# Gigaset

## Minimum requirements

## Gigaset pro PBX systems:



## Operating systems

Windows:

- XP, SP2
- Windows7
- Server 2003
- Server 2008

## Apple:

- X Apple Computer with Intel processor
- MAC OS X 10.5.8, 10.6 or 10.7

#### Linux:

• Kernel 2.6 (or higher)

#### Browser

- Firefox 5.0.x (or higher)
- Windows Internet Explorer 8.x (or higher)
- Apple Safari 5.0.x (or higher)

## Software

• T300/500 PRO (V5.0.1.5 or higher)

## Gigaset pro phones:



## Software

Devices:

- DE700/900IP PRO (V01.01.13)
- DE310/410IP PRO (V01.00.07/V01.00.08)
- N510IP PRO (V051)

## Gigaset Quicksync

For Apple Mac

- Version 2.1.1
- Support of Mac OS X 10.7, 10.6 and 10.5

For Windows (32bit)

- Version 7.1
- Win XP (with Framework 2.0)
- Windows Vista
- Windows 7

For Windows (64bit)

- Version 7.1
- Win XP (with Framework 2.0)
- Windows Vista
- Windows 7

# Minimum requirements for customer environment:

## Network

Network-speed (LAN)

• 100 Mbit

Cabling

• Cat 5e

Internet-access

The firmware of the phones and pbx will be continuously improved. Please make sure to have the installation of pbx-system and phones always on the latest sw-releases.

The phones can be updated via several options:

- Centrally on the pbx
- With build in sw-version, coming with pbx-software
- $\bullet \ \ With \ latest \ sw-package, uploaded \ with \ auto-provisioning-modules$
- Package and module can be downloaded via the wiki-pages (http://wiki.gigaset.com)
- Automatically via WebUI of the phone
- Via Gigaset.net server (if profile.gigaset.net/device is entered in server-field)
- Via Gigaset pro PBX (if ip-address is entered in server-field)
- Manually via WebUI of the phone
- Download firmware from product-pages (http://gigaset.com/pro) and upload it manually via WebUI

The latest versions of the PC-software (integrations installer and GS Quicksync) can be downloaded via the Gigaset pro product pages (http://gigaset.com/pro).

## Recommendations

Depending on the environment the equipment is installed, following recommendations are given. Medium to high traffic/load (also just peaks) in the network would probably recommend following settings:

## Switch

- VLAN for separating phone- and computer-network
- TOS/Diffserv for Quality of Service (QoS) in LAN
- Enable Port-switching (Multi-IP/-MAC) when using buildin switches of telephones (DE310/410/700/900IP PRO, DX800A and N720IP))

#### Router

- Router should have enough CPU power to avoid bottlenecks in transmission
- Use VLAN to divide the networks for computer (best effort) and telephony
- Enable QoS in the network (LAN and WAN (upload, if available))
- Don't use SIP ALG (if available)
- Use business router instead of consumer hardware
- Use HW VPN if interconnection between multiple sites is used
- Use Wi-Fi with minimum of 702.11g (n is preferred)

## Cabling

- 100/1000MBit switches for internal traffic
- Cat 6 (or 7) cabling to ensure Gigabit-compatibility
- Using WLAN-clients only in exceptional case (DE900IP PRO)
- Don't use powerline communication
- Minimize the number of cascade-switches (star-topology preferred)

## ISP

- Use business ISPs which can guarantee stability of the line
- Check bandwidth for up- and download when using VoIP-provider
- Codec G.711 uses ca. 100kbps per call (good voice-quality)
- Codec G.729 uses ca. 45kbps per call (average voice-quality, no fax-transmission)

## Provider connection

#### General

- Check requirements for external, parallel calls in the company (normally ca. 10% of total users)
- Check internal call-rates
- Use only trusted provider (preferred the certified provider)

## **PSTN**

- Use only for fallback
- Use Digium TDM404EF (Gigaset-edition)
  4-port FXO PCI-card
- Use Digium TDM422EF (Gigaset-edition) 2-port FXS & 2-port FXO PCI-card
- Use Digium TDM440EF (Gigaset-edition) 4-port FXS PCI-card

## ISDN/S0

- Use Digium B410PF (Gigaset-edition) 4-port SO PCI-card
- Check supported features of your line
- Check echo-cancellation settings of your line (card supports hw-ec)
- Use crossed cables only for internal S0-bus
- Use normal ISDN-cable (or lan-cable) for external S0-bus

## E1/PRI

- Use Digium TE122BF (1-port) or TE207PF (2-port) (Gigaset-edition) PCI-card
- Check supported features of your line
- Check echo-cancellation settings of your line (card supports hw-ec)
- Check jumper position for internal or external bus of the port
- Check maximum possible parallel calls of the line

## VolP

- Use only certified provider (see WebUI of T300/500 or wiki)
- Check maximum possible parallel calls of the line
- Check used codec when using fax-functionality (e.g. G.729 doesn't support fax-transmission)

## Gigaset pro