



LANCOM Fax Gateway Option

The professional solution for fax applications

- Receive and send fax via the LANCOM router
- Send 2 to 8 faxes in parallel depending on the router model
- "Hard fax" in the router-no problems with server updates or system maintenance
- Stable fax transmission in the LAN
- Ideal for server virtualization, migration and backup

Tested and confirmed for:

 ACTFAX[®]

 David[®] fx[™]

 GFIFAXmaker[™]

 servonic

 Visendo[®]
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LANCOM
Systems

LANCOM Fax Gateway Option

Unified Communications (UC) promises a revolution by providing us with communications media wherever we are. And yet many UC-solution providers are strangely quiet about a core element of business communications: Fax support. The seamless integration of fax into everyday business provides considerable benefits:

Employees receive faxes directly in their e-mail inbox, and documents can be sent by fax immediately after writing-there's no need for printing out or archiving. Fax messages can be received at mobile devices and at the home office. There is no need for you to dial a fax number; you simply select a contact from your address book. Incoming faxes are automatically forwarded to the relevant contact person. The LANCOM Fax Gateway Option enables up to eight faxes to be sent and received simultaneously via the LANCOM router. No ISDN boards, no fax modems-thanks to this robust hard-fax solution for fax servers, your LANCOM with its Fax Gateway Option makes it convenient, efficient and reliable to send and receive fax in the whole of your network.

More than a fax modem

Once the LANCOM Fax Gateway Option is installed, the LANCAPI provides the computers in the network with voice and data channels, and also with fax Group 3 support. The LANCAPI supplied is compatible to the CAPI 2.0 specification, which makes it ideal for combination with professional communication- and fax servers as well as fax applications for client PCs based on this interface. Compared to either a conventional or software fax modem, the LANCAPI provides fax applications with extensive control over calls and, most importantly, the ability to use the calling-line number to automatically associate the incoming fax with an employee or group.

Less hardware, greater flexibility

The fax modem integrated into the router allows client PCs and servers without ISDN hardware to make use of ISDN services (voice, data and fax). Forget that inconvenient fax-hardware installation and the frequent incompatibilities. It is easy to upgrade to more powerful hardware or provide a backup system in case of server failure. A Windows operating system (32 bit, 64 bit) equipped with the LANCAPI software component has full access to ISDN fax functions.

High performance, low cost

In combination with suitable routers and depending on the number of interfaces (1 to 4x ISDN BRI), the LANCOM Fax Gateway Option provides up to eight parallel channels for voice or fax transmission. Not only does the LANCAPI architecture allow a router with the Fax Gateway Option to be used by any number of PCs or servers, but these PCs can also use multiple routers equipped with the Fax Gateway Option. In comparison with hardware fax cards offering this number of channels, the combination of LANCOM routers and the Fax Gateway Option can be a significant cost saver.

Virtualization without the headaches

For SME's in particular, the LANCOM Fax Gateway Option is the ideal solution where fax servers have to interoperate with other server services on shared virtualized hardware. LANCAPI is a driver which runs on 32- and 64-bit Windows servers, including virtualized servers and even where multiple virtual instances run on a single machine. The LANCAPI architecture enables multiple real or virtual computers to simultaneously access a single router with the Fax Gateway Option. The number of available channel can be increased by operating multiple LANCOM routers with the Fax Gateway Option. This additionally provides a backup in case an ISDN connection or router should fail.

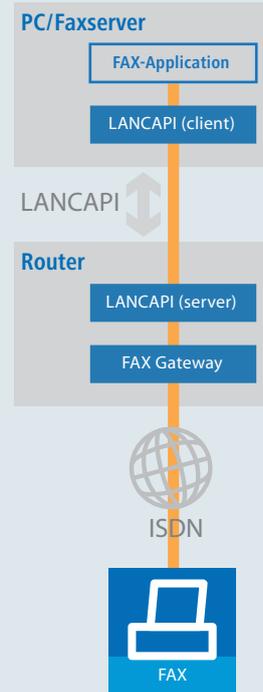
Hard fax instead of soft fax

LAN-based fax transmission via LANCAPI is more reliable than using an IP-based soft modem; the LAN does not transport modulated fax tones, but data streams which can be buffered to protect against run-time variations in the network. The tones required by the ISDN network are first modulated by the "hard fax" in the router with an activated Fax Gateway Option. Furthermore, there is no need to install and maintain a soft-fax driver with the inherent dependencies on the operating system and installed environment. Once activated, the fax functions are available to all of the network computers which have the LANCAPI installed.

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Components of the LANCOM fax solution

- **Fax-Application** – a fax application, such as fax-server software which sends and receives fax via CAPI 2.0 (not included in the package)
- **LANCAPI (client)** – this CAPI driver (CAPI 2.0) simulates an ISDN card. UDP is the basis for sending/receiving signals and data to/from a LANCAPI server running on a LANCOM router with ISDN interfaces
- **LANCAPI (server)** – receives/sends signals and data to/from the LANCAPI client via UDP, and mediates to the ISDN
- **Fax Gateway Option** – fax modem (hard fax) in the router that uses LANCAPI to provide fax services to the network. The Fax Gateway can use T.30 in the router to connect to the fax machines in the ISDN via (max. 8) ISDN B-channels



Technical data	
Fax profile	Fax Group 3
Transfer speeds	Max. 14.4 kbs
Number of fax channels	2 - 8 depending on the router model (1 - 4x ISDN BRI interfaces) and free channels (e.g. for simultaneous use of data dial-in or dial-out, for Voice over IP, or for remote configuration)
Fax data transfer	- V.21 channel 2 (300-bps audio frequency-shift keying modulation with an average frequency of 1,750 Hz) - V.27ter (2,400, 4,800 bps, PSK modulation) - V.29 (4,800, 7,200, 9,600 bps, PSK and QAM modulation) - V.17 (7200, 9600, 12,000, 14,400 bps, TCM modulation)
Fax protocol	T.30
Data compression	- T.4 (MH, MR compression) - T.6 (MMR compression)
LANCAPI profile with Fax Gateway Option	- Global options: Internal controller supported - B1 protocol support: 64 kbps with HDLC framing, 64 kbps bit-transparent operation with framing from the network, T.30 modem for Group 3 - B2 protocol support: ISO 7776 (X.75 SLP), transparent, T.30 for Group 3 - B3 protocol support: Transparent, T.30 for Group 3 fax, T.30 for Group 3 fax with extensions
Supported routers	LANCOM 1722 VoIP (annex A and B), 4 fax channels LANCOM 1723 VoIP (annex A and B), 4 fax channels, but max. 2 to the exchange LANCOM 1724 VoIP (annex A and B), 8 fax channels LANCOM 1781 series (annex A and B), 2 fax channels
Supported operating systems	Windows 2000, Windows XP, Windows Vista, Windows 7, Windows Server 2003, Windows Server 2008 (32-bit systems via LANCAPI x86, 64-bit systems via LANCAPI x64, no support for Itanium/IA64)
Package content	License sticker, LANCOM CD, LANCOM Fax Gateway Option manual
Item number	61425