

Alcatel omnipcx office installation manual



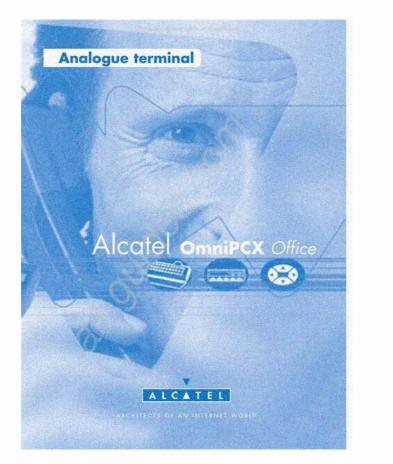
.. Safety rules The information presented is subject to change without notice. Alcatel-Lucent assumes no responsibility for inaccuracies contained herein. Copyright ©... Chapter 1 General Presentation PreliminaryOverview Security Chapter 2 Hardware: Platform and Interfaces Overview .Overview4.82 Limits4.83 Extending Your InstallationChapter 8 Glossary GlossaryAB Preliminary 1.1.1 Overview 1.1.1.1 SYMBOLS USED IN THE DOCUMENTATION See note. See important information. 1.1.1.2 CLAUSES Copyright and Trademarks Datalight is a registered . Page 7 QUW SТ...VX trademark of Datalight, Inc.

FlashFXtm is a trademark of Datalight, Inc. Copyright 1993 - 2000 Datalight, Inc., All Rights Reserved. Security 1.2.1 Safety rules... Page 10 Chapter Protective earthing This equipment must imperatively be connected to a permanent earth protection installed according to current legislation. Installation of the mains power must be installed as close as possible to the unit and must be easily accessible. Page 11 The EC labeling indicates that this product conforms to the EC directives currently in force, in particular: 89/336/EEC (Electromagnetic compatibility) 73/23/EEC (Low Voltage) R&TTE 1999/5/EC compliance 100/10/EC compace Edition 200 employees, For Usinesses with 6 to 200 employees, For Usinesses entropy entropy









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Equipment shall be installed at the factory or in the field by submitter's trained personnel in accordance with the installation instruction provided with the equipment. Equipment 2.4.1 Detailed description The following table lists the boards available on Alcatel-Lucent OmniPCX Office Communication Server (S, M or L racks). Board Function Optional boards Connections CPU-3 Processing Unit (From R5.0) 128 HSL1, HSL2: Lanswitch or Ethernet Mb Flash Memory. interconnection with terminal Optional Hard Drive add-on modules Please-wait message player AFU, AFU-1: (Auxiliary Tuner for background music Function Unit) Alarm VoIP4-1, VoIP8-1 and Doorphone VoIP16... Page 22 Chapter Board Function Optional boards Connections CoCPU CoProcessing Unit (From R2.0) SLANX4: mini switch terminal CoCPU-2 CoProcessing Unit (From R3.1) (CPUs - CoCPUlink) DDI2 2 or 4 analog trunk line An

The UAI16-1 board is used to power terminals connected to the 16 interfaces remotely from an EPS48 external power supplies and the splitters provided. Page 27 2.4.1.9 PRA Boards This board provides 1 primary access for connecting the Alcatel-Lucent OmniPCX Office Communication Server system to the ISDN digital public network or to private networks: PRA -T2, DASS2, DLT2 : 30 x 64-Kbps B-channel; 2048 Kbps. Page 28 Chapter 2.4.1.9.1 Function of the LEDs T2 Name T1 Name Function BUSY BUSY B-channels busy (red LED lights up if at least 1 B-channel is busy) RAI (ATD) Remote frame alarm (red LED lights up on alarm) AIS (SIA2M) Too many "1's in the 2-Mbit binary train (red LED lights up on alarm) NOS (MS) NSIG Absence of 2-Mbit signal (red LED lights up on alarm) NOS (MS) NSIG Absence of 2-Mbit signal (red LED lights up on alarm) Page 29 Each category-5 RJ45 connector has 2 green LEDs: Left LED = link status and activity: • off: link disconnected • on: link connected • blinking: link active Right LED = full duplex/collision: • off: Half Duplex • on: Full Duplex •

Page 32 Chapter Figure 2.26: Example of Daughter Boards on CPU-1 Figure 2.27: Example of CPU with SATA Hard Disk 2.4.1.16 BASE Module Provision 2.4.1.16.1 Rack 1 2-18... Page 33 Boards Slots 1-2 CPU Slot CPU-1, CPU-2, CPU-2, CPU-3, Obligatory CPU-3m, CPU-4 MIX x/y/z AMIX-1 x/y/z UAI4, UAI8, UAI16, UAI16-1 SLI4, SLI8, SLI4-1, SLI8-1 SLI16, SLI16-1 PRA-T2, PRA-T1, DASS2, DLT2, T1-CAS, PCM R2 APA4, APA8 DDI2, DD14 BRA2, BRA4, BRA8 CoCPU-1, CoCPU-2 LANX8, LANX16, LANX16-1, LANX8-2, LANX16-1, LANX8-2, LANX16-2... Page 34 UAI16, UAI16-1 SLI4, SLI8, SLI16, SLI16-1 PRA-T2, PRA-T1, DASS2, DLT2, T1-CAS, PCM R2 APA4 APA8 DDI2, DD14 BRA2, BRA4, BRA8 CoCPU-1, CoCPU-2 LANX8, LANX16, LANX16-1, LANX8-2, LANX16-2... Page 34 UAI16, UAI16-1 SLI4, SLI8, SLI16, SLI16-1 PRA-T2, PRA-T1, DASS2, DLT2, T1-CAS, PCM R2 APA4 APA8 DDI2, DD14 BRA2, BRA4, BRA8 CoCPU-1, CoCPU-2 LANX8, LANX16, LANX16-1, LANX8-2, LANX16-2... Page 34 UAI16, UAI16-1 SLI4, SLI8, SLI16, SLI16-1 PRA-T2, PRA-T1, DASS2, DLT2, T1-CAS, PCM R2 APA4 APA8 DDI2, DD14 BRA2, BRA4, BRA8 CoCPU-1, CoCPU-2 LANX8, LANX16, LANX16-1, LANX8-2, LANX16-2... Page 34 UAI16, UAI16-1 SLI4, SLI8, SLI16, SLI16-1 PRA-T2, PRA-T1, DASS2, DLT2, T1-CAS, PCM R2 APA4 APA8 DDI2, DD14 BRA2, BRA4, BRA8 CoCPU-1, CoCPU-2 LANX8, LANX16, LANX16-1, LANX8-2, LANX16-2... Page 34 UAI16, UAI16-1 SLI4, SLI8, SLI16, SLI16-1 PRA-T2, PRA-T1, DASS2, DLT2, T1-CAS, PCM R2 APA4 APA8 DDI2, DD14 BRA2, BRA4, BRA8 CoCPU-1, CoCPU-2 LANX8, LANX16, LANX16-1, LANX8-2, LANX16-2 2.4.1.17 Alcatel-Lucent OmniPCX Office Compact Edition 1st and 2nd Generations 2-20...

Page 35 Board MIX Slot CPU-2, CPU-3, CPU-3, CPU-3, CPU-4 Obligatory MIX x/y/z AMIX-1 x/y/z Mini-MIX 2-21... Page 36 Chapter 2-22... 3.1.1 SOFTWARE LICENCE MANAGEMENT On an Alcatel-Lucent OmniPCX Office Communication Server several types of devices may be connected, several services may be offered and several applications may run.

The purpose of the feature "Software Licence Management" is to define for a given system (i.e. Page 38 Chapter the PRINC (PRINCIPAL) software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or MAIN for the system functions (voice, Internet, etc.) the CTI functions The software key or CSL (CTI key) extension. Page 39 3.2.1.1 Voice services available in "limited" mode Stations, including Alcatel-Lucent DECT Reflexes stations Voice server with name announcement, 2 ports and 20 minutes" storage 4 welcome messages (pre-announcement) 2 system languages "Please Wait"... Page 40 Chapter The following table lists the functions controlled services Relevant Values in Modularity. Controlled services Relevant Values in Modularity Hardware software limited mode extension version STANDARD TELEPHONY Number of Reflexes sets According to selected model Number of analog sets MOBILITY... Page 41 Controlled services Relevant Values in Modularity Hardware software limited mode extension versio

Page 42 Chapter Controlled services Relevant Values in Modularity Hardware software limited mode extension version Accounting over IP From R5.0 closed open LANGUAGES Number of languages SWL RELEASE Required system release From R2 0 (R1 or R1.1) 1 (R2) 2 (R3) 3 (R4) 4 (R5) 5 (R6) ENGINE... Page 43 75/200 * 0 (from R2) Number of monitors 250 (R1) 250/500 ** 0 (from R2) Features None Alcatel-Lucent OmniPCX Office Communication Server CALL CENTER Number of sessions 28/200 * Number of sessions ... Page 44 Chapter Number of sessions Number of monitors 250/500 ** Features None CSTA DESKTOP CLIENT Number of sessions... Page 44 Chapter Number of sessions Number of monitors 250/500 ** Features From R3.1 75 ** Features From R3.1 None SOFTWARE LICENSE VERSION Required system version From R2 1 (R2) (R1/R1.1) 2 (R3) 3 (R4) 4 (R5) 3. Placed on a table: no more than three units can be laid on top of each other. Remark: The Alcatel-Lucent OmniPCX Office Compact Edition unit is fixed either directly to the wall, or to a wall support (US version). In both cases, use the hole drilling template supplied with the unit. Page 46 Moreover, the weight of the equipment must be evenly distributed between the brackets.

If mounting the Alcatel-Lucent OmniPCX Office Communication Server module results in exceeding the load on the front supports (generally the total weight divided by two), the... When superposing them vertically, they should be separated by at least 10 cm. Verify that the cables connecting the Alcatel-Lucent OmniPCX Office Communication Server or other equipment, or the supports for the housing structure (19" rack for example) do not obstruct the air flow through the unit. Page 48 All outputs are made using Female RJ45 connectors. Remark: the CPU-2 and MIX boards used for Alcatel-Lucent OmniPCX Office Compact Edition have the same characteristics as those used by Alcatel-Lucent OmniPCX Office Communication Server. 4.2.1.1.1 CPU-1, CPU-2, CPU-3, CPU-3, CPU-3, CPU-4, CPUe-1 and CPUe-2 boards... Page 49 RJ45 pin Up-Link Unit 1 to 3 outputs LAN : 10/100 base T Ethernet port (MDI-II/straight). UNIT1, UNIT2, UNIT3: ports on integrated LAN switch (MDI-X/crossover). UPLINK : integrated LAN switch uplink port (MDI-II/straight). INIT1, UNIT2, UNIT3: ports on integrated LAN switch (MDI-X/crossover). UPLINK : integrated LAN switch uplink port (MDI-II/straight). INIT1, UNIT2, UNIT3: ports on integrated LAN switch (MDI-X/crossover). UPLINK : integrated LAN switch uplink port (MDI-II/straight). II/straight).

4.2.1.1.3 SLIboard RJ45 pin 1 to 16 1 to 16: connecting analog Z terminals. Page 50 Chapter PBX: use in private network with TX and RX twisted pairs. 4.2.1.1.8 LANX and LANX-1 board RJ45 pin Ports 1 to 15: internal ports. Up-Link: LAN connection. 4.2.1.1.9 LANX-2 board RJ45 pin Ports 1 to 14 GE1, GE2 TR0+ TR0-... Page 51 Access Type Impedance Alcatel Reflexes, Z, T0, UTP, FTP or STP, Category 3 or 5 120 Ohms UTP, FTP or STP, Category 3 or 5 120 Ohms UTP, FTP or STP, Category 5 100 Ohms STP supplied with the product, Category 5... Page 52 Chapter 4.2.1.4 CONNECTING TERMINALS 4.2.1.4.1 Connection of Alcatel Reflexes terminals are equipped with a cable and a self-acting switch that plugs into the wall socket. Each terminal is connected up by a pair of 0.5 or 0.6 mm diameter wires.

Page 53 System - Reflexes terminal distances: 0.5 mm SYT type cable: 800 m (station without option) or 800 m (station without option) or 800 m (station without option) or 850 m (station with S0 or Z option). 278 type 0.6 mm cable: 1200 m (station with S0 or Z option). 278 type 0.6 mm cable: 1200 m (station without option) or 850 m (station with S0 or Z option). 278 type 0.6 mm cable: 1200 m (station with S0 or Z option). 278 type 0.6 mm cable: 1200 m (station without option) or 850 m (station with S0 or Z option). 278 type 0.6 mm cable: 1200 m (station with S0 or Z option). 2

All the box connections are made with straight RJ45-RJ45 cables. Output connector functions: BRA: connection of T0 access to be forwarded. Page 56 Chapter 4.2.1.5.2 Digital Public Network by T1 or T2 access The diagram below shows a PRA-T2 board, but is equally applicable for a PRA-T1 board. 4-12... Page 57 The PRA board is connected to a digital line termination (DLT) by 2 symmetrical twisted pairs. Cable impedance: 120 Ohms +/- 20% between 200kHz and 1MHz; 120 Ohms +/- 10% at 1 MHz. Remark: We recommend using an L120-series cable (or the L204 equivalent).

The distance T1-DLT or T2-DLT is limited by the amount of loss between the DLT and T1/T2, which must not exceed 6 dB at 1024 kHz. Page 58 Chapter 4.2.1.5.4 Analog Public Network - Direct Dialing In. 4.2.1.6 LAN CONNECTION The LANX8/LANX16 board is used to connect servers, PCs, IP terminals and external switches. 4-14... Page 59 Category 5 cable, FTP or STP, impedance 100 Ohms: maximum length 100 m. 4.2.1.7 CONNECTING AUXILIARY EQUIPMENT All auxiliary equipment is connected via the AUDIO-TRL output (control contact open when idle) and the AUDIN input of the AUDIO-IN connector. Page 60 Chapter Audio input characteristics: Max, power : 10 W Max. current : 500 mAThe contacts of the alarm and doorphone controls have the same electrical characteristics as those indicated above. 4.2.1.7.2 Connecting a background music tuner This is connected via the AUDIO-IN connector. Page 61 4.2.1.7.3 Connecting an alarm The alarm is activated in the event of a false stopping of the system. It is connected via the AUDIO-UT connector. Page 62 Chapter 4.2.1.7.4 Connecting a boorphone system are connected via the AUDIO-UT connector. Audio output characteristics: Output impedance: <.... Page 62 Chapter 4.2.1.7.4 Connecting a boorphone system. It is connected via the AUDIO-UT connector. Page 60 Chapter 4.2.1.7.9 Connecting a doorphone system. The system also allows peekers are connected via the AUDIO-UT connector. Page 60 Chapter 4.2.1.7.9 Connecting a boorphone system. The system also allows for the connection of 2 doorphones interface comprises an interface. Several of these doorphones scale be connected to the system; the limit is determined by the maximum number of analog stations the system can support. 4.3.1.2 BATTERY IMPLEMENTATION Alcatel-Lucent OmmiPCX Office Communication Server is supplied with one or there aplie caution: Alcatel-Lucent OmmiPCX Office Compacet set and

a. Connect the middle connector of the black wire to the negative (black) terminal of battery B2. b. If required, connect the other connectors of the black wire to the negative (black) terminals of batteries B1 and B3. Page 69 6. Close the unit and secure it with the four screws. 7. Stick a label on the unit stating the date of the installation and the number of batteries installed. Procedure for 36 V stack version (for L systems) The 12 V stack version of the external battery unit can used with L systems. It uses three 12V - 7Ah batteries strictly in the order detailed below (also see the figure below). a. Connect the black wire to the negative (black) terminal of battery B1. b. Connect a yellow wire between the positive (red) terminal of battery B1 and the negative (black) terminal of battery B2. Page 71 Mate-N-Lok 2-terminal connector must be connected to the extension unit. Installation of external batteries for the M and L units 1. Stop the Alcatel-Lucent OmniPCX Office Communication Server system, and remove the power supply cord from the system side.

Page 72 Chapter 4. Remove the fan connector, then remove the power supply unit and the battery unit. 5. Replace the battery cable with the new cable provided with the connection kit (3EH 75031 AA). 6.

If the BAT IN/EXT connector is present, remove the red jumper. 4-28... Page 73 • "EXTERNAL BATTERY 36VDC/3.5A" for unit L. 11. Connect the cable (with J1 connector) between the Alcatel-Lucent OmniPCX Office Communication Server system and the external unit. 12. Set the ON/OFF switch on the external battery unit to the ON position (I or red). Page 74 7. Put the upper cover back in place. 8. Connect the cable (with J1 connector) between the Alcatel-Lucent OmniPCX Office Communication Server system and the external unit. 9. Set the ON/OFF switch on the external unit. 9. Set the ON/OFF switch is set to the OFF position (I or red). Page 75 Ensure that the J1 jack is NOT connected to the Alcatel-Lucent OmniPCX Office Compact Edition unit. Page 76 Chapter 3. Connect the negative (black) terminals of the batteries as described below (and shown in the figure below). a. Connect the middle connector of the black wire to the negative (black) terminal of battery B1. b.

If required, connect the end connector of the black wire to the negative (black) terminal of battery B2. Page 77 2. Move the red extBAT jumper from the NO position. Note: Since R5.0, it is possible to install a hard disk on a Alcatel-Lucent OmniPCX Office Compact Edition unit. In that case, it is MANDATORY to install the external battery unit, and the extBAT jumper of the PSXS MUST be set to YES.

CONNECTING A UPS Note: This paragraph is not relevant to the Alcatel-Lucent OmniPCX Office Compact Edition unit. A UPS (Uninterruptible Power Supply) can be used to allow system data to be saved for at least an hour in the event of mains failure. Page 79 Protective grounding terminal shall be permanently connected to the ground. A.3.1.5.2 Alcatel-Lucent OmniPCX Office Compact Edition is powered by an external power supply unit (100/240V). It is connected via a jack plug at the front of the module (right hand side). Chapter For performance and safety reasons, the system must always be connected to the ground. The ground must be connected prior to all the other connections. For performance and safety reasons, the system must always be connected to the ground. The ground must be connected prior to all the other connection terminal used at the rear of the terminal (pull it towards the interior of the terminal and then pull it out). Plug in the line cable: Turn the terminal for this purpose for Advanced Reflexes terminal. Join the module to the set using the metallic strip and the 4 screws provided in the kit 4.4.1.3.3 Alcatel-Lucent OmniPCX Office Compact Edition is imply involves connection and safety reasons. The use and the terminal term terminal for the set using the metallic strip and the 4 screws provided in the kit 4.4.1.3.3 Alcatel-Lucent of the terminal. Join the module to the set using the metallic strip and the 4 screws provided in the kit screw B. Reflexes TERMINALS Attacel-Lucent First and Easy Reflexes terminal. Using the croupe the terminal term terminal the networe the terminal, the module and the set using the metal plate. Slide this plate up the lower groove and sacket. Wall mounted. The installation simply involves connection between the terminal, the module and the screw B. Reflexes terminals. The ground must be connected prove the save of the terminal term on the terminal term of the terminal term of the terminal term of the terminal term of the terminal. The module is the set using the metalli

8 Series Sets 4.5.1 IPTouch 4008/4018 Phone 4.5.1.1 Commissioning 4.5.1.1.1 Overview This module presents all the actions required for commissioning: The Alcatel-Lucent IP Touch 4018 Phone set The Alcatel-Lucent IP Touch 4018 Phone Extended Edition set The commissioning of Alcatel-Lucent IP Touch 4018 Phone and Alcatel-Lucent IP Touch 4018 Phone Set The Alcatel-Lucen

4018 phone Extended Edition sets is identical. Page 89 Initialize the set Program keys Prerequisites None. Connecting the sets This section describes how to: Connect an IP Touch set to the LAN (Local Area Network) Connect the power supply Prerequisites None.

Connecting an IP Touch set to the LAN: 1. Page 90 Chapter Choosing the initialization mode or Refer to the table below. table 4.21: Initialization modes Then the required initialization mode is You have a DHCP server Dynamic mode or Refer to table: Initialization Proprietary dynamic mode procedure... Page 91 Static 1. Connect the power supply. 2. Before initialization phase 5 starts, press i, then the # key. The Main menu appears. 3. From the Main menu, choose IP Parameters menu appears. 4.

Choose Static and press the OK key. 5. Chapter In the procedure below, it is assumed that: there is one DHCP server no VLAN has to be configured. Prerequisites None. Relocating and retaining the same set To relocate and retain the same set: 1. Unplug the set. 2. Plug the set into a connector at its new location. 4.5.1.1.3 The Alcatel-Lucent IP Touch 4008 Phone set The Alcatel-Lucent IP Touch 4008 Phone with a new transceiver and a new LAN switch.

Page 93 Figure 4.50: Alcatel-Lucent IP Touch 4028 Phone, Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent IP Touch 4068 Phone connectors 4.5.2.1.2 Commissioning the sets This section describes how to: Connect the sets Initialize the sets Connect optional equipment Program keys Prerequisites None. Page 94 Chapter To connect the set to the LAN: 1. Turn the set over so that you can see its base. 2. Plug the RJ45 cable into the set's LAN connector. 3. Connect the RJ45 cable to the LAN itself.

Connecting power supply The set can be supplied from two possible power sources: An AC/DC external adapter which is a 42V power supply A female jack is used to connect the power adapter. Page 95 You do not have a DHCP Static mode Refer to table: Initialization server procedure Obtain from your network administrator: • An IP address for the IP Touch set • The subnetwork mask • The router address • The TFTP server address (master VoIP board address) Note:... Page 96 Chapter Static 1. Connect the power supply. 2. Before initialization phase 5 starts, press i, then the # key.

The Main menu appears. 3. From the Main menu, choose IP Parameters. The IP Parameters menu appears. 4. Choose Static. 5. Enter the following: a. Page 97 AOM Alcatel-Lucent 9 series Smart Display Module provides 14 keys with programmable LCD labels Prerequisites None. Rules and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4028 Phone, Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent IP Touch 4068 Phone sets: A maximum of three Add-On Modules of the types AOM10 and AOM40 can be connected to each set, providing up to 120 additional keys. Page 98 Chapter The 3.5 mm female jack can receive an external station speaker jack. In order to take the external station speaker into account, the set customization for the jack has to be set to "Loudspeaker". Prerequisites None. Connecting an external station speaker To connect an external station speaker, plug the external station speaker jack into the associated connector on the side of the set. 2. Select Name and enter the name to be associated with the key. then press OK. The desired name is associated with the key. 3. Select Number and enter the telephone number to be associated with the key. Page 100 Chapter Figure 4.51: Alcatel-Lucent 4019 Digital Phone connectors 4.6.1.1.2 Commissioning the set This section describes how to: Connect the set Program keys Prerequisites None.

Connecting the set This section describes how to connect the set to the telephone system. Prerequisites None. In fact, only the direct call key can be programmed (with a telephone number), which by default is the sixth programmable key. However, the Personal/Dial by name key can be programmed in a similar way. To program a key: 1. Press the i key followed by the required programmable key. 2. Page 102 Chapter Connect optional equipment Program keys Prerequisites None. Connecting the sets This section describes how to connect a set to the telephone system. Prerequisites None. Connecting to the telephone system To connect a set to the telephone system: 1. Turn the set over so that you can see its base. 2. Page 103 42 additional keys. Add-On Modules of types AOM10 and AOM40 can be used on the same set, but a Smart Display Module cannot be used in conjunction with an AOM10 or AOM40. If an AOM10 is used with other Add-On Modules, it must be connected as the last module on the far right of the set. The desired name is associated with the key. Note: As of release 6.0 of Alcatel-Lucent OmniPCX Office Communication Server, it is possible to use Uni- code - Chinese and Cyrillic - characters. It is at this step that it becomes active, if used. For more in- formation about IME, refer to the section Operation - Input Method Editor in this chapter. The V24/CTI Interface Module allows a Data Terminal Equipment (DTE) to be connected to the OmniPCX Office, via a UA link, by means of an RS232 serial link (CTI port) or a V24 link.

The V24/CTI Interface Module can be used alone or combined with an Alcatel-Lucent 9 series set. Chapter CAN/CSA-C22.2 No 950-95: Canada 4.7.1.2.2 ECM EN55022: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment FCC part15: US requirements 4.7.1.2.3 V24 & CTI CCITT Rec.: V24,V28, V25bis, V54, V110 Hayes protocols ECMA 102: Attachment requirements for pan-European approval for connection to PSTN... Page 107 4.7.2.2 Jumpers The jumper in a gray background is factory installed. To configure the V24/CTI Interface Module, open the device with the 2 screws located under the module.

If the jumper is positioned for "stand-alone" operation, an associated set cannot work.

If the jumper is positioned for "associated UA set"... Chapter 4.7.3 External connections 4.7.3.1 V24/CTI Interface Module is connected as follows: Figure 4.56: V24/CTI Interface Module Connection The V24/CTI Interface Module is connected to: 1.

The UA set 3 m maximum length (RJ11/RJ11 cable) 2. Page 109 Figure 4.57: Rear Panel 1. RJ11 connector for UA line to PCX 2. V24 SUBD9 connector 3. CTI SUBD9 connector Figure 4.58: Connector 5. CTI SUBD9 connector 3. CTI SUBD9 connector 5. CTI SUBD9 con

Interactions with other software releases OmniPCX Office release 5.1 requires 4 kinds of DECT initialization: Europe, Latin America, United-States and China. See also: § IBS CONFIGURATION 4.8.1.6... Page 113 The Line length is the cable length used to plug the IBS to the system (distance between the IBS and OmniPCX Office). It enables the system to add a delay in signal and to avoid a shift in clock signal that creates a reset of the IBS. Page 114 Chapter There are 3 possibilities of configuration: Short line (400-800 meters) Medium line (400-800 meters) Long line (800-1200 meters) Restart the IBS after you have modified the Line length parameter. Antenna diversity Antenna diversity is the ability of the IBS to move the transmission and reception from one antenna to the other so that the signal is always of the highest quality.

Page 115 Figure 4.61: DECT/PWT Frequencies Note 2: Due to hardware, there is a limit in the number of channels: DECT EUROPE, LATAM, CHINA: 1, 2, 4, 5, 8, 10 channels DECT US: 1, 2, 4, 5, 8 channels PWT: 1, 2, 4, 5, 8 channels 4.8.1.9... Page 116 Chapter bands in the different countries, 4 types of initialization of frequency plans are available: Europe, Latin America, The United-States and China. table 4.30: RF Band Europe Channel TX Freq RX Freq 1897.344 1898.206 1895.616 1896.480 1893.888 1894.752 1892.160 1893.024 1890.432 1891.296 1888.704... Page 117 1926.720 1927.584 1924.992 1923.264 1923.264 1923.264 1923.264 1921.536 1919.808 1919.808 1919.808 1918.060 1916.352 1914.624 1912.896

Page 120 Chapter Square zone Rectangular zone Example 1: square building Example 2: rectangular building floor flo

Page 122 Chapter (release 6 and later). Note 2: For more details, refer to the documentation of the operating system used on the client workstation. The following services web browsing Electronic messaging access to an FTP server file server. Page 123 4.9.1.1.2 Ethernet network access board Dynamic IP Address (DHCP) Reserve a range of addresses for PCs in the system: WBM : Network -> DHCP tab . Enable obtaining IP addresses from a DHCP server on the PC. Example: Configured to use the Proxy server. The IP address of this server is that of the Alcatel-Lucent OmniPCX Office Communication Server main CPU board that hosts the "Internet Access" software. The port number used by the proxy is that configured in WBM: Proxy ->... Page 125 If the company is connected to the Internet via Alcatel-Lucent OmniPCX Office Communication Server, it is used as the gateway between the LAN and the Internet for the exchange of messages. Chapter If the firewall is enabled on Alcatel-Lucent OmniPCX Office Communication Server, only passive FTP tool used, please refer to the FTP tool used, please refer to the FTP tool used, please refer to the FTP tool users in HTPS is 10 for Alcatel-Lucent OmniPCX Office Ad- vanced Edition CS platforms and 25 for Alcatel-Lucent OmniPCX Office Premium Edition CS platforms and 25 for Alcatel-Lucent OmniPCX Office Communication Server in HTPS is 10 for Alcatel-Lucent OmniPCX Office Ad- vanced Edition CS platforms and 25 for Alcatel-Lucent OmniPCX Office Communication Server in HTPS is 10 for Alcatel-Lucent OmniPCX Office Communication Server in HTPS is 10 for Alcatel-Lucent OmniPCX Office Communication Server in HTPS is 10 for Alcatel-Lucent OmniPCX Office Ad- vanced Edition CS platforms and 25 for Alcatel-Lucent OmniPCX Office Communication Server in HTPS is 10 for Alcatel-Lucent OmniPCX Office Communication Server in HTPS is 10 for Alcatel-Lucent OmniPCX Office Communication Server in HTPS is 10 for Alcatel-Lucent OmniPCX Office Ad- vanced Edition CS platforms and 25 for Alcatel-Lucent OmniPCX Office Pr

The add-on modules are always transferred provided the substitution set supports these modules. Page 130 Multi Reflexes 4099 option (also called Multiple UA hub) connects up to 3 Alcatel Reflexes or Alcatel-Lucent 9 series terminals to an Alcatel-Lucent 9 series terminals. Page 131 Interface classification UA link: TBTS Hub/Alcatel Reflexes or Alcatel-Lucent 9 series 1 to 3 : TBTS Maximum distances between Alcatel-Lucent 9 series 1 to 3 : TBT

Fit the CPU board of the main module with an HSL daughter board. An add-on module may only include synchronous digital network interfaces (BRA, PRA) if this type of card is already incorporated into the main module). Page 134 Chapter RJ45 pin MAIN: MAIN: HSL to basic module. 4.11.1.4.3 Role of the # key Name Color Feature POWER Red/Green Mains operation: steady green led Battery operation: steady red LED Red/Green Both fans functioning: steady red led 4.11.1.4.4 Adding a third module Replace the HSL1 board of the CPU board with an HSL2 board.

Stations Default Configuration 5.1.1 Detailed description 5.1.1.1 DEFAULT CONFIGURATION 5.1.1.1 Alcatel-Lucent 8 series and Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Lucent 9 series station profiles Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Lucent 9 series station profiles Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Lucent 19 Touch 4039 Digital Phone sets Each of these sets has 2 programmable keys (F1/F2) and 40 virtual add-on keys. Their default functions depend on: The configuration of the set is sold (US or non-US) Page 136 Chapter Figure 5.1: Virtual Key Functions for Operator Sets in KeySystem mode... Page 137 Figure 5.2: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem mode... Page 130 Eigense 5.4: Virtual Key Functions for Operator Sets in KeySystem Figure 5.4: Virtual Key Functions for Operator Sets in KeySystem Figure 5.4: Virtual Key Functions for Operator Sets in KeySystem Figure 5.4: Virtual Key Functions for Operator Sets in KeySystem Figure 5.4: Virtual Key Functions for Operator Sets in KeySystem Figure 5.4: Virtual Key Fu

Manager/Assistant/Normal sets in KeySystem Mode... Page 138 Chapter Figure 5.3: Virtual Key Functions for Attendant sets in KeySystem Mode... Page 140 Chapter Figure 5.5: [US only] Virtual Key Functions for Operator Sets in KeySystem Mode... Page 141 Figure 5.6: [US only] Virtual Key Functions for Manager/Assistant Sets in KeySystem Mode... Page 142 Chapter Figure 5.7: [US only] Virtual Key Functions for Normal Sets in KeySystem Mode... Page 143 Figure 5.8: Virtual Key Functions for Operator/Manager/Assistant/Normal Sets in PABX Mode 5.10... Page 144 Chapter Figure 5.9: [US only] Virtual Key Functions for Operator Sets in PABX Mode 5.10... Page 145 Figure 5.10: [US only] Virtual Key Functions for Manager/Assistant Sets in PABX Mode 5.10... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Manager/Assistant Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11... Page 146 Chapter Figure 5.11: [US only] Virtual Key Functions for Normal Sets in PABX Mode 5.11..

Alcatel-Lucent IP Touch 4018 Phone and Alcatel-Lucent 4019 Digital Phone sets Each of these sets has 6 programmable keys which have the default functions indicated below. Page 148 Chapter 5-14... System Startup from a Phone Set 6.1.1 Configuration procedure You can start-up the system using a phone set, provided this phone set is either an Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Luce

6.2.1 Overview OMC is the PC application used to program the Alcatel-Lucent OmniPCX Office Communication Server system via a local connection (V24 or LAN) or a remote connection (the PC modem is connected to the Alcatel-Lucent OmniPCX Office Communication Server integrated modem via the public network). When installation is finished, you access the application either: by double-clicking on the new icon created on the Windows desktop, or by selecting Start -> Program -> Alcatel-Lucent OmniPCX Office Communication Server -> OMC. The window Welcome to OMC appears. Page 159 4. Select the Connect menu. 5. Select the Local menu. 6. The system offers to install Alcatel-Lucent OmniPCX Office Communication Server Direct V24. Click on Yes. The Modem options window is displayed.

7. Click Add. The Installation window is displayed.

A final software including all the countries parameters (S, M and L racks delivered in BTCO mode) or A software tool (Alcatel-Lucent OmniPCX Office Compact Edition system and S, M and L racks delivered in stock mode). This software tool is installed on the CPU and must be updated with a further system software package (including the specific country parameters) also called country software, so that the installation is complete. Page 161 1. Open OMC.

2. Open the Tools folder. 3. Open the OMC-Software Download application. 4. In the Communication Mode window, select the type of download: • Local • Modem Direct • Mode Direct • Mo

Page 165 Internet access installation 6.3.1 Overview With Alcatel-Lucent OmniPCX Office Communication Server, several computers can be connected to the company's LAN and access Internet services and applications through a shared Internet connection. The proposed Internet services are available even if Internet access is not established through Alcatel-Lucent OmniPCX Office Communication Server, several computers can be connected to the company's LAN and access Internet services and applications through a shared Internet connection. The proposed Internet services are available even if Internet access is not established through Alcatel-Lucent OmniPCX Office Communication Server.

Page 166 TYPES OF INTERNET ACCESS 6.3.1.1.1 Internet access via Alcatel-Lucent OmniPCX Office Communication Server Alcatel-Lucent OmniPCX Office Communication unication Assistant: it is a Web application designed for Alcatel-Lucent OmniPCX Office Communication Server end users to help them manage in-house corporate communication (e-mails and voice messages). All these services are configured via a secure web interface; web-based Management (wBM). Page 100 Chapte Address. web Comn verification of information prior to validation, the possibility of choosing the display language (French, English, German, Italian, Spanish, Portuguese or Dutch). The language is configured in the Web navigator. The following diagram illustrates the main elements in a screen. The WBM interface contains three screen types: 1. Page 169 1. Open the Web navigator. 2. Enter the following address in the Address field of the Web navigator: https:///admin where is the machine's IP address or name. You go to the Web-Based Management - Authentication page. Page 170 6.3.4 Connecting your e-communication server to the LAN 6.3.4.1 Configuration procedure The necessary hardware on Alcatel-Lucent OmniPCX Office Communication Server is: a CPUe-1/CPUe-2 board an ISDN T0 or T2 connector a client station connected to the LAN a LAN switch (LANX8, LAN X16 or external switch) Page 171 Communication Server and the access provider: On demand, Always on or Callback 5. IP Address: the IP address is allocated to Alcatel-Lucent OmniPCX Office Communication Server by the access provider 6. Primary and secondary name server: IP addresses of the DNS servers on the premises of the access provider. Page 172 • Profile name: this name identifies the new Internet connection managed by Alcatel-Lucent OmniPCX Office Communication Server. The profile groups together all the parameters associated with the connection. It is best to give it a name that represents the newly created connection managed by Alcatel-Lucent OmniPCX Office Communication Server. The profile groups together all the parameters associated with the connection. It is advisable to enter a name that is representative of the created connection, such as the name of the access provider. Page 174 • Profile name: this name identifies the new Internet connection managed by Alcatel-Lucent OmniPCX Office Communication Server. The profile groups together all the parameters associated with the connection. It is best to give it a name that represents the newly created connection - the name of the access provider, for example. Page 175 ISDN or DSL modem/Cable modem. IP addresses of Alcatel-Lucent OmniPCX Office Communication Server, and of the router on the IAP's premises. This negotiation is tested during an ISDN and DSL Modem/Cable Modem type connection. Page 176 Chapter Testing the remote address by pinging the ISP's router. This checks that the DNS configuration entered in the system is correct and, if not, it is used to dynamically locate the DNS servers present on the IAP's premises. Page 177 BATTERY MAINTENANCE Alcatel-Lucent OmniPCX Office Compact Edition) are supplied with internal batteries that provide back-up power in the event of a mains power failure. Alternatively, all systems may be optionally equipped with an external battery pack to provide back-up power. Page 178 Chapter sealed lead battery 7 Ah / 12 V fire resistance better than or equal to UL94-V2 7.1.1.2 BOARD BATTERY MAINTENANCE It is recommended that the batteries in the CPU-1/CPUe-1, CPU-2, CPU-3, CPU-3, CPU-4, CoCPU-1, and CoCPU-2 boards should be replaced by batteries of the same type every two years. Page 179 The procedure presented below assumes that a board is to be installed in a vacant slot in the systems. It is also forbidden for CPU boards in all systems. (of the same or different type) is to be installed in the same slot in the system cabinet. Note 1: Hot swap is forbidden in Alcatel-Lucent Om- niPCX Office Compact Edition and Alcatel-Lucent Om- niPCX Office Compact Edition 2nd generation CS. It is also forbidden for CPU boards in all sys- tems. Page 181 malfunctioning of your installation. 7.1.1.6.1 Handling Always wear a discharge device (bracelet, heel clip, etc.) to protect against electrostatic discharges. Avoid any knocks to the hard disks must be stored in an electrostatic protective bag Avoid contact between hard disks... Page 183 Glossary 8.1.1 Automatic Call Distribution A computerized phone system that responds to the caller with a voice menu, and connects the call to the required agent. It can also control call flows by automatically routing calls in the order of arrival. ACSE Association Control Service Element. Page 184 Chapter Bandwidth Allocation Control Protocol. Control protocol associated with BAP. Bandwidth Allocation Protocol. PPP protocol that manages bandwidth by allocating it dynamically between two ports, i.e. between the two extremities of a point-to-point link. Bandwidth On Demand. Service that allocates bandwidth automatically in response to traffic volume. Basic Rate Access. Page 185 File Transfer Protocol. Standard protocol for exchanging files between remote computers over the Internet. FTP/STP/UTP Foiled Twisted Pairs/Shielded Twisted Pairs/Unshielded Twisted Pairs. Types of connection cables to be used between an Alcatel-Lucent OmniPCX Office Communication Server and an external distribution panel. 8.1.7 GATEKEEPER... Page 186 Chapter 8.1.8 H.323 ITU standard for multimedia communication (voice, video, data). H.450 Additional services associated with H.323 version 2. High Speed Link. Link between the basic module and an add-on module; requires an HSL daughter board to be fitted on the CPU and MEX boards. HTTP HyperText Transfer Protocol. Page 187 In the context of the WLAN client: file server, proxy, main server. Page 188 Operator Station. Dedicated Reflexes terminal for answering incoming calls from the public network. OmniPCX Office Management and configuration tool. 8.1.15 Password Authentication Procedure used by PPP servers to validate connection requests. Page 189 PSTN Public Switched Telephone Network, PTN(X) Private Telecommunications Network (eXchange). A private network consisting of switches and terminals connected together by telephone links, Personal Wireless Telecommunications. Corresponds to the DECT standard for the North American countries (especially the US), 8,1,16 Quality Of Service, Page 190 Chapter Session Initiation Protocol, A signaling protocol for Internet conferencing, telephony, events notification, and instant messaging. SIP initiates for example, call setup, routing and authentication within an IP domain. SLAN LAN Switch. Daughter board for mounting on a CoCPU/CoCPU-1/CoCPU-2 board to enable it to commu- nicate with the CPU/CPUe/CPUe-1/CPUe-2. Page 191 Uniform Resource (file, program, image, etc.) accessible on the Internet. User to User Signaling. Information carried clear end-to-end by ISDN to enable exchanges between net- work subscribers; the ISVPN protocol is contained within this information. 8.1.21 Voice Mail Unit. Page 1 Installation Manual Release 8.2 - May 2012... Page 1 InstallatOmniPCX Office RCE SmallOmniPCX Office RCE MediumOmniPCX Office RCE Large Compact ... InstallationOverviewEquipment Detailed description 4.93 ...G reserves the right to modify the characteristics of its products without notice. Alcatel-Lucent Enterprise - 32, avenue Kléber F-92707 Colombes Cedex RCS Paris 602 033 185. 1.2.1.2... Page 10 Chapter Protective earthing This equipment must imperatively be connected to a permanent earth protection installed according to current legislation. Installation of the mains power The mains power must be installed as close as possible to the unit and must be easily accessible. Page 11 73/23/EEC (Low Voltage) R&TTE 1999/5/EC compliance 1999/5/EC (Specific Absorption Rate) 1.2.1.4 Interface Classification 1.2.1.4.1 OmniPCX Office RCE Small, Medium, Large SELV: Safety Extra Low Voltage TNV-3: Telecommunication Network Voltage Figure 1.2: OmniPCX Office RCE Small, Medium, Large 1.2.1.4.2 OmniPCX Office RCE Compact... Page 12 The Mini-MIX daughter board requires BACKXS-N back panel and PSXS-N power supply module. The Mini-MIX daughter board can be used only in an OmniPCX Office RCE Compact or, in case of migration from R7.1 or lower, in a Compact Edition 2nd Generation, equipped with a PowerCPU board. Page 13 may cause harmful interference and void the user's authority to operate this equipment. Japan - VCCI (Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Page 14 Chapter... Page 15 (according to country). The stations are packaged separately. Platforms Alcatel-Lucent OmniPCX Office Communication Server is available in the following models: 2.2.1 OmniPCX Office RCE Compact 14 ports.

1 CPU slot + 1 MIX slot... Page 16 Note: This wall-mounted version is also called XS-N. The Mini-MIX daughter board, plugged on a PowerCPU booard, requires an OmniPCX Office RCE Compact, or, in case of migration from Release 7.1 or lower, a Compact Edition 2nd Generation. The Mini-MIX daughter board cannot be used on an Alcatel-Lucent OmniPCX Office Compact Edition. Page 17 Slot 80 EN 01 for the first T0 access (80-001-01) Slot 80 EN 02 for the second T0 access (80-002-01) Slot 80 EN 02 for the second T0 access (80-009-01) Slot 80 EN 10 for the second Z access (80-010-01) 2.2.2 OmniPCX Office RCE Small... Page 18 Dimension: H = 66 mm; W = 442 mm; D = 400 mm. Weight: 6 kg. 2.2.3 OmniPCX Office RCE Medium 56 ports. 1 CPU slot 5 general-purpose slots. Energy consumption: 1,2 A (230 V) / 2,3 A (110 V) - 120 W. Page 19 Installation 2.3.1 Overview This hardware must be installed on the customer's site, by a qualified installer, in... Page 20 Equipment shall be installed at the factory or in the field by submitter's trained personnel in accordance with the installation instruction provided with the equipment. Equipment 2.4.1 Boards and Options The following table lists the boards available on OmniPCX Office RCE Small, Medium, Large. Board Function Optional boards Connections... SLI16 SLI4-1 SLI8-1 SLI16-1 SLI4-2 SLI8-2 SLI16-2 UAI4 4, 8 or 16 UA interfaces Alcatel-Lucent 9 series or UAI8 UAI16-1 board: possibility of Alcatel Reflexes stations UAI16 powering terminals connected to Multi Reflexes 4099 UAI16-1 the 16 interfaces remotely from...

Page 22 Chapter As of R8.0, the PowerCPU board performs the CPU functions of an OmniPCX Office system. 2.4.2.1.1 Function of the LEDs Name Color Function Green CPU functioning LED (flashing) POWER Red/Green Mains operation: steady green LED Battery operation: steady yellow LED... Page 23 Board used for connecting up digital terminals or DECT 4070 IO/EO base stations. The UAI16-1 board is used to power terminals connected to the 16 interfaces remotely from an EPS48 external power supplies and the splitters provided. Page 24 2.4.2.7 PRA Boards This board provides 1 primary access for connecting the Alcatel-Lucent OmniPCX Office Communication Server system to the ISDN digital public networks or to private networks: PRA -T2, DASS2, DLT2 : 30 x 64-Kbps B-channels + 1 x 64-Kbps B-channel; 2048 Kbps. Page 25 T2 Name T1 Name Function BUSY BUSY B-channels busy (red LED lights up if at least 1 B-channel is busy) RAI (ATD) Remote frame alarm (red LED lights up on alarm) AIS (SIA2M) Too many "1's in the 2-Mbit binary train (red LED lights up on alarm) Page 26 Chapter Each category-5 RJ45 connector has 2 green LEDs: Left LED = link status and activity: • off: link disconnected • on: link connected • blinking: link active Right LED = full duplex/collision: • off: Half Duplex • on: Full Duplex • on: Fu

OmniPCX Office RCE Small, Medium, Large ARMADA VOIP32... Page 28 Chapter Mini-MIX daughter board can be used only in an OmniPCX Office RCE Compact Cdition 2nd Generation, equipped with a Power/PU ArX.1, Page 30 SL116, SL116-1, SL14-2, PRA-T2, PRA-T1, DASS2, DLT2, T1-CAS, PCM 2APA, APA6 DD2, DD14 BRA2, BRA4, LANXB, LANXI6, LANXI6-2, LAX, 30 mniPCX Office RCE Large Boards Slot 1 Slots 2-3-4 Slots5-67-8 CPU Slot Power/PU Mandatory MIX xly/z AMIX-1 xly/z UAI4, UAI8 UAI16, UAI16-1... Flage 30 Chapter 2.4.2.14.3 OmniPCX Office RCE Large Boards Slot 1 Slots 2-3-4 Slots5-67-8 CPU Slot Power/PU Mandatory MIX xly/z AMIX-1 xly/z UAI4, UAI8 UAI16, SL14-1, SL18-1, SL16-1, SL14-2, SL8-2, DLT2, T1-CAS, PCM R2... 3.1.1 SOFTWARE LICENCE MANAGEMENT On an Acatel-Lucent OmniPCX Office Communication Server several types of devices may be connected, several services may be offered and several applications may run. The purpose of the feature "Software licence Management" is to define for a given system (i.e. Chapter the PRINC (PRINCHIPAL) software key or MAIn for the system functions (voice, system feature, etc.). The SUMMARE several manufacture service levels, they frame reasing on your cost (CTI key) settimate reasing or each service levels, they frama or uniber Send this serial number Send this serial number Send this serial number Send true site. The table also gives the limited state. The table also gives the limited state service levels, the granularity or upgrades, the maximum service level for each service, and if a hardware experiment on Nouloarity Hardware Send and VOIP truk channels From R8.0 VOIP R1.0/R1.1 volP on application have for Software key or Sont Controlled services Relevant Values in Modularity Hardware software limited extension version mode PROY HA22, SPAC 40, PRA-12, PRA-11, PRA-11

Chapter web mail voice mail dialer 3.4.9.2 Number of MyIC Office sessions (from R8.1) This application is used on a PC to access to some configuration parameters of the terminal (diversion,...), to access to the call log, to access to the voice mail and to make a call. The system controls the number of opened sessions in the mode of a "floating license"... none are allocated to the VoIP trunks. If the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks are increased (assuming that the key contains provisions for VoIP trunks), the number of VoIP trunks, the addition of Number of VoIP trunks and Number of VoIP trunks configuration, external notification, mailbox configuration. All the services which need memory, can be reduced (message storage capacity, number of mailbox greetings, distribute list name, record on line) 3.4.15.1 MOH Length The MMC has to control the duration of the recording. 3.4.15.2 MOH for multiple entities If the value N of that service is greater to 1 and less or equal to 4, it is possible to create on the...

My IC Mobile is an application running on an Apple iPhone or an Android phone, which makes the Apple iPhone or Android phone become an OmniPCX Office subscriber or a new My IC Mobile for iPhone subscriber or a new My IC Mobile for... Page 46 Chapter maximum value indicated by the present license item. 3.4.21.2 Number of SIP phone enhanced (from R8.1) The subscribers of type SIP phone enhanced can use more services that a SIP phone enhanced subscriber is refused if the number of existing such subscribers has reached the maximum value indicated by the present license item. Compact platform which can also be fixed directly to the wall. In both cases, use the hole drilling template supplied with the platform. 2. Mounted in a rack: the OmniPCX Office RCE Small, Medium, Large platforms are mounted in the rack using the fixing brackets supplied by the rack manufacturer, or using the optional 19"... Page 48 Moreover, the weight of the equipment must be evenly distributed between the brackets. If mounting the Alcatel-Lucent OmniPCX Office RCE Small and OmniPCX Office RCE Medium platforms only), maintain a free space of at least 15 cm around the whole system.

Ensure that no objects are placed on the upper part of the system to restrict the extraction of hot air. Page 50 Chapter All outputs are made using Female RJ45 pin CenRG SL1/SL12 Ground +12 V CenRg A ZA1 CenRG Ground +12 V CenRg A CONFIG RMTRES Ground MODULE1 ISDN T01 MODULE2 ISDN T02 Audio In Audio Audio Audio Audio Audio Audio Audio Audio In Audio Audio Audio In Audio Audio Audio In CenRg S 1 4.2.1.1.3 UAI Board RJ45 pin 1 to 16 (UAI) 1 to 16: connection of digital terminals or DECT 4070 IO/EO base stations.

4.2.1.1.4 UAI-1 Board RJ45 pin 2 to 16 1 : connection of an EPS48 external power supply + connection of digital terminals or DECT 4070 IO/EO base stations

Page 52 Chapter Ports 1 to 14: 10/100 BT ports. GE1, GE2: 10/100/1000 BT ports. 4.2.1.1.9 APA Board RJ45 pin... Page 53 4.2.1.4 Connecting Terminals 4.2.1.4.1 Connection of Digital Terminals The terminals are equipped with a cable and a self-acting switch that plugs into the wall socket. Each terminal is connected up by a pair of 0.5 or 0.6 mm diameter wires. System - digital terminals are equipped with a cable and a self-acting switch that plugs into the wall socket. Page 55 Connection to the Public Network 4.2.1.5.1 Digital Public Network via TO Access (or DLTO Private Network) The Alcatel-Lucent OmniPCX Office Communication or at a certain distance (up to 350 m), as required. Page 56 Chapter The ISDN-EFM box must be installed as close as possible to the system (3 m maximum). All the box connections are made with straight RJ45-RJ45 cables. Output connector functions: BRA: connection of TO access to be forwarded.

NT: connection of ISDN network termination.

S0: connection of forwarding S0 station. Page 57 4.2.1.5.2 Digital Public Network by T1 or T2 Access The diagram below shows a PRA-T2 board, but is equally applicable for a PRA-T1 board. 4-11... Page 58 Chapter The PRA board is connected to a digital line termination (DLT) by 2 symmetrical twisted pairs. Cable impedance: 120 Ohms +/- 20% between 200kHz and 1MHz; 120 Ohms +/- 10% at 1 MHz. Remark: We recommend using an L120-series cable (or the L204 equivalent). The distance T1-DLT or T2-DLT is limited by the amount of loss between the DLT and T1/T2, which must not exceed 6 due to connect servers, PCs, IP terminals and external switches. 4-13... Page 60 Chapter Category 5 cable, FTP or STP, impedance 100 Ohms: maximum length 100 m. 4.2.1.7 Connecting a Please-Wait Message Player This is connected via the AUDIO, AUX and DOORPHONE context of the AUDIO input of the AUDIO connector. Page 62 Chapter 4.2.1.7.3 Connecting a Background Music Tuner This is connected via the AUDIO connector. 4.2.1.7.4 Connecting a Background Music Tuner This is connected via the AUDIO connector. 4.2.1.7.4 Connecting a Background Music Tuner This is connected via the AUDIO connector. 4.2.1.7.4 Connecting a Broadcast Loudspeakers are connected via the AUDIO connector. Page 63 4.2.1.7.6 Connecting a Doorphone 2 doorphone types are available, depending on the operating mode used: Type A: relay-controlled doorphones (e.g. NPTT) Type B: doorphones controlled by MF Q23 signals requiring an SLI interface (e.g. TELEMINI and UNIVERSAL DOORPHONE) The doorphone interface comprises an intercom and an optional latch powered by the mains supply through a SELV (Safety Extra Low Voltage) transformer. Page 64 Chapter A

single doorphone with doorstrike may be connected to the system. The system also allows for the connection of 2 doorphones require the use of a Z station interface. Several of these doorphones can be connected to the system;... The battery fuse is located on the board and requires the back panel to be dismantled to gain access. It has the following characteristics: OmniPCX Office RCE Small and OmniPCX Office RCE Small and OmniPCX Office RCE Small, Medium, Large platforms are pre-wired and 4-20... Page 66 OmniPCX Office RCE Small, Medium, Large platforms are pre-wired and 4-20... Page 67 You will have to choose the appropriate preparation procedure, according to whether you have a rack or stack version of the external battery unit. The connection procedure is the same for OmniPCX Office RCE Medium and OmniPCX Office RCE Small platforms. Page 68 Procedure for 12 V stack version (for OmniPCX Office RCE Small and OmniPCX Office RCE Small platforms. Page 68 Procedure for 12 V stack version (for OmniPCX Office RCE Small platforms. Page 68 Procedure for 12 V stack version (for OmniPCX Office RCE Small and OmniPCX Office RCE Small and OmniPCX Office RCE Small platforms. Page 68 Procedure for 12 V stack version (for OmniPCX Office RCE Small and OmniPCX Office RCE Small and OmniPCX Office RCE Small platforms. Page 68 Procedure for 12 V stack version (for OmniPCX Office RCE Small and OmniPCX Offi

Either one battery or three batteries can be installed in the unit. Page 69 black) and that there is no cable connected to the J1 connector (see the figure below). 2. Open the unit by removing the four screws (ST3.5x32) with a screwdriver (Phillips PH2). 3. Insert the batteries in the open unit as follows (also see the figure below): a. Page 70 Procedure for 36 V stack version (for OmniPCX Office RCE Large platforms) The 12 V stack version of the external battery unit can be used with OmniPCX Office RCE Large platforms. It uses three 12V - 7Ah batteries. Two external battery units can be connected in parallel to obtain the autonomy achieved with six batteries. Page 71 1. Ensure that the ON/OFF switch on the external battery unit is set to the OFF position (0 or black) and that there is no cable connected to the unit (see the figure below). 2. Open the unit by removing the four screws (ST3.5x32) with a screwdriver (Phillips PH2).

3. Page 72 Mate-N-Lok 3-terminal connector must be connected to the principal unit and its Mate-N-Lok 2-terminal connector must be connected to the extension unit. Installation of External Batteries for the OmniPCX Office RCE Medium and OmniPCX Office RCE Large Platforms... Page 73 1. Stop the Alcatel-Lucent OmniPCX Office Communication Server system, and remove the power supply cord from the platform side. Disconnect the power supply cable on the platform side before handling the power supply and the internal battery. Page 74 Ensure that the mains power cable is NOT connected to the OmniPCX Office RCE Compact platform. Page 75 2. Insert the batteries in the open unit as follows (see the figure below): a. Place the first battery in the middle position (battery B1). b. If a second battery is to be used, place this battery in the remaining position (battery B2). Page 76 Disconnect the mains adapter from the OmniPCX Office RCE Compact platform. c. Using a screwdriver, unscrew the power supply module (PSXS or PSXS-N) from the side of the OmniPCX Office RCE Compact platform and pull the module out of the cabinet.

Note: If a hard disk is installed on an OmniPCX Office RCE Compact platform, it is MANDATORY to install the external battery unit, and the extBAT jumper of the PSXS-N MUST be set to YES. It is mandatory to use a power supply module PSXS-N with reference 3EH73072ACxx on an OmniPCX Office RCE Compact platform equipped with a PowerCPU board and a hard disk. Page 78 Chapter It is connected via the mains socket at the rear of the platform: UPS Power: use the mains cable provided with the Alcatel-Lucent OmniPCX Office Communication Server module. UPS Connection - module: use the cable supplied with the UPS For an installation using 3 Alcatel-Lucent OmniPCX Office Communication Server module. UPS connected to the grounding terminal shall be permanently connected to the ground.

4.3.1.5.2 OmniPCX Office RCE Compact OmniPCX Office RCE Compact platform is powered by an external power supply unit (100/240V). It is connected via a jack plug at the front of the module (right hand side).

Chapter Audio test If this sequence is correct, the display on the dedicated terminals shows the system date: Monday 01 January 00h00. After powering up, you can activate the system from a dedicated terminal or by OMC (refer to the specific notice). SIP Terminals 4.4.1 8082 My IC Phone... Page 81 Figure 4.41: 8082 My IC Phone set connectors 4.4.1.1.2 Commissioning is needed, 8082 My IC Phone set are fully plug &... Page 82 2. Configure 4.41: 8082 My IC Phone set are fully plug &... Page 82 2. Configure the user name and password in OMC prerequisites The Alcatel-Lucent OmniPCX Office Communication Server version must be operational For network configuration, any of the following insteeded, 8082 My IC Phone sets are fully plug &... Page 83 Two types of dynamic initialization options: Static initialization options: Static initialization options: Static initialization commissioning is needed, 8082 My IC Phone sets of dynamic initialization options: Static initialization: Page 83 Two types of dynamic initialization options: Static initialization: Page 84 IP address Router IP address Subnet mask Option 66

It will be requested during the generic SIP set configuration... The commissioning of Alcatel-Lucent IP Touch 4018 phone Extended Edition sets is identical. The following figure illustrates the connectors on the base of the Alcatel-Lucent IP Touch 4018 Phone and Alcatel-Lucent IP Touch 4018 phone Extended Edition sets. Page 95 Figure 4.44: Alcatel-Lucent IP Touch 4018 Phone and Alcatel-Lucent IP Touch 4018 phone Extended Edition connectors 4.5.1.1.2 Commissioning the set This section describes how to:... Page 96 Chapter 1. Turn the set over so that you can see its base. 2. Plug the RJ45 cable into the set's LAN connector. 3. Connect the RJ45 cable to the LAN itself. Connecting power supply The set can be supplied from two possible power sources: An AC/DC external adapter which is a 42V power supply A female jack is used to connect the power adapter. Page 97 You do not have a DHCP Static mode Refer to table: Initialization server procedure Obtain from your network administrator: • An IP address for the IP Touch set • The subnetwork mask • The router address • The TFTP server address, which is the IP address of the PowerCPU board... Page 98 Chapter Static 1. Connect the power supply. 2. Before initialization phase 5 starts, press i, then the # key. The Main menu appears.

3. From the Main menu, choose IP Parameters. The IP Parameters menu appears. 4. Choose Static and press the OK key. 5. 2. Plug the set into a connector at its new location. 4.5.1.1.3 The Alcatel-Lucent IP Touch 4008 Phone set The Alcatel-Lucent IP Touch 4008 Phone is a cost reduction of the Alcatel-Lucent IP Touch 4018 Phone with a new transceiver and a new LAN switch. Page 100 Chapter Figure 4.45: Alcatel-Lucent IP Touch 4028 Phone, Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent IP Touch 4038 Phone Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent IP Touch 4038 Phone Alcatel-Lu

Turn the set over so that you can see its base.

2. Plug the RJ45 cable into the set's LAN connector. 3. Connect the RJ45 cable to the LAN itself. Connecting power supply The set can be supplied from two possible power supply A female jack is used to connect the RJ45 cable to the LAN itself. to table: Initialization server procedure Obtain from your network administrator: • An IP address for the IP Touch set • The subnetwork mask • The router address, which is the IP address of the PowerCPU board... Page 103 Connecting an Add-On Modules (AOMs) can be connected to the Alcatel-Lucent IP Touch 4028 Phone, Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone and restrictions The following rules apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone apply to the use of Add-On Modules with the Alcatel-Lucent IP Touch 4038 Phone apply to the use apply to the use of Add-On Modules with the Alcatel-Lucent IP and Alcatel-Lucent IP Touch 4068 Phone sets: A maximum of three Add-On Modules of the types AOM10 and AOM40 can be connected to each set, providing up to 120 additional keys. Page 105 The 3.5 mm female jack can receive an external station speaker jack. In order to take the external station speaker into account, the set customization for the jack has to be set to "Loudspeaker". Prerequisites None. Connecting an external station speaker To connect an external station speaker, plug the set into a connector at its new location. 9 Series Sets 4.6.1 4019 Digital Phone 4.6.1.1 Commissioning 4.6.1.1.1 presents all the actions required for commissioning the Alcatel-Lucent 4019 Digital Phone set. The following figure illustrates the connectors on the base of the set. 4-60... Page 107 Figure 4.46: Alcatel-Lucent 4019 Digital Phone connectors 4.6.1.1.2 Commissioning keys Prerequisites None. Connecting the set This section describes how to connect the set to the telephone system. Prerequisites None. Page 108 4.6.2.1.1 Overview This module presents all the actions required for commissioning the Alcatel-Lucent 4039 Digital Phone sets. The following figure illustrates the connectors on the base of each set. Figure 4.47: Alcatel-Lucent 4029 Digital Phone and Alcatel-Lucent 4039 Digital Phone and Alcatel-Lucent 4039 Digital Phone sets. They are added to the Alcatel-Lucent 4039 Digital Phone sets. right side of the set. Three types of Add-On Module exist and provide keys associated with icons:... Page 110 Chapter 42 additional keys. Add-On Module cannot be used in conjunction with an AOM10 or AOM40. If an AOM10 is used with other Add-On Modules, it must be connected as the last module on the far right of the set. The desired name is associated with the key. Note: As of release 6.0 of Alcatel-Lucent OmniPCX Office Communication about IME, refer to the section Operation - Input Method Editor in this chapter. The V24/CTI Interface Module allows a Data Terminal Equipment (DTE) to be connected to the OmniPCX Office, via a UA link, by means of an RS232 serial link (CTI port) or a V24 link. The V24/CTI Interface Module can be used alone or combined with an Alcatel-Lucent 9 series set. 4.7.1.2.2 ECM EN55022: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of technology equipment EN55024: Limits and ECMA 102: Attachment requirements for pan-European approval for connection to PSTN of TE (excluding TE supporting the voice telephony service) in which network addressing,... Chapter 4.7.2.2 Jumpers The jumper in a gray background is factory installed. To configure the V24/CTI Interface Module, open the device with the 2 screws located under the module. If the jumper is positioned for "stand-alone" operation, an associated set cannot work. If the jumper is positioned for "associated UA set"... Page 115 The V24/CTI Interface Module is connected to: 1. The digital set 3 m maximum length (RJ11/RJ11 cable) 2. The PCX via a wall socket and a distributor frame 3. Chapter 2. V24 SUBD9 connector 3. CTI SUBD9 connector Figure 4.53: Connector Details RS 232 port (V24): Signal Description Data Carrier Detect. Transmit data. Received data. Data Terminal Ready. Protective ground. Data Set Ready. Request To Send. Clear To Send. Ringing Indicator. Page 117 Communication Server via a UA link. Figure 4.54: Example of Configuration with an Alcatel-Lucent 9 series set. Note: The AP Interface Module is also compatible with Alcatel Reflexes sets. Page 118 Chapter ETS 300 439: Business TeleCommunications (BTC); Transmission characteristics of digital Private Branch eXchanges (PBXs) TBR21: Attachment requirements for pan-European approval for connection to PSTN of TE (excluding TE supporting the voice telephony service) in which network addressing, if provided, is by means of DTMF signalling 4.8.1.2.4 Environment Classes ETS 300 019: Environmental conditions and tests for telecommunication equipment: •... Page 119 Connecting AP Interface Module Figure 4.57: AP Interface Module Figure 4.57: AP Interface Module Signature 4.57: AP Interface Module Figure 4.57: AP Interface Module Figure 4.57: AP Interface Module Figure 4.57: AP Interface Module Signature 4.57: AP Interface Module Figure 4.57: AP Interface Module Fig Communication Server via a wall socket and a distributor 4-73... Page 120 Chapter frame. Connect an AP module is identical to connect a digital set. Maxinum length between AP module and PCX depends on cable quality. For example: • LY 0.5 mm cable: up to 800 m • Ref 278 0.6 mm cable: up to 1200 m 3. Alcatel-Lucent OmniPCX Office Communication Server via a UA link. This bus allows S0 terminals (S0 sets, PCs equipped with an S0 interface, Fax G4, modem, etc.) to be connected. The S0 Interface Module can be used alone or combined with an Alcatel-Lucent 9 series set. 4-75... Chapter Note: The S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configuration with an S0 Interface Module is also compatible with Alcatel Reflexes sets Figure 4.60: Example of Configure 4.60: Example of Configure 4.60: Exam adapter) is required. There are two possible operating modes on the S0 bus: Non permanent layer: layer 1 must be set up by the calling end (PCX or terminal) at the start of each call;... Page 123 EN55022: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of radio interference characteristics of information technology equipment EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits and methods of measurement of each call;... Page 123 EN55024: Limits a measurement of immunity characteristics of information technology equipment FCC part15: US requirements 4.9.1.2.3 ISDN ETS 300 012: Basic access ETS 300 047: Basic access ETS 300 047: Basic access afety and protection... Page 124 Chapter 4.9.2.2 Jumper The jumper in a gray background is factory installed. To configure the S0 Interface Module, open the device with the 2 screws, located under the module. If the jumper is positioned for "associated digital set"... Page 125 The S0 module is connected to: 1. A digital set (optional), via an RJ11/RJ11 cable of a 3 m maximum length 2. The Alcatel-Lucent OmniPCX Office Communication Server, via a wall socket and a distributor frame Connecting an S0 module is identical to connecting a digital set. Page 126 Chapter Figure 4.64: Rear Panel Details 1. RJ11 socket for UA line 2. RJ45 socket for S0 bus 3. Power supply socket Figure 4.65: Socket Details PCX and digital set socket: Description Not used External Ringing 2 Not used... 4.10.1.1 CONNECTION The Alcatel-Lucent 4070 IO is designed for internal installation in the building, while the Alcatel-Lucent 4070 EO is designed for external installation. The 4070 EO IBS comes in a plastic box and is protected against temperature variation, reflection and diffraction. These phenomena are related to the environment of the Alcatel-Lucent 4070 IO/EO, and affect the radio performance of the system. The effects can improve or deteriorate wave propagation. Page 129 Take as an example a building with a metallic structure. A radio wave will tend to be subject to many reflections which will consequently degrade system performance. Moreover, the range of an Alcatel-Lucent 4070 IO/EO is very dependent on the amount of attenuation subjected to the radio wave across various zones. Page 130 The ARI number identifies each OmniPCX Office. Each OmniPCX Office has an identical default ARI number. When you install a new OmniPCX Office, you have to change the default ARI number. You can only keep the first digit, which is "1" and which means "ARI type B". The Line length is the cable the system to add a delay in signal and to avoid a shift in clock signals and eliminates echo and noises. This device is activated by default. When an IBS is deployed in a noisy environment, a lot of signals, including Speech ones, are eliminated while in Conversation state. Page 133 Once the IBS finishes the downloading, the system starts the initialization. The system selects the T0, T2, or CPU main board clock as the source. Then the system selects the following data: Fixed part capabilities (Full slot, 1924.992 1923.264 1923.264 1923.264 1921.536 1921.536 1919.808 1919.808 1918.060 1918.060 1918.060 1918.060 1918.060 1918.060 1918.060 ... Alcatel-Lucent 4070 IO/EO. 4.10.2.1.1 Conditions for using lightning should be used when they: - are less than 1.5 m from a wall more than 2 m below the antenna. Page 136 4.10.2.3.2 Layout technique For structures with a number of floors, different solutions can be envisaged as a function of: the coverage obtained at each level. Installation examples 4-90... Page 137 Square zone Rectangular zone Example 1: square building Example 2: rectangular building floor floor floor floor It is possible to alter the number of base stations used from one floor to another for this type of building. The technique used is overlapping the location of base stations from one level to another. This technique can be used for alternate floors if the coverage of a level can be achieved from an adjacent level. PIMphony 4.11.1 Overview Alcatel-Lucent PIMphony is a personal productivity tool that connects your phone terminal (dedicated, analog or DECT wireless set) with your computer, providing enhanced usage of your telephone. PIMphony IP is an IP phone that provides the same level of features as PIMphony associated with an actual terminal. Alcatel-Lucent PIMphony also provides tight integration with the most popular PIMs (Personal Information Managers) on the market, enabling them for Computer Telephony. Note: For information and details concerning Alcatel-Lucent PIMphony also provides tight integration with the most popular PIMs (Personal Information Managers) on the market, enabling them for Computer Telephony. installation, refer to the Installation Manual section in the PIMphony Online Help. Chapter PIMphony SPI for Microsoft TAPI Server (with SP4) [32 bits] Windows Server 2003 R2 (with SP4) [32 bits] Windows 2000 Pro (with SP4) [32 bits] Windows 2000 Pro (with SP4) [32 bits] Windows Server (with SP4) [32 bits] Windows 2000 Pro (with SP4) SP2) [32 bits] Windows 2008 R2 Server (with SP1) [64 bits] Windows XP Pro (SP1 or SP2 or SP3) [32 bits] Yes... Page 141 Plug in the line cable(connector) and position it as shown in the illustration below. Replace the panel. 4.12.1.2.2 Attaching the handset cable: Turn the terminal Plug in the handset cable (connector) into the guide intended for this purpose. 4.12.1.2.3 Wall mounted Preparing Premium Reflexes terminals Turn the terminal. Page 142 Chapter Attach the terminal using the two lugs: introduce the lugs into the holes previously occupied by the feet (left foot and hole intended for this purpose for Advanced Reflexes terminals). Stabilize the mounting by clipping the foot into the base of the terminal. 4.12.1.2.4 Mounting optional modules: Turn the terminal Remove the panel situated at the rear of the terminal. Page 143 Connect the unit to the terminal. Join the module to the set using the metallic strip and the 4 screws provided in the kit 4.12.1.3 Alcatel-Lucent First AND Easy Reflexes TERMINALS 4.12.1.3 Alcatel-Luc illustration. Page 144 Attach the terminal 4.12.1.3.3 Mounting optional modules: For Alcatel-Lucent First and Easy Reflexes terminal; this module is external to the terminal; this module and the wall sacket. The replacement set keeps its own default functions (customized settings are not transferred). The data not transferred is stored in the Alcatel-Lucent OmniPCX Office Communication Server system until a set of the same type as the initial one is connected. Page 146 The add-on modules are always transferred provided the substitution set supports these modules. Note: It is possible to replace a Reflexes set. 4.13.1.1.2 IP Touch set replace an Alcatel-Lucent 9 series set with a Reflexes set. 4.13.1.1.2 IP Touch terminal by connecting a terminal of the same family only, into your phone socket. Page 147 The set is recognized as soon as it has been plugged into the socket. 4.13.1.1.5 Using a Multi Reflexes 4099 hub Multi Reflexes 4099 option (also called Multiple UA hub) connects up to 3 Alcatel-Lucent 9 series or Alcatel Reflexes terminals to an Alcatel-Lucent 9 series or Alcatel Reflexes terminals to an Alcatel-Lucent 9 series or Alcatel Reflexes 4099 hub Multi Reflexes terminals to an Alcatel-Lucent 9 series or Alcatel Reflexes 4099 hub Multi Reflexes 4099 connection of DECT base stations, 4070 IO/EO, Alcatel-Lucent 9 series sets or Alcatel Reflexes sets with V24/CTI Interface Module. Note: IP Touch sets cannot be connected to a hub. Page 149 0,5 mm cable: 505 m 0.6 mm cable: 50 hub. 4.13.1.2 Adding/Replacing Boards Except for PowerCPU, any board can be plugged/unplugged when the system is powered up. Page 150 Chapter 4.13.1.4 Adding a Module Expansion. The CPU slot of the module expansion must be fitted with a PowerMEX board with an HSL1 daughter board. Page 151 RJ45 pin MAIN: MAIN: HSL to basic module. 4.13.1.4.3 Role of the # key Name Color Feature POWER Red/Green Both fans functioning: steady green led 1 or both fans down: steady red led 4.13.1.4.4 Adding a third module Replace the HSL1 board of the PowerCPU board with an HSL2 board. Page 152 9. Use OMC to restore the previously saved and modified configuration data. Migration to R8.x OmniPCX Office RCE Compact. 1. Use the OMC, Release 8 to save configuration data 2. Page 153 9. Use LOLA to restore the previously saved customer data. 10. Use OMC to restore the previously saved and migration, use the OMC configuration data. Configuration data. Configuration data. 4-107..

Page 154 Chapter 4-108... Page 155 Detailed description 5.1.1 DEFAULT CONFIGURATION 5.1.1.1 Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Lucent 4039 Digital Phone sets Each of these sets has 2 programmable keys (F1/F2) and 40 virtual add-on keys. Their default functions depend on:... Page 156 Chapter Figure 5.1: Virtual Key Functions for Operator Sets in KeySystem mode... Page 157 Figure 5.2: Virtual Key Functions for Manager/Assistant/Normal sets in KeySystem Mode... Page 158 Chapter Figure 5.3: Virtual Key Functions for Attendant sets in KeySystem mode... Page 160 Chapter Figure 5.5: [US only] Virtual Key Functions for Operator Sets in KeySystem Mode... Page 161 Figure 5.6: [US only] Virtual Key Functions for Manager/Assistant Sets in KeySystem Mode... Page 161 Figure 5.7: [US only] Virtual Key Functions for Normal Sets in KeySystem Mode... Page 161 Figure 5.7: [US only] Virtual Key Functions for Normal Sets in KeySystem Mode...

Page 163 Figure 5.8: Virtual Key Functions for Operator/Manager/Assistant/Normal Sets in PABX Mode... Page 164 Chapter Figure 5.9: [US only] Virtual Key Functions for Operator Sets in PABX Mode 5-10...

Page 165 Figure 5.10: [US only] Virtual Key Functions for Manager/Assistant Sets in PABX Mode 5-11... Page 166 The default functions of these keys are the same as for the sets detailed in Alcatel-Lucent IP Touch 4038 Phone, Alcatel-Lucent IP Touch 4038 Phone and Alcatel-Lucent 4039 Digital Phone sets . However, in this case the virtual keys are selected using 4 physical buttons, 2 on each side of the set's display, as shown below. Page 167 There are 10 pages of virtual keys (the pages can be scrolled through using the up/down buttons of the set's 4-way navigator), with 4 virtual keys on each page. 5.1.1.3 Alcatel-Lucent IP Touch 4018 Phone and Alcatel-Lucent 4019 Digital Phone sets Each of these sets has 6 programmable keys which have the default functions indicated below. Page 168 Chapter 5-14... Follow this start-up session to enter the data required to operate the system. The procedures below show the Alcatel-Lucent IP Touch 4068 Phone interface, but the menus are the same using the Alcatel-Lucent IP Touch 4038 Phone or Alcatel-Lucent 4039 Digital Phone interface and are similar using the Advanced interface.

Page 170 Chapter To restart the session from the beginning during programming. To restart the session if you quit using the Exit function 6.1.1.3 INSTALLATION NUMBER This number must be entered in its entirety. The number of your installation can include a maximum of three fields for a total of 18 digits. Page 171 : Used to choose one of the pre-programmed numbering plans: (2 to 4 digits, national or with *). Any modification of the numbering plan causes the deletion of any existing DDI numbers. 6.1.1.5 TERMINAL DDI NUMBERS This function is used to define the DDI numbers (Direct Dialing Inwards) of all the terminals of a Business system and the Administrative terminals (dedicated terminals) of a Hotel system. Page 172 Chapter Look through the list of internal directory numbers and validate the entry displayed. Delete the digits contained in the field "Direct no." (use the down arrow navigator key to display this option) Reject the complete list of DDI numbers as defined and return to the start of the function. Page 173 10: Number of numbers still available in the DDI table after configuration of Direct Dial numbers. In a Hotel installation, all the Z terminals are used as hotel room terminals (except the first which is a fax and the second which is a public telephone). A pool of DDI numbers means that these terminals can be assigned with a dynamic DDI number when a customer checks in.

Page 174 Chapter This function is only available for a business installation (in a Hotel only PCX mode is used). "PCX Mode" and "Intercom Mode" PCX Mode" an

A specific reinforced cable must link the "Config" RJ45 connector on the system CPU to the Com port of the PC using OMC. Page 180 6.2.3.4 OMC Remote Access By Modem With remote access, you can use OMC to configure or download an Alcatel-Lucent OmniPCX Office Communication Server system. This access can be managed using: an ISDN modem able to use ISDN PPP (point to point) protocol at 64K (1 B-channel) or... Page 181 The sub-sections below describe how to set up the following remote access methods: Direct V24 Connection (OmniPCX Office Direct V24) Remote connection via ISDN modem (an example is provided for driver installation) V24 Driver Installation Procedure 1. Page 182 6.2.3.4.2 Remote Access By The Analog Modem Analog Modem (recommended) Alcatel-Lucent OmniPCX Office Communication Server is equipped with an analog modem V34 for remote access through the public network. This modem provides a point-to-point communication link accessible via standard LINUX protocols (PPP, etc.). Page 183 In the remote access, the protocol used in the "data link" OSI layer is PPP (Point-to-Point Protocol).

The TCP/IP protocols are used respectively in the "transport" and "network" layers. For each layer, Alcatel-Lucent OmniPCX Office Communication Server carries out an access control.

Access With Proxy A proxy server can be added to improve security. To connect a remote OmniPCX Office via a proxy server. Figure 6.21: Configuration Example with a Proxy Server To configure a proxy server: 1. OmniPCX Office, requests the proxy account and password to connect to the proxy server. Figure 6.21: Configuration Example with a Proxy Server To configure a proxy server: 1. OmniPCX Office, requests the proxy account and the associated password, To modify the privileged user password: In OMC, select Options > Change Privileged User Password from the menu toolbar The Change Privileged User Password window opens. Page 186 Never write down your password. The first thing an attacker will do is rummage through your personal belongings. 6.2.4.1 Downloading software for Alcatel-Lucent OmniPCX Office Communication Server (OmniPCX Office RCE Small, Medium, Large platforms delivered in BTCO mode) To download the software, proceed as follows: 1. Open OMC. Because the OmniPCX Office RCE Compact platform does not use internal backup batteries like the other OmniPCX Office RCE Small, Medium, Large platforms, it is important not to cut off the cabinet's main power supply during software download. Any power shut down during the BIOS downloading will damage the PowerCPU. Page 188 Chapter 1. Mode 1: Data and tool repository 2. Mode 2: Typical installation 3.

Mode 3: Typical modification 4. Mode 4: Expert 5. Mode 5: Multisite Important: Access to modes 2, 3, 4 and 5 is password protected: pbxk1064 (using the OMC Easy tool) 6.2.5.1 Mode 1: Data and tool repository... Page 189 As well as the Business configuration, this wizard can be used to configure terminal numbers in the hotel rooms. 6.2.5.2.3 Installation Wizard This wizard enables you to use a .crp type file created under Data and tool repository Wizard. Follow the instructions;... Page 190 Mode 5: Multisite This new mode is available with Easy, EasyPlus and Expert Views. It allows you to manage several Alcatel-Lucent OmniPCX Office Communication Server systems. The Multisite feature includes the following basic services: An Installation Wizard to help installers and administrators to set up appropriate configurations when adding PBXs to a network. Page 191 settings are overwritten when configured PBXs are added to a network. 6-23... Page 192 Chapter 6-24...

network. 0-25... rage 192 Chapter 0-24...

Page 193 UL94-V2 7.1.1.1.2 External Battery Characteristics number: up to 2 for OmniPCX Office RCE Compact, up to 3 for OmniPCX Office RCE Small and Small shows the disposed of according to the battery manufacturer's instructions. Page 195 Note 1: Hot installation is forbidden in OmniPCX Office RCE Compact platforms. It is also forbidden for PowerCPU boards in all platforms. 1.

If a hot installation is not possible, stop the system and disconnect it from the mains power... Note 1: Hot swap is forbidden for PowerCPU boards in all systems. 1. If a hot swap is not possible, stop the system and disconnect it from the mains power supply. Page 197 Always wear a discharge device (bracelet, heel clip, etc.) to protect against electrostatic discharges. Avoid any knocks to the hard disk Do not touch the connector Handle the disk by holding it by the sides 7.1.1.6.2 Storage All hard disks must be stored in an electrostatic protective bag Avoid contact between hard disks Do not pile them up (even when packed) 7.1.1.6.3 Transport. Page 198 Chapter... Glossary 8.1.1 Automatic Call Distribution. A computerized phone system that responds to the caller with a voice menu, and connects the call to the required agent. It can also control call flows by automatically routing calls in the order of arrival. ACSE Association Control Service Element. Page 200 Chapter BACP Bandwidth Allocation Protocol. Control protocol associated with BAP. Bandwidth Allocation Protocol. PPP protocol that manages bandwidth by allocating it dynamically between two ports, i.e. between the two extremities of a point-to-point link. Bandwidth On Demand. Service that allocates bandwidth automatically in response to traffic volume. Basic Rate Access. Page 201 File Transfer Protocol. Standard protocol for exchanging files between remote computers over the Internet.

FTP/STP/UTP Foiled Twisted Pairs/Shielded Twisted Pairs/Unshielded Twisted Pairs. Types of connection cables to be used between an Alcatel-Lucent OmniPCX Office Communication Server and an external distribution panel. Page 202 Chapter 8.1.7 G.722 ITU-T 7 kHz wideband speech codec based on sub-band adaptive differential pulse code modulation (SB-ADPCM) within a bit rate of 48, 56 or 64 kbit/s. GATEKEEPER Secure directory server GATEWAY Device connecting different networks GENERAL BELL If the operator is absent, internal and external calls to the operator are directed to an external signaling device that lets any authorized terminal take these calls. Page 203 In the context of the OmniPCX Office, the LAN includes an IP network and provides services to the wired client and to the WLAN client: file server, proxy, main server. Page 204 IP addresses for internal purposes, while using just one IP address for external communication. Network Management Center. Workstation allowing a communication server administrator to remotely manage, administer (storage of call metering tickets for example) and optimize one or more Alcatel-Lucent OmniPCX Office Communication Server systems. Page 205 Remote Access Server. Remote access server to the system LAN. Rich Communication Edition (for example, OmniPCX Office RCE Compact is the short designation for Alcatel-Lucent OmniPCX Office Rich Communication Edition Compact).

RGO, RGI, RGM General resource keys supporting local and/or external calls, whether outgoing (RGO), incoming (RGI), or mixed (RGM). Page 206 Chapter Resource key for a particular destination; supports local calls for this number if assigned to a speed dial number, incoming calls for the number if assigned to a DDI number, or outgoing calls on a trunk group if assigned to a trunk group. Resource key dedicated to a set;... Page 207 TFTP Trivial File Transfer Protocol. The simplest network application for transferring files.

(Analog) Trunk Line connecting the system to the public switched network. Transport Layer Security. TSAPI Telephony Services API. Standard defined by Novell, based on ECMA's CSTA standard. Telephony Services to telephony devices (modem, phone set, etc.). 8.1.20 Universal Alcatel Interface. Page 208 AP is specified by the 802.11 family of specifications. The WLAN handset range includes Alcatel-Lucent IP Touch 310/610 WLAN Handsets are sometimes referred to as MIPT (Mobile IP Touch) handsets.