Fax Server Component - Design

Vladimír Bobek *<vladimir.bobek@suse.cz>* Radim Gelner *<radim.gelner@suse.cz>*

Copyright © 2004, SuSE CR, s.r.o.

Revhistory:

1.0, 20.2.2004 1.1, 10.3.2004

Abstract

The Design specification involves planning and documenting the global features of the Fax Server Component in preparation for the Development phase. This document should provide the programmers with the necessary information to design and write software routines to perform well-defined tasks within the application. The low level internal features (such as flow of control, variable types, error handling, etc.) are left for the Development phase.

1 Description

The component consists of these high level subcomponents:

- YaST Fax Server module,
- HylaFax.

YaST module handles autodetection of compatible, correctly configured devices and configuration of HylaFax subcomponent.

HylaFax is the server that handles sending, receiving and storing of the faxes (fax services) via locally connected devices.

2 Use Case

The administrator ensures the correct HW setup of one of the compatible fax devices at the server computer.

Then starts the YaST Modem or ISDN module there to configure the device.

After that proceeds to the YaST Fax Server module to assign the device to the Fax Server and to manage Fax Server users and services.

Once the Fax Server configuration is complete, the outbound and/or inbound services can be used by users via mail, virtual print queue or third party client tools.

3 Interface

The user communicates with the HylaFax Server via mail or printer gateways or using third party client software.

Email gateway accepts emails with command requests in the body and similarly printer gateway accepts PostScript printer jobs with commands embodied in them.

Third party client tools interfaces are not described here.

The mail and printer gateways communicate with HylaFax via its own communication protocol derived from FTP protocol.

The interface between YaST module and HylaFax is mostly indirect – YaST module modifies the HylaFax server's configuration files. Practically no interprocess communication occurs.

HylaFax Server communicates with user via email or printer queue depending on the setup.

4 Subcomponents

4.1 YaST Fax Server module

4.1.1 Description

The YaST module is the "frontend" to the HylaFax Server configuration. It allows configuration of both analog modems and ISDN devices with the help of already existing YaST modules and their assignment to the HylaFax server.

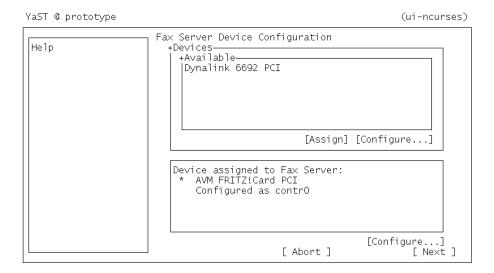
Second task of the YaST subcomponent is to manage Fax Server user accounts.

Third task is to manage Fax Server services.

4.1.2 Use Case

The first step for the administrator is to prepare the supported device (analog modem or ISDN card) and to correctly configure it using either YaST Modem or ISDN configuration module. This part is not covered here.

Then the administrator starts the YaST Fax Server component:

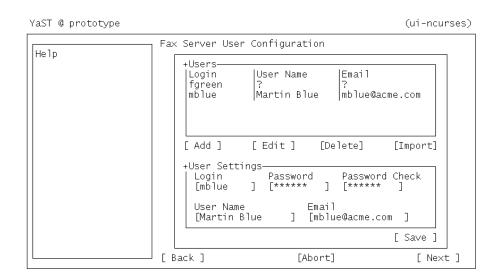


Here, the available correctly configured devices appear, allowing the administrator to assign one of them to the Fax Server.

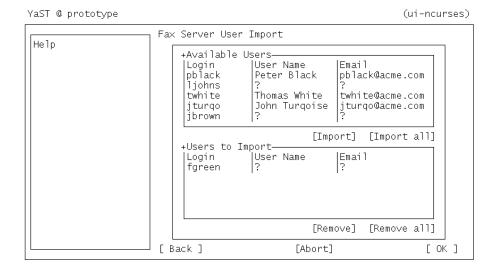
If there is not a device assigned to the Fax Server, the module will not allow the administrator to proceed.



In the next screen the administrator manages user accounts of the Fax Server.

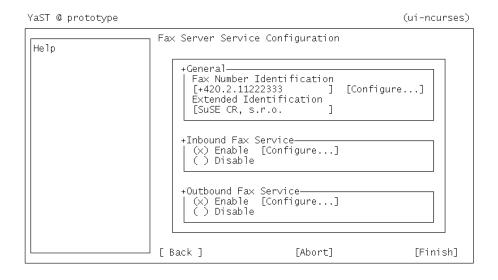


User accounts can be created from scratch or imported from the system (local, NIS and LDAP users).

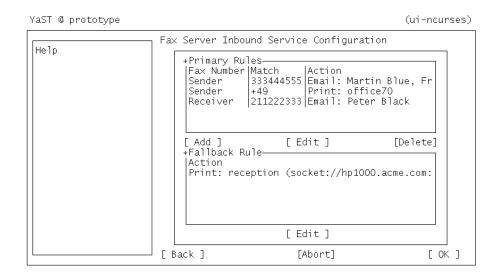


Only the users with Fax Server account are allowed to use Fax Server Services.

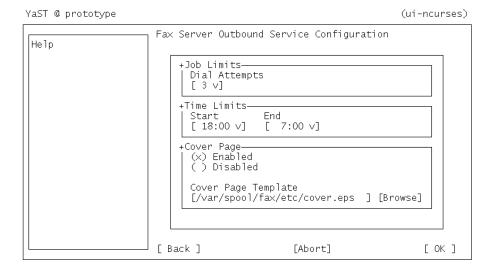
In the next step the Fax Server services can be configured.



There are general settings and independent inbound...



...and outbound services.



When finished gathering the administrator's input, the module writes the configuration of the HylaFax Server and restarts it to reread the configuration.



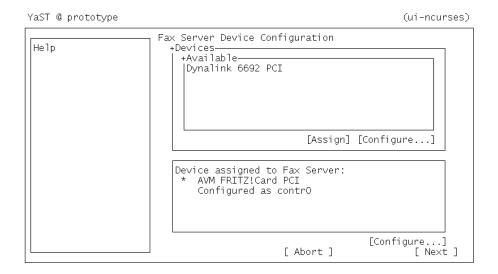
This concludes the HylaFax Server configuration.

4.1.3 Interface

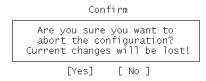
There are several interfaces defined in the YaST module. There is an interface between SCRs and Perl application logic and then between Perl logic and YCP dialog definitions. More information to come when things get clearer...

4.1.3.1 User interface Follows the complete list of user interface dialogs for YaST module:

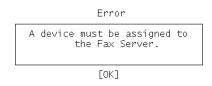
4.1.3.1.1 yastui_01.txt



4.1.3.1.2 yastui_01_01.txt



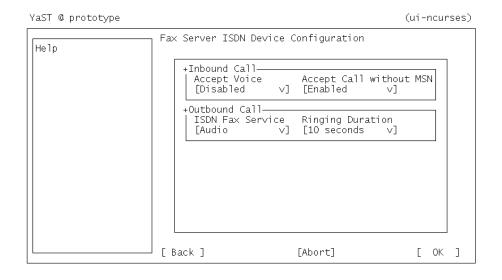
4.1.3.1.3 yastui_01_02.txt



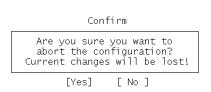
4.1.3.1.4 yastui_01_03.txt



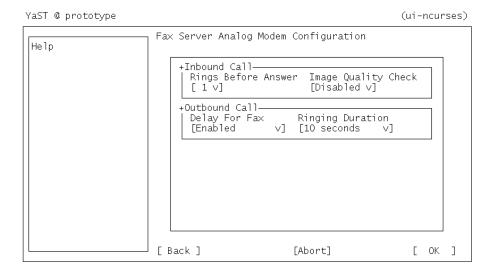
4.1.3.1.5 yastui_01_04.txt



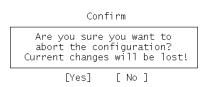
4.1.3.1.6 yastui_01_04_01.txt



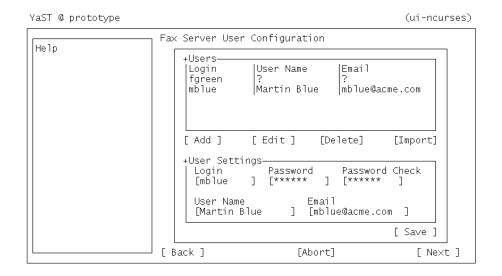
4.1.3.1.7 yastui_01_05.txt



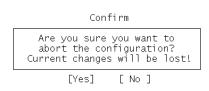
4.1.3.1.8 yastui_01_05_01.txt



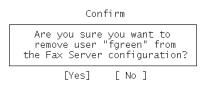
4.1.3.1.9 yastui_02.txt



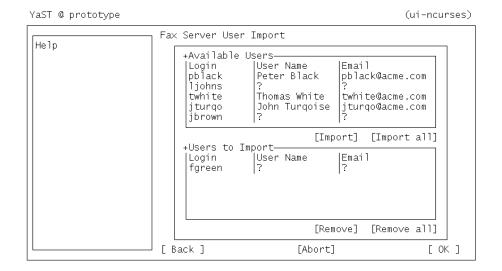
4.1.3.1.10 yastui_02_01.txt



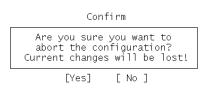
4.1.3.1.11 yastui_02_02.txt



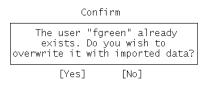
4.1.3.1.12 yastui_02_03.txt



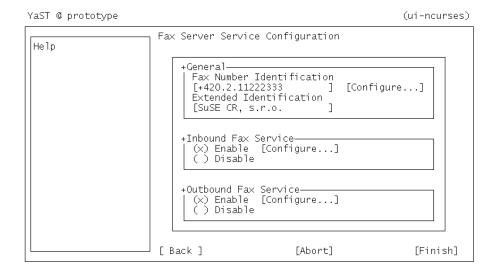
4.1.3.1.13 yastui_02_03_01.txt



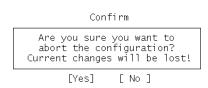
4.1.3.1.14 yastui_02_03_02.txt



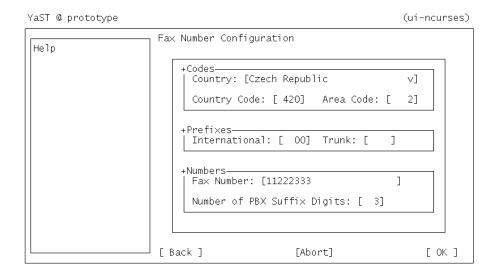
4.1.3.1.15 yastui_03.txt



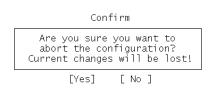
4.1.3.1.16 yastui_03_01.txt



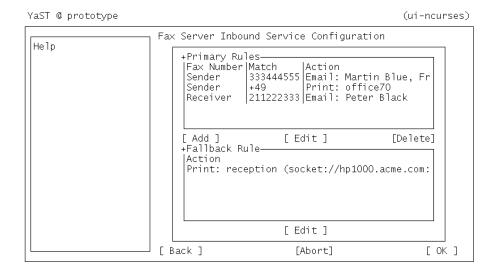
4.1.3.1.17 yastui_03_02.txt



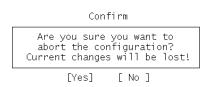
4.1.3.1.18 yastui_03_02_01.txt



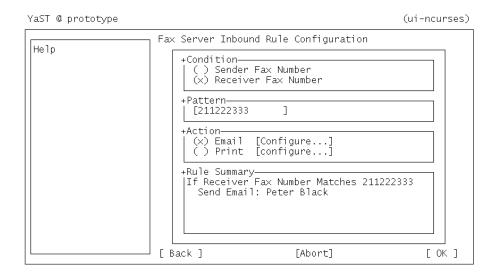
4.1.3.1.19 yastui_03_03.txt



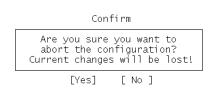
4.1.3.1.20 yastui_03_03_01.txt



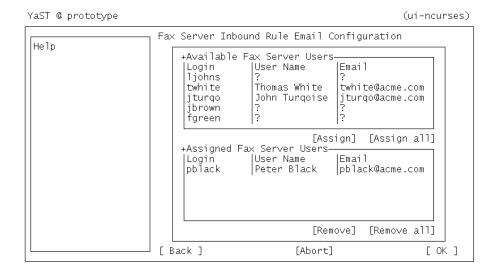
4.1.3.1.21 yastui_03_03_02.txt



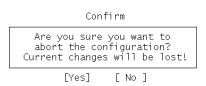
4.1.3.1.22 yastui_03_03_02_01.txt



4.1.3.1.23 yastui_03_03_02_02.txt



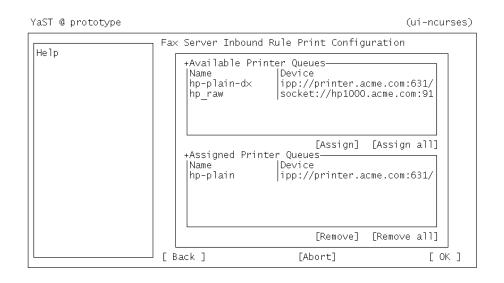
4.1.3.1.24 yastui_03_03_02_02_01.txt



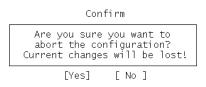
4.1.3.1.25 yastui_03_03_02_02_02_txt



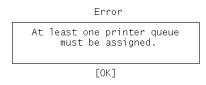
4.1.3.1.26 yastui_03_03_02_03.txt



4.1.3.1.27 yastui_03_03_02_03_01.txt



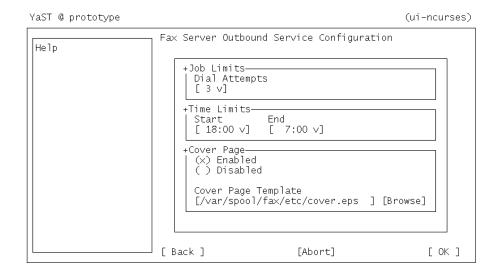
4.1.3.1.28 yastui_03_03_02_03_02.txt



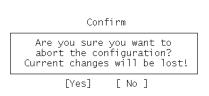
4.1.3.1.29 yastui_03_03_03.txt



4.1.3.1.30 yastui_03_04.txt



4.1.3.1.31 yastui_03_04_01.txt



4.1.3.1.32 yastui_03_04_02.txt

Error

Start Time must be higher than End Time.

[OK]

4.1.3.1.33 yastui_03_04_03.txt



4.1.3.1.34 yastui_03_05.txt



4.1.3.1.35 yastui_03_06.txt



4.1.3.1.36 yastui_03_07.txt



4.2 HylaFax

4.2.1 Description

HylaFax is an enterprise—class system for sending and receiving faxes. It has client—server architecture. The fax devices are connected to a server.

Fax Server mail and printer gateways are considered clients here. There are also third party clients e. g. WHFC and SuSEFax.

HylaFax handles analog modems directly and ISDN cards with help of capi4linux and capi4hylafax.

4.2.2 Use Case

The HylaFax Server is first configured via YaST module. That means, the correctly configured device is assigned to the HylaFax, user accounts are created and services configured and started.

Then the user initiates the fax job by "printing" the document he/she wants to fax to the Fax Server printer gateway.

In the document there must be included commands that will be passed by the gateway to the Fax Server.

It is most likely under standard circumstances the command will be in form:

```
#fax user:pass destination_fax_number#
```

Printer gateway reads this information from the print job and uses it to transfer the fax data the Fax Server.

Also the confirmation email is sent to the user.

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Accepted?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"fax mblue: ***** +420.555666777"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server accepted the request and queued the fax job for delivery.
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

When Fax Server delivers the fax message to the receiver, the notification email is sent to the user.

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Done?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was completed sucesfully.
RESULT
Fax Job has left the queue sucessfully.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
The user has also the possibility to check the status of the fax job or to remove it via the mail or printer
gateways.
  The output of the status query is shown below.
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Status Report?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"status mblue:***** 100"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Job #100
```

Destination: +420.555666777

```
Scheduled for delivery: 01.01.2004, 12:34

Owner: Martin Blue <mblue@acme.com>

State: Waiting

HELP

Below is brief overview of the Fax Server email interface commands:
help

fax [user[:password]] number

remove [user[:password]] [job]

status [user[:password]] [job]

The commands should be placed in the e-mail body and enclosed in # (pound) signs.

Example: (pound)remove mblue:M4rtln 100(pound)

--

Product Name -- Fax Server Component (prototype)
```

4.2.3 Interface

HylaFax Server uses mechanisms of interprocess communication (pipes, named FIFOs, exit codes) to communicate with its subprocesses.

The client—server communication is handled via HylaFax protocol.

4.2.3.1 User interface Follows the complete list of messages accepted (requests) and sent (confirmations, errors and notifications) by the email gateway:

4.2.3.1.1 fax:request (mailui_fax_01.txt)

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject:
Content-Type: text/plain; charset=ISO8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable

#fax mblue:M4rtln +420.555666777#

--
Martin Blue, ACME, Inc.

--AttachmentBoundary
  content-type: application/postscript;
[content-type: application/pdf;]
[content-type: text/plain;]
[content-type: image/tiff;]
name=fax.ps
[name=fax.pdf]
```

```
[name=fax.txt]
[name=fax.tif]
content-transfer-Encoding: base64
content-id: <UW9x74a4V3fKms37>
--AttachmentBoundary
```

4.2.3.1.2 fax:request_02

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject:
Content-Type: text/plain; charset=ISO8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable
#fax#
Martin Blue, ACME, Inc.
--AttachmentBoundary
 content-type: application/postscript;
 [content-type: application/pdf;]
 [content-type: text/plain;]
 [content-type: image/tiff;]
 name=fax.ps
 [name=fax.pdf]
 [name=fax.txt]
 [name=fax.tif]
 content-transfer-Encoding: base64
 content-id: <UW9x74a4V3fKms37>
--AttachmentBoundary
```

4.2.3.1.3 fax:request_03

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject:
Content-Type: text/plain; charset=ISO8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable
#fax mblue +420.555666777#
Martin Blue, ACME, Inc.
--AttachmentBoundary
 content-type: application/postscript;
 [content-type: application/pdf;]
 [content-type: text/plain;]
 [content-type: image/tiff;]
 name=fax.ps
 [name=fax.pdf]
 [name=fax.txt]
 [name=fax.tif]
 content-transfer-Encoding: base64
```

```
content-id: <UW9x74a4V3fKms37>
--AttachmentBoundary
```

4.2.3.1.4 fax:request_04

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: George Alien <galien@bad.com>
To: Fax Server <fax@acme.com>
Subject:
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
#REMOVE 100#
George Alien, BAD, Inc.
--AttachmentBoundary
 content-type: application/postscript;
 [content-type: application/pdf;]
 [content-type: text/plain;]
 [content-type: image/tiff;]
 name=fax.ps
 [name=fax.pdf]
 [name=fax.txt]
 [name=fax.tif]
 content-transfer-Encoding: base64
 content-id: <UW9x74a4V3fKms37>
--AttachmentBoundary
```

4.2.3.1.5 fax:request_05

```
Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject:
Content-Type: text/plain; charset=ISO8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable

#fax mblue:M4rtln +420.555666777#

--
Martin Blue, ACME, Inc.
```

4.2.3.1.6 fax:confirm_01 (mailui_fax_02.txt)

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Accepted?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
```

ACTION

```
Fax Server received the following command request:
"fax mblue:***** +420.555666777"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server accepted the request and queued the fax job for delivery.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.7 fax:error_01 (mailui_fax_03.txt)
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Request Rejected?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"fax"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: The destination fax number is missing.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
```

```
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
  4.2.3.1.8 fax:error_02
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Request Authentication Error?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"fax mblue +420.555666777"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: User authentication failed.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in \# (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.9 fax:error_03
```

Date: Thu, 01 Jan 2004 12:00:00 +0100 From: Fax Server <fax@acme.com>

To: Martin Blue <mblue@acme.com>

Subject: =?UTF-8?Q?Fax Request Rejected?=

Content-Type: text/plain; charset=UTF-8; format=flowed

Content-Transfer-Encoding: quoted-printable

ACTION

```
Fax Server received the following command request:
"fax mblue:M4rt1n +420.555666777"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: No fax data were found.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.10 *:notify_01 (mailui_fax_04.txt)
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Done?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was completed sucesfully.
RESULT
Fax Job has left the queue sucessfully.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
```

```
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.11 *:notify_02
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Requeued?=
[Subject: =?UTF-8?Q?Fax Job #100 Blocked?=]
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was not completed, but was requeued for retry.
[Fax Job was blocked by concurrent jobs.]
RESULT
Fax Job has remained in the queue for later delivery.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.12 *:notify_03
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Failed?=
[Subject: =?UTF-8?Q?Fax Job #100 Rejected?=]
[Subject: =?UTF-8?Q?Fax Job #100 Removed?=]
[Subject: =?UTF-8?Q?Fax Job #100 Timeout?=]
[Subject: =?UTF-8?Q?Fax Job #100 Conversion Failed?=]
```

Content-Type: text/plain; charset=UTF-8; format=flowed

Content-Transfer-Encoding: quoted-printable

```
ACTION
Fax Job was not completed.
[Fax Job was rejected.]
[Fax Job was removed from the queue.]
[Fax Job did not complete in time.]
[Fax Job format conversion failed.]
RESULT
Fax Job has been removed from the queue.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.13 *:request_01 (mailui_general_01.txt)
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Martin Blue <mblue@acme.com>
```

```
Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject:
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable

Blah?

#huh#
--.
Martin Blue, ACME, Inc.
```

4.2.3.1.14 *:error_01 (mailui_general_03.txt)

Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Request General Error?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable

ACTION Fax Server received the request but was unable to recognize it. RESULT Fax Server rejected the request: No command found in the email body. HELP Below is brief overview of the Fax Server email interface commands: help fax [user[:password]] number remove [user[:password]] [job] status [user[:password]] [job] The commands should be placed in the e-mail body and enclosed in # (pound) signs. Example: (pound)remove mblue:M4rt1n 100(pound) --. Product Name -- Fax Server Component (prototype) 4.2.3.1.15 *:notify_01 (mailui_general_04.txt) Date: Thu, 01 Jan 2004 12:00:00 +0100 From: Fax Server <fax@acme.com> To: Martin Blue <mblue@acme.com> Subject: =?UTF-8?Q?Fax Job #100 Done?= Content-Type: text/plain; charset=UTF-8; format=flowed Content-Transfer-Encoding: quoted-printable ACTION Fax Job was completed sucesfully. RESULT Fax Job has left the queue sucessfully. HELP Below is brief overview of the Fax Server email interface commands: help fax [user[:password]] number remove [user[:password]] [job] status [user[:password]] [job]

The commands should be placed in the e-mail body and enclosed in # (pound) signs.

Example: (pound)remove mblue:M4rt1n 100(pound)

--Product Name -- Fax Server Component (prototype)

4.2.3.1.16 *:notify_02

Date: Thu, 01 Jan 2004 12:00:00 +0100 From: Fax Server <fax@acme.com> To: Martin Blue <mblue@acme.com> Subject: =?UTF-8?Q?Fax Job #100 Requeued?= [Subject: =?UTF-8?Q?Fax Job #100 Blocked?=] Content-Type: text/plain; charset=UTF-8; format=flowed Content-Transfer-Encoding: quoted-printable ACTION Fax Job was not completed, but was requeued for retry. [Fax Job was blocked by concurrent jobs.] RESULT Fax Job has remained in the queue for later delivery. HELP Below is brief overview of the Fax Server email interface commands: help fax [user[:password]] number remove [user[:password]] [job] status [user[:password]] [job] The commands should be placed in the e-mail body and enclosed in # (pound) signs. Example: (pound)remove mblue:M4rt1n 100(pound)

4.2.3.1.17 *:notify_03

Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Failed?=
[Subject: =?UTF-8?Q?Fax Job #100 Rejected?=]
[Subject: =?UTF-8?Q?Fax Job #100 Removed?=]
[Subject: =?UTF-8?Q?Fax Job #100 Timeout?=]
[Subject: =?UTF-8?Q?Fax Job #100 Conversion Failed?=]
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable

Product Name -- Fax Server Component (prototype)

ACTION

```
Fax Job was not completed.
[Fax Job was rejected.]
[Fax Job was removed from the queue.]
[Fax Job did not complete in time.]
[Fax Job format conversion failed.]
RESULT
Fax Job has been removed from the queue.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound)
signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

4.2.3.1.18 remove:request_01 (mailui_remove_01.txt)

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject: =?UTF-8?Q?Re: Fax Job #100 Accepted?=
Content-Type: text/plain; charset=ISO8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable

#remove mblue:M4rt1n#
--
Martin Blue, ACME, Inc.
```

4.2.3.1.19 remove:request_02

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject:
Content-Type: text/plain; charset=ISO8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable
#remove mblue:M4rtln 100#
```

__

Martin Blue, ACME, Inc.

4.2.3.1.20 remove:request_03

Date: Thu, 01 Jan 2004 12:00:00 +0100 From: Martin Blue <mblue@acme.com>

To: Fax Server <fax@acme.com>

Subject: =?UTF-8?Q?Re: Fax Job #150 Accepted?=

Content-Type: text/plain; charset=ISO8859-1; format=flowed

Content-Transfer-Encoding: quoted-printable

#remove mblue:M4rt1n 100#

--

Martin Blue, ACME, Inc.

4.2.3.1.21 remove:request_04

Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Martin Blue <mblue@acme.com>

To: Fax Server <fax@acme.com>

Subject:

Content-Type: text/plain; charset=ISO8859-1; format=flowed

Content-Transfer-Encoding: quoted-printable

#remove#

--

Martin Blue, ACME, Inc.

4.2.3.1.22 remove:request_05

Date: Thu, 01 Jan 2004 12:00:00 +0100 From: Martin Blue <mblue@acme.com>

To: Fax Server <fax@acme.com>

Subject: =?UTF-8?Q?Re: Fax Job #100 Accepted?=

Content-Type: text/plain; charset=ISO8859-1; format=flowed

Content-Transfer-Encoding: quoted-printable

#remove mblue#

--

Martin Blue, ACME, Inc.

4.2.3.1.23 remove:confirm_01 (mailui_remove_02.txt)

Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>

Subject: =?UTF-8?Q?Fax Job #100 To Be Removed?=

Content-Type: text/plain; charset=UTF-8; format=flowed

Content-Transfer-Encoding: quoted-printable

```
ACTION
Fax Server received the following command request:
"remove mblue:***** 100"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server accepted the request and will perform it shortly.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.24 remove:error_01 (mailui_remove_03.txt)
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Request Rejected?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"remove"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: The fax job number is missing.
HELP
Below is brief overview of the Fax Server email interface commands:
```

help

```
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.25 remove:error_02
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Authentication Error?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"remove mblue 100"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: User authentication failed.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

4.2.3.1.26 remove:error_03

Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Fax Server <fax@acme.com>

```
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #150 Not Found?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"remove mblue:***** 150"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: No such a fax job.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

4.2.3.1.27 *:notify_01 (mailui_remove_04.txt)

help

```
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Done?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable

ACTION

Fax Job was completed sucesfully.

RESULT

Fax Job has left the queue sucessfully.

HELP

Below is brief overview of the Fax Server email interface commands:
```

```
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.28 *:notify_02
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Requeued?=
[Subject: =?UTF-8?Q?Fax Job #100 Blocked?=]
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was not completed, but was requeued for retry.
[Fax Job was blocked by concurrent jobs.]
RESULT
Fax Job has remained in the queue for later delivery.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

4.2.3.1.29 *:notify_03

Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>

Subject: =?UTF-8?Q?Fax Job #100 Failed?=

```
[Subject: =?UTF-8?Q?Fax Job #100 Rejected?=]
[Subject: =?UTF-8?Q?Fax Job #100 Removed?=]
[Subject: =?UTF-8?Q?Fax Job #100 Timeout?=]
[Subject: =?UTF-8?Q?Fax Job #100 Conversion Failed?=]
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was not completed.
[Fax Job was rejected.]
[Fax Job was removed from the queue.]
[Fax Job did not complete in time.]
[Fax Job format conversion failed.]
RESULT
Fax Job has been removed from the queue.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in \# (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

4.2.3.1.30 status:request_01 (mailui_status_01.txt)

```
Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Requeued?=
Content-Type: text/plain; charset=IS08859-1; format=flowed
Content-Transfer-Encoding: quoted-printable

#status mblue:M4rtln#
--
Martin Blue, ACME, Inc.
```

4.2.3.1.31 status:request_02

Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Martin Blue <mblue@acme.com>
To: Fax Server <fax@acme.com>

Subject:

Content-Type: text/plain; charset=ISO8859-1; format=flowed

Content-Transfer-Encoding: quoted-printable

#status mblue:M4rt1n 100#

Martin Blue, ACME, Inc.

4.2.3.1.32 status:request_03

Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Martin Blue <mblue@acme.com>

To: Fax Server <fax@acme.com>

Subject: =?UTF-8?Q?Re: Fax Job #150 Accepted?=

Content-Type: text/plain; charset=ISO8859-1; format=flowed

Content-Transfer-Encoding: quoted-printable

#status mblue:M4rt1n 100#

__

Martin Blue, ACME, Inc.

4.2.3.1.33 status:request_04

Date: Thu, 01 Jan 2004 12:00:00 +0100 From: Martin Blue <mblue@acme.com>

To: Fax Server <fax@acme.com>

Subject:

Content-Type: text/plain; charset=ISO8859-1; format=flowed

Content-Transfer-Encoding: quoted-printable

#status#

--

Martin Blue, ACME, Inc.

4.2.3.1.34 status:request_05

Date: Thu, 01 Jan 2004 12:00:00 +0100

From: Martin Blue <mblue@acme.com>

To: Fax Server <fax@acme.com>

Subject: =?UTF-8?Q?Fax Job #100 Requeued?=

Content-Type: text/plain; charset=ISO8859-1; format=flowed

Content-Transfer-Encoding: quoted-printable

#status mblue#

--

Martin Blue, ACME, Inc.

4.2.3.1.35 status:confirm_01 (mailui_status_02.txt)

Date: Thu, 01 Jan 2004 12:00:00 +0100

```
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Status Report?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"status mblue:***** 100"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Job #100
Destination: +420.555666777
Scheduled for delivery: 01.01.2004, 12:34
[Scheduled for delivery: Now]
Owner: Martin Blue <mblue@acme.com>
State: Undefined
[State: Suspended]
[State: Pending]
[State: Sleeping]
[State: Blocked]
[State: Waiting]
[State: Running]
[State: Done]
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

4.2.3.1.36 status:error_01 (mailui_status_03.txt)

Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>

Subject: =?UTF-8?Q?Fax Request Rejected?=

```
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"status"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: The fax job number is missing.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.37 status:error_02
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Authentication Error?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"status mblue 100"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: User authentication failed.
HELP
Below is brief overview of the Fax Server email interface commands:
```

```
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.38 status:error_03
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #150 Not Found?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Server received the following command request:
"status mblue:***** 150"
from the user "Martin Blue <mblue@acme.com>".
RESULT
Fax Server rejected the request: No such a fax job.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```

4.2.3.1.39 *:notify_01 (mailui_status_04.txt)

Date: Thu, 01 Jan 2004 12:00:00 +0100

```
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Done?=
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was completed sucesfully.
RESULT
Fax Job has left the queue sucessfully.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.40 *:notify_02
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Requeued?=
[Subject: =?UTF-8?Q?Fax Job #100 Blocked?=]
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was not completed, but was requeued for retry.
[Fax Job was blocked by concurrent jobs.]
RESULT
Fax Job has remained in the queue for later delivery.
HELP
Below is brief overview of the Fax Server email interface commands:
```

help

fax [user[:password]] number

```
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
  4.2.3.1.41 *:notify_03
Date: Thu, 01 Jan 2004 12:00:00 +0100
From: Fax Server <fax@acme.com>
To: Martin Blue <mblue@acme.com>
Subject: =?UTF-8?Q?Fax Job #100 Failed?=
[Subject: =?UTF-8?Q?Fax Job #100 Rejected?=]
[Subject: =?UTF-8?Q?Fax Job #100 Removed?=]
[Subject: =?UTF-8?Q?Fax Job #100 Timeout?=]
[Subject: =?UTF-8?Q?Fax Job #100 Conversion Failed?=]
Content-Type: text/plain; charset=UTF-8; format=flowed
Content-Transfer-Encoding: quoted-printable
ACTION
Fax Job was not completed.
[Fax Job was rejected.]
[Fax Job was removed from the queue.]
[Fax Job did not complete in time.]
[Fax Job format conversion failed.]
RESULT
Fax Job has been removed from the queue.
HELP
Below is brief overview of the Fax Server email interface commands:
help
fax [user[:password]] number
remove [user[:password]] [job]
status [user[:password]] [job]
The commands should be placed in the e-mail body and enclosed in # (pound) signs.
Example: (pound)remove mblue:M4rt1n 100(pound)
Product Name -- Fax Server Component (prototype)
```