How to use email2fax

Applies to VoipNow 3 and higher!

This article explains the fax mechanism in VoipNow, more precisely the sending of fax messages as attachments to emails, also known as the email2fax feature.

Sending a fax message

VoipNow's email2fax feature allows you to send fax messages by attaching the fax content as a `.pdf`, `.jpg` or `.tiff` file to an email message, which is then sent to a special faxing email address on the server.

Before explaining how this actually happens, you should know that only Phone terminal extensions support the email2fax feature. After receiving the fax message as attachment to an email, the server asks the sender for approval. When confirmed, it converts the attachment into a suitable fax format and sends it to the number(s) specified in the email subject.

The sender's address is used by the system to verify the destination extension for the email-generated fax. In order to be able to send faxes using the **email2fax** feature, the sender's email must be added to one of the extensions in the system. For more details, check the How to Enable Faxing for an Extension section.

Please note that only one extension can send faxes to that sender, so you cannot add the sender's email address on several extensions.

Enabling fax features server-wide

To enable the email2fax feature, go to **Unified Communications Zero Priority Fax** tab.

The **Fax Preferences** available are:

- **System accepts faxes by email:** Select this checkbox to enable the email2fax feature server-wide.
- **Server hostname in fax approval emails:** The hostname to be used in the approval link generated by the server and sent by email when a fax is dispatched.
- **Email address where server receives faxes:** The email address that will receive the fax messages.The domain part of this address will be used as mail domain for the VoipNow server.
- **Maximum size of an email:** The maximum size of an email attachment (fax content). The accepted values range from 1 to 100 MB. The default value is 10 MB.
- **Maximum number of fax files per email:** The maximum number of files that can be attached to a fax message. The accepted values range from 1 to 10. The default value is 5 files.
- **Maximum number of fax recipients:** The maximum number of fax recipients (phone numbers) for a fax message. The accepted values range from 1 to 999. The default value is 5.
- **Keep minimum <x> seconds between fax reattempts:** The minimum waiting time before being allowed to click the confirmation link received via email every time a new fax email message is scheduled for sending. The accepted values range from 60 to 36,000 seconds. The default value is 300 seconds.
- **Ring remote party for <x> seconds:** The time frame during which the recipient will be rang.
- **Erase faxes that were not confirmed for:** The time interval unconfirmed faxes will be stored in the system. The accepted values range from 1 to 100 days. The default value is 30 days.
- **Erase faxes that could not be sent for:** The time interval unsent faxes will be stored in the system. The accepted values range from 1 to 100 days. The default value is 30 days.

Enabling faxing for an extension

Choose the extension you want to enable the fax feature for, click the **Phone terminal setup** icon and fill in the options available in the **Fax Center** section:

- **Enable fax center:** Select to enable the fax functionality for the current extension.
- **Accept faxes sent by email to <FAX_EMAIL_ADDRESS>:** Select to accept fax emails on this extension.
- **Accept fax from email:** Enter the sender's email address/addresses that is allowed to send faxes through this extension.

You may leave the other options with their default values. Such options are used only when the extension receives faxes.

Changing the standard messages sent by the server

The email notification sent by the server to the customer for fax approval can be globally customized.

To do this, go to the **Unified Communications Email templates** page. The following templates can be customized from the **Unified Communications Email Templates** section:

- Fax message received
- Sent fax accepted
- Sent fax not accepted
- Fax delivery report
- Pre-approved fax accepted

Templates can be further customized on both service provider and organization levels by clicking their corresponding **Email templates** icon.

All the email templates use variables to automatically insert strings such as the phone number. The variables are displayed in the `[VARIABLE_NAME]` form. For more information about the available variables, consult the **Email Templates** section from the online help.

Canceling an attempt to resend a fax

In the **Extension Management** page, click the **Sent faxes** button. The system keeps a log of all fax messages queued for the current extension.

The section is organized as follows:

- **Source**: The fax message source
- **ID**: The message ID
- **Approved**: The approval status (yes/no).
- **Fax to**: The recipient(s) number(s).
- **Status:** The current status of the fax message (approved, sent, partially sent, sending failed, cancelled, scheduled for sending, not approved, preapproved, purged)
- **Size:** The fax message size.
- **Added:** The date the fax email was added to the system.
- **Sent on:** The date the fax message left the system.
- **Info:** The events log for the fax message.

Sending a fax email

To send a fax email, you need to create an email with the following mandatory elements:

- **To:** The email address configured on the server to accept fax emails (e.g. fax@example_server.com).
- **Subject:** The subject line is used by the system to determine the numbers you wish to send the fax to. This line can only contain the destination fax number (e.g. 1234546) or several fax numbers separated by blanks (e.g. 123456 1235556 22345565).
- **The email body**: Leave this field empty.
- **Attachments**: The actual fax content is taken from the attachment by the system. There are three types of supported attachments: $JPEG$, PDF, and $TIFF$. If an unsupported file is attached, the system will fail to send the fax.

If you want the best results with the PDF files, it's recommended to create them using embedded fonts.

Troubleshooting

Check for issues in maillog

Fax emails get processed by the Postfix mail server. Postfix keeps a log of its activity in the $/var/log/maillog$ logfile. To watch the maillog, run the following command:

```
tail -f /var/log/maillog
```

Check if emails reach the server

If a client's email has reached the server, you should be able to see it in the maillog. We recommend that you look for an entry similar to this one:

> *DATE TIME SERVER_HOSTNAME postfix/smtpd[21802]: E9324D318D06: client=HOSTNAME[IP_ADDRESS]*

This means that the client's machine has connected to the server. Therefore you're not dealing with a connection-related issue. Then the destination address is checked and, if it turns out invalid (it should be the same as the one set up on the server to receive fax messages), the email is dropped. If that's the case, the system will send you a notification.

Check if faxes get processed

If the email has reached the server and its destination is valid, it gets sent through the `procmail` utility. The attachment is processed with the help of the `faxprocess` utility.

`faxprocess` logs its activity in `/var/log/maillog`

If the email reaches the server and gets validated by Postfix reaching `faxprocess`, yet the fax does not get sent, then ensure that:

- **The sender's address is correct.** If the address is not the same as the one entered in the system, `faxprocess` will reject the message.
- **The attachment has a correct extension**. The accepted file extensions are `.tiff`, `.pdf` or `.jpg`.

Location of fax files (based on the stage of approval)

The faxprocess script uses two directories:

- /var/lib/faxmsg is the location of emails before processing
- /var/spool/fax is the location of attachments after processing

Related articles

- How to configure sharing policies for a user account
- Troubleshooting fax calls
- How to use email2fax
- Troubleshooting fax session failures caused by incorrect negotiation of T38FaxMaxDatagram parameter
- Troubleshooting font-related fax issues