Fax Server

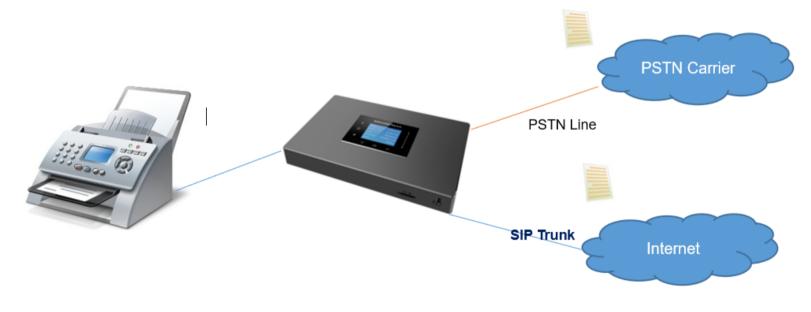
Fax Server is one of the most useful and important UCM6xxx features that allows the user to send and receive Fax files. The UCM6xxx IP-PBX series support T.30 for legacy analog Fax transmissions along with T.38 and Pass-through for Fax Over IP. The UCM6xxx series provide a lot of options and methods to perform sending/receiving Fax files depending on user's resources and the way he/she wants to proceed.



UCM Fax Server supports T.38 which is a protocol that dictates how to send a fax over a computer data network and requires a T.38-capable VoIP service or gateway (please check with your service provider for this protocol support), otherwise the transmission of Fax will proceed via pass through using RTP for sending facsimile signals.

This guide describes the steps to follow in order to perform sending and receiving fax files when the user has an Analog Fax machine connected to UCM6xxx's FXS Port or when he only wants to use a virtual fax machine and benefit from the value-added features of the UCM6xxx related to fax.

Setup UCM6XXX with Physical Fax Machine



Physical Fax Machine Deployment Diagram

FXS Extension Configuration

FXS (Foreign Exchange Station) is any telephone interface that is used for end-user analog telephony equipment, (i.e. analog fax machine and analog phones) to provide battery power, dial tone and generate the ringing voltage and therefore the user needs to create a "FXS Extension" for the Fax machine to

All the UCM IP-PBX models have two FXS ports to connect analog phone and Fax machine for typical SMB installations.

Please, refer to the following steps in order to create the FXS extension:

1. Go to UCM6xxx Web GUI \rightarrow Extension/Trunk \rightarrow Extension.

2. Click on + Add .

3. Under "Basic Settings", configure the extension's parameters.

Extensions > Creat	e New Extensio	n				
< Basic Settings	Media	Features	Voicemail	Specific Time	Wave Client	Follow Me
* Select Extension Type	FXS Extension	~				
Select Add Method	Single	~				
General						
* Extension	1005			Analog Station	FXS 1	~
CallerID Number				* Call Privileges	Internal	~
User Settings						
First Name				Last Name		
Email Address				* User Password	ADZ!dW@v9	
Mobile Number	+1 ~					
	Cancel	Save				

Create FXS Extension for Fax Machine (Basic Settings)

4. Select the extension type to be "FXS Extension" and select which FXS port where the Fax machine will be connected.

1	Extensions > Create New Extension							
<	gs	Media	Features	Voicemail	Specific Time	Wave Client	Follow Me	Advanced Settings >
1	Fax							
	Fax Mode		Fax Gateway	~	Fax to Email	Ye	25	~
			Cancel	Save				

Create FXS Extension for Fax Machine (Media)

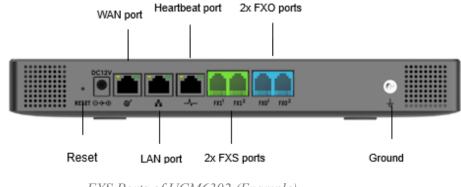
5. Under "Media", set the "Fax Mode" to "Fax Gateway" so that the UCM6xxx can support conversation and processing of Fax data from T.30 to T.38 and

T.38 to T.30.

6. Click on Save and Apply changes.

Connecting FAX Machine to UCM

After creating the FXS extension, the user needs to make sure of connecting his Fax Machine to the chosen and configured FXS Port. The following figure shows the example of UCM3202's FXS Ports.

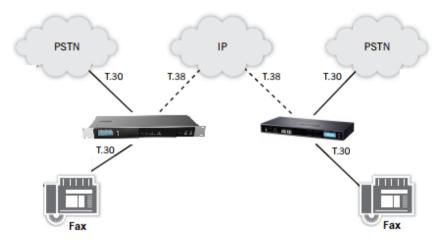


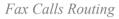
FXS Ports of UCM6302 (Example)

Routing FAX Calls

As shown on below diagram, the fax transmission originates from the physical Fax machine as a T.30 fax. Then the built-in T.38 gateway module in UCM6xxx translates the fax transmission to T.38 format and sends it over the IP network to the other UCM6xxx.

The second Server translates back the transmission to T.30 and sends it the attached Fax Machine or over the PSTN line for external numbers.





User needs to setup Trunks and call routing rules in order to route incoming and outgoing fax through the desired trunk, we will show the steps to use analog and VOIP trunk to perform sending and receiving Fax files.

Create Analog Trunk

Please, refer to the following steps in order to create an analog trunk:

- 1. Go to UCM6xxx Web UI \rightarrow Extension/Trunk \rightarrow Analog trunks.
- 2. Click on + Create New Analog Trunk to create a new Analog Trunk, or on 🗹 to edit an existing one.

Analog Trunks > Create New Analog Trunks				
* FXO Port	1 🔽 2	* Trunk Name	Analog_Trunk2	
Advanced Options				
SLA Mode				
Enable Polarity Reversal				
Current Disconnect Threshold (ms)	200	* Ring Timeout	8000	
* RX Gain	0dB v	* TX Gain	0dB v	
Use CallerID				
Caller ID Scheme	Bellcore/Telcordia v	* FXO Dial Delay (ms)	0	
Auto Record		Disable This Trunk		
DAHDI Out Line Selection	Ascend ~			
Echo Cancellation Mode	Default ~	Direct Callback		
Append #				
Total Time Limit For Outb	ound Calls			
Enable Total Time Limit For Outbound Calls				
	Cancel Save			
	Analo	g Trunk for Fax		

Make sure to choose the right FXO port where PSTN Line is connected and to set Fax Mode on "none".

3. Click on "Save" and "Apply Changes".

Create VoIP Trunk

Please, refer to the following steps in order to create a VoIP Trunk:

1. Go to UCM6xxx Web UI \rightarrow Extension/Trunk \rightarrow VoIP Trunks.

2. Click on + Create New SIP Trunk to create a new VoIP Trunk.

3. Set the SIP credentials given by the service provider (server IP or domain, username and password...etc).

4. Click on "Save" and "Apply Changes".

Basic Settings	Advanced Settings
lf the host is not a nume the UCM will do an SRV	eric IP address, but the port number is present in the URI, the UCM perform record lookup.
* Provider Name	Grandstream
* Host Name	1.1.1.1
Transport	UDP ~
Auto Record	
Keep Original CID	
Keep Trunk CID	
NAT	
Disable This Trunk	
TEL URI	Disabled
CallerID Number	
CallerID Name	
From Domain	
Jitter Buffer	NetEQ
Direct Collback	Cancel Save

VoIP Trunks > Edit	t SIP Trunk: Grandstream				
Basic Settings	Advanced Settings				
Video FEC					
ICE Support					
TURN Relay					
FECC					
Silence Suppression					
SRTP	Disabled	~			
SRTP Crypto Suite	3 Available		1	Selected	
	Search Q		Search	Q	
	AES_256_CM_HMAC_SHA1		AES_CM_12	8_HMAC_SHA1 T	
	AEAD_AES_128_GCM	<		^	
	AEAD_AES_256_GCM	>		~	
				*	
				×	
IPVT Mode					
Enable T.38 UDPTL					
Include Special Attributes					
	Cancel Save				

SIP Trunk Advanced Settings

(1) As shown above, Users can enable T.38 UDPTL option under the advanced settings of the trunk.

Sending/Receiving Fax Files using Fax Machine

Please, refer to the following steps in order to manage sending/receiving faxes using a fax machine.

- 1. Connect Fax machine to the UCM6xxx FXS port.
- 2. Connect PSTN line to the UCM6xxx FXO port (in the case of using Analog Trunk).

3. Go to Web GUI \rightarrow Extension/Trunk page.

4. Create or edit a Trunk:

• Analog trunk: *Please, refer to the chapter [Create Analog* Trunk]

• VoIP trunk: *Please, refer to the chapter [Create VoIP Trunk]*

5. Go to UCM6xxx Web GUI→Extension/Trunk→Extensions page.

6. Create or edit the extension for FXS port. Please, refer to the chapter [FXS Extension Configuration].

7. Under Web GUI→Extension/Trunk→Inbound Routes page, click on + Add in order to create an inbound route to use the Fax trunk to receive fax files.

- 8. Select the trunk you created (Analog Trunk or SIP Trunk).
- 9. Enable Fax Detection so that the fax signals from the trunk during a call will be detected. Users can afterward set the fax destination as Extension to send the fax to the designated Extension. or as Fax to Email in order to send the fax as an email attachment to the designated extension's email address. If the selected extension does not have an associated email address, it will be sent to the default email address configured in the Call Features->Fax/T.38->Fax Settings page. (Email settings need to be pre-configured).
- 10. If fax detection is not enabled, Users can select the created FXS extension for Fax machine under **Default Destination** setting, this way all the incoming traffic through this inbound route will be forwarded to the selected destination.

General			
* Trunks	SIP Trunks Grandstream	Inbound Route Name	
Disable This Route			
Pattern			
* Pattern		CallerID Pattern	
		Seamless Transfer	
CID Source	None v	Whitelist	
Call Setting			
Ringback Tone	None v	Alert-info	None v
Auto Record		Fax Detection	
Fax Destination	Fax to Email	1001 (s.adler@gmail.com	n) 🛛 🗸
Auto Answer		* Detection Timeout (sec)	10
Prompt	Default ~	Block Collect Calls	

Inbound Route with FXS Extension as default destination

- 11. Enable "Auto Answer" if this inbound route is used to receive regular calls. The UCM will answer the incoming calls and will forward the fax when it's detected, if the UCM detects a regular call, it will forward it to the corresponding extensions.
- 12. Click on "Save" and "Apply Changes".

In order to send outbound fax, users should follow below steps:

1. Under Web GUI→Extension/Trunk→Outbound Routes page, click on + Add in order to create an outbound route to use the fax trunk to send files.

2. Select the trunk you created (Analog Trunk or SIP Trunk).

Edit Outbound Rule: 99			(Cancel	Save
General					
* Calling Rule Name :	SenFAX	Disable This Route:			
* Pattern :	_9.	Privilege Level:	Internal v		
	,	é	Warning: Setting privilege level at "Internal" has potential security risks.		
PIN Groups :	None ~	PIN Groups with Privilege			
Password:					
Enable Filter on Source Caller	ID				
Enable Filter on Source Caller		Outbound Route CID:			
Call Duration Limit					
Call Duration Limit:					
Main Trunk					
*Trunk:	SIPTrunks telkom v]			
Strip :					
Prepend:					
Failover Trunk					
+ Add					
TRUNKS	STRIP	PREPEND		OPTIONS	
	Copyright © Grandstream Networ	ks, Inc. 2014-2021. All Rights Reserved.			

Outbound Route

3. Click on "Save" and "Apply changes".

After this configuration is done, Fax files can be received and sent with the Fax Machine connected to UCM6xxx on the FXS Port.

UCM6XXX Fax Value-Added Features

The UCM IP-PBX series have many value-added features related to fax and which can help users who don't have PSTN lines and FAX machine to send and receive fax files in PDF format.

Among these features we have the fax sending from web GUI, fax to email, email to fax and fax detection.

WEB GUI Fax Sending

In order to use the FAX sending feature of the UCM, users need to follow below steps:

1. Under Web GUI→Extension/Trunk→Outbound Routes page, click on + Add in order to create an outbound route to use the fax trunk to send files. Refer to the previous steps [Outbound Routes].

2. Select the trunk already created (Analog Trunk or SIP Trunk).

3. Access to UCM web GUI either using admin account or user portal.

4. Go to UCM6xxx Web GUI \rightarrow Other Features \rightarrow Fax Sending (Value-Added Features \rightarrow Fax Sending for the UCM62XX and UCM6510).

5. Enter the fax number and upload the file to be faxed.

Fax Sending * External Fax Number: Fax File:	02151420384 Choose File to Upload		
	Fax Sending Settings		
PDF or TIF/TIFF File.			
I Tł	ne fax file must be PDF or TIF/TIFF format.	×	
	* External Fax Number: Fax File : PDF or TIF/TIFF File.	• External Fax Number: 02151420384 Fax File: Choose File to Upload Send <i>Fax Sending Settings</i> PDF or TIF/TIFF File. The fax file must be PDF or TIF/TIFF format.	• External Fax Number: • External Fax Number: • Choose File to Upload • Send • Send • Fax Sending Settings PDF or TIF/TIFF File. • The fax file must be PDF or TIF/TIFF format.

Format Error Message

Once the right file is selected, the Fax File will be successfully placed in the send queue and the user can view the File Send progress that shows the status and progress percentage of files with also the possibility to resend the failed ones using the resend button.

ÎÎ D	elete 🔚 Clear					Q External Fax Number
	NAME \$	DATE 🗘	SENDER 🗢	EXTERNAL FAX NUMBER \$	CURRENT PROGRESS 🗘	OPTIONS
	ACTCRM_Integration_Guide. pdf	2021-10-14 03:34:20 UTC-12:0 0	admin	7200	Sending 85%	
	ACTCRM_Integration_Guide. pdf	2021-10-14 03:34:06 UTC-12:0 0	admin	7200	Success	Ū
	ACTCRM_Integration_Guide. pdf	2021-10-14 03:31:55 UTC-12:0 0	admin	02151420384	Failed	1. 🔟
			< <u>1</u> >			Total: 3 10 / page Y Goto 1

File Send Progress

1 Note

The paper size is limited to A4 dimensions (8×11 inches). Any size larger than that will result in cutoffs/distortion.

Fax Resending

The UCM6xxx supports the options "Enable Fax Resend" and "Max Resend Attempts" which are available under Call Features \rightarrow Fax/T.38 \rightarrow Fax Settings page. These options allow the UCM to keep attempting to send faxes up to a specified amount of times.

Additionally, if a fax still fails to send, a Resend button will appear in the File Send Progress list in Value-Added Features –> Fax Sending (for the

UCM6300 go to **Other Features→Fax Sending**) to allow manual resending.

To enable the FAX resend feature, please refer to following steps:

1. Under UCM6xxx Web UI \rightarrow Call Features \rightarrow Fax/T.38, check the option "Enable FAX Resend".

- 2. Configure the "MAX Resend Attempts" with the maximum attempts number to resend the FAX.
- 3. Click on "Save" and "Apply Changes".

Fax Settings		
* Enable Error Correction Mode:	✓	
* Maximum Transfer Rate :	14400 ~	
* Minimum Transfer Rate :	2400 ~	
* Max Concurrent Sending Fax :	Single ~	
* Fax Queue Length :	6 ~	
User Information in Fax		
Header: Fax Header Information :		
Default Email Address :		Email Template
Send PDF Files Only:		
Enable Fax Resend :		
Max Resend Attempts :	5	
Fax Resend Frequency:	50	

FAX Settings

Note: When the fax fails to send, a **Resend** button will appear in the File Send Progress list in Value-Added Features \rightarrow Fax Sending to allow manual resending as displayed on the following screenshot.

nd Progress Delete 🔚 Clear					Q External Fax Number
NAME \$	DATE 🗘	SENDER 🗘	EXTERNAL FAX NUMBER ≑	CURRENT PROGRESS 🗘	OPTIONS
ACTCRM_Integration_Guide. pdf	2021-10-14 03:34:20 UTC-12:0 0	admin	7200	Sending 85%	Ô
ACTCRM_Integration_Guide. pdf	2021-10-14 03:34:06 UTC-12:0 0	admin	7200	Success	Ū
ACTCRM_Integration_Guide. pdf	2021-10-14 03:31:55 UTC-12:0 0	admin	02151420384	8 Failed	1
		<u>< 1</u> >			Total: 3 10 / page ~ Goto 1

UCM Email Settings

First step in setting up fax-to-mail feature is to configure UCM Email settings; this can be done by following below steps:

1. Log into the web GUI as an admin under System Settings→Email Settings→Email Settings

2. Enter the required information for SMTP.

3. Click on "Save" then "Apply Changes".

4. Click on "Test" button and test if the email settings are correct and that a test mail has been received.

Email Settings		
Email Settings	Email Template	Email Send Log
TLS Enable :		
Туре:	Client	~
Email Template Sending	HTML	~
Format:		
* SMTP Server :	192.168.6.202:587	
* Enable SASL Authenticati	on : 🔽	
* Username:	adminSmtp	
* Password :	•••••	Q
Enable Email-to-Fax :		
Email-to-Fax	Disable	~
Blacklist/Whitelist:		
Email-to-Fax Subject	XXX	~
Format:		
* POP/POP3 Server Addres	s: 192.168.6.202	
* POP/POP3 Server Port:	991	
* Display Name :	Branch_PBX	
* Sender:	Branch1@domain.loca	I
Test		

Email Settings

Please refer to the following table and screenshot to have more information about the email settings configuration.

Parameter	Description
TLS Enable	If enabled, TLS will be used when forwarding emails to the SMTP server.
Туре	 MTA: Mail Transfer Agent. The configured domain will be used in the sender address. Warning: Emails sent by MTA may be considered spam by the destination SMTP server. Client: Send emails to the configured SMTP server, which will then forward the emails to the destination address.
Email Template Sending Format	Select the email template format to be sent. The "HTML" format is compatible with most mail clients and is recommended. If the mail client does not support the "HTML" format, please select the "Plain Text" format.
SMTP Server	Enter the SMTP server. For example, smtp.mydomain.com:25. Port number is optional.

Enable SASL Authentication	Toggles SASL authentication. If disabled, UCM will not use the username and password for email client authentication. Most email servers require login authentication while private email servers may allow anonymous login. If using Microsoft Exchange Server or if credentials are not required, please disable this option.
Username	Enter the username of the email account.
Password	Enter the password of the email account. It is highly recommended to use HTTPS when saving and applying password changes.
Enable Email-to-Fax	Monitors the inbox of the configured email address for the specified subject. If detected, the UCM will get a copy of the attachment from the email and send it to the XXX extension by fax. The attachment must be in PDF/TIF/TIFF format.
POP/POP3 Server Address	Enter the IP address of the POP/POP3 server.
POP/POP3 Server Port	Enter the port of the POP/POP3 server.
Display Name	Enter the name of the PBX that will be displayed in sent emails.
Sender	Enter the email used to send the emails.

This way we confirmed that UCM can send emails via Its built-in SMTP client, specified The Email address blacklist for local/external contacts preventing faxing from unauthorized email addresses. Moreover, users can customize the emails that will be sent along with the FAX, this can be done under Email template page as shown below.

Edit Email Template: Fax		Save
* Subject: * Message in Text Format:	New Fax from \${CALLERIDNUM} \${CALLERIDNAME} Hi \${RECEIVEEXTEN}, You have received a new fax \${FILENAME} (\${FAXPAGES} pages) at \${FAXDATE} from \${CALLERIDNUM} \${CALLERIDNAME}.	
Message in HTML Format :	Restore Default Template ● ● I B I U ###########	
	Preview Restore Default Template J Upload	1

Email Template for FAX

Create/Edit Virtual FAX Extensions

The second step is to create a new Fax extension which will be mapped with a certain email address.

Please, follow below steps:

- 1. Go to UCM6xxx Web GUI \rightarrow Call features \rightarrow FAX/T.38
- 2. Click on + Create New Fax Extension and enter the number and name of the extension.
- 3. Enter the Email Address where to send the received Faxes.

Create New Fax Extension



Create New Fax Extension

Once the user created the extension, it will be displayed in the FAX/T.38 menu with the possibility of editing the extension's information by clicking on 🗹 button or deleting them with 🔹 button.

Fax Settings		
* Enable Error Correction Mode :		
* Maximum Transfer Rate :	14400 ×]
* Minimum Transfer Rate :	2400 ~]
* Max Concurrent Sending Fax :	Single v]
* Fax Queue Length :	6 ×]
User Information in Fax		
Header:		
Fax Header Information :		
Default Email Address :		Email Template
Enable Fax Resend :		
Max Resend Attempts :	5]
Fax Resend Frequency:	50]

User can click on "Fax settings" in order to configure the Fax/T.38 parameters as the following figure.

Fax Settings

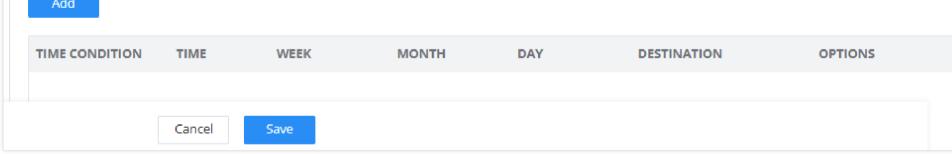
Parameter	Description
Enable Error Correction Mode	Configure to enable Error Correction Mode (ECM).
Maximum Transfer Rate	Configure the maximum transfer rate during Fax rate negotiation.
Minimum Transfer Rate	Configure the minimum transfer rate during Fax rate negotiation.
Max Concurrent Sending Fax	Determines how many users can send fax at the same time.
Fax Queue Length	Maximum length of fax queue.
Fax Header Information	Adds header information to fax files.
Default Email Address	Send fax to this email address if the fax destination does not have an email address configured.
Send PDF Files Only	If enabled, fax emails will no longer attach TIFF files. Only PDF files will be attached.
Enable Fax Resend	Enable Fax Resend.
Max Resend Attempts	Max Resend Attempts.
Fax Resend Frequency	Fax Resend Frequency.

Receiving FAX Files using Virtual Faxing

Now, that email settings and virtual fax extension have been set up and in order to receive Fax files using virtual faxing, please refer to the following steps:

- 1. Under UCM6xxx Web UI → Call Features → Fax/T.38, create a new Fax extension. *Please refer to the chapter [Create/Edit Virtual FAX* Extensions].
- 2. Create or edit a Trunk:
- Analog trunk: Please, refer to the chapter [Create Analog Trunk]
- VOIP trunk: Please, refer to the chapter [Create VoIP Trunk]
- 3. Under Web GUI→Extension/Trunk→Inbound Routes page, click on + Add in order to create an inbound route to use the Fax trunk to receive fax files.
- 4. Select the trunk you created (Analog Trunk or SIP Trunk).
- 5. Select the created FAX extension as the default destination.

Inbound Routes > Crea	te New Inbound Rule			
CID Source	None ~		Seamless Transfer Whitelist	
Call Setting				
Ringback Tone	None ~		Alert-info	None ~
Auto Record			Fax Detection	
CallerID Setting				
Prepend Trunk Name			Set CallerID Info	
CallerID Name Lookup				
Mode				
Enable Route-Level Inbound Mode			Inbound Multiple Mode	
Default Mode Mode 1				
* Default Destination	Fax	FAX_1		~
Time Condition				



Inbound Route with Fax Extension as Default Destination

5. Click on "Save" and "Apply Changes".

Once successfully configured, the incoming Fax from external Fax machine to the PSTN line number will be converted to PDF file and sent to the Email

address fax@domain.local set when Fax Extension was created. The list of received Fax files is displayed under UCM6xxx Web UI \rightarrow Call Features \rightarrow Fax/T.38.

List of Fax Files				
<u> n</u> Delete Sele	ected Fax Files 🗊 Delete All	Callee Number		Q Search
	Name 🗢	Date ≑	Size 🕏	Options
	VFAX-5000-20170828-110103-1503932444.50.pdf	2017-08-28 11:01:25 UTC-04:00	1573	业 🛅
	VFAX-5000-20170828-110103-1503932444.50.tiff	2017-08-28 11:01:20 UTC-04:00	5871	上 🛅

List of Fax Files

Customizing FAX EMAIL Template

The EMAIL templates on the UCM can be used to send an email notification about the fax and the users can customize this template based on their needs.

Please refer to the following steps to have more details about the customization of the FAX EMAIL template:

1. Access the Web GUI→Settings→Email Settings→Email Templates

2. Select the FAX template and press the edit button 🛛 under the options column to edit the template as desired.

Email Settings			
Email Settings Email 1	Email Send Log		
↓ Upload Template Images	🖒 Reset All Template Images		
Туре	Name	Time	Options
Conference Schedule	conference_template.html	2018-06-26 04:44:53 UTC-04:00	C
User Password	password_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ
Fax Sending	sendfax_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ
Alert Events	alert_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ
Extension	account_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ
CDR	cdr_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ
Voicemail	voicemail_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ
Call Queue Statistics	callqueuestatistics_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ
Fax	fax_template.html	2018-06-26 04:44:53 UTC-04:00	Ľ

3. Configure the fields of the template

• Users have the ability to preview mail sample by clicking on

Q Preview

in order to restore the default email template. • Click on 🖒 Restore Default Template

• Finally, users can click on



to upload a custom picture to the email template to display their own logo in the sent mails for example

Using Mail-to-Fax

UCM Email Settings

First step in setting up fax-to-mail feature is to configure UCM Email settings; this can be done by following below steps:

- 1. Log into the web GUI as an admin under System Settings→Email Settings→Email Settings.
- 2. Select the Type Client and enter the required information for SMTP.
- 3. Click on "Save" then "Apply Changes".
- 4. Click on "Test" Button and test if the email settings are correct and that a test mail has been received.

Email Settings			
Email Settings	Email Template	Email Send Log	
TLS Enable :	2		
Type:	Client		~
Email Template Sendin	ng Format: HTML		~
* SMTP Server :	smtp.gmail.co	om:587	
* Enable SASL Authentic	ation : 🔽		
* Username :	gstest2019		
* Password :	•••••		Q
Enable Email-to-Fax :	2		
Email-to-Fax Blacklist/V	Whitelist: Disable		~
Email-to-Fax Subject Fo	ormat: SendFaxMail	To XXX	~
* POP/POP3 Server Addr	ress : pop.gmail.cor	n:995	
* POP/POP3 Server Port	995		
* Display Name :	PBX		
* Sender :	gstest2019@g	gmail.com	
Test			

Email Settings

Please refer to the following table and screenshot to have more information about the email settings configuration.

Parameter	Description
TLS Enable	If enabled, TLS will be used when forwarding emails to the SMTP server.

Туре	 MTA: Mail Transfer Agent. The configured domain will be used in the sender address. Warning: Emails sent by MTA may be considered spam by the destination SMTP server. Client: Send emails to the configured SMTP server, which will then forward the emails to the destination address.
Email Template Sending Format	Select the email template format to be sent. The "HTML" format is compatible with most mail clients and is recommended. If the mail client does not support the "HTML" format, please select the "Plain Text" format.
SMTP Server	Enter the SMTP server.

	For example, smtp.mydomain.com:25. Port number is optional.
Enable SASL Authentication	Toggles SASL authentication. If disabled, UCM will not use the username and password for email client authentication. Most email servers require login authentication while private email servers may allow anonymous login. If using Microsoft Exchange Server or if credentials are not required, please disable this option.
Username	Enter the username of the email account.
Password	Enter the password of the email account. It is highly recommended to use HTTPS when saving and applying password changes.
Enable Email-to-Fax	Monitors the inbox of the configured email address for the specified subject. If detected, the UCM will get a copy of the attachment from the email and send it to the XXX extension by fax. The attachment must be in PDF/TIF/TIFF format.
POP/POP3 Server Address	Enter the IP address of the POP/POP3 server.
POP/POP3 Server Port	Enter the port of the POP/POP3 server.
Display Name	Enter the name of the PBX that will be displayed in sent emails.
Sender	Enter the email used to send the emails.

Create/Edit Virtual FAX Extensions

The second step is to create a new Fax extension which will be mapped with a certain email address.

Please, follow the next steps below:

- 1. Go to UCM6xxx Web GUI \rightarrow Call features \rightarrow FAX/T.38.
- 2. Click on + Create New Fax Extension and enter the number and name of the extension.

3. Enter the Email Address where to send the received Faxes.

Create New Fax Extens	sion
* Extension :	7200



Create new Fax extension

Once the user created the extension, it will be displayed in the FAX/T.38 menu with the possibility of editing the extension's information by clicking on 🛛

button or deleting them with 🛛 button.

User can click on "Fax settings" in order to configure the Fax/T.38 parameters as the following figure.

Fax Settings		
*Enable Error Correction Mode:		
*Maximum Transfer Rate:	14400 ~	
*Minimum Transfer Rate:	2400 ~	
*Max Concurrent Sending Fax:	Single v	
*Fax Queue Length:	6 v	
Fax Header Information:		
Default Email Address:		Email Template
Enable Fax Resend :	~	
Max Resend Attempts:	5	

Fax Settings

Parameter	Description	
Enable Error Correction Mode	Configure to enable Error Correction Mode (ECM).	
Maximum Transfer Rate	Configure the maximum transfer rate during Fax rate negotiation.	
Minimum Transfer Rate	Configure the minimum transfer rate during Fax rate negotiation.	
Max Concurrent Sending Fax	Determines how many users can send fax at the same time.	
Fax Queue Length	Maximum length of fax queue.	
Fax Header Information	Adds header information to fax files.	
Default Email Address	Send fax to this email address if the fax destination does not have an email address configured.	
Send PDF Files Only	If enabled, fax emails will no longer attach TIFF files. Only PDF files will be attached.	
Enable Fax Resend	Enable Fax Resend.	

Max Resend Attempts	Max Resend Attempts.
Fax Resend Frequency	Fax Resend Frequency.

Sending Mail to FAX

After enabling and configuring the MAIL to FAX option, the UCM monitors the configured email inbox for emails with the subject "SendFaxMail To XXX"

and it will extract the attachments of detected emails and send it to the configured extension by fax. The attachment must be in PDF/TIF/TIFF format.

Please refer to the following steps:

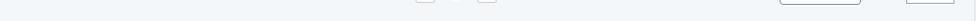
- 1. Access your EMAIL box and compose a new email.
- 2. Fill the email address configured on the UCM as destination.
- 3. Specify the subject with "SendFaxMail To 7200", on this example 7200 is the FAX extension that we have already configured on the UCM.
- 4. Insert the attachment to be sent (The attachment must be in PDF/TIF/TIFF format).

SendFaxMail To 7200	_ * ×
londonucm@grandstream.com	
SendFaxMail To 7200	
T-REC-E.180-198811-S!!PDF-E.pdf (362K) ×	
5 ♂ Sans Serif ▼ TT▼ B I U A▼ E▼ 注 注 注 ⊡ ⊡ ™ ඞ S 🕅	
Send \checkmark \triangle \bigcirc	Ū

Example of EMAIL to FAX

Now the UCM will extract the attachments of detected emails and send it to the configured extension by fax, users can also check the list of the fax files received under the web GUI \rightarrow Call Features \rightarrow Fax/T.38 as shown on the following screenshot.

List of Fax Fil	es			
🗊 Delete Se	elected Fax Files 🗊 Delete All	C	Callee Number	Q Searc
	Name 🗢	Date 🗢	Size 🜲	Options
	VFAX-7200-20180717-113516-1531841716.1.pdf	2018-07-17 11:35:38 UTC-04:00	7618	土 💼
	VFAX-7200-20180717-113516-1531841716.1.tiff	2018-07-17 11:35:33 UTC-04:00	12120	🕁 💼
	VFAX-7200-20180717-092921-1531834161.1.pdf	2018-07-17 09:31:30 UTC-04:00	166589	业 💼
	VFAX-7200-20180717-092921-1531834161.1.tiff	2018-07-17 09:31:25 UTC-04:00	209278	业 💼
	Total: 4 < <u>1</u>		10 / page v	Goto 1

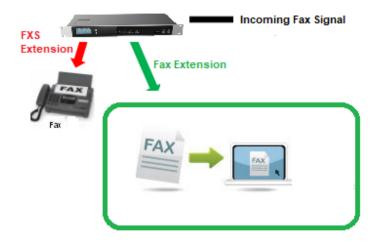


List of Fax Files

Fax Detection and Intelligent Routing

Users can configure the Fax detection and intelligent routing the Inbound Route of the trunk that they are using. Enabling **Fax Detection** option will enable

detecting the Fax Signal during a call, and the received Fax file will be sent to the designated extension or email address.



Fax Intelligent Routing after a Fax Signaling Detection

The user can also Enable Fax intelligent Routing in order to route directly the Fax signal to the appropriate FXS Extension connected to the Physical Fax Machine or the Virtual Faxing Extension. The user needs to choose this extension number from the available extensions in Fax Destination.