

If this is your First-Time-use of FaxScan™ (VBA038) application along with PacketScan (PKV104), then we recommend you follow all the steps explained in FaxScan™ (VBA032 & PKV104)-Quick-Install-Guide to install FaxScan™ application before proceeding with the steps below.

FaxScan™ works with PacketScan as well as independently (as DOS command line), in this scenario we are working on the DOS command line interface.

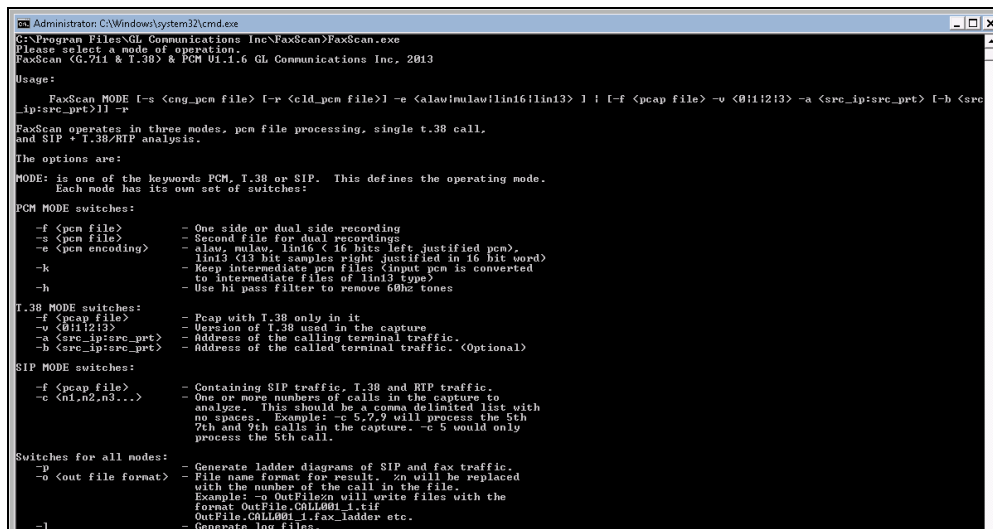
## Quick Checkout using batch files

FaxScan™ is an executable that runs in a Windows® command-line and can be called directly, using Batch files, or manually using command client's software test environment.

- Open command prompt (Windows® Start → All Programs → Accessories → Command Prompt) and change the present working directory to the installation path. (Type CD C:\Program Files\GL Communications Inc\FaxScan)
- For TDM based Fax test (VBA038) –
  - Run **test\_pcm.bat**
  - This will run FaxScan on all the sample files that have been provided with the installation under “C:\Program Files\GL Communications Inc\FaxScan\vectors\pcm\_vectors”.
  - Creates “**unittest\pcm**” output folder in the installation directory. Under the "unittest\pcm", there should be 20 ladder files and 17 image files.
- For IP based Fax test (PKV104) (Includes SIP and T.38) –
  - Run **test\_sip.bat**
  - This will run FaxScan on all the sample files that have been provided with the installation under “C:\Program Files\GL Communications Inc\FaxScan\vectors\SIP\_vectors” folder.
  - Creates “**unittest\sip**” output folder in the installation directory. Under the "unittest\sip" folder, there should be 13 fax ladder files, 13 SIP ladder files, 12 image files.
- This output folder will have the “\*.sip\_ladder, \*.fax\_ladder” and “\*.tiff” files for the analyzed sample files.
- “\*.ladder” is a text file that shows the complete fax call analysis result and can be opened with any text editor like Notepad®.
- “\*.tiff” is the image that has been transmitted/received over the FAX call.

## Quick Checkout using Command Line usage of FaxScan™

- Open Windows® command prompt (Windows® Start → All Programs → Accessories → Command Prompt) and change the present working directory to installation path. (Type CD C:\Program Files\GL Communications Inc\FaxScan\bin in the command line)
- Run **FaxScan.exe** to see the help text/syntax for FaxScan command as shown in the figure below:



```

Administrator: C:\Windows\System32\cmd.exe
C:\Program Files\GL Communications Inc\FaxScan>FaxScan.exe
Please select a mode of operation:
FaxScan <G.711 & T.38> & PCM V1.1.6 GL Communications Inc, 2013

Usage:
FaxScan MODE [-s <cap_pcm file>] [-r <cid_pcm file>] -e <alaw|mulaw|lin16|lin13> ] ! [-f <pcap file>] -v <011213> -a <src_ip:src_port> [-b <src_ip:src_port>] ! -r

FaxScan operates in three modes, pcm file processing, single t.38 call,
and SIP + T.38/RTP analysis.

The options are:
MODE: is one of the keywords PCM, T.38 or SIP. This defines the operating mode.
Each mode has its own set of switches:

PCM MODE switches:
-f <pcm file>          - One side or dual side recording
-s <pcm file>          - Second file for dual recordings
-e <pcm encoding>     - alaw, mulaw, lin16 < 16 bits left justified pcm>,
                    - lin13 <13 bit samples right justified in 16 bit word>
-k                    - Keep intermediate pcm files <input pcm is converted
                    - to intermediate files of lin13 type>
-h                    - Use hi pass filter to remove 60hz tones

T.38 MODE switches:
-f <pcap file>        - Pcap with T.38 only in it
-v <011213>           - Version of T.38 used in the capture
-a <src_ip:src_port>  - Address of the calling terminal traffic.
-b <src_ip:src_port>  - Address of the called terminal traffic. <Optional>

SIP MODE switches:
-f <pcap file>        - Containing SIP traffic, T.38 and RTP traffic.
-e <n1.n2.n3...>      - One or more numbers of calls in the capture to
                    - analyze. This should be a comma delimited list with
                    - no spaces. Example: -e 5,7,9 will process the 5th
                    - 7th and 9th calls in the capture. -e 5 would only
                    - process the 5th call.

Switches for all modes:
-T                    - Generate ladder diagrams of SIP and fax traffic.
-o <out file format>  - File name format for result. %n will be replaced
                    - with the number of the call in the file.
                    - Example: -o OutFile%n will write files with the
                    - format OutFile_CALL001_1.tif
                    - OneFile:GLL001_1_fax_ladder etc.
-l                    - Generate log files.
  
```



- Command to run FaxScan over PCM files is shown below:

```
C:\Program Files\...\FaxScan\bin > FaxScan.exe PCM -f vectors\pcm_vectors\v34_31200_RX.pcm -s
vectors\pcm_vectors\v34_31200_TX.pcm -e lin16,
```

All the three output files will be created on the same folder with “\*.sip-ladder”, “\*.fax\_ladder”, and “\*.tiff”

Where:

PCM = Mode of execution

-f = first file input -- v34\_31200\_RX.pcm

-s = second file input -- v34\_31200\_TX.pcm

-e = encoding in lin16-linear 16 (other encoding options supported are mulaw, alaw, lin13)

```
C:\Program Files\GL Communications Inc\FaxScan>FaxScan.exe PCM -f vectors\pcm_vectors\v34_31200_RX.pcm -s vectors\pcm_vectors\v34_31200_TX.pcm
-e lin16
fmt: lin16
lowerfmt:lin16
type arg:lin16
Wrote fax ladder: unittest\PCM\v34_31200_TX.fax_ladder
Wrote TIFF image: unittest\PCM\v34_31200_TX.tif
```

- Command to run FaxScan over SIP files is shown below:

```
C:\Program Files\GL Communications Inc\FaxScan\bin > FaxScan.exe SIP -p -f vectors\SIP_vectors\rtp.pcap,
```

User can view the output files on the same folder with “\*.sip-ladder”, “\*.fax\_ladder”, and “\*.tiff”

Where:

SIP = Mode of execution

-p = Indicates to create ladder for SIP and fax traffic

-f = Input file for fax analysis -- rtp.pcap

```
C:\Program Files\GL Communications Inc\FaxScan>FaxScan.exe SIP -p -f vectors\SIP_vectors\bad_fax_call_8_cal_test.pcap
Total Calls Discovered: 1
Call #1 ID: 1898983871622000232540192.168.30.105
Wrote SIP ladder: unittest\PCM\bad_fax_call_8_cal_test.pcap.CALL001.sip_ladder
Call #1 Segment #1 Media: T.38
-----Processing Called Media-----
-----Processing Calling Media-----
Wrote fax ladder: unittest\PCM\bad_fax_call_8_cal_test.pcap.CALL001_1.fax_ladder
Wrote TIFF image: unittest\PCM\bad_fax_call_8_cal_test.pcap.CALL001_1.tif
```

- For the detailed and complete command lines, refer to the FaxScan User Manual
- If you are still having issues or have other questions call GL Communications Inc. @ 301 670 4784.