



Alcatel OmniVista 4760
The Open Management Platform

A powerful solution to manage
your network



ARCHITECTS OF AN INTERNET WORLD



OPEN ARCHITECTURE

Trying to stay current with today's network and telecommunication advances can sometimes be frustrating and overwhelming. Telecom managers need flexible network management tools to deal with these challenges now more than ever.

The network administration platform has evolved from a mere management tool to a powerful application suite that monitors employees' activity and even advises managers.

Alcatel OmniVista 4760 is an open network management application suite that provides basic management features such as configuration, incident management, and value-added features such as enterprise directory, animated topology, performance management and accounting. These enhanced applications manage the circuit-switched telephony devices as well as the IP based components of the Alcatel OmniPCX family.

The OmniVista product family provides network management for both Alcatel communication servers and data networks.

Alcatel OmniVista 4760: an open architecture

The OmniVista 4760 suite is a set of applications designed to aid telecom managers and administrators in their day-to-day tasks and help them make strategic choices in their converged networks. It was designed for telecom people by telecom people. OmniVista 4760 supports industry standards and is Web-based allowing anyone with intranet access to have secured, rights-based access to management tasks. In addition, the use of the Java programming language provides platform independence.

The OmniVista 4760 also integrates an embedded security agent that configures user access rights. The OmniVista 4760 provides comprehensive tools for both the voice and data environments.

Key components of the OmniVista 4760:

- > It is tightly linked with the Alcatel **OmniPCX 4400**, *Enterprise*, and *Office* distributed architecture where it permanently monitors the global network for alarms, modifications and status.
- > The client/server and standard client architecture is accessible through Java-supported Web browsers, giving widespread availability to the tools.
- > The OmniVista 4760 can also be integrated into legacy enterprise information systems. The LDAP directory server can easily exchange information with other enterprise applications.
- > The OmniVista 4760 and **OmniPCX 4400*/Enterprise** SNMP agents allow integration into a global enterprise management platform, such as HP OpenView or CA Unicenter TNG®.

Alcatel OmniVista 4760 - Architecture

*Alcatel **OmniPCX 4400** R4.2 and later versions





LDAP enterprise directory

Because a company's success depends on its people, a corporate directory becomes a key success factor for efficient internal communication. The directory needs to be flexible and able to assist every employee with quick and relevant information on the desktop.

The directory application included in the Alcatel OmniVista 4760 is designed to address a converged infrastructure as well as provide information on all desktops. It works with the main enterprise directories as part of a unified directory strategy based on the LDAP standard. Any terminal with a Web browser is now able to access the directory information through a user-friendly interface. What's more, any Alcatel **OmniPCX 4400/Enterprise** user can place a call by simply clicking on the displayed phone number.

This central directory provides the telecom manager with all the converged voice/data information. In addition, each user can manage his/her own address book.

The information can be shared with other directories or with LDAP clients such as Microsoft Outlook®. In this case, the directory database would contain information such as IP address, QoS rights, and remote access rights.

There is an automatic database synchronization between distributed **OmniPCX 4400/Enterprise** servers and the OmniVista 4760 directory server. For example, when there is an update of a cost center or a name in the company directory, it will automatically update the cost center and the name of the user in the **OmniPCX 4400/Enterprise** database.

To enable lookup and modification of an entry in a user-friendly way, the OmniVista 4760 is accessible from a Web browser. These global approaches, in addition to the security mechanisms and the ability to fully customize the Web pages, allow all organizational needs of the enterprise to be met. From anywhere on the intranet or even from remote access, fields or records may be created or modified by some users, while others may be allowed to delete them.

A teleworker can click on a directory element while viewing the result of a directory request and directly call the person shown on the screen.



EASY ADMINISTRATION



Network topology

The Alcatel OmniVista 4760 network topology application is designed to simplify an Alcatel **OmniPCX** telecom manager's tasks.

The topology map is animated in real time and shows the network devices (Alcatel **OmniPCX 4400/Enterprise/Office**) as well as the logical links between platforms. If a problem occurs, the manager clicks on the object and accesses the faulty element. It provides everything from a bird's-eye view to a view of the faulty board. If a parameter needs to be changed, the telecom manager clicks on the object to launch the configuration module.

Enhanced mechanisms have been implemented such as customization of the topology map, auto-discovery of the links between platforms and selection of platforms, plus display by interest, geographical aspects, etc.

Alarms

The Alarms application centralizes the alarms and events coming from an Alcatel **OmniPCX 4400/Enterprise/Office** network.

These alarms are displayed in real time according to filters and are processed by the application according to the needs of the telecom manager. When an alarm occurs, a sound can be played, an automated email can be sent, or a script can be processed. This helps the telecom manager to react before users complain. The alarms are displayed following the ISO model, using specific colors according to the level of severity.

Once the alarms are displayed, the manager may decide to delete an alarm, acknowledge it, or find out more information about it. Statistics on alarms are also available.

The combination of the OmniVista 4760 topology and the alarm application empowers the network manager to reduce troubleshooting time and be more proactive.





Configuration

The configuration module provides centralized management of the Alcatel **OmniPCX 4400/Enterprise/Office**. The configuration data in the **OmniPCX 4400/Enterprise** is organized according to an object-based model. The **OmniPCX Office** configuration is provided by integrating **OmniPCX Office** specific configuration tools (PM5 and IA Web based configuration) into the Alcatel OmniVista 4760 platform.

Regardless of which **OmniPCX 4400/Enterprise** release is used, the management application will automatically adapt its interface to the managed platform. The managed **OmniPCX 4400/Enterprise** is configured on-line to ensure consistency and relevance of the data. It allows any combination of central and local management while accessing a continuously-updated database. The Alcatel OmniVista 4760 configuration module has been designed to be flexible, user-friendly, and integrate into a legacy environment. This allows management of a single **OmniPCX 4400/Enterprise** or a network of platforms (i.e., multiple nodes of **OmniPCX 4400/Enterprise**).

As an example, the OmniVista 4760 makes it possible to import or export data directly from any application using a standard text file format. The graphical view of the telephones also simplifies the customization of the programmable keys. Using templates or profiles facilitates the creation of groups of users. These profiles and templates make it easier to apply rules directly to a set of **OmniPCX 4400/Enterprise** users/objects in one operation.

The "scoping" feature allows you to filter and update the same object in the whole Alcatel **OmniPCX 4400/Enterprise** network. For example, you can create an emergency call number on the top-right programmable key of all telephones at once.

Performance management

As your organization grows, your communication system needs to be permanently monitored.

- Is your IT infrastructure able to support growing VoIP traffic?
- Is your on-site infrastructure (DECT/PWT) well designed?
- Does your installation have enough bandwidth to handle the overall traffic to carrier networks?
- Is VoIP communication quality acceptable?
- Do your attendants respond fast enough?

Network managers expect their NMS to allow them to optimize the capacity, ensure the quality of the network, support a wireless DECT/PWT infrastructure, save telecommunications costs, and allow them to monitor the quality of telephone service. The OmniVista 4760 Performance Management tool analyzes the quality of service delivered by a feature, a network architecture, a private wireless infrastructure, and more.

Here are some examples of the many kinds of information available:

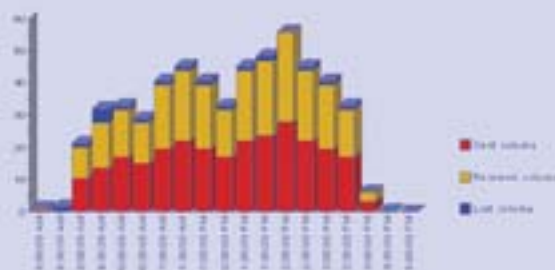
- > measurement of response time
- > measurement of the VoIP traffic on the data network
- > statistics on the quality of VoIP communications
- > statistics on the line-occupancy ratio for incoming calls
- > reports on attendant and subscriber traffic
- > occupancy rates of the different internal and external links
- > average time spent waiting for an attendant
- > base station traffic analysis for capacity control of cells.

Reports can be created using the predefined templates or can be customized. The OmniVista 4760 architecture lets network managers schedule reports and then receive them by automated email as well as consult them from anywhere on the intranet.



VOICE OVER IP PERFORMANCE

Report on equipment: sent, received and lost volume
Filter: yesterday, board 16-6



Call-accounting

Any expense that equals two percent or more of the enterprise's income requires close monitoring. This is just as true for telephone usage – telephone costs must be controlled and their efficiency measured. The Alcatel OmniVista 4760 offers all companies, operating on one or several sites, a way to analyze telecommunication costs as well as the quality of their telephone service.

The OmniVista 4760 has a relational database that stores call detail information. The database can be searched, sorted, analyzed, presented, and exported according to selected criteria. All types of detailed and summary reports as well as hit lists are possible. Reports that are used frequently are pre-defined and pre-installed to ease the task of the accounting manager.

Costs can be controlled in a multi-carrier environment. Simulation facilities are available to help the telecom manager make the best carrier choice.

Call monitoring provides supervision of telecom expenses on a specific resource, such as a user, a group, or a department. It can be used to monitor the traffic peaks, or control DISA use to detect any security breaches. It can be set up so that an automated email will be dispatched when those expenses, number of calls or durations exceed a specified threshold.

With the OmniVista 4760 architecture, reports are made available to authorized users through a Web browser anywhere on the network. The reports can be predefined or personalized, taking into account operators' tariffs, special costs, masks and more. They can be generated automatically in a variety of formats (Excel, .pdf, html, text) with 3D graphs, and sent by email to the managers.



UNIFIED MANAGEMENT

Unified management

The evolution of voice networks has a tremendous impact on management.

IP telephony impacts the configuration and MAC (moves, additions, and changes) with the implementation of a DHCP server. QoS parameters need to be entered at the communication server source. Also, various directories across the enterprise need to be synchronized for maximum efficiency. This is where LDAP fits in.

The Alcatel OmniVista 4760 and Alcatel **OmniPCX 4400/Enterprise** feature SNMP agents that facilitate their

integration with in the overall enterprise SNMP management platform (based upon Alcatel solutions or others).

All **OmniPCX 4400/Enterprise** objects such as the Alcatel e-Reflexes™ phones, gateways, and processors support SNMP MIB 2 that can be analyzed by a third party management platform, such as HP OpenView® or CA Unicenter TNG®.

Alcatel is a leader in enterprise IP communications solutions. To enable our users to take advantage of infrastructure and applications more efficiently, the OmniVista 4760 opens the path towards unified network management solutions for the enterprise.

Alcatel OmniVista 4760 HW & SW minimum requirements

OmniVista 4760 application suite can be supplied with or without the PC platform for the server and/or clients.

MINIMUM HW & SW REQUIREMENTS FOR THE SERVER

Non dedicated server

- 250 users or less
1 node, IP connection, accounting and configuration only 1.4 GHz processor, 256 MB RAM, 18 GB hard disk.

Dedicated server

- 5000 users or less 2 GHz processor, 512 MB RAM, 18 GB hard disk.
- More than 5000 users 2.4 GHz dual-processor, 1 GB RAM, 45 GB hard disk, RAID 5.
- Server operating system: Windows® 2000 Professional or Server.

MINIMUM HW & SW REQUIREMENTS FOR THE CLIENTS

- 766 MHz processor, 128 MB RAM, 3 GB hard disk.
- 4 Mb video memory minimum, allowing 1024x768 resolution in 16 M colors.
- OS supported: Windows® 1998, 2000, NT4 Workstation or Server, Millenium, Windows® XP.
- Client access through browsers: Microsoft Internet Explorer® Release 5.0 or higher, Netscape Communicator® Release 4.7 or higher.



www.alcatel.com

4276271 - GB - 06/2003 - Alcatel Business Systems
32, av. Kleber - 92707 Colombes - France - Phone: +33 (0)1 55 66 70 00,
RCS Paris B 602 033 185 - This document does not constitute a contract.
The functions mentioned are country-specific and availability depends
on the public network to which systems are connected.
Alcatel reserves the right to modify characteristics without notice,
in order to conform with new standards or to improve product performance.
All trademarks are the property of their respective companies
Pictures: Alcatel - Design: KRPLUS [23276]