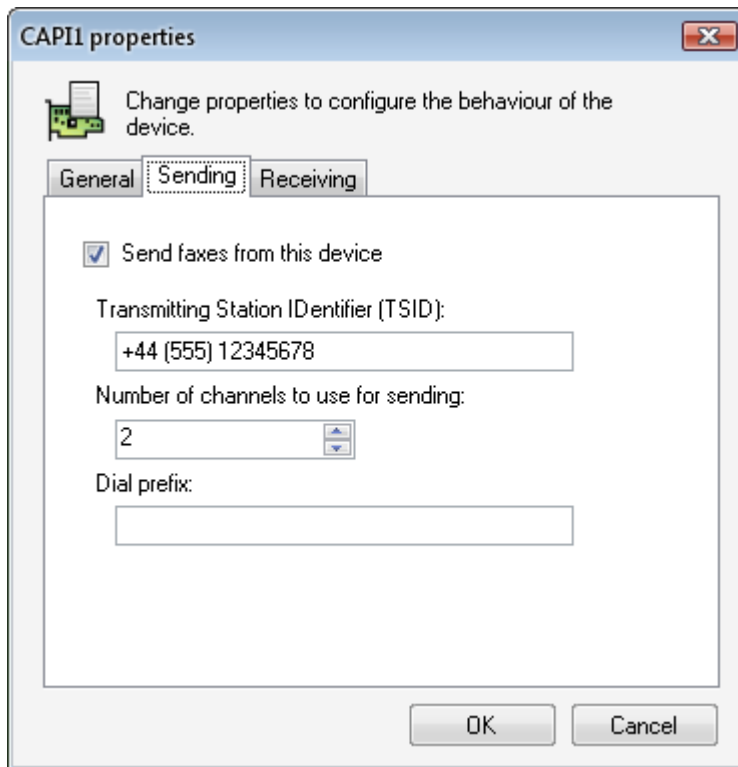
Aloaha CAPI device general options

5. Set up the sending options. You may select not to send faxes via this CAPI controller and so you can disable the 'Send faxes from this device' check box option.

In the case that you want to send faxes from this controller it is recommended to set the 'Transmitting Station Identifier (TSID)' to the phone number of the line that you will be connecting your controller to. The TSID is used to identify the sending fax machine (in this case a CAPI compatible controller) to the receiving fax machine.

You may wish to limit the number of concurrent sending channels from the maximum available. For example, if your CAPI controller supports 4 channels, you may select to limit the number of faxes going out to 2 so that the other two channels are free to receive or are just not used.

The Dial Prefix is added before the dial string. This can be used when using a PABX and a prefix is needed to get an outside line.

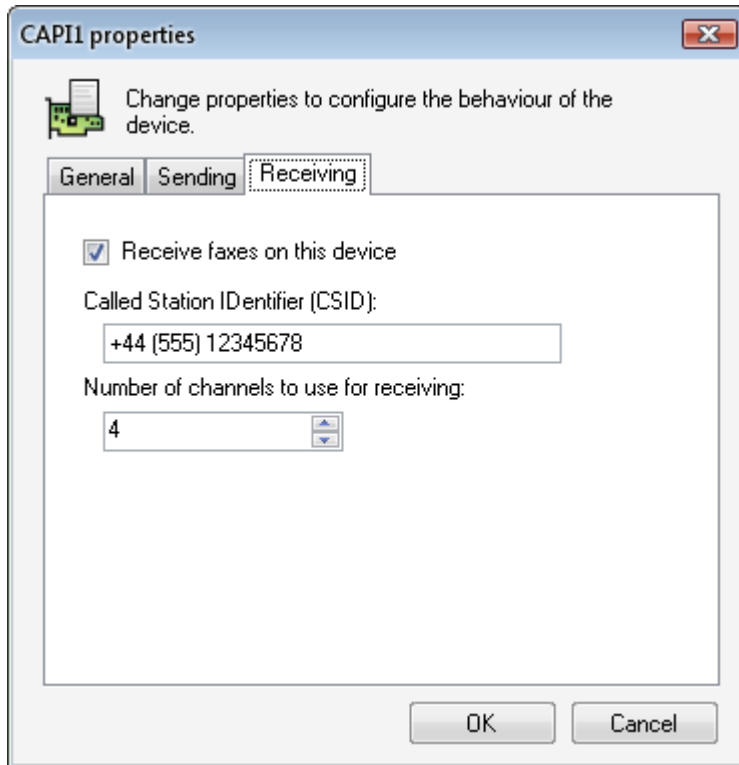


Aloaha CAPI device sending options

6. Set up the receiving options. You may select not to receive faxes via this CAPI controller and so you can disable the 'Receive faxes on this device' check box option.


In the case that you want to receive faxes from this controller it is recommended to set the 'Called Station Identifier (CSID)' to the phone number of the line that you will be connecting your controller to. The CSID is used to identify the receiving fax machine (in this case a CAPI compatible controller) to the transmitting fax machine.


You may wish to limit the number of concurrent receiving channels from the maximum available. For example, if your CAPI controller supports 4 channels, you may select to limit the number of faxes coming in to 2 so that the other two channels are free to send or are just not used.



Aloaha CAPI device receiving options

7. Press the OK button to apply the settings. Repeat from step 4 to 7 for each CAPI controller detected.

 The CAPI controller list is prioritized, which means that you can configure the priority on which CAPI controller a fax is sent first by moving the controllers up and down at your own discretion.

 Not all changes done to the controller list while the Aloaha Fax Suite service is started will be changed at run-time. In such cases it is better to restart the Aloaha Fax Suite service for the settings to take effect.

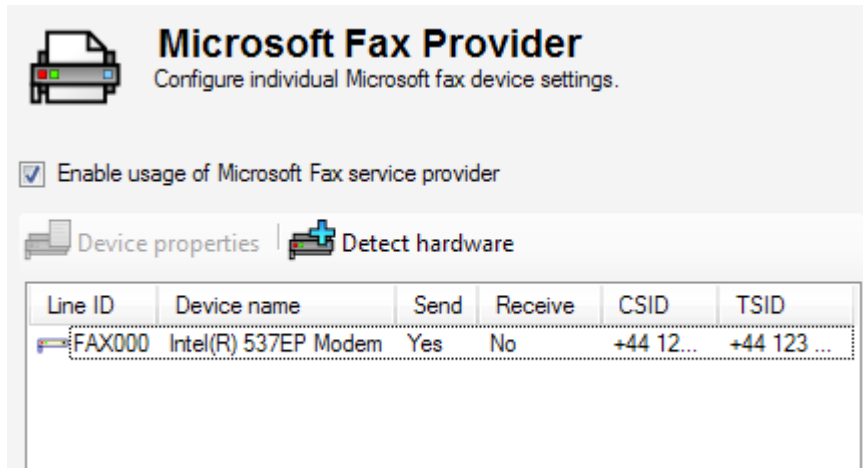
2.5 Integrating with Microsoft Fax

In Windows XP, Windows 2003, Windows Vista 2003 Business and Windows Vista Ultimate a small fax utility is included with the operating system. The Aloaha Fax Suite server can integrate with this utility to extend its functionality and also help businesses that already use this utility to increase the functionality to a much higher degree.

 Windows 2000 Microsoft Fax is not supported.

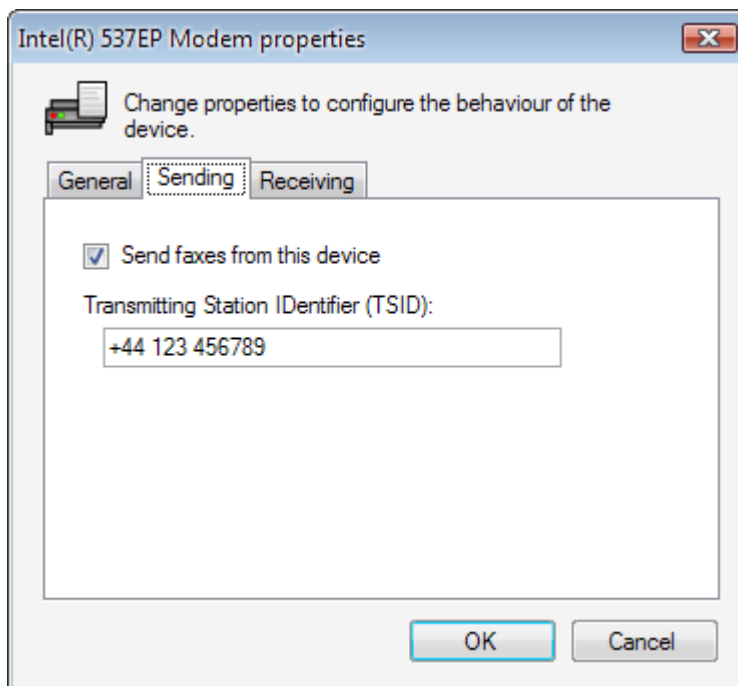
Installing with Microsoft fax is as simple as following these simple steps:

1. Make sure that the Microsoft Fax Service is installed (Scan and Fax in Vista). Also make sure that the hardware is visible in the Windows Hardware Manager and that you can at least send a fax using the Microsoft Fax basic functionality.
2. Open the Aloaha Fax Suite configuration and go to the '*Microsoft Fax Provider*' category.



Aloha Microsoft Fax provider device list

3. If not yet enabled, click on the 'Enable usage of Microsoft fax service provider' check box to enable the Microsoft fax provider.
4. Click on the toolbar button named 'Detect hardware' and all installed fax devices in use by Microsoft fax are added to the list.



Aloha Microsoft Fax device options

You can then configure the individual device properties by using the 'Device properties' toolbar button with a device selected. This will pop up the modem properties dialog.

 Details on how to configure the options for a Microsoft Fax device is described later on in this manual.

Chapter




3

Installation

3 Installation

3.1 System requirements

The following system requirements are guidelines on which system the Aloaha Fax Suite will run. Performance is also dependent on the number of applications running on the machine. The system was tested on high spec machines as well as low spec machines to get an idea on performance.

 Due to the nature of the intensive image processing done by the fax sub-system, the more RAM and CPU power you have, the better the performance of the Aloaha Fax Suite server will be.

OS: Windows 2000 sp3, Windows XP sp2, Windows 2003 or Windows Vista

.NET: Microsoft .NET Framework 2.0 (v2.0.50727)

CPU: 2Ghz CPU (Dual core recommended)

RAM: 512MB

HD: 500MB of free space

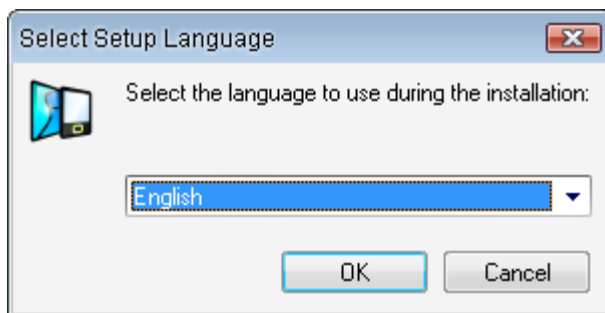
VGA: 800x600 16bpp Windows compatible video card.

LAN: 100Mbps Network card.

MS Fax support: Windows XP sp2, Windows 2003, Windows Vista Business or Windows Vista Ultimate

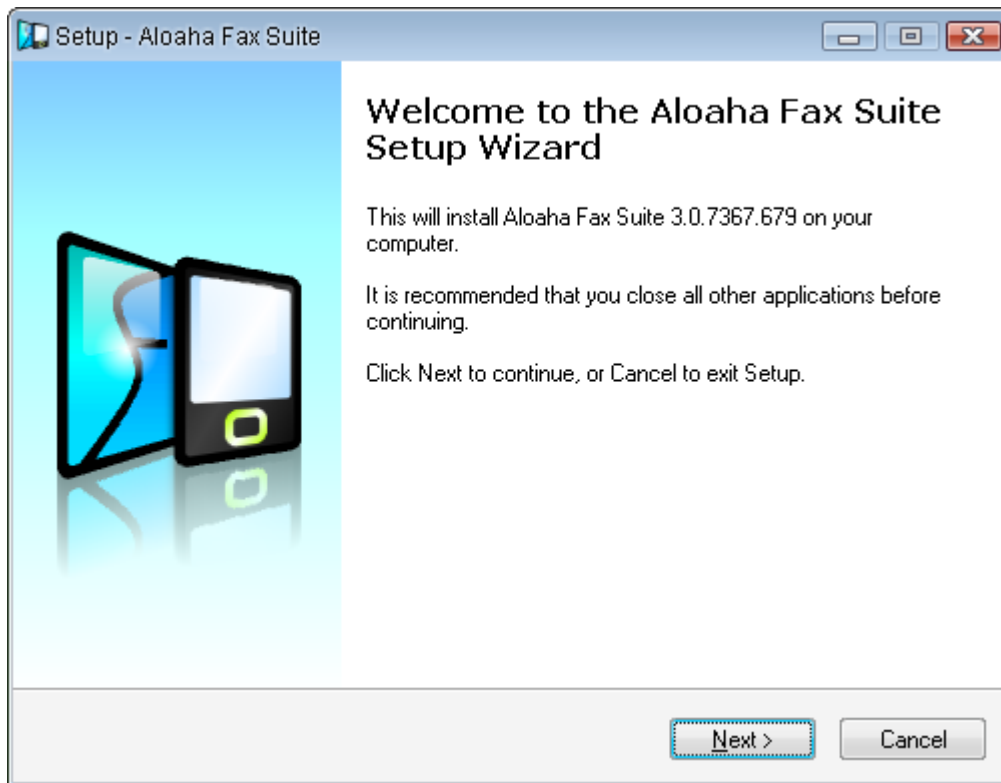
3.2 Step by step installation

To install the Aloaha Fax Suite server, locate the installation setup executable file normally named '*alohafaxsuite_setup.exe*' and double-click on it. You will be presented with the following dialog to choose your preferred language.



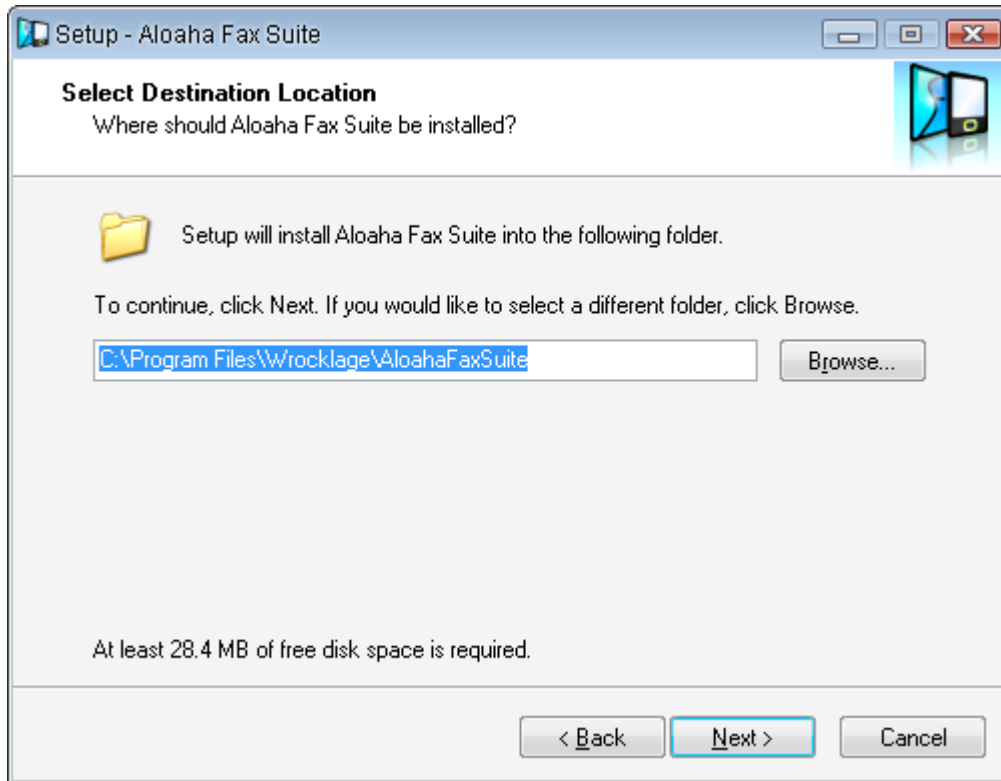
Choose your language

After choosing the language, you will be prompted to install .NET 2.0 if you do not have it installed in which case the installation will install it automatically. The following welcome dialog is shown after the language dialog or after the .NET framework is installed.



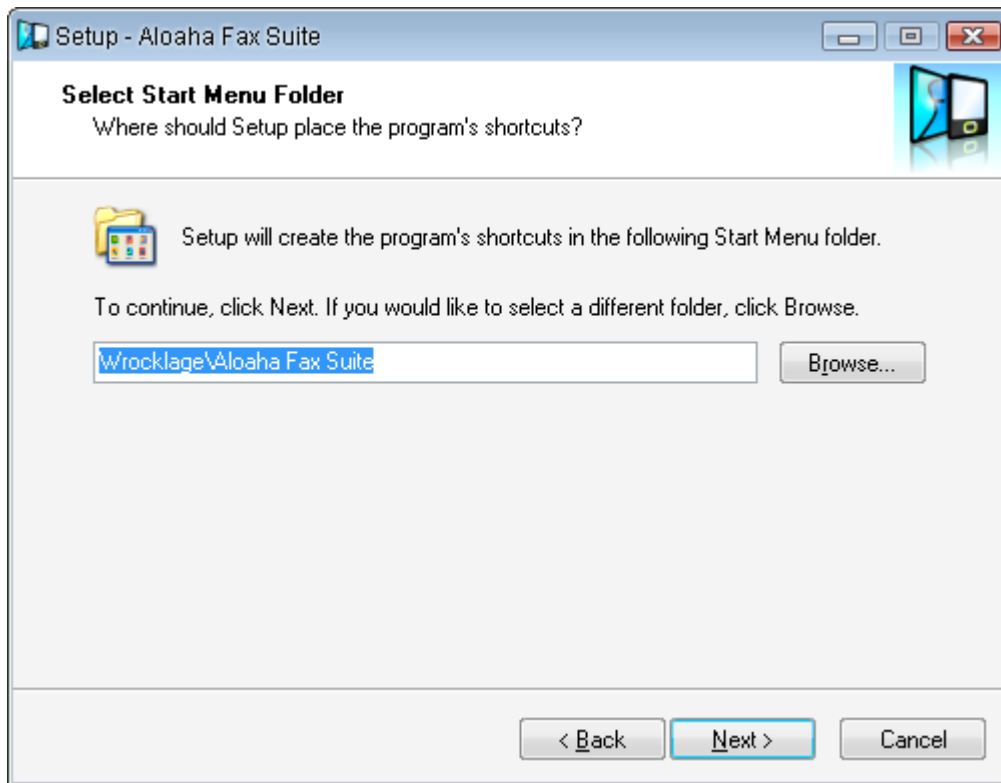
Welcome dialog

Click 'Next' to continue. Now you will be prompted to choose your preferred installation folder location. The default installation path is usually fine with many users. When ready click 'Next' to continue.



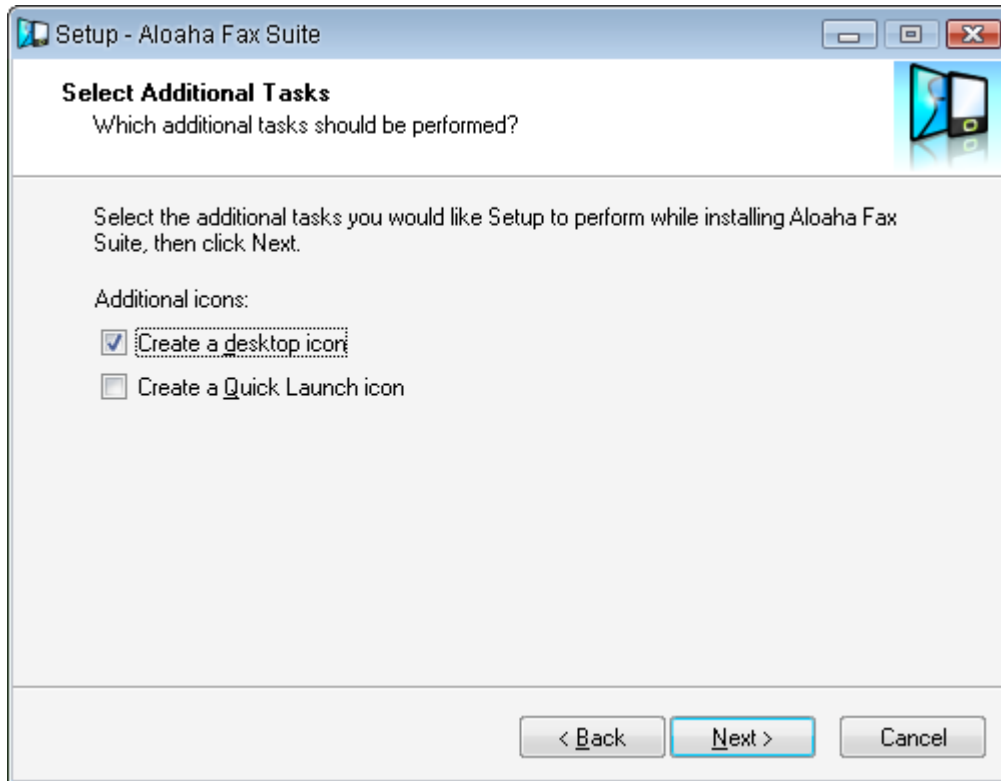
Chooses installation destination folder

Now you are prompted to choose the preferred program group folder and name to add to the start menu. The default value is normally fine with many users. When ready click 'Next' to continue.



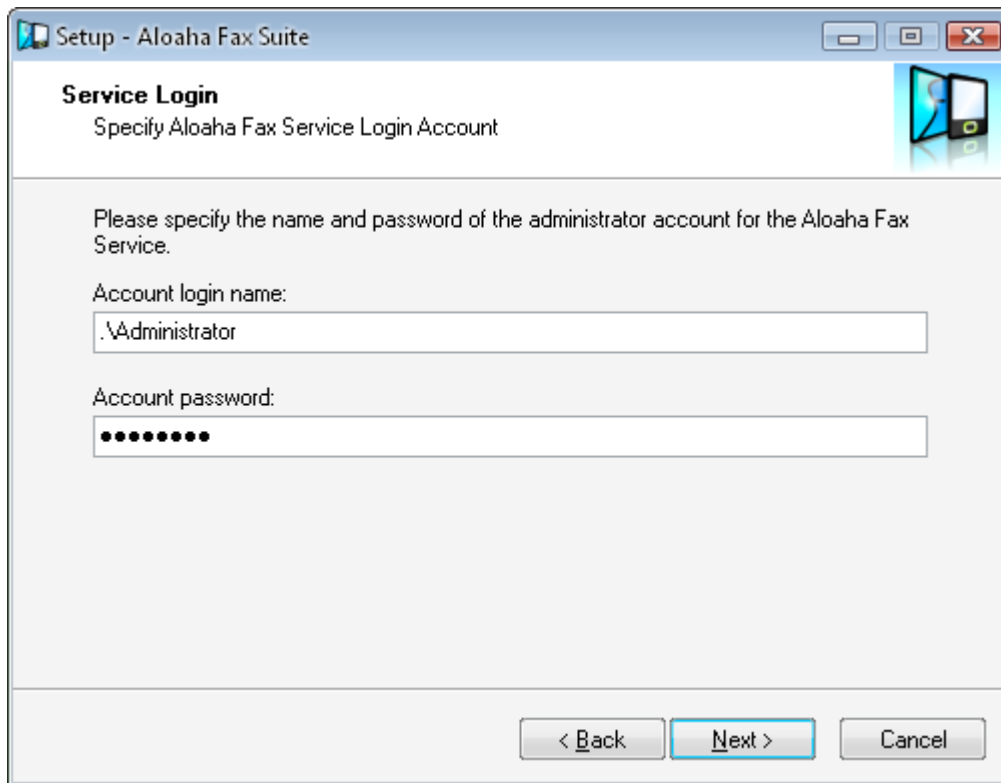
Choose start menu folder

Select additional tasks to be performed, for instance, to create a desktop icon and/or a quick launch icon for the Aloaha Fax Suite configuration. Click 'Next' to continue.



Choose additional options

The Aloaha Fax Suite service should run under the machine or domain administrator account to work correctly. In the following dialog you have to enter the account login name and the account password. By default the installation puts the name of the account for the current user account being used to install. This should be the correct user since you should use the machine or domain administrator to install the Aloaha Fax Suite.



Setup - Aloaha Fax Suite

Service Login

Specify Aloaha Fax Service Login Account

Please specify the name and password of the administrator account for the Aloaha Fax Service.

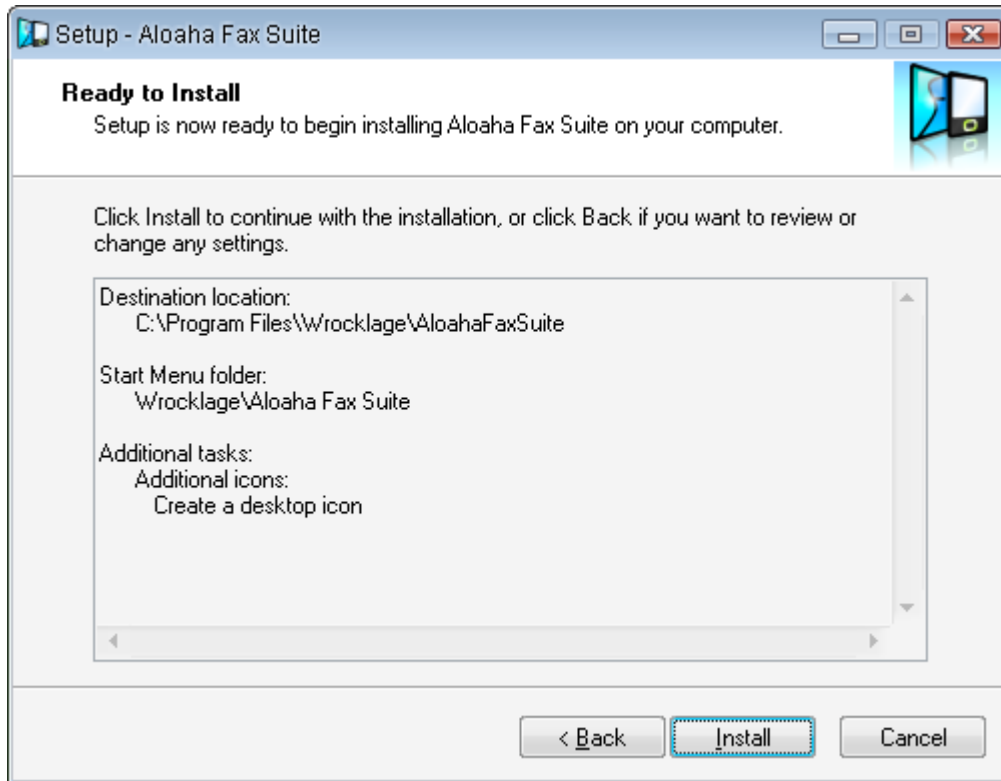
Account login name:

Account password:

< Back Next > Cancel

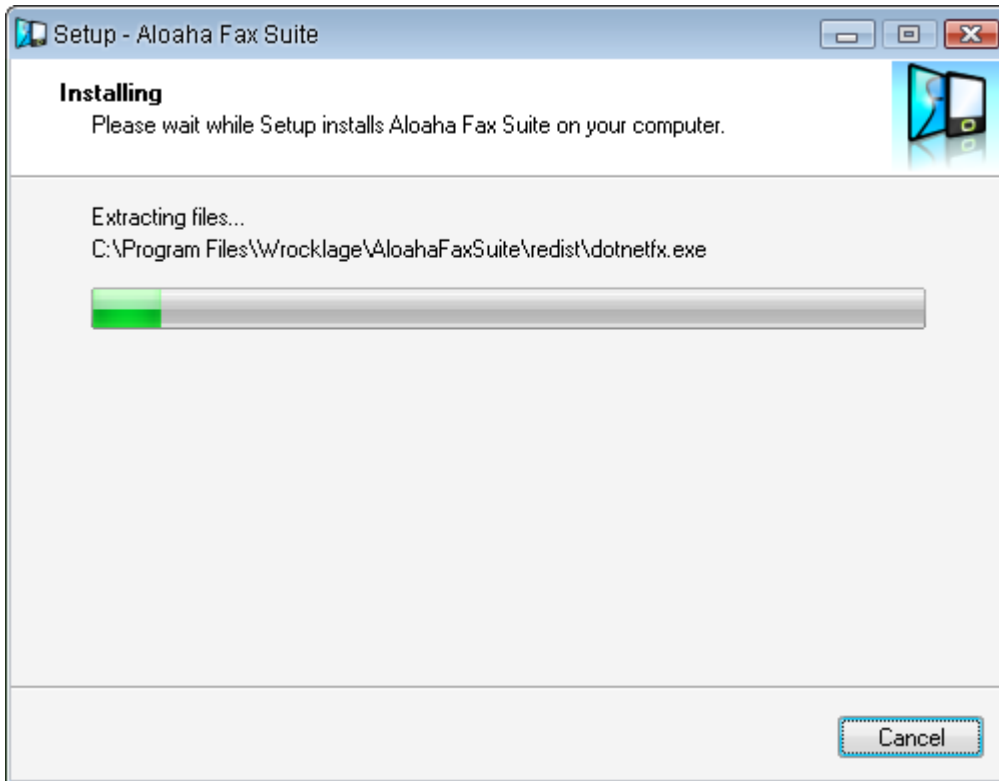
Service login credentials

The following dialog shows you a summary of all the options chosen during the installation questions asked in the previous dialogs. Now you have to click 'Install' to begin installing the actual files.



Summary dialog before file copy

The progress dialog will be shown next while the files are being installed. At this point you have to wait for the files to be copied for the next dialog to be shown or you can also click on the 'Cancel' button to stop the installation now.



Installing files

While the files are being copied you will be presented with this dialog to allow the installation of the Aloaha Fax Suite Printer Driver which is used by the fax server for image processing and conversion. Click 'Continue Anyway' to install the printer driver.



Printer driver install confirmation

After installation the final dialog is shown to confirm the success of the installation. You can choose to start

the configuration now.

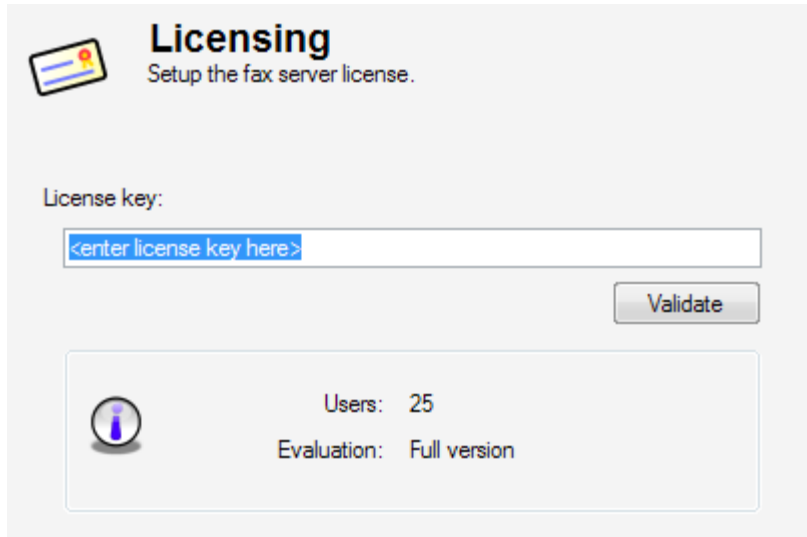


Finish dialog

Click 'Finish' to end the installation and if you have chosen the option, the Aloaha Fax Suite configuration will start for you to configure.

3.3 Entering license key after install

After installation you need to enter your license key into the configuration unless you are running in trial mode. In the Aloaha Fax Suite configuration go to the 'Licensing' category and enter the license key. Once ready click on 'Validate' to validate your license key. If you wish to go back to evaluation mode (if still in trial period) you can remove the license key and press 'Validate'.



Licensing
Setup the fax server license.

License key:

Validate

Users: 25
Evaluation: Full version

Aloaha licensing options

Information about the license key will be shown in the box below the license key entry box. This will show you the amount of users and the evaluation mode you are currently in.

3.4 Upgrading

Upgrading to a newer build of the Aloaha Fax Suite consists of going through the installation process of the new build by running the setup executable file of the new build and installing over the previous build.

 Configuration data is kept unless otherwise stated in the readme file of the installation setup file.

Chapter



4

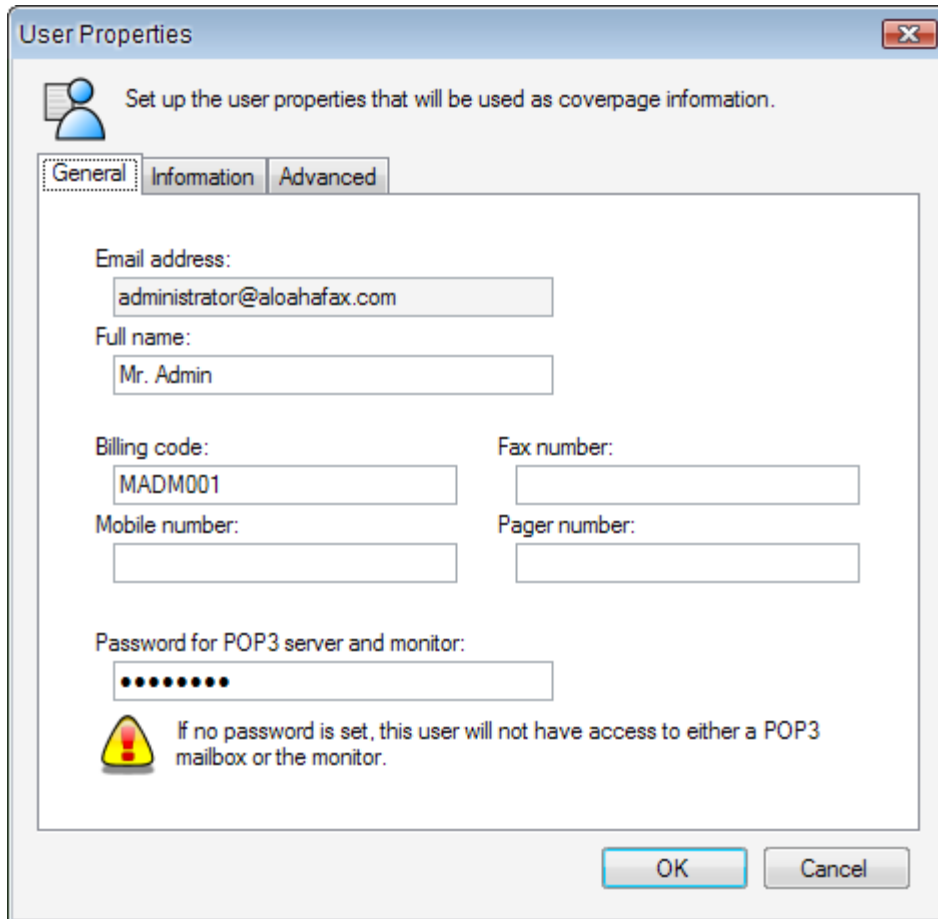
Configuring the fax server

4 Configuring the fax server

4.1 The importance of users

In Aloaha Fax Suite, every operation depends on users. Users are the central hub of the system and thus without users the server cannot work.

The first thing that the Aloaha Fax Suite will ask you is to add at least a new user. Users are needed for the SMTP server, the POP3 server, the HTTP server, the fax system, the SMS system, the notifications, and virtually all sub-systems of the Aloaha Fax Suite server.



User Properties

Set up the user properties that will be used as coverage information.

General Information Advanced


Email address:

Full name:

Billing code: Fax number:

Mobile number: Pager number:

Password for POP3 server and monitor:

 If no password is set, this user will not have access to either a POP3 mailbox or the monitor.

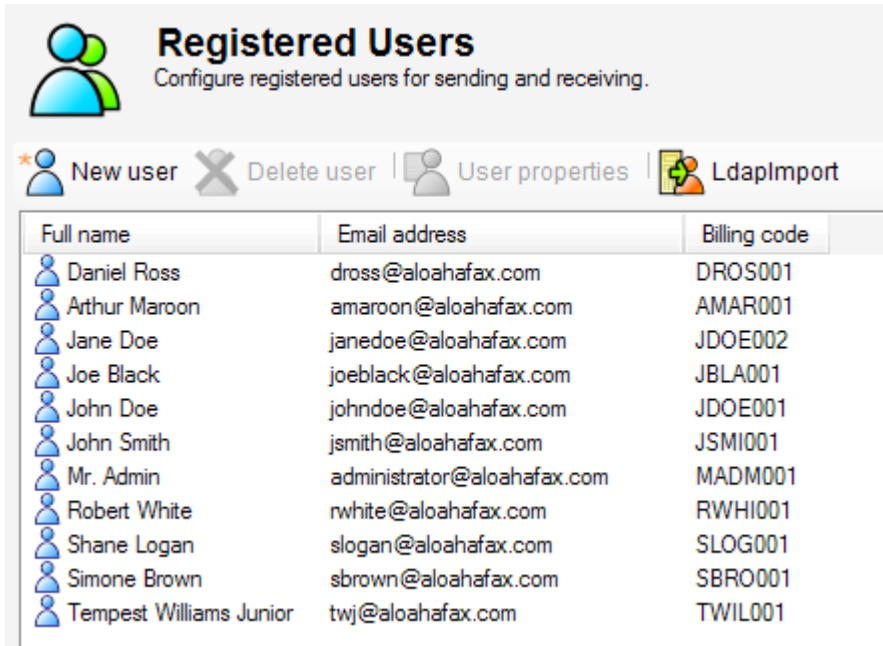
OK Cancel

General user properties

When adding users, these can be assigned some rights. When giving a password to a user, he will be able to connect to the built-in POP3 server and the built-in HTTP server hosted fax monitor. In addition to this a right to access all faxes of all users can be granted to a user to manage all the outgoing faxes from all users.

4.2 Importing users from LDAP/Exchange server

When you have the LDAP settings configured and enabled (see next section), you will have an import LDAP users button in the registered users list. This button is used to manually import users from an LDAP server such as Active Directory, Exchange or any other compatible LDAP server.



Registered Users
Configure registered users for sending and receiving.

* New user | Delete user | User properties | LdapImport

Full name	Email address	Billing code
Daniel Ross	dross@aloahafax.com	DROS001
Arthur Maroon	amaroon@aloahafax.com	AMAR001
Jane Doe	janedoe@aloahafax.com	JDOE002
Joe Black	joebblack@aloahafax.com	JBLA001
John Doe	johndoe@aloahafax.com	JDOE001
John Smith	jsmith@aloahafax.com	JSMI001
Mr. Admin	administrator@aloahafax.com	MADM001
Robert White	rwhite@aloahafax.com	RWHI001
Shane Logan	slogan@aloahafax.com	SLOG001
Simone Brown	sbrown@aloahafax.com	SBRO001
Tempest Williams Junior	twj@aloahafax.com	TWIL001

Aloaha registered user list

Click on the LDAP import button and then search for the users to add into the registered users list.

4.3 Automatic user import from LDAP/Exchange

The Aloaha Fax Server has the ability to import users from LDAP automatically and add them in the registered users list. This is done on sending a mail to the fax server. When the mail gets to the fax server, the email address is checked against the 'known' registered users, if it is not in the set it will look it up in the LDAP server set up for automatic import.

 Automatic import only works if LDAP is enabled and set up correctly.

User import (LDAP)
Configure Lightweight Directory Access Protocol (LDAP) settings for registered user import.

General | Advanced | Field Mapping

Enable LDAP importing.

LDAP Server

Host name or IP address of server:

Domain name: (e.g. myldapdomain.com)

Auto-import users from LDAP

Authentication

User name: Password:

Miscellaneous

[Test LDAP server \(may take several seconds\)](#)
[Change configuration scheme...](#)

Aloaha LDAP user import general options

Setting up LDAP is made easy by the use of templates. Common settings for different LDAP server are preset by selecting a 'configuration scheme' which is asked the first time when enabling the LDAP importer or when clicking on the 'Change configuration scheme' link.

To connect to an LDAP server some basic settings are needed. These include the host name or IP address of the machine where the LDAP server is located, the domain name of the LDAP server and optionally authentication. The domain name is translated to the proper LDAP connection string. For example if 'aloahafax.local' is specified as domain name, the following LDAP distinguished name (DN) is used:


DC=aloahafax, DC=local

If you wish to enable automatic import of users from LDAP, you should enable the 'Auto-import users from LDAP' check box.

If the configuration scheme does not work for your setup then you can fine tune the connection string by setting up advanced LDAP options.

Aloaha LDAP user import advanced options

LDAP servers are normally connected to by using port 389 but if this is not the case for your LDAP server you can change it by specifying it in the port field. The search root should normally be left blank to search all the 'folders' within an LDAP server for users.

 Leaving the search root empty could result in slow searches since it results in a global search. To specify a single, specific CN folder to search in, you can specify this. This results in a change in the DN connection string. For example if 'users' is specified in the search root field and considering the prior domain name example, the following DN connection string is used:

CN=users, DC=aloahafax, DC=local

Objects in LDAP have a class name. User objects in Active Directory and Exchange have the class name set to 'user'. Other LDAP servers can have this set to 'people' or 'contact'. This field is used as the filter when looking for LDAP objects. For example, if 'user' is specified as object class, the following LDAP filter part is used:

(objectClass=user)

There are three types of authentication supported for LDAP. Anonymous, Basic and Negotiate. When using anonymous, no credentials are passed to the LDAP server and thus you can omit the credentials altogether. Basic authentication is exactly what the name states, basic authentication protocol and Negotiate is specified to use the Microsoft Negotiate authentication service which is used mostly for Active Directory and Exchange.

The Aloaha Fax Suite LDAP client supports the usage of server side SSL certificates. When enabling SSL,

you have to choose how to accept the server certificate from two options. Either always trust the server certificate or compare with a stored certificate file which must be kept at the place of reference.

Coveragepage field	LDAP Attribute
Email address	mail
Full name	cn
Billing code	
Fax number	facsimileTelephoneNumber
Mobile number	mobile
Pager number	pager
Company	company
Department	department
Office phone	telephoneNumber
Title	title
Office location	physicalDeliveryOfficeName
Home phone	homePhone
Country	co
City	l
State	st
Street address	streetAddress
Zip/Postal code	postalCode

Aloaha LDAP user import field mapping

Object in LDAP have fields that could be named differently per LDAP server and so the mapping between the LDAP object fields and the Aloaha Fax Suite server coverage fields can be configured using the field mapping configuration. When choosing a configuration scheme, most if not all of the fields are predefined and should be kept as-is.

If there are fields that cannot be mapped to an LDAP object field or you wish to not populate it, you can leave the particular field empty.

4.4 The SMTP server


The Aloaha Fax Suite server has a built-in SMTP server to automatically intercept emails for sending as fax and/or SMS. The SMTP server is RFC compliant and it is one of the most powerful features in the Aloaha Fax Suite server as it gives the ability to integrate seamlessly with any SMTP server that can relay/forward emails to another SMTP server. It also gives the possibility to extract the fax or SMS number directly from the email address of the recipient in the email. For example, to send a fax to 12345678 you format the email address as follows:

12345678@aloahafax.com

The @aloahafax.com part is configurable in the SMTP server settings in the 'domains' configuration group.

SMTP Server
Configure in-built SMTP server to support 'number@domain' addressing for sending.

Enable in-built SMTP server.

 Changes to this form will take effect on restart of the fax server.

General


Domain name reported to email clients:

Port for listening to email client requests:

Domains


Email address domains for Fax:

Email address domains for SMS:

 Multiple email address domains must be separated by semicolons (;)


Aloaha SMTP server options

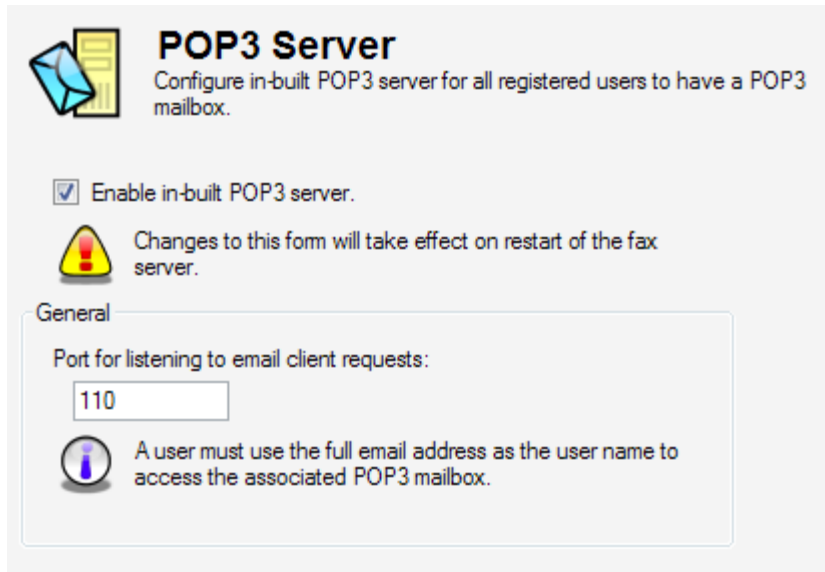
If you do not want this functionality you can switch off the SMTP server by disabling the 'Enable in-built SMTP server' check box. If this is the case, you cannot send faxes using this method. The POP3 downloader can be used instead.

 The POP3 downloader can be used in conjunction with the SMTP server as long as the administrator knows what he is doing.

4.5 The POP3 server


In addition to a built-in SMTP server, the Aloaha Fax Suite server has a built-in POP3 server that works in conjunction with the built-in SMTP server. This is a standard RFC compliant POP3 server that gives access to a mailbox for all the registered users that have a password.

 To use the built-in POP3 server, the built-in SMTP server must also be enabled.



Aloaha POP3 server options

The POP3 server standard port is 110 but to avoid conflicts, the first installation sets this to port 8110. You should change this to 110 if you know that there would be no conflicts with other POP3 servers on the same machine.

 For registered users to login to the POP3 server, they have to use their full email address as the mailbox login name.

Registered users can send normal mails to other registered users thus making the built-in SMTP and POP3 server pair an internal mail infrastructure for your company.

4.6 The HTTP server

The Aloaha Fax Suite server has a built-in HTTP server for serving pages to web browsers. The main purpose of the HTTP server is to host the fax monitor to registered users with a password configured. The default HTTP address to access the fax monitor from a web browser is as follows:

`http://192.168.0.1:8080/faxsuite/`

The above example assumes that the Aloaha Fax Suite server is installed on the machine with IP 192.168.0.1 and that the HTTP server's port is set at 8080 which is the default for the first time install.



HTTP Server
Configure in-built HTTP server for all registered users to access their personal area including fax jobs.

Enable in-built HTTP server.


 Changes to this form will take effect on restart of the fax server.

General


Port for listening to web browser requests:

 A user must use the full email address to login to the associated personal area.

Aloaha HTTP server options

 For registered users to login to the fax monitor, they have to use their full email address as the login name. Users that do not have a password can still access the HTTP server but will not have access to the fax monitor. This gives your registered users to access the user manual on how to send faxes and SMS messages with Aloaha Fax Suite.


The fax monitor allows the user to manage his outgoing faxes by viewing and canceling jobs.

 Please refer to the user manual for information on how to use the fax monitor.

4.7 Setting up notifications

Notifications are an integral part of the Aloaha Fax Suite. They are used to notify users of any possible failures and the success of their faxes or SMS messages. Without notifications registered users will not know what is happening to their faxes and SMS messages.

Notifications are emails sent to an SMTP server. By default this is configured to use the built-in SMTP server at port 8025 but can be configured to use any other SMTP server or port which is standard at port 25. The recipients will be email addresses from the registered users list.



SMTP Mail Notifier

Configure options for all notification and email delivery.

Notification global options

Number of retries on notification delivery failure:

Interval between retries: (in minutes)

SMTP General Options

SMTP Mail server host name or IP address:

SMTP Advanced Options

SMTP Mail server port: (default: 25)

Aloaha SMTP notifier options

The retries option is used when the SMTP server is not available or a connection error occurs. This ensures that the notification is delivered.

4.8 Priority and Discount

You will need to set priority on some users for sending faxes. For this reason there is the Priority and Discount options where you can assign users to their respective priority so that when sending a fax, the priority is used for that particular user.

Priority and Discount
Configure users to send at specified priorities or at discount time. Normal priority and no discount are default.

Low priority High priority Discount time

Assign users to send in high priority only.

Add Remove

Full name	Email address
Mr. Admin	administrator@aloahafax.com
Tempest Williams Junior	twj@aloahafax.com

Aloaha priority and discount options

Discount time is the lowest priority as it will make the fax send at the discount time specified in the 'sending options' category.

Chapter



5

Inbound routing

5 Inbound routing

5.1 Overview

When receiving faxes, the ability for the Aloaha Fax Suite to forward a received fax to the correct and intended recipient is of utmost importance. The Aloaha Fax Suite has a very powerful state of the art routing engine based on rules.


The basic concept of routing is based around the restriction that faxes arrive all at a central fax server. The problem to solve is to whom the fax should be sent to. This is done by analyzing all the information available at the time of reception and compare these with rules that determine the correct recipient.


Following are some of the fields that could be collected during reception:

- Transmitting Station Identifier (TSID)
- Caller ID
- DID/MSN/DTMF numbers.

ISDN


When using ISDN lines, you could have a Basic Rate Interface (BRI) or a Primary Rate Interface (PRI). Since ISDN is digital it contains very accurate information when receiving faxes. The most important are the MSN numbers for BRI and the DID for PRI.


 A Basic Rate Interface (BRI) interface consists of 2 distinct physical channels with 8 to 12 virtual numbers for MSN routing while a Primary Rate Interface (PRI) interface consists of 24 to 30 distinct physical channels with a large number of virtual numbers (100+) for DID routing. Contact your telephone company for plan details.

 The Aloaha Fax Suite server supports the Dialogic/Eicon Diva Server ISDN solutions via the Dialogic Fax Provider configurable in the Aloaha Fax Suite configuration.

Fax over IP (FOIP)


If using Fax over IP, information is gathered from the transmission where the sender number, the called number and other information is known. These will be used as the basis for inbound fax routing when using Fax over IP.


 Fax over IP inbound routing is very similar to ISDN since they are both digital and they both can have virtual numbers associated with one or more physical channels.

 The Aloaha Fax Suite server supports the Dialogic/Eicon Diva Server SoftIP Fax over IP solution both H.323 and SIP via the Dialogic Fax Provider configurable in the Aloaha Fax Suite configuration.

Analog lines (POTS)

If using standard analog telephone lines, the information gathered is limited and depends on the telephone provider service. Routing is based on DTMF where a PABX or the sender of the fax has to type in a code after the call has been answered and just before the fax begins to receive. Caller ID is also possible if the modem or card adapter used supports it.

 The Aloaha Fax Suite server supports Dialogic/Eicon Diva Server Analog solutions via the Dialogic Fax Provider and standard fax modems using the Microsoft Fax Provider in conjunction with the Microsoft Fax Service (Scan and Fax on Vista) which are both configurable in the Aloaha Fax Suite configuration.

 DTMF is only supported using Dialog/Eicon boards. Caller ID is supported on both Dialogic/Eicon and Microsoft Fax Providers.

5.2 Standard routing

There is a mandatory routing setting in the Aloaha Fax Suite and this is the user to whom all that faxes that cannot be routed are routed to. This user is needed so that if a fax cannot be routed to anyone there will always be someone to route the fax to.

Fax Inbound Routing
Configure users to receive unrouted or all inbound faxes.

Receive unrouted | Receive all

Set up users to receive unrouted inbound faxes. At least one user must be added.

Add Remove

Full name	Email address
Daniel Ross	dross@aloahafax.com

Aloaha fax inbound routing user list

If you want one or more users to receive a copy of all the faxes received, this can be done by adding users in the 'receive all' list.

5.3 Rules based routing

The Aloaha Fax Suite routing has a very powerful state of the art routing engine based on rules. It is easy to understand and set up once you get to understand it.

The system needs a set of rules. Each rule is based on one or more conditions / exceptions and one or more users to route the fax to when the rule is satisfied.

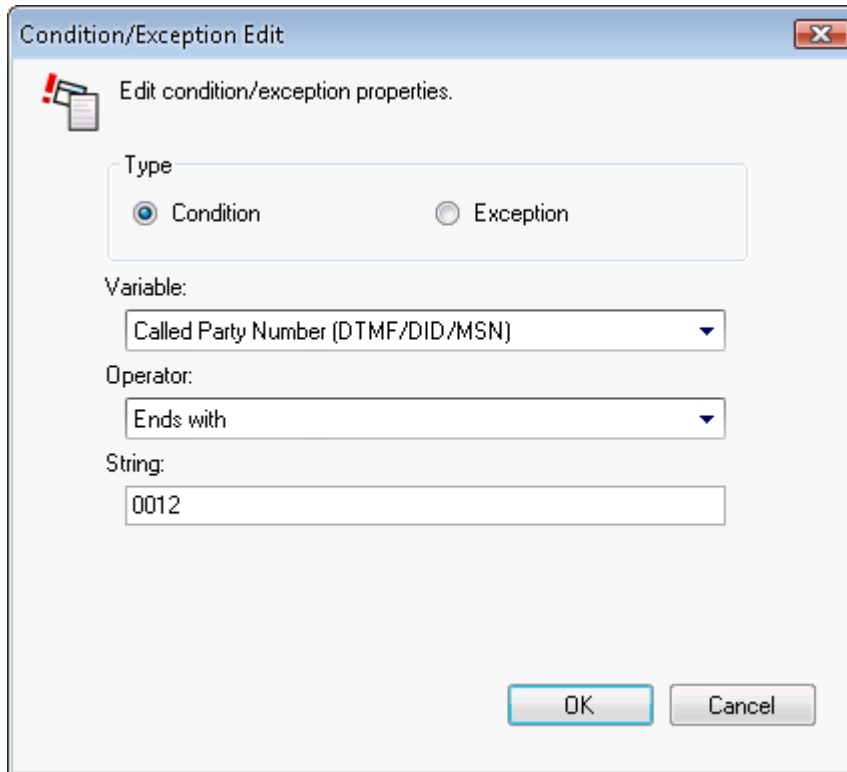
Fax Inbound Routing Rules
Configure routing rules to route inbound faxes to specific users.

New routing rule Delete routing rule New copy Edit routing rule

Rule name	Rule summary
Robert six to three	If 'Called Party Number (DTMF/DID/MSN)' ends with '0012' and 'Re...
Simone nine to six	If 'Called Party Number (DTMF/DID/MSN)' ends with '0012' and 'Re...
Spammer	If 'Caller ID' ends with '112033112' then route to 'administrator@aloha...

Aloaha fax routing rules list

To create a rule, click on the 'New routing rule' toolbar button and a new rule editor dialog is shown. Since this will be a new rule, the condition / exception edit dialog is also shown to create the mandatory condition or exception.



Condition/Exception Edit

Edit condition/exception properties.

Type

Condition Exception

Variable:

Called Party Number (DTMF/DID/MSN)

Operator:

Ends with

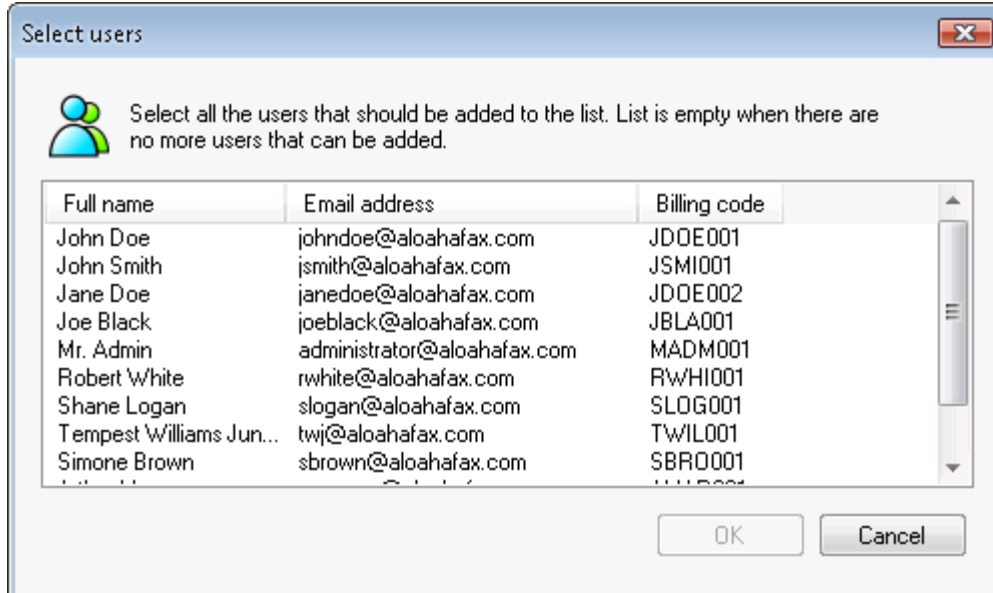
String:

0012

OK Cancel

Editing a routing rule condition

Once you set up the first condition or exception, the 'select users' dialog is shown for you to choose the mandatory one or more users to route the fax to when the rule is satisfied.



Select users

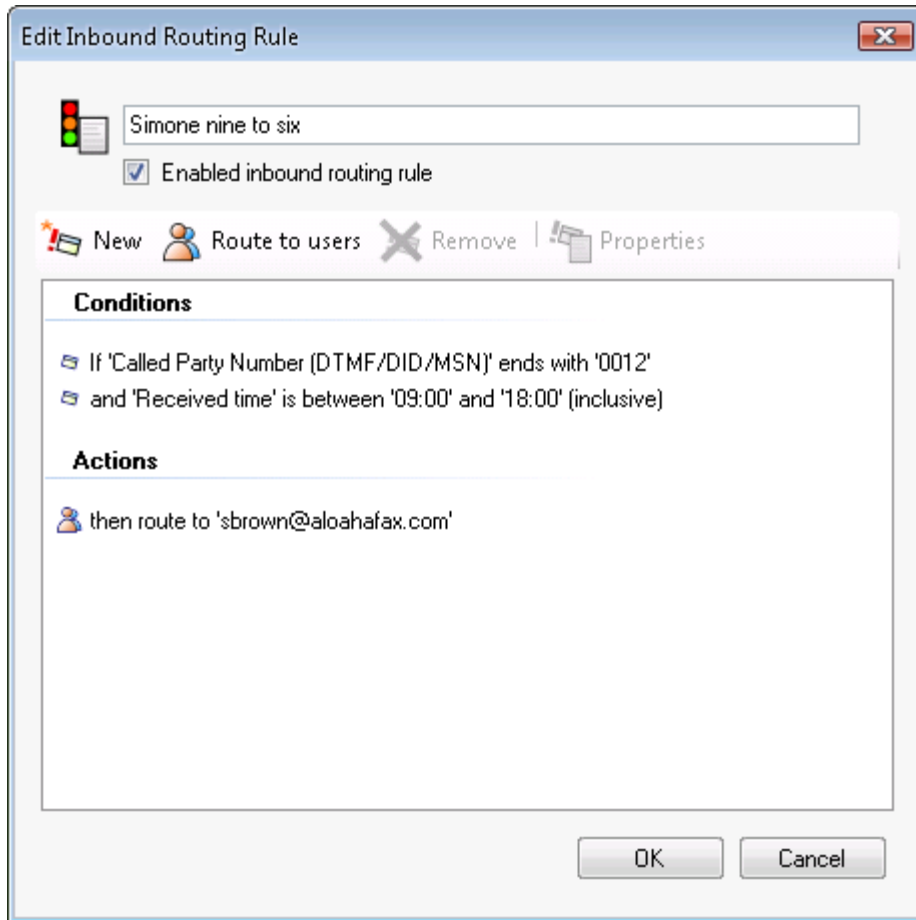
Select all the users that should be added to the list. List is empty when there are no more users that can be added.

Full name	Email address	Billing code
John Doe	john.doe@aloahafax.com	JDOE001
John Smith	jsmith@aloahafax.com	JSMI001
Jane Doe	janedoe@aloahafax.com	JDOE002
Joe Black	joebblack@aloahafax.com	JBLA001
Mr. Admin	administrator@aloahafax.com	MADM001
Robert White	rwhite@aloahafax.com	RWHI001
Shane Logan	slogan@aloahafax.com	SLOG001
Tempest Williams Jun...	twj@aloahafax.com	TWIL001
Simone Brown	sbrown@aloahafax.com	SBRO001

OK Cancel

Assigning users to the routing rule

When you select the users the inbound routing rule dialog shows the rule created. In this case there are two conditions for this rule. This example shows that for a fax to be routed, the 'Called Party Number' must end with '0012' and the time when the fax was received is between nine in the morning and six in the evening. If these conditions are met, a copy of the fax is sent to 'sbrown@aloahafax.com'.



Editing a routing rule

All inbound routing rules are computed even if a rule has been satisfied, then all the other remaining rules are also computed.

5.4 SMS Routing

SMS messages are received at the fax server and thus it is of utmost importance that the messages reach the intended recipient correctly since SMS messages could be very personal.

The same applies for incoming SMS message routing. The SMS configuration section contains exact replicas of the routing system of the fax but for SMS messages.

The only difference is that the SMS messages are routed based on the number of the sender, the message text and the line identifier.

Chapter



6

Coverpages

6 Coverpages

6.1 Overview

Coverpages are single page templates where information about the company, the sender, the recipient are displayed in conjunction with the formatting of the message text. The coverpage is always the first page of a fax.



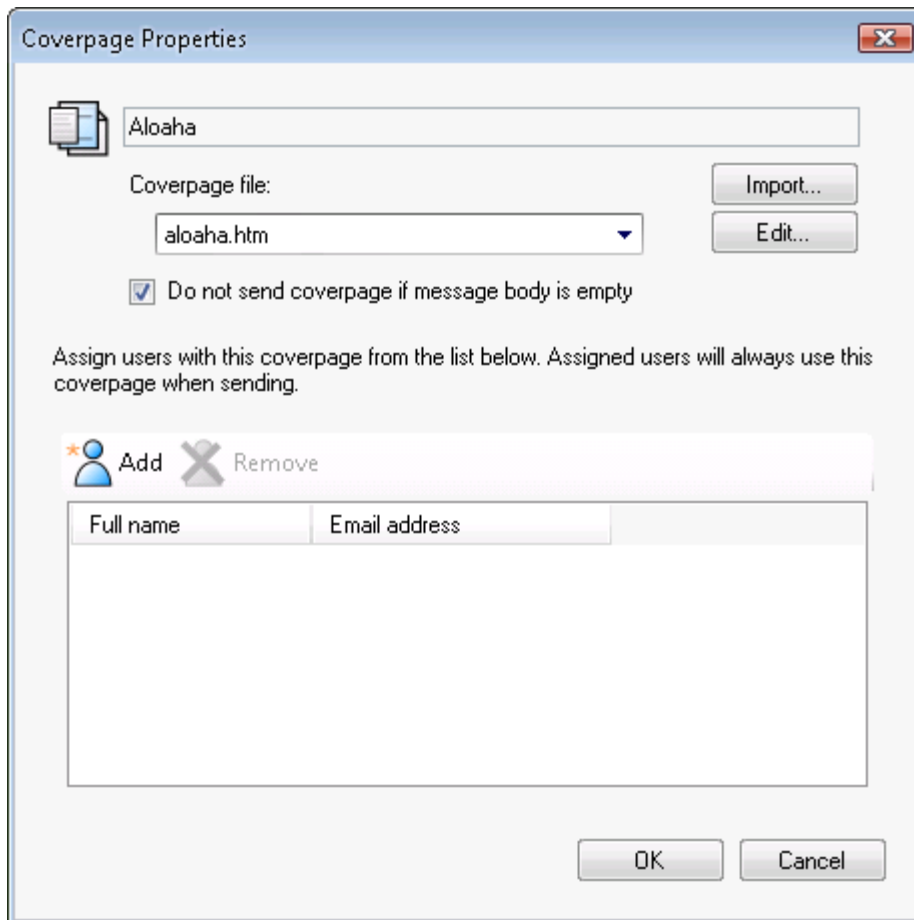
Aloaha coverpage list

There can be as many coverpage templates as needed by configuring them in the Aloaha Fax Suite configuration. Each coverpage can be assigned to registered users, for example, a coverpage must be different for sales than for marketing so two coverpage templates one for sales and one for marketing are created. The sales coverpage is then assigned to all the registered users for sales and the marketing coverpage is assigned to all the registered users for marketing.


6.2 Default coverpage

A default coverpage is a coverpage that is assigned to always be sent for each outgoing fax if no other coverpage is assigned to the particular sender. For example, if a sender is associated the sales coverpage, then the default coverpage is not used but if a sender does not have an associated coverpage, then the default coverpage is used. This ensures that a coverpage is always sent for every outgoing fax.

The default coverpage can be un-assigned. This imposes that all registered users that do not have an assigned coverpage will not set a coverpage at all. This is useful when your company does not need a coverpage or has its own coverpage already in the fax to send.



Editing coveragepage options


 A coveragepage will not be sent if there is no message text in the email sent to the fax server. This is an option and is configurable per coveragepage.

6.3 Designing coveragepages

In Aloaha Fax Suite server, coveragepages are in HTML format. Only images and CSS style sheets are supported as externally linked files by the HTML coveragepage.

Use a normal HTML editor to create the coveragepages. Microsoft Word is **not** recommended to create coveragepages as it creates multiple external files which bloat the file which makes it problematic. Good HTML editing applications include Microsoft Frontpage, Macromedia Dreamweaver and if you are handy with HTML any good text editor will do.


The HTML template is used as a coveragepage but since this is a template it must contain replacement fields. These are formatted in between curly braces and include fields for the sender information, the recipient information and fax transmission information fields. There are built-in fields and user-defined fields. These will be covered in the next sections.

 MHT format is also supported. MHT is a special file created by Microsoft Internet Explorer when saving a web page. Internally MHT is in MIME format.

6.4 Supported coveragepage fields

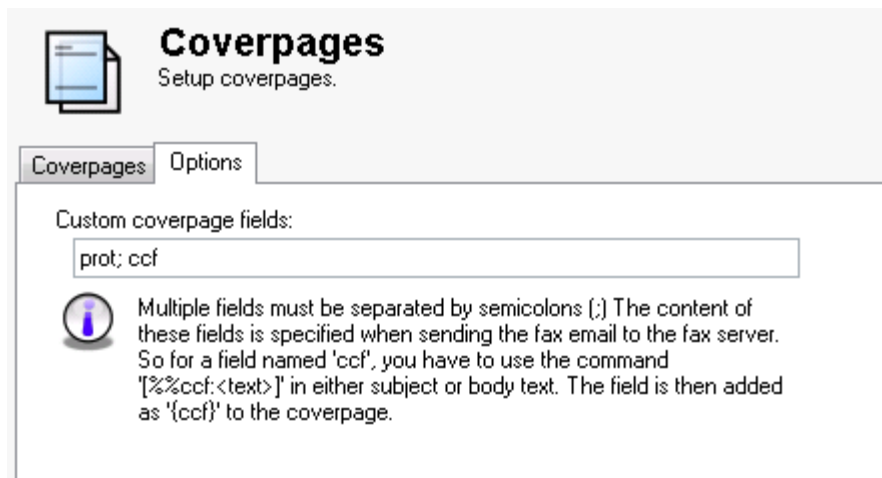
Coverpages have to have replacement fields which are replaced by the respective information of the current fax that is going to be sent. The following table shows all the built-in supported fields:

Field	Replace with
{sender_email}	Sender's email address
{sender_name}	Sender's name
{sender_billingcode}	Sender's billing code
{sender_faxnumber}	Sender's fax number
{sender_mobilenumber}	Sender's mobile number
{sender_pagernumber}	Sender's pager number
{sender_company}	Sender's company
{sender_department}	Sender's department
{sender_officephone}	Sender's office phone
{sender_title}	Sender's title
{sender_officelocation}	Sender's office location
{sender_homephone}	Sender's home phone
{sender_city}	Sender's city
{sender_state}	Sender's state
{sender_streetaddress}	Sender's street address
{sender_zipcode}	Sender's ZIP code
{sender_country}	Sender's country
{recipient_name}	Recipient's name
{recipient_number}	Recipient's number
{date_time_long}	Long date and time
{date_time}	Short date and time
{date_long}	Long date
{date}	Short date
{time}	Time
{pages}	Total pages including coveragepage
{subject}	Subject
{jobno}	Job number
{faxjobid}	Fax job identified
{body}	Message text

 A special coveragepage is included with the installation of Aloaha Fax Suite setup called 'AllCoverFields' which contains all these fields for your testing needs.

6.5 Custom coveragepage fields

A special feature of Aloaha Fax Suite is to have custom coveragepage fields. These can be defined in the coveragepage options in the configuration as shows the following image:



Aloaha coveragepage custom field options

In this example two custom fields are defined as 'prot' and 'ccf' respectively. Now that these fields have been defined, they can be added to a coveragepage template by following the steps below:

1. Edit the intended coveragepage in your preferred editor.
2. Where needed, add the fields as '{prot}' and '{ccf}' respectively. Note the curly braces.
3. Save the coveragepage file.

Now that you have a coveragepage with custom fields, you have to fill them up. This is done from the user's side when sending a fax. The user has to enter special commands either in the subject or message of the email as follows:

To replace field 'prot' with '0001203' use this command:


```
[%%prot:0001203]
```

To replace field 'ccf' with 'XYZee Ltd.' use this command:

```
[%%ccf:XYZee Ltd.]
```

Once these fields are encountered when the fax server is replacing fields, they will be parsed and replaced correctly. The commands will be removed from the email after parsing so they will not show in the coveragepage.

 If the commands are not specified in the email, the fields are still replaced with empty strings.

 It is important to note that if a coveragepage contains custom fields and these are removed from the coveragepage options, these will not be replaced and will remain in the coveragepage as '{prot}' or '{ccf}'

Chapter



7


Monitoring


7 Monitoring

7.1 Overview

Fax monitoring is an important factor in a fax product and the Aloaha Fax Suite provides a very effective way of providing this.

The monitor provided by Aloaha Fax Suite gives the possibility for registered users to keep track of and control their own faxes while giving the rights to administrative registered users to control company-wide fax flows. This creates a problem that special client software would be needed on the registered user machines, but with Aloaha Fax Suite you do not need the administrative burden as **no client is needed** on the registered user machines. Only a web browser is needed!

 The built in HTTP server hosts the monitoring web site so it must be enabled to get access to the monitor.

 Supported web browsers are: Microsoft Internet Explorer, Mozilla Firefox, Opera. Apple Safari 3 is also supported but only on port 80 since Safari seems to block ports other than port 80.


7.2 Connecting to monitor from clients

To connect to the monitor via Web Browser from the client you have to use the following URL:

`http://<server>[:<port>]/faxesuite/`

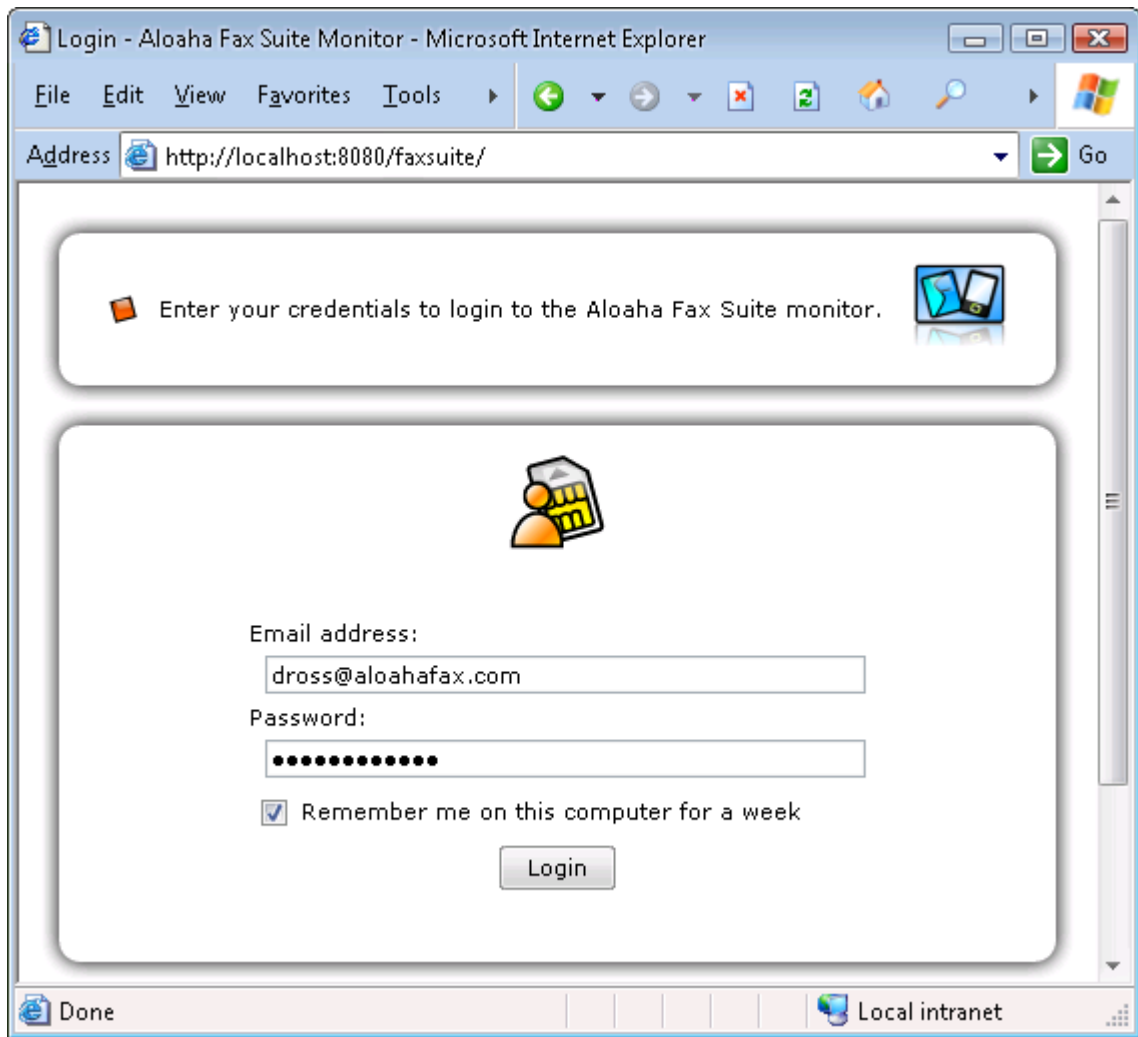
For example, if the server machine has host name 'faxserver' and the HTTP server is at port 8080, the URL should be:

`http://faxserver:8080/faxesuite/`


 If the HTTP server port is 80 you do not need to specify the port number and the URL is specified as follows:


`http://faxserver/faxesuite/`

When the user connects to the monitor, the login page is shown.



Logging in to the fax monitor

 For a user to login to the monitor, a password must be set up for the user in the user properties in the Aloaha Fax Suite server.

 The user manual is available through the web monitor even if a user does not have a password set.

For more information on how to use the monitor, refer to the user manual.

Chapter




8

Advanced Use

8 Advanced Use

8.1 Archiving

Faxes and SMS messages can be backed-up/archived to specific folders. For fax these folders include one for received faxes, one for successfully sent faxes and one for failed faxes. For SMS messages there is one for received SMS messages, one for successfully sent messages and one for failed SMS messages.

 Each folder is separate but the same folder can be used for all to keep all archives together in one folder.

The archived files consist of an INI file containing specific information on the fax or SMS message and all the relevant attachments, if available. INI files are text files and are easily readable by any text editor. The respective attachments are named the same as the INI file with a different file extension for easy reference.

 Reference to the attachment files is also included in the INI file under the [_files_] section.



Fax Archiving
Enable or disable archiving.

Received fax archiving

Enable archiving of received faxes

Archive received faxes in folder:
.\archive\received

Successfully sent fax archiving

Enable archiving of successfully sent faxes


Archive successfully sent faxes in folder:
.\archive\sentsuccess

Failed sent fax archiving

Enable archiving of failed sent faxes

Archive failed sent faxes in folder:
.\archive\sentfailed


Aloaha fax archiving options

 Archiving is enabled by default and keeping it enabled is recommended even for legal reasons. Future product expansion modules may take advantage of the archived store.

8.2 Reports

When users send faxes or SMS messages, notification emails are sent back to the sending user to notify him of events like submission to the fax server, failed fax transmission and successful fax transmission. This is also true when receiving fax or SMS messages, designated users will receive a notification report showing and including the received fax or SMS message.

These reports can be fine-tuned via the reports configuration. The most useful option is whether to include the fax attachment within the report. This would be useful to save bandwidth or email inbox space.

 If reports are disabled, archiving and logging still takes place. Only the notification is not sent.



Fax Reports
Enable or disable reports for inbound and outbound fax transmission.

Received fax reports

- Route received fax reports to intended recipients
- Include fax attachment

Successfully sent fax reports

- Send transmission reports to sender
- Include fax attachment


Failed sent fax reports

- Send transmission reports to sender
- Include fax attachment

Other reports

- Send submit confirmation report

Aloaha fax report options

 All reports are enabled by default. It is recommended that all reports are enabled for the user to know what is happening to his fax or SMS message.

8.3 Logging

The Aloaha Fax Suite has the ability to keep a log of all faxes and SMS messages that are sent and received within the fax server. The log consists of a Comma Separated Values (CSV) formatted text file with each line containing a reference to a fax and SMS message send and received.

 The log files are found in the 'logs' folder under the installation folder of the Aloaha Fax Suite.

Due to the nature of CSV files, the log files can be imported into applications like Microsoft Excel for special processing. This is useful for billing summaries or reports.




Fax Logging
Enable or disable logging for inbound and outbound fax transmission.

Received fax logging
 Enable logging of received faxes

Successfully sent fax logging
 Enable logging of successfully sent faxes


Failed sent fax logging
 Enable logging of failed sent faxes

Aloaha fax logging options

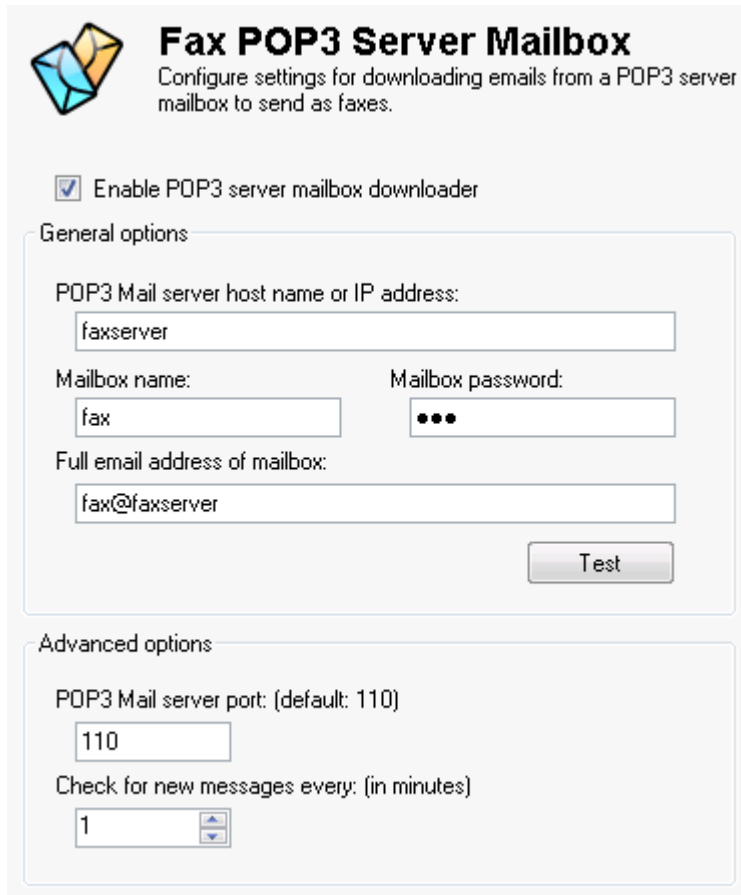
 Logging is enabled by default and keeping it enabled is recommended even for legal reasons. Future product expansion modules may take advantage of the logging store.

8.4 POP3 Downloader

In addition to having a built-in SMTP server, the Aloaha Fax Suite has the ability to download mails directly from a mailbox in any POP3 server. The POP3 downloader can be used in cases where the built-in SMTP server cannot be used for company reasons or security reasons or when using your current ISP provided email box as the mailbox to send faxes or SMS messages from.

 To use the POP3 downloader for both Fax and SMS sending, two mailboxes are needed, one for fax and one for SMS. Two configuration categories are provided one for fax and one for SMS.

The POP3 downloader downloads ALL emails from the mailbox and marks them for deletion so the mailbox must be dedicated for the purpose.



Fax POP3 Server Mailbox
Configure settings for downloading emails from a POP3 server mailbox to send as faxes.

Enable POP3 server mailbox downloader

General options

POP3 Mail server host name or IP address:

Mailbox name: Mailbox password:

Full email address of mailbox:

Advanced options

POP3 Mail server port: (default: 110)

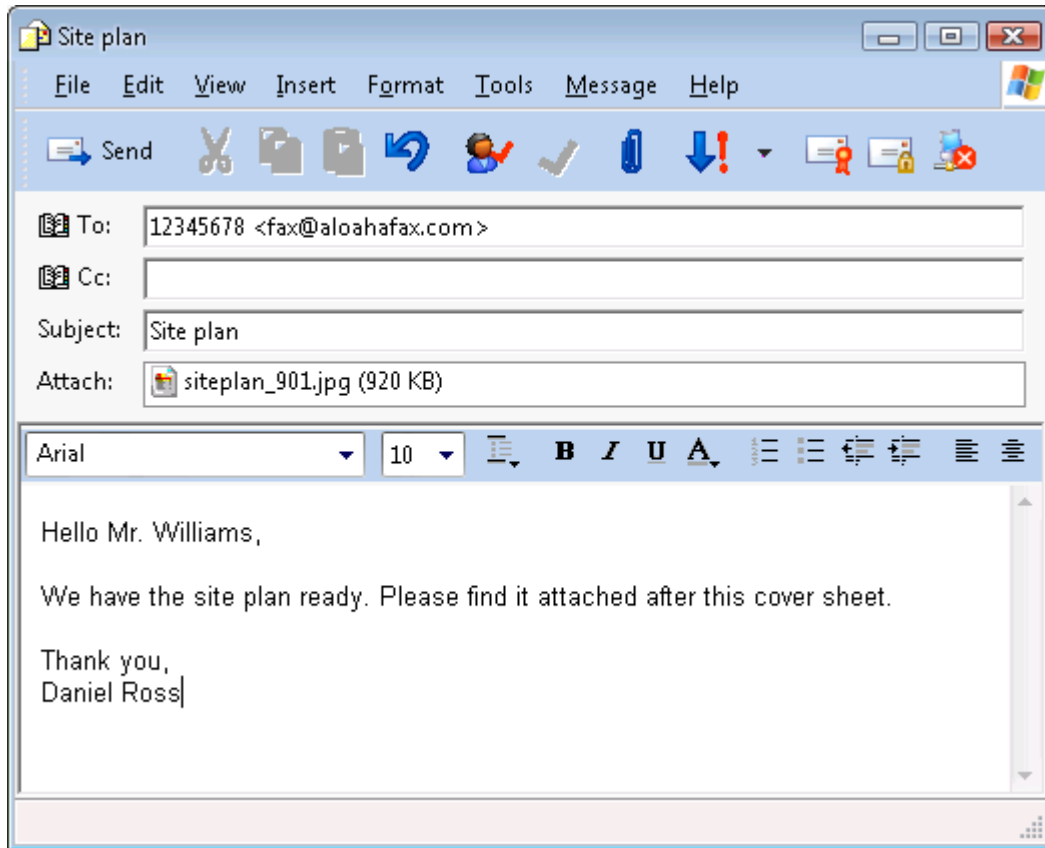
Check for new messages every: (in minutes)

Aloaha fax POP3 downloader options

Downloaded emails are scanned for attachments and recipients and are submitted to the fax server in the usual manner. To send a fax using the POP3 downloaded functionality the email recipients must be specified in the following format:
faxnumber <mymailbox@myserver.com>


For example if sending a fax to 12345678 and your fax mailbox email address is fax@aloahafax.com, you would address the email to:
12345678 <fax@aloahafax.com>

The following screenshot shows this example:



Composing a fax for use with the POP3 downloader

After you send this email, the fax POP3 downloader will download the email from the fax mailbox and parse the recipient where it will deduce that the fax number is 12345678. The fax server will then convert and send this fax as usual.

 This feature can be used in conjunction with the built-in SMTP and POP3 server but it is very important to be careful on what settings are set since this can lead to a mail loop or even worse not to send a faxes at all.

Chapter



9

Using the TextParser API

9 Using the TextParser API

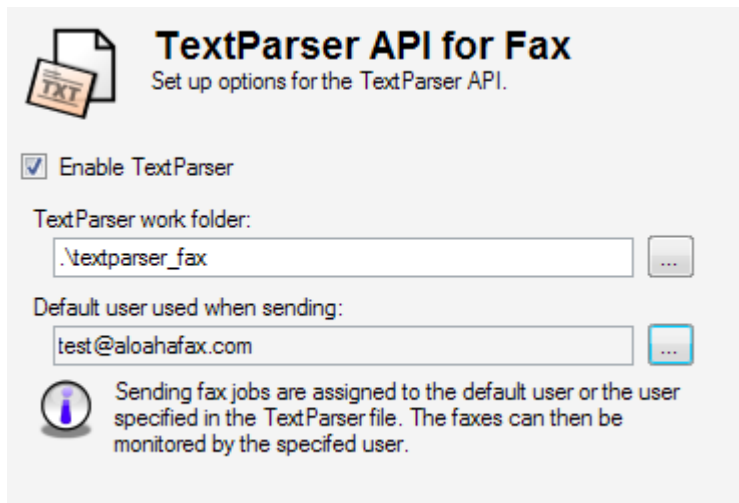
9.1 Overview

The TextParser API is an application programming interface that lets you integrate with the fax server using normal text files. It can only be used for sending faxes and/or SMS messages.

All that is needed is a dedicated folder that will be used to save TextParser API formatted text files and report text files. More information is given later on.

The TextParser API can be used for both Faxing and SMS messaging. A work folder is needed for each, e.g. one for faxing and one for SMS messaging. **The same work folder should not be used for both fax and SMS or the results will be unpredictable.**

To enable the TextParser API you have to go to the TextParser API configuration category and tick the Enable TextParser check box as shown below:



Aloaha TextParser API options

Both the work folder and default user settings must be correctly set for the TextParser API to work correctly. For the work folder, relative paths are allowed where the root will be the installation folder.

The default user is used to assign new fax jobs sent with the TextParser API to the user. This gives the advantage that the faxes can be monitored normally using the fax monitor and logging in using the default user. The user can be overridden by a TextParser API command so the default user is a fail safe if no user is specified.

9.2 Sending

To send a fax using the TextParser API you have to create a new text file in the work folder which will contain special commands and the message body. An example file is as follows:

```
[%%to: 12345678]
[%%subject: Test fax to 12345678]
This is the message body.
```

When the fax server encounters this text file, it parses the commands and leaves only the message body. The commands tell the fax server to send a fax to '12345678' with subject 'Test fax to 12345678' and message body 'This is the message body'.

Since there is no user set explicitly, the fax server will take the default user set previously as the sender of this fax message. No mails will be send to the user for this fax message.

For a list of commands please refer to the Command reference.

9.3 Reports

Since no mails are sent to the sending user, a form of notification is needed. The fax server creates new text files in the same work folder configured for the TextParser API that will work as notifications.

There 3 types of notifications available with 3 different file extensions as follows:

```
.notification
.success
.error
```

The notifications are created with the same file name of the original text file that created the fax job, so for example if the text file was named 'test.txt', the report text file will be created as 'test.success'.

The .notification type is not a final notification but rather just a message regarding your fax job. Normally this will contain a message regarding fax submission and job number. There can be more than one . notification file for the same text file in which case the second file, if the first file still exists, will be named 'test.notification.01'.

The .success and .error types are **final** notifications which means that this is the last notification which is either a successful fax or a failed fax. Using the same example, a successful report will be named 'test.success' while a failed report will be named 'test.error'.

The contents of the notification is description text which is very similar to the mail notification body text.

 It is best to delete the notification files after use to avoid conflicts.

9.4 Command reference

The syntax for TextParser API commands is the following:

```
[%% <command> : <parameters> ]
```

The parameters can be more than one depending on the command. To specify more than one parameter, separate the parameters with commas. If a parameter contains a comma that is part of the parameter, the parameter can be enclosed in a double or single quotes pair, e.g.: [%%to: "00,44,012,3456789", Mr. Gibson]

Command specify recipient: To

The 'To' command is used to specify a single recipient. This command can be used multiple times to specify more than one recipient.

The command syntax is as follows:


```
[%%to: <number>, <name>]
```

Parameters:

<number> specifies the fax or SMS number to send to. (required)
<name> specifies the name of the recipient. (optional)

Examples:

```
[%%to: "00,44,012,3456789", Mr.Gibson]
[%%: 123456789]
```

 Note that in the second case the command is omitted. This is on purpose as the 'To' command is the default command and if the command name 'To' is not specified it is still treated as a 'To' command.

Command specify priority: Priority

This is a fax only command. The 'Priority' command is used to specify the priority if the fax job. This command should only be issued once. In the case of multiple entries, the last command will take effect.

The command syntax is as follows:

```
[%%priority: <priority>]
```

Parameters:

<priority> specifies the priority. Valid values are 'High', 'Normal', 'Low', 'Discount'. (required)

Examples:

```
[%%priority: High]
[%%priority: Discount]
```

Command specify subject: Subject

The 'Subject' command is used to specify the job subject. This command should only be issued once. In the case of multiple entries, the last command will take effect.

The command syntax is as follows:

```
[%%subject: <subject>]
```

Parameters:

<subject> specifies the subject text. (required)

Examples:

```
[%%subject: Test fax to 123456789]
[%%subject: "This is the fax subject."]
```

Command specify sender: Sender

The 'Sender' command is used to specify the sender of the job. This command should only be issued once. In the case of multiple entries, the last command will take effect.

The command syntax is as follows:

```
[%%sender: <email address>]
```

Parameters:

<subject> specifies the email address of the registered user to use as the sender of the fax/SMS job. (required)

Examples:

```
[%%sender: test@aloahafax.com]
[%%sender: dross@aloahafax.com]
```

Command specify attachments: Attach

The 'Attach' command is used to specify file attachments. This command can be used more than once.

The command syntax is as follows:


```
[%%attach: <filename>, <filename2>, ...]
```

Parameters:

<filename> specifies the filename of the file to attach. (required)
<filename2> specifies the filename of the second file to attach. (optional)
<...> More filenames to attach.

Examples:

```
[%%attach: plan.pdf, invoice.doc, proforma.doc]
[%%attach: specialoffer.doc]
```

 This is a variable parameter command, where at least one parameter is required but more than one parameters can be specified. The files must be present in the same work folder where the TextParser API file exists. No full or relative paths allowed.

Command specify custom coverage field

Any unknown commands will be treated as custom coverage fields. For example the following command will set the 'prot' coverage field as '1234':

```
[%%prot: 1234]
```

See [Custom coverage fields](#) for more information.

Chapter



10

HP Digital Sender support

10 HP Digital Sender support

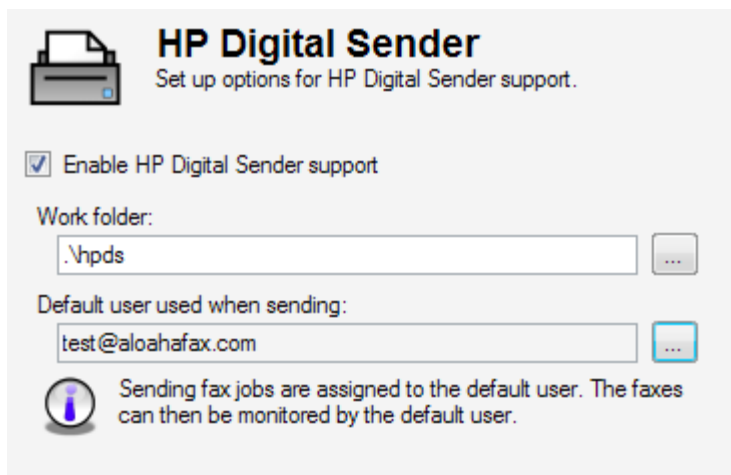
10.1 Overview

The HP Digital Sender is a network connected paper scanner device that can connect to a fax server to send scanned paper images as faxes.

All that is needed is the dedicated folder that is set up on installing the HP Digital Sender software that will be used to negotiate information from the HP Digital Sender to the Aloaha Fax Suite server. Normally the work folder is called 'HPFSCAN' by the HP Digital Sender software.

The HP Digital Sender support can only be used for Faxing and only for sending.

To enable the HP Digital Sender support you have to go to the HP Digital Sender configuration category and tick the Enable HP Digital Sender support check box as shown below:



Aloaha HP Digital Sender support options

Both the work folder and default user settings must be correctly set for the HP Digital Sender support to work correctly. For the work folder, relative paths are allowed where the root will be the installation folder.

The default user is used to assign new fax jobs sent with the HP Digital Sender to the user. This gives the advantage that the faxes can be monitored normally using the fax monitor and logging in using the default user.

10.2 Sending

To enable faxes to be sent from an HP Digital Sender you have to open the HP Digital Sender link application from the Control Panel.

1. In the HP Digital sender link applet, switch to the Inbox tab and in the 'Path to receive inbox' field, enter the folder for your HP Digital Sender to use as a work folder.
2. Tick the 'enable receive' check box to enable this feature.
3. Find the HP Digital Sender 'JetAdmin' utility and 'Modify' your HP Digital Sender to enable fax mode. When asked for the Network Fax Server type, choose 'Other vendors with notification support'.

To send a fax go to your HP Digital Sender and insert the paper to send into it. Press the FAX button and from the keypad enter the fax number to whom you want to send the fax to. Press the 'Send' button to scan and submit the fax to the Aloaha Fax Suite server.

10.3 Reports

The HP Digital Sender is configured to have users log into it. These users are part of the company and normally can receive emails directly from the HP Digital sender. This is the normal way that it should be configured.

The Aloaha Fax Server supports giving details to the HP Digital Sender so that it can track the faxes it sends and also to send reports directly to the HP Digital Sender user that originally scanned and sent the fax. This is all done through the work folder.

Chapter




11

Troubleshooting

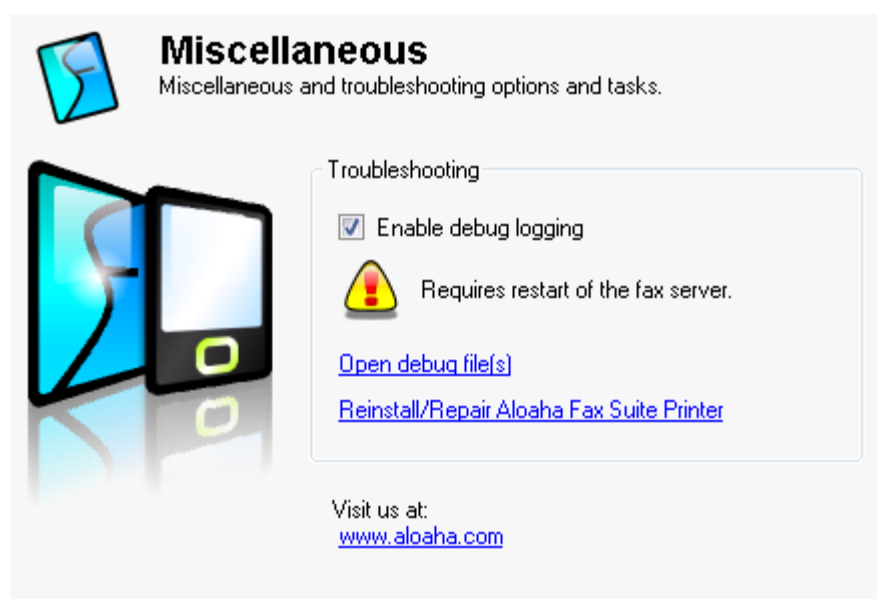
11 Troubleshooting

11.1 Enabling debug

To aid troubleshooting in Aloaha Fax Suite server, debug mode can be switched on. By switching on debug, a text file with debugging information will be created. This text file contains vital information about the proceedings of the server and thus can help on troubleshooting problems that might be encountered.

 **Your privacy is protected.** All effort has been put so that no personal information is gathered. Any material and information sent to us will remain confidential.

To enable the debug log you have to go to the miscellaneous category and enable debug mode and restart the Aloaha Fax Suite server service from the services category. So all this is done from the Aloaha Fax Suite configuration.



Aloaha miscellaneous options

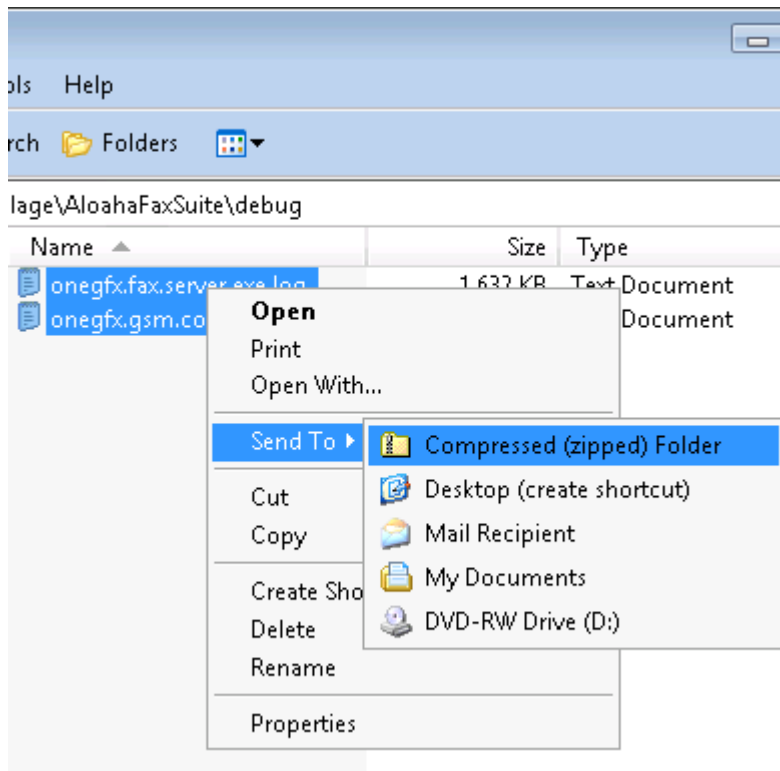
11.2 Extracting and compressing debug files

Straight after reproducing the problem that you might have, the debug file(s) containing all needed information will be in the 'debug' folder under the installation folder of the Aloaha Fax Suite.

Before sending these files to us as a result of a problem description, you might be better off compressing all the files in one ZIP archive file. Compressing all debug files in a ZIP archive file will reduce the overall size of the debug files by more than 60% of the original size.

1. To compress to ZIP file, open Windows Explorer and navigate to the 'debug' folder under the installation folder of the Aloaha Fax Suite server. This is normally (but not always) at 'C:\Program Files\Aloaha\AloahaFaxSuite\debug'.
2. Select all the files by pressing CTRL + A.
3. Right-click on a selected item and a menu should pop up.
4. From this menu select 'Send To' and then 'Compressed (Zipped) Folder'

This will create a new file with the same name as the file right-clicked upon but with file extension ZIP. This would be the file to send to us in case of a problem.

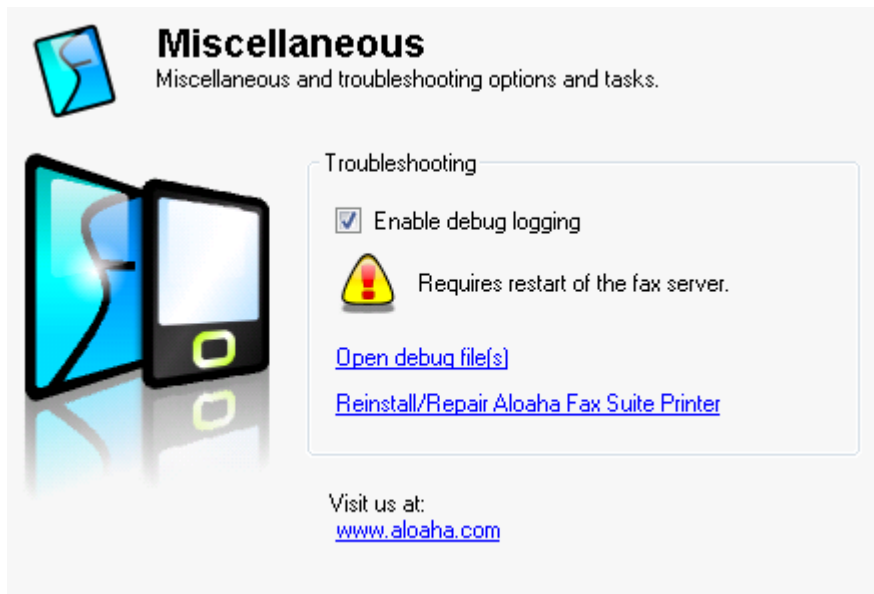


Compressing files

11.3 Repairing the Aloaha Printer Driver


The Aloaha Fax Suite server includes a printer driver used for conversion purposes. This printer driver is not used to drive a physical printer but it is a virtual printer driver that captures the print output from applications and is needed by the fax server.

In a case there you would have conversion troubles, first check in the Windows Printers and Faxes folder (under Control Panel) to check if the 'Aloaha Fax Suite Printer Driver' exists. In case it does not exist or the problem persists, it is recommended to repair the printer driver. To do so click on the 'Reinstall/Repair Aloaha Fax Suite Printer' link in the miscellaneous category in the Aloaha Fax Suite configuration.



The screenshot shows a window titled "Miscellaneous" with a subtitle "Miscellaneous and troubleshooting options and tasks." On the left, there is an icon of a blue envelope and a black mobile phone. The main content area is titled "Troubleshooting" and contains a checked checkbox for "Enable debug logging" with a yellow warning triangle icon and the text "Requires restart of the fax server." Below this are two blue hyperlinks: "Open debug file(s)" and "Reinstall/Repair Aloaha Fax Suite Printer". At the bottom, it says "Visit us at: www.aloaha.com".

Aloaha miscellaneous options

 After any attempt of repairing the printer driver, it is recommended that the Aloaha Fax Suite server service is restarted from the Aloaha Fax Suite configuration services category.

Chapter

12

SMS

12 SMS

12.1 Overview

The Aloaha Fax Suite server is not just a fax server but also a powerful native SMS message server. Using multiple mobile devices or modems, SMS messages can be sent fast and reliably to anyone with a mobile device able to receive SMS messages.

You send SMS messages the same way as when sending fax messages. Refer to the user manual for more information on how to send SMS messages.

This system is very useful when you have a number of colleagues that are out on the field and need to be contacted urgently. All you need to do is to send a single email to the Aloaha Fax Suite server with all the colleagues' mobile numbers as recipients and a short text message. The SMS server will take care of the rest for you.

Best of all, if any of the colleagues reply back, you will receive his message directly in your inbox.

12.2 Devices

The SMS server is a native SMS server where the devices are natively supported. There are no third party drivers or intermediaries. This gives maximum compatibility with a lot of different mobile devices. In theory any GSM mobile that can be contacted as a COM port interface and that supports the GSM AT commands can be used. Both PDU and text modes are supported which best mode is detected automatically with an Artificial Intelligence method that adapts to each mobile connected to the SMS server.

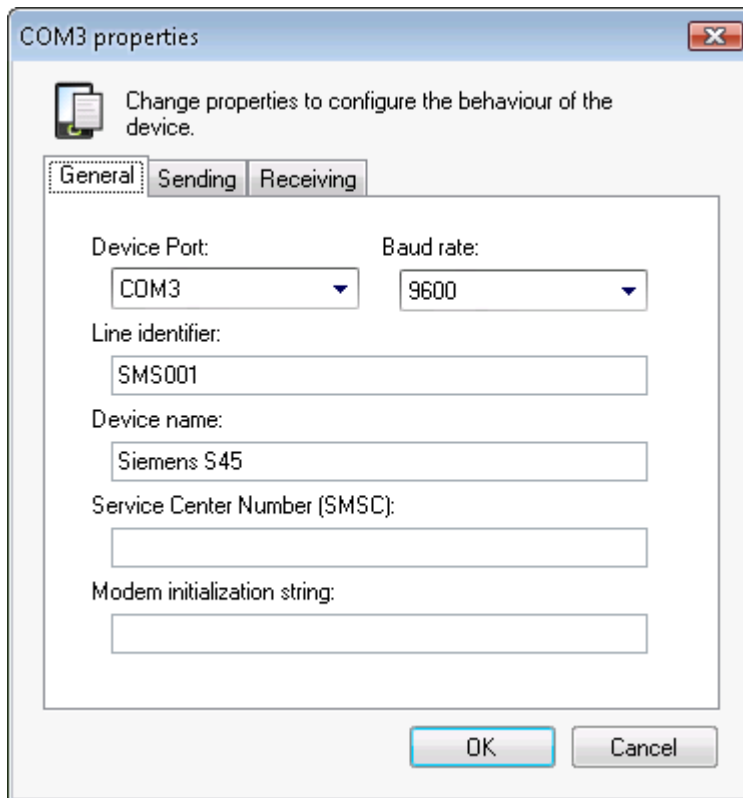
Mobiles that connect to the machine using a USB cable can also be used if a COM port interface is given. This is normally done by installing the software/drivers provided with the mobile device.



Line ID	Port	Device name	Send	Receive	SMSC
SMS001	COM3	Siemens S45	Yes	Yes	Default

Aloaha SMS device list

To add a new mobile device, go to the 'SMS devices' category and click on the Add device button. Enter the information of your mobile device. The only important options to set are the device port and the baud rate. The rest can be left empty unless other fine tuning is required.



COM3 properties

Change properties to configure the behaviour of the device.

General Sending Receiving

Device Port: COM3 Baud rate: 9600

Line identifier: SMS001

Device name: Siemens S45

Service Center Number (SMSC):

Modem initialization string:

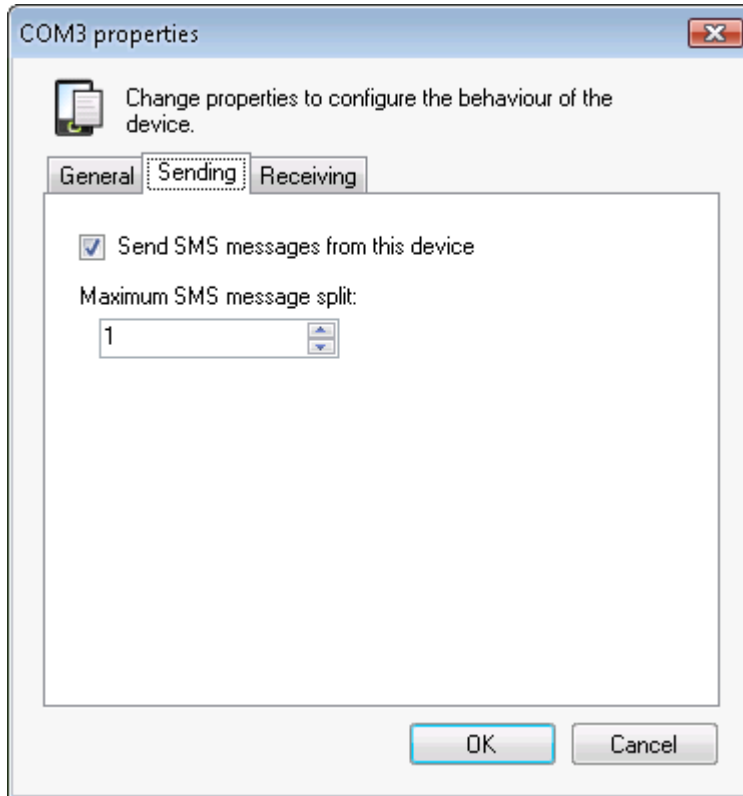
OK Cancel

The image shows a Windows-style dialog box titled "COM3 properties". It has three tabs: "General", "Sending", and "Receiving", with "General" selected. The dialog contains several fields: "Device Port" is a dropdown menu set to "COM3"; "Baud rate" is a dropdown menu set to "9600"; "Line identifier" is a text box containing "SMS001"; "Device name" is a text box containing "Siemens S45"; "Service Center Number (SMSC)" is an empty text box; and "Modem initialization string" is an empty text box. At the bottom right, there are "OK" and "Cancel" buttons.

SMS device general options

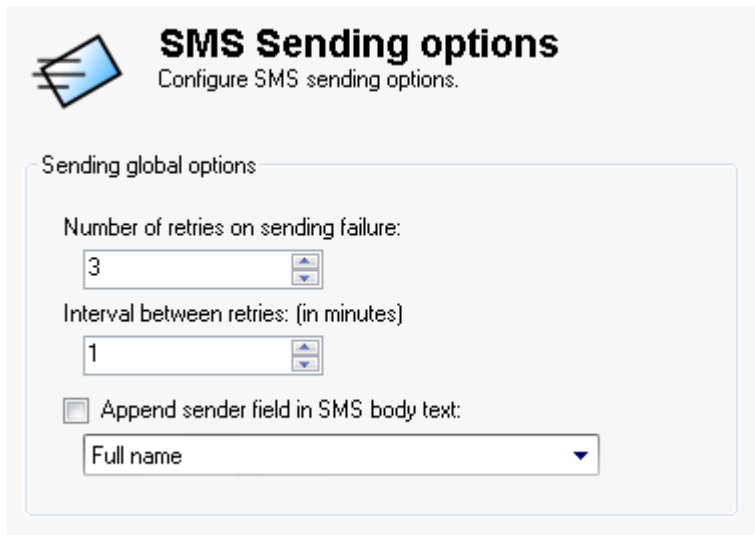
12.3 Sending options

When sending SMS messages, these are limited to 160 characters per message if using the standard GSM character set and to 72 characters if using Unicode messages (if supported by the mobile). The SMS server has the capability to split an SMS message to multiple messages up to a number specified in the mobile device properties 'Sending' page.



SMS device sending options

The 'SMS sending options' category has additional options on the number of times an SMS message is retried if it fails to send. To append the user name of the sender of the SMS message to the SMS message, an option is also provided in the said category. All user properties are provided for appending to the SMS message.



SMS Sending options
Configure SMS sending options.

Sending global options


Number of retries on sending failure:
3

Interval between retries: (in minutes)
1

Append sender field in SMS body text:
Full name

Aloaha SMS sending options

12.4 More information

 For related information on inbound routing, advanced options and POP3 downloader for SMS messages please refer to the appropriate sections in the manual which are common for both fax and SMS.