

ADOBE® FLASH® MEDIA GATEWAY 2.0

QUICK START GUIDE

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Adobe® Flash® Media Gateway Quick Start Guide for Windows®.

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Adobe® Flash® Media Gateway (FMG) provides programmable interfaces to integrate applications built on Flash platform with VoIP communication infrastructure. FMG thus creates opportunities for a new class of rich internet applications.

What to do first

Check the system requirements

If you're not sure whether FMG can run on your computer, review the complete system requirements and recommendations for your Adobe software. See the *ReadMe* file included with the installation file.

The additional software dependencies are as follows.

- FMG requires Adobe® Flash® Media Server® (FMS) 3.0 or higher to provide telephony services to Flash clients. A free, development version of FMS can be obtained from <http://www.adobe.com/products/flashmediaserver>.
- (Optional) FMG requires a SIP-compliant client to make calls to/from SIP phones within the local network.

Note: FMG has been tested with X-lite® and Zoiper® SIP phones.

- (Optional) You require a user account at an external SIP gateway service to make/receive calls to/from third-party SIP accounts, including calls to mobile and PSTN networks.

Note: FMG has been tested with Asterisk® 1.4 and 1.6 releases.

Install the software

To install FMG, run FMGSetup.exe and follow the prompts in the installation wizard. For more information on the installation process, see *Adobe® Flash® Media Gateway Installation and Configuration Guide*.

Deploy sample telephony applications

Scenario 1 FMS and FMG are running on the same host machine

Copy the `${FMG-Install-Folder}\FMSApplications\telephony` folder to `${FMS-Install-Folder}\applications\`.

Note: \${FMS-Install-Folder} refers to the FMS installation folder. On a windows machine, the default location is C:\Program Files\Adobe\Flash Media Server x.x\.

\${FMG-Install-Folder} refers to the FMG installation folder; the default location is C:\Program Files\Adobe\Flash Media Gateway\.

Scenario 2 FMS and FMG are running on different machines

Specify the IP address of the machine running the FMS. `${FMG-Install-Folder}/conf/rtmp.xml` contains the entries that specify the FMS host name and the FMS applications that can use the telephony services provided by FMG. The default "localhost" is the FMS host. Replace the entries with the host name or IP address of the machine running the FMS.

Configure the FMS

Note: Configuring latest Flash Media Server 4.0 requires updating following configuration to enable registry core which is critical for FMG to provide telephony services to an FMS applications. Older versions of FMS do not require this step.

In Server.xml file placed at C:/Program Files/Adobe/Flash Media Server 4/conf, under <Server> tag add <Registry enabled="true" /> to enable registry core.

Configure the SIP phone and gateway

sip.xml contains the default entries for the following:

- Two SIP phones
- One SIP gateway

Specify the IP address/host name of the SIP client phones or the SIP gateway in the <remoteSipHost> tag of sip.xml. Ensure that the user name/password is correct. For all other settings, see the comments in sip.xml.

Note: Restart FMG to enforce the changes made in the configuration files.

Making VoIP calls using sample telephony applications

FMG includes sample telephony applications to test the installation with simple use cases. To make VoIP calls using the sample applications, do the following:

- Deploy the sample telephony applications in the FMS application folder.
- Ensure that FMS and FMG are running. (Confirm from Windows > Control Panel> Administrative Tools > Services.)

Sign in using sample Flash phone

1 On the machine running the FMS, open the sample Flash phone file, \$(FMS-Install-Folder)\applications\telephony\FlashPhone\flashPhone.html.

2 Do one of the following:

- If the file is open on the same machine as the one running the FMS, the default entries don't require any modifications. Click Connect to view the next screen.
- If the file is open on a machine other than the one running the FMS, replace *localhost* with the FMS hostname in the server URL field.
The sample application assigns phone numbers sequentially (such as 1000, 1001, and 1002). This phone number is displayed at the top-left corner of the telephone screen.

Note: A unique phone number is assigned to a Flash phone at each successful sign in.

Make calls using the sample Flash phone

Basic: Telephony samples

- 1** Dial 8888 to listen to a continuous music playback from FMG.
- 2** Dial 9999 to record your voice. During the call, press # to stop recording and listen to the recorded voice.

- 3 Open another flashPhone.html on the same or a different machine in the Local Area Network and sign in after modifying the RTMP URL (if FMS isn't present on the *localhost: rtmp://<fms-machine-hostName-or-IPAddress>/telephony/*).
- 4 Dial the 1xxx series number of the previously opened phone and press the Call button.
- 5 Wait for the ring. Accept the call when the receiver phone displays the incoming call.
- 6 Start the conversation and hang up when the conversation is complete.

Note: On dialing any other number, FMG routes the call to the SIP interface per the default SIP profile defined in *sip.xml* and *workflow.xml*.

Advance: Call to SIP soft phones and video conferencing devices

- 1 Configure a SIP soft phone as described in [Configure the SIP phone and gateway](#).
- 2 After the SIP phone is connected to FMG per the above settings, dial 777 or 888 from the Flash phone. The call is routed to the corresponding SIP phone.
- 3 Once you have hands on experience of placing audio calls using FMG; configure FMG to place calls to a video conference endpoint using following steps.
 - a In FMG configuration file *conf/sip.xml*; locate profile 'sipVideoPhone'. Update `<remoteSipHost>` tag with the IPAddress of SIP video device.
 - b By default FMG is configured to call user '999' on the SIP video device configured in 'step a.' If your SIP device doesn't accept call to arbitrary username; you may choose to configure FMG to call desired user on your SIP video device using following steps.
 - i Locate tag *conf/workflow.xml* and open for edit.
 - ii Locate `<Context name="rtmp">` in the *workflow.xml*; under this tag locate the handling for dialed number '999'; and replace `${destNum}` with `<valid_userName_on_SIP_device>`. This will configure FMG to route calls to the configured user at your SIPvideo endpoint whenever '999' is dialed from the 'Sample Flash Phone'. Restart FMG.
- 4 Now, use the separately provided Sample FlashPhone.swf with video display to connect in the same manner as was done to make audio calls using *flashphone.html*.
- 5 Dial number "999" to place call on your video device. Upon call answer, the Flashphone will display the remote video. The video stream being shown on Flashphone stays available for web distribution on FMS for complete duration of the call.

Advanced: Call to external numbers using a SIP gateway

This requires a SIP account with an external SIP server. FMG can use such accounts to route calls from RTMP/SIP to any valid number through an external SIP server.

- 1 Open *\$(FMG-Install-Folder)/conf/sip.xml* and modify the default entry for SIP server, as described in the XML comments.
- 2 Restart FMG from Windows > Control Panel > Administrative Tools > Services.
- 3 On the FMS host, restart/open a new instance of *flashPhone.html*, and log in as described in [Sign in using sample Flash phone](#).
- 4 Dial any number provided in the external SIP gateway to make a VoIP call that is routed through an external SIP server.

See Also

Note: All paths displayed in this section are the default installation paths.

For FMG Telephony Leg Service API reference and usage instructions, see C:\program files\Adobe\Flash Media Gateway\docs\FMG Leg Service API.pdf.

For information on configuring FMG, see C:\program files\Adobe\Flash Media Gateway\docs\FMG Installation and Configuration.pdf.

For FMG Control Service API reference, see C:\program files\Adobe\Flash Media Gateway\docs\FMG Control Service API.pdf.

For working samples with source code, see C:\program files\Adobe\Flash Media Gateway\FMSApplications\.

For SSAS Telephony Library files that can be reused, see C:\program files\Adobe\Flash Media Gateway\FMSApplications\telephony\TelephonyLib\.