

# Native VoIP

Companies can avoid costly voice calls between their different sites in the world by sending voice over their existing worldwide data connections. They can simplify their in-site cabling infrastructure by connecting telephones to the same cable as PCs. And they can deliver a consistent level of voice features whatever the location — headquarters, branch offices, home workers or mobile workers — by incorporating a voice server on the data network.



## Native VoIP

Alcatel OmniPCX Office is a server. More precisely it is an appliance server, which means that the software is preloaded, thus allowing easy installation and maintenance as well as unmatched reliability.

Alcatel OmniPCX Office offers native feature-rich call management for up to 200 IP users, without the need of additional hardware.

All-in-a-box Alcatel OmniPCX Office integrates a call server and a media gateway.

## Lower costs

With Alcatel OmniPCX Office, a company can reduce long-distance charges for intra-company calls by integrating voice in its WAN data network.

## Easy IP phone modification

With Alcatel OmniPCX Office DHCP server, moving or adding an IP phone can be done in seconds.

## Better communications with branch offices, home workers, mobile workers

Increasingly users expect a transparency of features between headquarters and branch offices (same directory, voice mail, etc.). By having remote IP phones in branches managed by the call server in the headquarters, this is implemented natively — IP phones share exactly the same features wherever they are located. Implementation assumes a managed data link between sites (leased lines, IPVPN, etc.).

When mobile workers connect to the company through the internet (e.g. to download price lists or files), their PC can benefit remotely from the call server telephony features.



**IP telephony**

OmniPCX Office offers feature rich call management for up to 200 IP users.



**IP Reflexes sets**

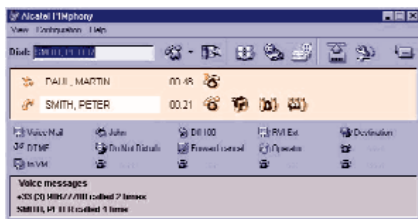
A range of 4 phones - Advanced, Premium, Easy, First - offering a high level of telephony services (e.g. dial by name, text messaging, multiline, supervisor, secretary, etc.).

- 2 port Ethernet switch (10/100BT)
- G711 and G723.1 voice compression
- Voice Activity Detection (VAD) and Comfort noise generation
- Level 3 QOS: TOS and Diffserv

**IP PIMphony (soft phone)**

Alcatel PIMphony is a client server software package providing user-friendly access to OmniPCX Office telephony features from a PC (refer to PIMphony for Alcatel OmniPCX Office datasheet). It includes:

- VoIP protocol stacks, G711 and G723.1 voice compression to load on PCs
- PIMphony client software to load on PCs
- CTI server software embedded in OmniPCX Office
- 3 feature level: Basic, Pro or Team
- Level 3 tagging and prioritization available with Windows 98, 2000, Millenium, NT4)
- For increased comfort handset or headsets are available



**H323 devices**

OmniPCX Office supports standard H323 (V1 & V2) devices like PCs with Microsoft NetMeeting.

**IP trunking**

Alcatel OmniPCX Office offers IP trunking for up to 120 IP trunks. IP trunking is available with 2 main types of access to the WAN.

**WAN access through Alcatel OmniPCX Office**

VoIP benefits from OmniPCX WAN QOS mechanism.

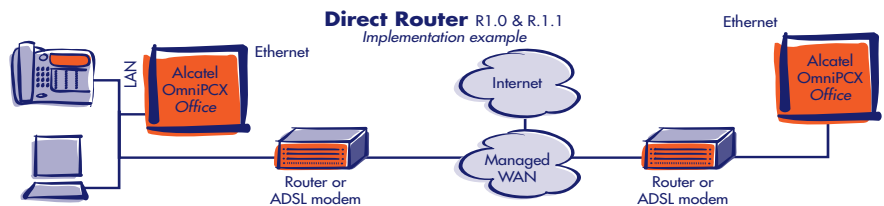
- Policing: Based on TOS/Diffserv header, OmniPCX Office puts Voice-over IP in its high priority queue
- Queuing/ Shaping: OmniPCX Office manages 2 queues in a buffer memory — High Priority queue and Lower Priority queue.
- Congestion control: OmniPCX Office use Random Early Detection mechanism (RED) on the Lower Priority queue to inform packet sources to decrease their transmission rate.
- VoIP shares the bandwidth with OmniPCX Office internet applications (e-mail, VPN, etc.).



**Direct WAN access via a router**

IP phones can access the WAN via a router directly connected to the LAN. This solution is particularly suitable for large corporate data networks.

- Policing, queuing, shaping and congestion control are managed directly by the router.



**Overflow and backup**

Whatever the connection method, Alcatel OmniPCX Office provides overflow and backup mechanisms through ISDN

- Overflow: when VoIP calls exceed a given threshold
- Backup: in case of WAN link failure

**Interoperability**

- Alcatel OmniPCX Office is H323 V2 compliant and thus is able to interoperate with Alcatel and non-Alcatel systems supporting this standard.

