



# **IP Office PARTNER Version**

## **PARTNER Version Quick Installation Guide**

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#### Documentation information

For the most current versions of documentation, go to the Avaya Support web site (<http://www.avaya.com/support>) or the IP Office Knowledge Base (<http://marketingtools.avaya.com/knowledgebase/>).

#### Avaya Support

Avaya provides a telephone number for you to use to report problems or to ask questions about your contact center. The support telephone number is 1 800 628 2888 in the United States. For additional support telephone numbers, see the Avaya Web site: <http://www.avaya.com/support>.

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# Chapter 1.

# Introduction



# 1. Introduction

The Avaya IP Office Essential Edition - PARTNER® Version is a telephone system software that runs on the Avaya IP Office 500 V2 hardware platform. It is designed for small businesses and more specifically retail stores, manufacturers, and professional offices; generally with 5 to 25 users.

IP Office Essential Edition - PARTNER Version, although physically different, provides the same features and behavior as the Avaya PARTNER Advanced Communication System (ACS).

This quick guide explains how to install the IP Office Essential Edition - PARTNER Version system. It is intended that installation should be carried out by an Avaya trained technician using a laptop PC with IP Office Manager R6.0+ software installed. When this quick installation is completed systems running with analog trunks, should place and receive calls with no further programming or setup.

- The IP Office PARTNER Version system is a converged voice and data communications system. It should therefore only be installed by persons with telephony and IP data network experience.
- Installers must be trained on IP Office systems. Through its Avaya University (AU), Avaya provides a range of training courses including specific IP Office implementation and installation training. It also provides certification schemes for installers to achieve various levels of IP Office accreditation.
- It is the installer's responsibility to ensure that all installation work is done in accordance with local and national regulations and requirements. It is also their responsibility to accurately establish the customer's requirements before installation and to ensure that the installation meets those requirements.
- You should read and understand this documentation before installation. You should also obtain and read the Avaya Technical Bulletins relevant to recent IP Office software and hardware releases to ensure that you are familiar with any changes to the equipment and software.

## Limitations

This document contains only basic information for systems using standard analog telephone equipment. Essential Edition - PARTNER Version is an out of the box installation and is meant to be operational for analogue telephone users when it is switched on, without requiring any setting up or pre configuration.

For telephones that require system configuration such as SIP or Trunk settings, or if you are not fully familiar with the Avaya IP Office system, you should refer to the installation and configuration instructions contained in the *Avaya IP Office Essential Edition - PARTNER Version, Installation and Reference Manual* and the *Avaya IP Office Essential Edition - PARTNER Version, Administrator PC Tool*.

 Note: IP Office PARTNER Version can be installed without using Avaya IP Office Manager software but only if it is a very basic system. If this method of installation is used, only those sections of this document listed below are relevant.

Chapter 1 - Introduction (this section) and [System Constraints](#)<sup>[10]</sup> only.

Chapter 2 - [Getting Started](#)<sup>[12]</sup>; all

Chapter 3 - [System Installation](#)<sup>[18]</sup>; all except [Manager Responses](#)<sup>[24]</sup>, Changing Remote/Administration [password](#)<sup>[26]</sup> and [Final Actions](#)<sup>[29]</sup>.

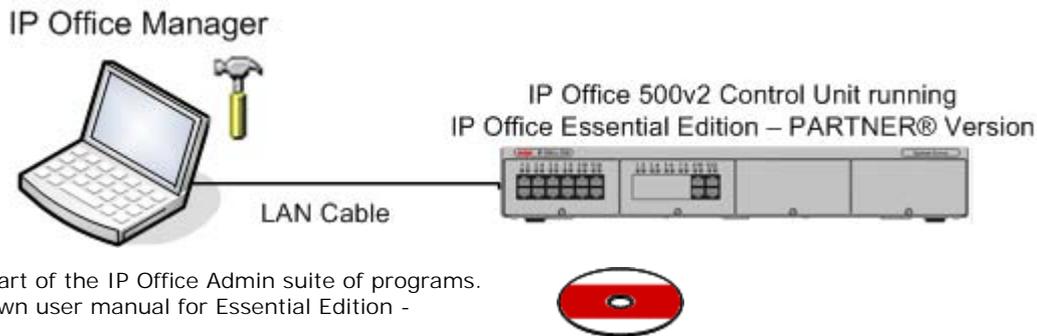
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## 1.1 IP Office Manager

 This data is provided for information only. It is not part of the installation procedure.

The Essential Edition - PARTNER Version Admin Tool (IP Office Manager) is an application for viewing and editing an IP Office system configuration. It is a tool meant primarily for system installers and maintainers. Manager runs on a Windows™ PC and connects to the Essential Edition - PARTNER Version equipment via Ethernet LAN connections. It is the recommended tool you should use during installation.

When Manager is used with Essential Edition - PARTNER Version, the PC running Manager is connected directly to the IP Office 500v2 control unit being installed or updated. Manager detects that an Essential Edition - PARTNER Version configuration is present and automatically starts in its Essential Edition - PARTNER Version mode, designed to manage the system.



Manager is part of the IP Office Admin suite of programs. and has its own user manual for Essential Edition - PARTNER.

You should note that the software level of Manager application is 2 higher than the software level of the IP Office 500 system core software with which it is released. For example IP Office Manager R8.0 was released with IP Office R6.0 core software.

Manager can be used to change, or introduce changes, to the Essential Edition - PARTNER Version system configuration. Easy to use hot links initiate administrator tasks

 **IMPORTANT**

Manager is an off-line editor. It loads a copy of the IP Office PARTNER Version system current configuration settings. Changes are made to that copy and it is then sent back to the IP Office 500v2 control unit for those changes to become active. This means that changes to the active configuration in the system that occur between Manager receiving and sending back the copy may be overwritten. For example this may affect changes made by users through their phone or voicemail mailbox after the copy of the configuration is received by Manager.

## 1.1.1 Installing Manager

 This data is provided for information only. It is not part of the installation procedure.

[Manager](#) is a component of the IP Office Admin Suite of applications. This suite is supplied on the IP Office Administrator Applications DVD. In addition to Manager, the suite includes:

- **System Monitor**  
This is a tool for system installers and maintainers. Interpreting the information output by System Monitor requires detailed data and telecoms knowledge.
- **System Status Application**  
This application that can be used to monitor the status of an IP Office system such as extension, trunks and other resources. It displays current alarms and most recent historical alarms.

### PC Requirements

Minimum PC Requirements	
RAM	256MB
Hard Disk Free Space	1GB*
Processor:	
- Pentium	PIII 800MHz
- Celeron	Celeron 3 800Mhz
- AMD	Athlon Opteron, Athlon64/XP
Additional Apps:	
- .NET2	Installed with Manager if not already present.

Operating System Support	
Server OS:	
Windows 2003 Server	✓
Windows 2008 Server	✓
Client OS:	
2000 Professional	✗
XP Professional	✓
Vista Business/Enterprise	✓
Vista Ultimate	✓
Windows 7	✓

\*Includes disk space required for .NET2 component.

## 1.2 System Constraints

 This data is provided for information only. It is not part of the installation procedure.

	Max allowed in system
IP Office Essential Edition - PARTNER Version Base Cards:	
Phone 8 - Base	3
Phone 2 - Base	3
DS 8 - Base	3
ETR-6 – Base (new)	3
6DS+2POTS+VCM10 LE Combination (new)	2
IP Office 500 Daughter Cards:	
ATM 4 Uni - daughter	3
PRI 1 Uni - daughter	1
IP Office 500v2 Expansion Modules:	
IP Office 500v2 PHONE 16	1
IP Office 500v2 DIGITAL STATION 16	1

System capacity for the Essential Edition - PARTNER Version is flexible and can use combinations of the following hardware components:

- Control unit (4 available slots – maximum of 4 of the following cards):
- The first (left hand) slot of the control unit must have a DS or ETR ports base card fitted. This is because in the Essential Edition - PARTNER Version, extensions 10 and 11 (ports 1 and 2) must support digital supervisor telephones.
- Up to 2 Combination cards (each provides 6 DS ports; 2 POTS station ports; 4 POTS line ports; and supports up to 10 SIP lines)
- Up to 3 ETR-6 cards (each provides 6 ETR station ports)
- Up to 3 DS8 cards (each provides 8 digital station ports)
- Up to 3 Phone 8 cards (each provides 8 POTS station ports)
  - o Maximum of 3 because a combination card; DS-8 or ETR-6 must be present in system
- Up to 3 Phone 2 cards (each provides up to 2 POTS station ports)
  - o Maximum of 3 because a combination card; DS-8 or ETR-6 must be present in system

An ATM4 daughter card can be added to any ETR6 card or DS card, or Phone card increasing POTS line capacity. 1 PRI/T1 daughter card may be added to any ETR-6 card or DS card or Phone card, increasing digital line capacity.

One expansion module may be added to the main control unit; providing additional growth capability. The supported expansion modules are:

- DS16 Expansion Module (adds 16 additional digital station ports.)
- Phone 16 Expansion Module (adds 16 additional analog station ports)

Based on these configurations; an Essential Edition - PARTNER Version may support up to 56 lines (1-PRI; 3 ATM4; up to 10 SIP trunks) and up to 48 stations (Up to 18 ETR stations and/or 46 digital ports + 2 POTS). Maximum growth capabilities are software blocked in the system.

IP Office PARTNER Version will support up to 10 SIP trunks, which can be assigned across multiple SIP service providers.

The following features are pre-assigned on the ETR-18D and 34D telephones:

- Last Number Redial
- Drop
- Voice Mail Access. Each extension has voice mailbox assigned with Automatic Voice Mail Coverage turned on.
- Recall (CO hook flash)
- Auto Line Selection – L1, L2, etc.

# Chapter 2.

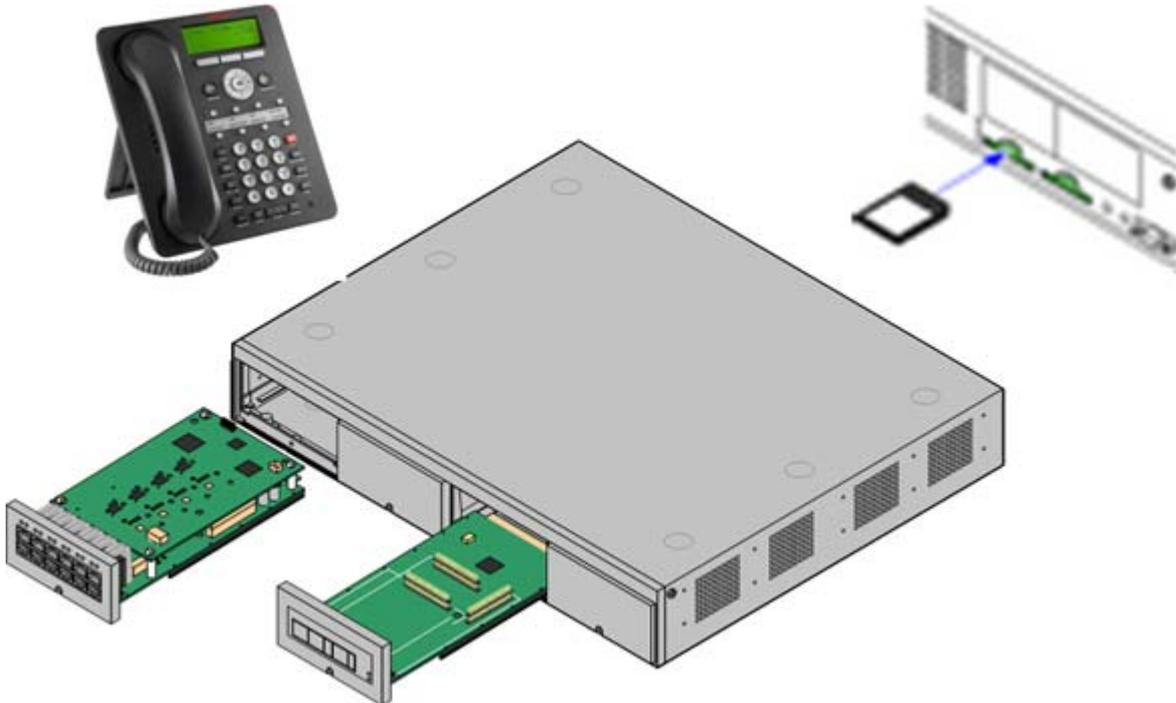
# Getting Started

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## 2. Getting Started

This chapter describes preparation work that should precede installation of the Essential Edition - PARTNER Version equipment and software.

### *System components*



### Pre requirements

- IP Office 500v2 control unit with power lead
- Base and daughter cards fitted to base cards as necessary, to fulfill customer system requirements
- Minimum of 1 digital (supervisor) telephone provided by the customer
- Avaya SD Card registered to customer
- Mounting kits installed if units are not to be freestanding.



### *Tools Required*

1. Phillips No. 1 screwdriver for removal of module covers.
2. Cutter for cable ties.
3. Phillips No. 4 screwdriver.
4. Flat screwdriver No 5 medium size.
5. Wrist-strap for anti-static grounding or similar.
6. PC running Windows XP/2003.

During the Staging Installation later in this manual, we recommend that you use a Laptop PC that has the IP Office Manager Essential Edition - PARTNER Version Administration Tool (Manager) application installed with a LAN cable for direct connection to the control unit, to enable changes to be made in the basic configuration or to set up user lists.

7. Indelible marker for cable labeling.

 *Parts Required*

1. Cable ties.
2. Cabling labels.

3. Technical Bulletins

Each IP Office PARTNER Version software release is normally accompanied by a Technical Bulletin detailing special installation requirements, known issues, etc. Various software releases and their associated Technical Bulletins can also be obtained from <http://support.avaya.com>.

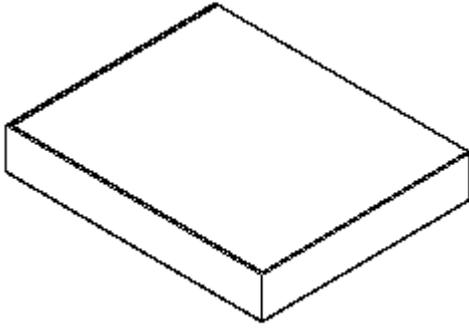
Pre-installation activity involves the following:

- Evaluating the environmental requirements
- Connecting lines and extensions
- Identifying telephone type to be installed at each extension
- Mounting and connecting auxiliary equipment
- Obtain a Laptop PC which has [IP Office Manager R6.0](#) <sup>8</sup> or above installed
- Ensure you have a pre programmed Avaya SD card that is compatible with the system you are about to install.

Note: The pre-installation tasks listed above should have been completed before installing the hardware

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## 2.1 Unpacking



Use the following procedure when unpacking any equipment supplied by Avaya or an Avaya reseller or distributor.

 Objective - To check that the correct equipment has been supplied and that no damage has occurred during transit.

 Information Required

- Equipment Checklist.  
Obtain an installation checklist of the parts and equipment expected.
- Identify the SD memory Card  
The serial number is printed on the SD, prefixed with either *SN* or *FK*

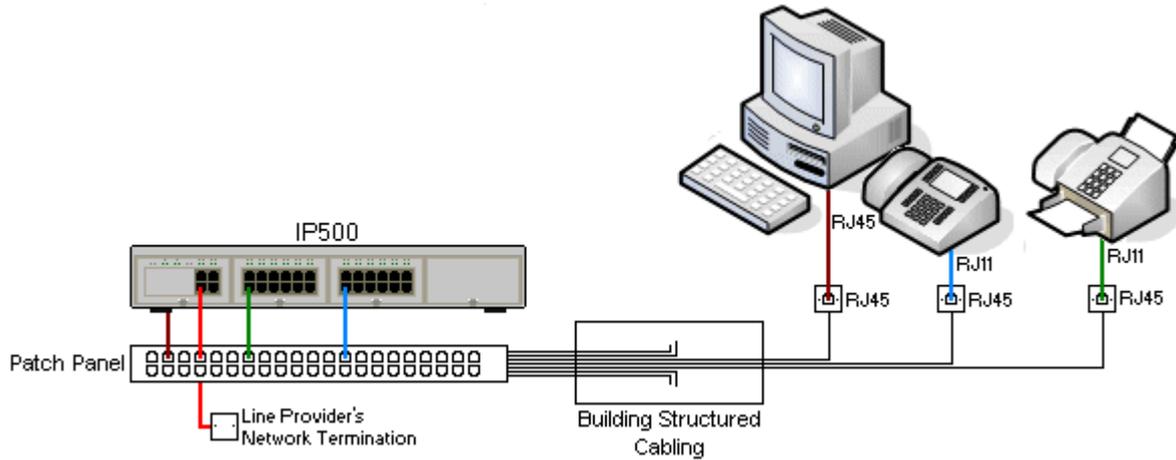


- Check for Package Damage.  
Before unpacking any equipment, check for any signs of damage that may have occurred during transit. If any damage exists bring it to the attention of the carrier.
- Check the Correct Parts Have Been Delivered.  
Check all cartons against the packing slip and ensure that you have the correct items. Report any errors or omissions to the equipment supplier.
- Retain All Packaging and Documentation.  
While unpacking the equipment, retain all the packaging material. Fault returns are accepted only if repackaged in the original packaging. If performing a staged installation, the original packaging will also assist when repacking equipment to be moved to the final install site.
- Ensure that Anti-Static Protection Measures are Observed.  
Ensure that anti-static protection measures are observed at all times when handling equipment with exposed electrical circuit boards.
- Check All Parts.  
Visually inspect each item and check that all the necessary documentation and accessory items have been included. Report any errors or omissions to the dealer that supplied the equipment.
- Check All Documentation.  
Ensure that you read and retain any documentation included with the equipment.

## 2.2 Cabling and Cables

The Essential Edition - PARTNER Version system is designed primarily for use within an RJ45 structured cabling system using CAT3 unshielded twisted-pair (UTP) cabling and RJ45 sockets.

A structured cabling system is one where cables are run from a central RJ45 patch panel in the communications/data room to individual RJ45 sockets at user's desk. All wires in each cable between the patch panel and the desk socket are connected straight through. This arrangement allows devices connected at the patch panel to be swapped to match the type of device that needs to be connected at the user socket. For example, making one user socket a phone port and another user socket a computer LAN port, without requiring any rewiring of the cables in between.



- **Traditional IDC Punchdown Wiring Installations**  
Where necessary, the far end RJ45 plug can be stripped from IP Office cables and wired into traditional wiring systems using punch-block connectors. This type of installation should be performed by an experienced wiring technician.
- **Trunk Connections**  
The majority of IP Office trunk ports use RJ45 connectors for acceptance of an RJ45-to-RJ45 cable. However, connection at the line providers end may require use of a different plug type in order to match the line providers equipment.
- **RJ11 Phone Connectors**  
Many phones use RJ11 sockets and are supplied with RJ11-to-RJ11 cables. RJ11 plugs can be inserted into RJ45 sockets and in many case the connection will work. However this is not recommended or supported as the connection lock is not truly positive and may become disconnected. An RJ45-to-RJ11 cable should be used for these connections.

## Standard IP Office Cables

The following are Avaya standard cables available for use with IP Office systems. The maximum length is applicable if the standard Avaya cable is replaced with an alternative cable.

Cable	Description	Part number	Standard Length	Maximum Length
9-Way DTE Cable	Connects to control unit RS232 DTE port. 9-Way D-type plug to 9-way D-type socket.	–	2m/6'6"	2m/6'6"
Structured Cabling DS Line Cable	Connects from RJ45 sockets to RJ11 socketed digital station and analog phones.	700047871	4m/13'2"	See table below.
PRI Trunk Cable	Connects PRI trunk ports to the line providers network termination point. RJ45 to RJ45. Red.	700213440	3m/9'10"	–
Expansion Interconnect Cable	Connects the control unit to expansion module. RJ45 to RJ45. Blue.	700213457	1m/3'3"	1m/3'3"
LAN Cable	Connects from IP Office LAN ports to IP devices. RJ45 to RJ45. Grey.	700213481	3m/9'10"	100m/328'

The table below details the maximum total cable distances for DS and analog extensions using different cable types.

Telephone	Unshielded Twisted-Pair (UTP) - 50nf/Km			CW1308
	AWG22 (0.65mm)	AWG24 (0.5mm)	AWG26 (0.4mm)	
1400 Series	1000m/3280'	1000m/3280'	400m/1310'	400m/1310'
ETR	1000m/3280'	1000m/3280'	400m/1310'	–
Analog Phones	1000m/3280'	1000m/ 3280'	400m/1640'	800m/2620'

# Chapter 3.

# System Installation

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## 3. System Installation

The procedures detailed in this section take you through an installation of Essential Edition - PARTNER Version. The instructions should all be completed in the order they are given.



**Objective** - To prepare and connect the major units of an Essential Edition - PARTNER Version system so that it is capable of being used for making and receiving telephone calls.

This installation section assumes that phones are being connected to IP Office PARTNER Version within an existing RJ45 structured cabling system. If phone connections are being made through older punchdown wiring systems then the installer is expected to be qualified and approved for that type of installation.

The basic installation procedure described in following sections of this document is as follows:

1. [Equip](#) [22] the [control unit](#) [19] with base cards fitted with daughter cards where needed. Insert [base cards](#) [22] working from left to right and do not leave unoccupied slots between cards.
2. Insert the supplied [SD](#) [21] card
3. Connect the [Manager](#) [8] laptop PC to the [control unit](#) [19]
4. Connect telephones to extensions 10 and 11 (Admin users)
5. Apply power to the control unit. The control unit automatically configures the connected system.
6. Start up the PC and run the Manager application. Ignore the splash screen display because as yet, it has not discovered an Essential Edition - PARTNER Version system to manage.
7. Manager software on the PC displays the Welcome screen, identifies basic system components and system settings.
8. Plug in [telephone](#) [25] connectors to the remaining extensions.
9. Apply simple housekeeping rules to cables by tying them in associated and clearly labeled bundles.
10. Route cables carefully so that they do not intrude the working area or create a hazard.
11. [Manager](#) [8] can be used to prepare user lists, permissions, group memberships and other administration tasks or the customer may do this through handset (TUI) actions detailed in the Essential Edition - PARTNER Version - *ETR Telephone System Programming and User Guide*.

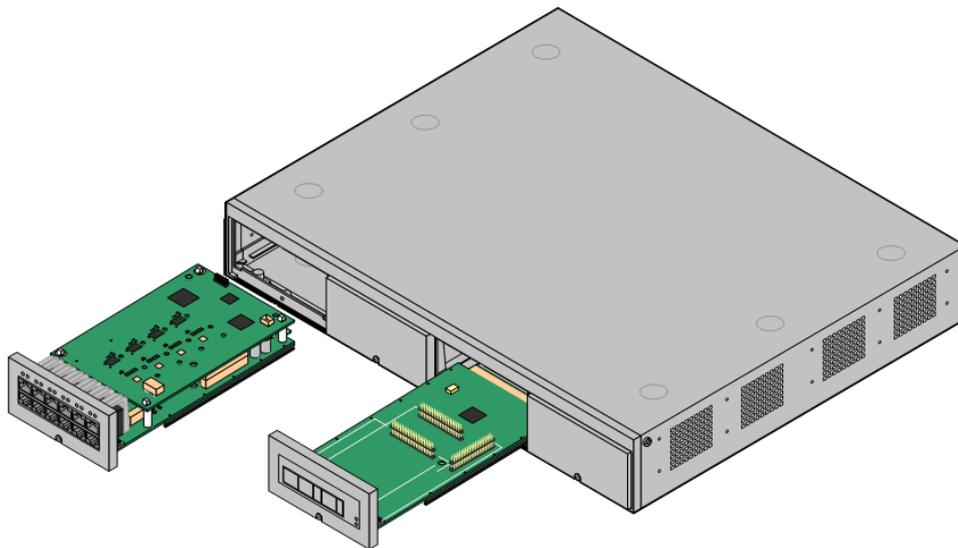
The procedures identified above are elaborated in the following sections.



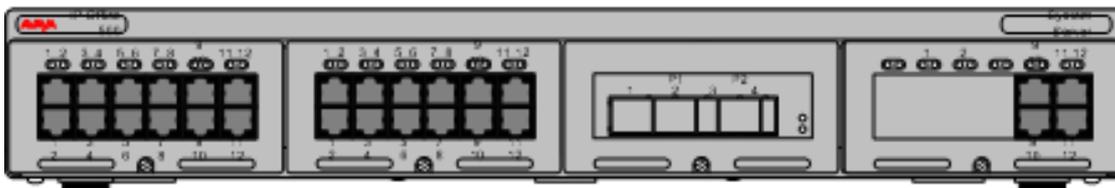
**Note:** Connection to analog and digital phones not located in the same building as the IP Office PARTNER Version is only supported with the addition of additional protective equipment and additional installation requirements. See "Out of Building Telephone Installations" in the *Avaya IP Office IP Office PARTNER Version Installation and Reference Manual*.

### 3.1 Control Unit

The IP Office 500v2 slots are numbered 1 to 4 from left to right. They can be used in any order. (See [Constraints](#)<sup>[10]</sup>) However, if the capacity for a particular type of card is exceeded, the card in the rightmost slot will be disabled. The control unit must not be used with uncovered slots as this would affect unit cooling.



Removable Base Cards



Typical Card Complement

Feature	Capacity
Maximum Extensions	Up to 48 extension ports of which there may be a maximum of 18 ETR ports.
Conference Parties	Maximum 64 in any individual conference. Silence suppression is applied to conferences with more than 10 parties.
Trunks Cards	Four. Any combination of IP500 trunk daughter cards and up to two IP400 trunk cards.
VCM Card Slots	Four. Up to a maximum of 128 channels using two IP500 VCM cards.
Locales	Supported in Canada, United States, plus Countries that support North American telephony (US) standards
Software Level	<ul style="list-style-type: none"> <li>IP Office core software level R6.0 minimum.</li> <li>Bin file = ip500v2.bin.</li> </ul>
Power Supply	Internal power supply unit.
Mounting	Free-standing, rack mounted (requires IP500 Rack Mounting Kit) or wall mounted (requires IP500 Wall Mounting Kit).
Dimensions	Width: 445mm/17.5". Depth: 365mm/14.4". Height: 73mm/2.9"/2U. Clearance: 90mm minimum all sides, 220mm at front. 500mm all side when wall mounted.
Memory	Maximum configuration file size: 2048KB.

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### 3.1.1 Grounding

Use of ground connections reduces the likelihood of problems in most telephony and data systems. This is especially important in buildings where multiple items of equipment are interconnected using long cable runs, for example phone and data networks.

All IP Office control units and external expansion modules must be connected to a functional ground. In some cases, such as ground start trunks, in addition to being a protective measure this is a functional requirement for the equipment to operate. In other cases it may be a locale regulatory requirement and or a necessary protective step, for example areas of high lightning risk.

-  **WARNING**  
During installation do not assume that ground points are correctly connected to ground. Test ground points before relying on them to ground connected equipment.

The ground point on IP Office control units and external expansion modules are marked with a  or  symbol. Ground connections to these points should use a 14 AWG solid wire with either a green sleeve for a functional ground or green and yellow sleeve for a protective ground.

- **Additional protective equipment**  
In addition to grounding, additional protective equipment will be required in the following situations. Refer to "Out of Building Telephone Installations" in the main *Avaya IP Office IP Office PARTNER Version Installation and Reference Manual*.
  - On any Digital Station or Phones external expansion module connected to an extension located in another building.

## 3.2 SD Card

The IP Office 500v2 control unit used in Essential Edition - PARTNER Version has two SD card slots on the rear panel labeled System SD and Optional SD.

Various IP Office 500v2 features and applications including a license key are required for the system configuration. These are stored on the SD card.

The serial number, also known as the feature key, is printed on the SD, prefixed with either *SV* or *FK*.

Except during maintenance the System SD slot must contain an Avaya SD card at all times. The files on that card are used when the Essential Edition - PARTNER Version system is started because the Feature Key serial number only present on Avaya cards is used for the licensing of IP Office features.

The Optional SD slot can be used for an optional second card to store occasional copies of the System SD card or individual files. Non-Avaya cards can be used for this as long as they conform to the standard below:

Format rules: SDHC minimum 4GB FAT32 format (Single partition, SDHC, class2+, FAT32, SPI & SD bus).

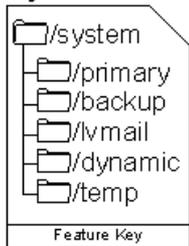


### SD Card Removal

SD cards should never be removed while being used. Though the SD card slot LEDs indicate when data is being written to an SD card, lack of flashing LED is not a sufficient safeguard. If the System SD card is removed, licensed features will continue operating for up to 2 hours. This allows card replacement on a live system. However the control unit is not fully functional until 2 hours after SD card re-insertion.

The System SD card contains the following folders:

### System SD



- primary  
Contains the firmware files for the control unit, external expansion modules and supported phones. The folder can also contain music on hold files and license key files. This is the main set of files used by the IP Office system when booting up. Also contains the stored copy of the Essential Edition - PARTNER Version configuration.
- backup  
Contains a copy of the primary folder at some previous point. A backup copy of the primary contents to this folder can be invoked manually (using Manager or SSA) or as part of the IP Office software upgrade using Manager.
- lvmail  
Contains the prompts used by embedded voicemail and the mailbox messages.
- dynamic  
Contains files used by the Essential Edition - PARTNER Version and retained through a reboot of the system.
- temp  
Contains temporary files used by the Essential Edition - PARTNER Version and not retained through a reboot of the system.

The Optional SD card can contain a similar set of folders. These are used as an additional backup or they can be used as the source for upgrading the contents of the System SD card.

The SD Card can be backed up and copied. The Manager [application](#) <sup>8</sup> enables updates and changes to be made to the SD Card content. Separate instructions for these tasks are contained in the *IP Office Administrator PC Tool (Manager) user manual*.

## 3.3 Fitting Base Cards

### General Notes

- Fit all the internal IP Office 500 cards before powering up the control unit.
- The first (left hand) slot of the control unit must have a DS or ETR ports base card fitted. This is because in the Essential Edition - PARTNER Version, extensions 10 and 11 (ports 1 and 2) must support digital supervisor telephones.
- Remaining cards can be fitted in any order into any available slots. The only exception is the IP Office 500 4-Port Expansion card which can only be installed in right hand slot 4.
- It is recommended that cards are fitted from left to right, otherwise automatic system number allocation could be inconvenient.
- There are restrictions to the number of supported cards of some types. When such a [limit](#) <sup>(10)</sup> is exceeded, the right-most card of that type will not function.
- Ensure that you use the labels supplied to identify the card fitted into the control unit.

### ⚠ Warnings

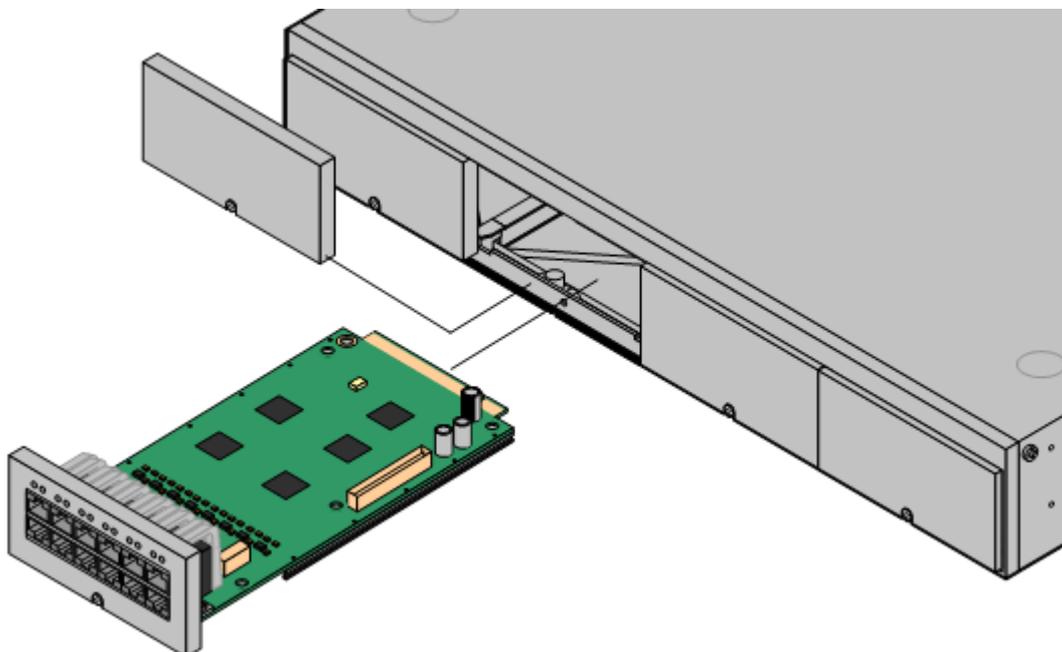
- Correct anti-static protection steps should be taken while handling circuit boards.
  - Cards must never be added or removed from the control unit while it has power connected.
- Tools Required
- 5mm Flat-blade screwdriver.



- Anti-static wrist strap and ground point.

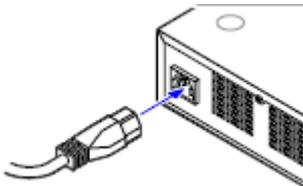
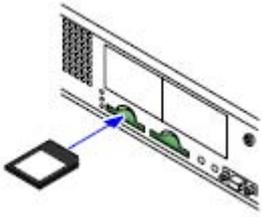
### Installing Base Card

1. Check that there is no power to the control unit.
2. Using a flat-bladed screwdriver, remove the cover from the slot on the front of the control unit that will be used for each card being installed. This cover is no longer required but should be retained until installation has been completed.



3. Starting at the left hand slot, insert cards. Allowing the card to rest against the bottom of the slot, begin sliding it into the control unit. When half inserted, check that the card rails have engaged with the slot edges by trying to gently rotate it. If the card rotates remove it and begin inserting it again.
4. The card should slide in freely until almost fully inserted. At this point apply pressure at the base of the front of the card to complete insertion of the connector.
5. Using a flat-bladed screwdriver secure the card.

## 3.4 Going Live



During installation it is recommended that the control unit is started without it being connected to any other unit. This ensures that the <%SHORT NAME%> defaults to a known set of IP address settings.

1. With power off, insert the SD card in the first (System SD) control unit rear panel slot.
2. Connect the installation laptop via an R45 lead to the LAN socket on the control unit rear panel.

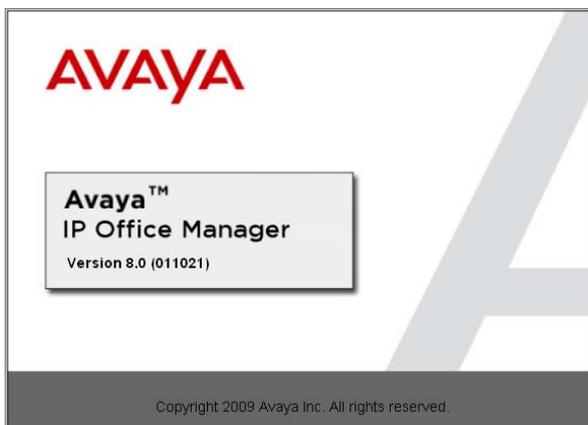
3. Apply power to the control unit

4. As the control unit goes through its start-up cycle, make the following checks:

- The CPU LED changes to green (rear of unit)
- The System SD LED changes to green (rear of unit)
- The LAN connection LED flashes and then settles to steady green (rear of unit)
- Card module front lamps light randomly but after approximately 30 seconds the No.1 lamps flash together once every 5 seconds (front of unit)
- If the control unit does not behave as above power it down and ensure all base card connectors are fully engaged.
- If retry fails, call Avaya support or refer to the Avaya IP Office PARTNER Version Installation and Reference Manual for more detailed installation instructions and technical information.

5. Start up Manager on the installation laptop.

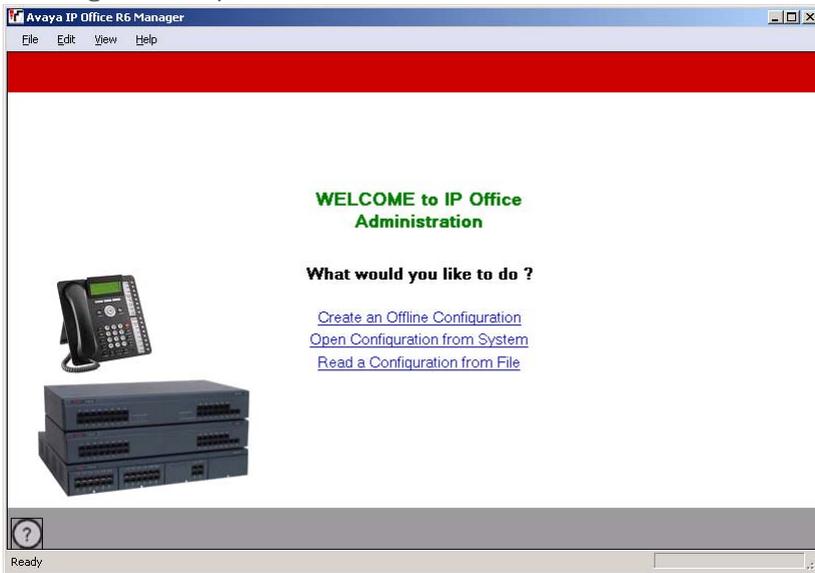
The splash screen displays briefly as Manager application starts. No response or action is required



### 3.5 Manager Responses

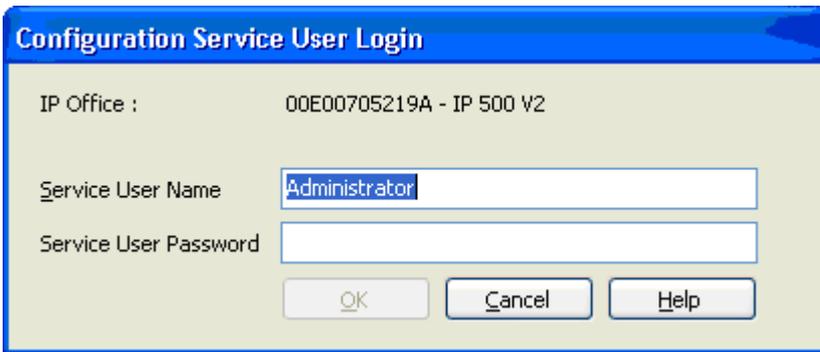
Manager, running on the laptop will detect Essential Edition - PARTNER Version has started up correctly

During start-up



This is called the Welcome view and is presented briefly during application start, followed by log-in session and presentation of the Administration screen.

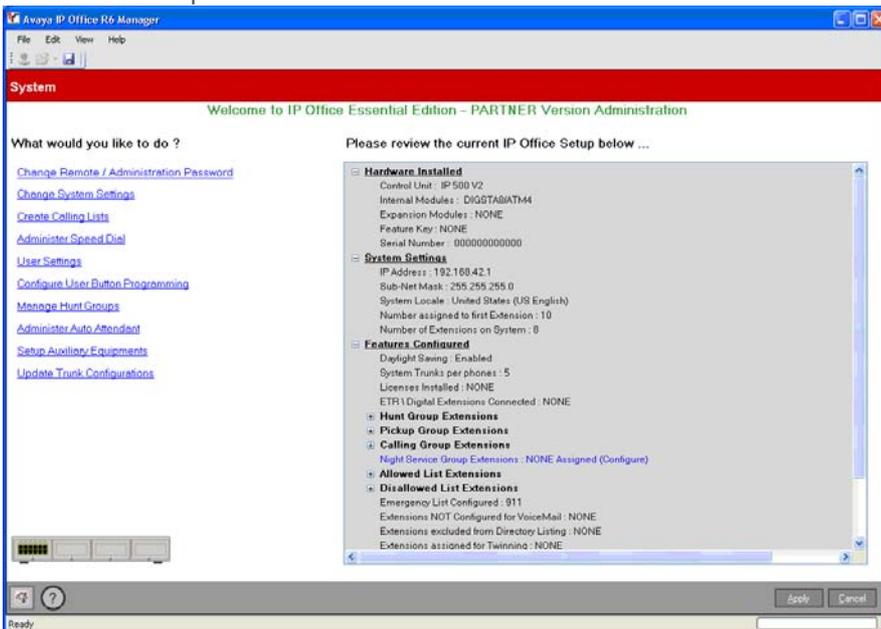
**i** This view remains displayed if Manager is unable to find a configuration file that is compatible with Essential Edition - PARTNER Version. This can be because the control unit is not powered up, or incorrect connection, thus preventing the manager application accessing the contents of the SD card. Refer to the separate Admin tool user manual for further instructions



The login dialog is displayed  
Default Service User password is Administrator

After successful login the welcome screen is replaced by the Administrator home page

After start-up



The Manager screen changes to this Admin home page as soon as the control unit has completed booting.

This view confirms that installation of the Essential Edition - PARTNER Version system has been successful

## 3.6 Connecting the System

If the site already has a patch panel for all outside lines and extensions, you should be able to use the existing wiring to install the system hardware and connect telephones to the system yourself.

### During control unit startup

- **Extensions and Users**  
A user is automatically created for each physical extension port detected in the system. Users are assigned extension numbers starting from 10. User names take the form Extn10, Extn11, .....
- **Hunt Group**  
A single hunt group 1 called Main is created and the first 10 users are placed into that hunt group as members. There are 1 to 6 hunt groups available.
- **Incoming Call Routes**  
Two default incoming call routes are created. Voice calls are routed to the hunt group Main.

### Installing Telephones

After you have installed the IP Office 500v2 control unit and have connected the line and extension cords and gone [live](#) <sup>23</sup>, you are ready to install the telephones. Installing the telephones includes assembling, connecting and testing, the telephone. As desired, you also can connect an Intercom Autodialer to certain telephones

### Assembling PARTNER Telephones

All PARTNER telephones are shipped with a stand for either desk-mounting or wall-mounting the telephone. For other telephones, see the instructions that are provided with the telephone.

Gather the line and extension cords hanging from the control unit and twist-tie or wire-wrap them.

### Testing the modules

1. Test the base card modules by doing the following:
  - a. Plug a system telephone into the first port on each module.
  - b. Press the line button on the telephone for each outside line and listen for a dial tone.

### Connecting handsets

1. For telephone systems that are based on a patch (intermediate) connection system:
2. Connect line cords to the line jacks on the modules.
3. Connect the free end of each line cord to the appropriate telephone network interface jack
4. Fill each module before moving to the next module to the right

 As each handset is connected any necessary software it contains is automatically checked and updated as necessary.

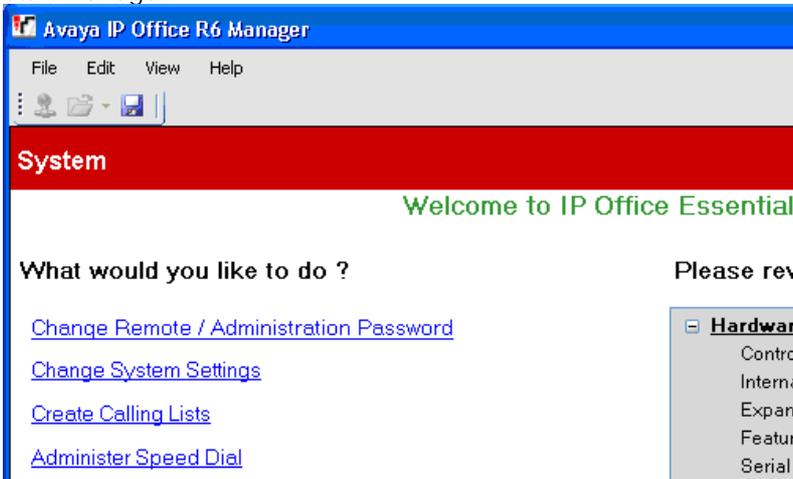
### 3.7 Change Admin Password

This password controls remote or local access to the system to make administrative changes to the overall set-up such as changes to the configuration or equipment. The administration password can only be changed by an administrator.

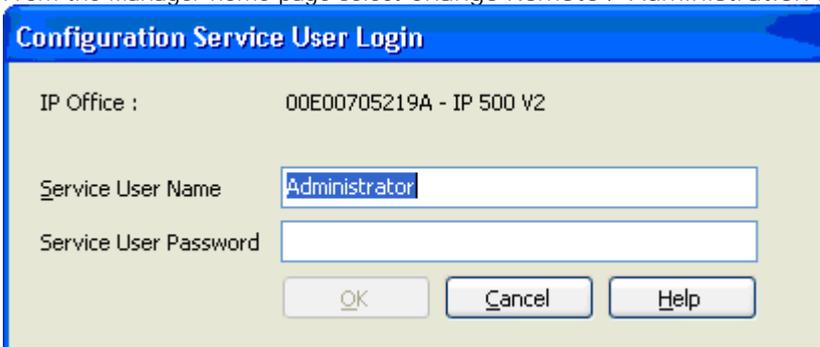
-  **WARNING - Administration Password Change Required**  
New Essential Edition - PARTNER Version systems use default security settings. These settings must be changed to make the system secure. As a minimum, you must change the default Remote/Administrator Password. Failure to do so will render the Essential Edition - PARTNER Version system potentially unsecured.

Change Remote/Administrator Password using Manager

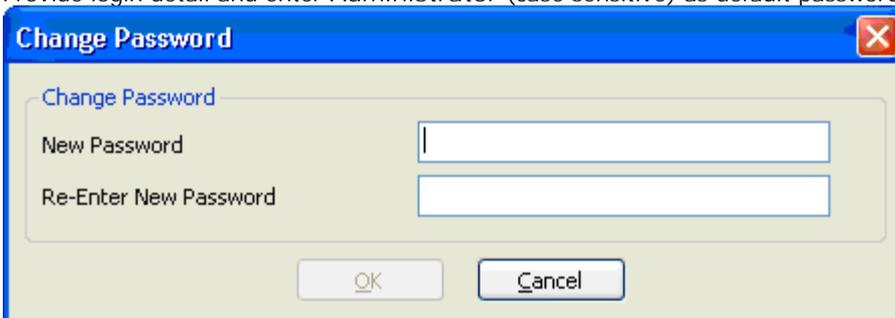
1. Start Manager.



2. From the Manager home page select Change Remote / Administration Password. A log in dialog is displayed.



3. Provide login detail and enter Administrator (case sensitive) as default password. The change dialog is displayed.



4. Make required changes and click OK.

 Remember you are changing the password for accessing the Essential Edition - PARTNER Version system to which you are attached, not the manager application.

**Change remote administration password from a ETR 18D/34D phone**

1. At a system administration extension (10 and 11); with the phone idle press Feature 0 0 followed by two presses of Intercom 1. System Administration: is shown on the display.
2. Dial #730.
3. If a [system password](#) <sup>28</sup> has been set, the prompt Enter Sys Password: is displayed. Enter the four digit system password.
4. The current password (default for new systems is Administrator) is displayed.
5. Enter or change the password.
  - Enter a character by pressing the indicated button until that character is displayed. If you pause more than 1 second after press a button, the cursor will move onto the next space.

1	1!"\$%&'()+,-./	2	2abcABC	3	3defDEF
4	4ghiGHI	5	5jkJKL	6	6mnoMNO
7	7pqrsPQRS	8	8tuvTUV	9	9wxyzWXYZ
*	*.;<=>?@[\\]^_`	0	0Space	#	#

6. To save the password, press Enter. The bottom line of the display shows the password as it has been entered.
7. Exit programming by pressing Feature 00. You can also exit programming mode by lifting the handset, then place it back in the cradle.

**Change remote administration password from a 1408/1416 phone**

1. At either of the system administration telephones (extensions 10 and 11), with the phone idle press Admin.
2. Use the ▲ up or down ▼ arrow buttons to scroll the display to System Administration. When displayed, press Select.
3. Dial #730.
4. If a [system password](#) <sup>28</sup> has been set for the system, you will be prompted to enter that password before you can proceed.
5. The display will show Remote password:.
  - Enter a character by pressing the indicated button until that character is displayed. If you pause more than 1 second after press a button, the cursor will move onto the next space.

1	1!"\$%&'()+,-./	2	2abcABC	3	3defDEF
4	4ghiGHI	5	5jkJKL	6	6mnoMNO
7	7pqrsPQRS	8	8tuvTUV	9	9wxyzWXYZ
*	*.;<=>?@[\\]^_`	0	0Space	#	#

4. Use the dial pad to enter an password of up to 8 characters. When completed press Enter. To remove the characters entered so far press Clear.
5. Exit programming by pressing PHONE/EXIT. Alternatively use the Back button to move to another menu.

---

## 3.8 Set System Password

The system password is a four-digit password that users can enter from their telephones to override dialing restrictions if the extension has access to an outside line. Through system administration you can set and change the system password from extensions 10 or 11.

- The password overrides all dialing restrictions.
- Once a password is programmed, you must enter it to turn Night Service on and off. Additionally, if night service is on, users in the Night Service Group must enter the password to make any outgoing calls except calls to numbers on the Emergency Phone Number List and marked system speed dial numbers.
- Dialing restrictions for extensions not in the Night Service Group remain the same as during normal daytime operation.

### Set/Change System Password using Manager

Once Essential Edition - PARTNER Version is installed, the responsibility for setting this password rests with the customer. You should point this fact out and if required, make the change using manager before you leave as follows:

1. In the *System Parameters* box, change system password (Field accepts digits only)
2. Click the hot link "Change System Settings"

### Set/Change System Password from an ETR 18D/34D phone

1. At a system administration extension (10 and 11); with the phone idle press Feature 0 0 followed by two presses of Intercom 1. System Administration: is shown on the display.
2. Dial #403. The phone displays Set System Password.
3. Enter a four-digit password.
4. Exit programming by pressing Feature 00. You can also exit programming mode by lifting the handset, then place it back in the cradle.

### Set/Change the system password from a 1408/1416 phone

1. At either of the system administration telephones (extensions 10 and 11), with the phone idle press Admin.
2. Use the ▲ up or down ▼ arrow buttons to scroll the display to System Administration. When displayed, press Select.
3. Use the ▲ up or down ▼ arrow buttons to scroll the display to Restrictions/Permissions. When displayed, press Select.
  - Alternatively, dial # and the same code as used by ETR phones for system administration.
4. Use the ▲ up or down ▼ arrow buttons to scroll the display to Set System Password. When displayed, press Select.
5. The current setting is displayed.
6. Enter the new four digit system password. Use Default to return to the default setting of no password.
7. Exit programming by pressing PHONE/EXIT. Alternatively use the Back button to move to another menu.

### 3.9 Final Actions

You may be required to compile calling lists, build groups and allocate permissions etc. before leaving the customer premises. This depends on arrangements made between your local office and the customer. If required, use Manager to create any lists. Changes to the basic Essential Edition - PARTNER Version configuration, setting up trunks, adding licenses etc. are detailed in the *Avaya IP Office IP Office PARTNER Version Administrator PC Tool User Guide* identified in the [Introduction](#) [7].

 As you use Manager to make changes to the IP Office PARTNER Version setup, you are forced to save or discard changes you have made before leaving any set-up screen to go on to another task. However, you should remember that you are accumulating these changes in a COPY of the control unit configuration file which must be saved back to the SD card before changes are effective. Similarly, system changes such as plugging in handsets during this time are recognized by the IP Office PARTNER Version system but are undetected by Manager which is working with a copy of the configuration file. Avaya recommend that whilst using Manager you save the configuration file at frequent intervals to ensure the working copy and Manager copies of the configuration file remain as compatible as possible.



Do not leave the Manager application open for long periods and particularly when it is not being used. Do not power down the system after changes, until a backup is taken. Backup instructions may be found in the IP Office PARTNER Version *Administration PC Application User Guide*.

Check system operation and gather all packing materials for disposal.

If appropriate, obtain sign-off signature from the customer.

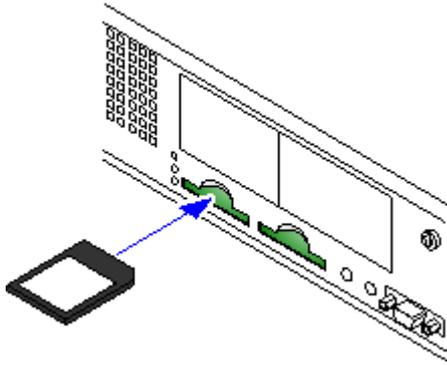


# Chapter 4.

# Troubleshooting

# 4. Troubleshooting

## Install problems



- Have you inserted the correct Avaya System SD card into the System SD slot on the rear of the control unit.
  - Ensure that you have the correct card. There are three versions, A-Law, Mu-Law and Partner Version.
  - Ensure that the card has the level of software required. If necessary the card can be upgraded to match a version of IP Office Manager.
- The control unit loads firmware from the System SD card with which it uses to upgrade itself and the components installed in the control unit.
- This process takes approximately a minute. The end of this process is indicated by LED1 on each base card flashing every 5 seconds. LED9 on each base card fitted with a trunk daughter card also flashes every 5 seconds.
- The control unit then begins upgrading the external expansion module (if fitted). This is indicated by the red center LED on each module flashing red. The process is completed when the LED changes to steady green.

The LEDs on the rear of the control unit go through the following sequence during a normal start up. Note that the times are approximately only:

LED	4s	4s	12s	5s	2s	5s	5s	10s	10s	Finished
CPU	Orange	Green	Green	Green Red	Green	Green	Green	Green	Green	Green
System SD	Orange	Off	Green	Green	Green	Off	Green	Green	Green Flash	Green
Optional SD If present.	Orange	Off	Green	Green	Green	Off	Off	Green	Green	Green

On the front of the control unit, LED1 on any IP500 base cards fitted is used as follows. LED9 is also used for any trunk daughter cards fitted.

LED	30s	30s	Finished
LED1/LED9	Red	Red Fast Flash	Red Flash every 5 seconds

## Checking the LEDs

### Control Unit LEDs

LED	Description
Optional SD System SD	Green on = OK, Flashing Green = reading or writing, Red = card not inserted correctly or missing
CPU	<ul style="list-style-type: none"> <li>• Alternate red/green = Starting up.</li> <li>• Green on = Okay.</li> <li>• Red on = No software.</li> <li>• Flashing Red = Error/Shutdown.</li> </ul>

### Base Card LEDs

Base Card	LEDs 1 to 8 Usage												
All Cards	<ul style="list-style-type: none"> <li>• LED1 is used for base card status: <ul style="list-style-type: none"> <li>• Red On = Error</li> <li>• Red Flash every 5 seconds = Card okay.</li> <li>• Red Slow Flash = Initializing.</li> <li>• Red Fast Flash = System shutdown.</li> </ul> </li> </ul>												
IP500 Analog Phone	No status LEDs are used for analog phone extensions.												
IP500 Digital Station	<ul style="list-style-type: none"> <li>• Green On - Phone detected.</li> </ul>												
IP500 VCM	<ul style="list-style-type: none"> <li>• LEDs 1 to 8 are unlabelled. They are used to indicate voice compression channel usage. Each LED lit represents 12.5% of the available voice compression channel capacity in use (total card capacity rather than licensed capacity).</li> </ul>												
IP500 4-Port Expansion	<p>LEDs 1 to 8 are used for the expansion ports on the rear of the control unit. LEDs 9 to 12 are used for the card's own expansion ports.</p> <table border="1"> <tbody> <tr> <td>Green</td> <td>On</td> <td>Expansion module present.</td> </tr> <tr> <td>Red</td> <td>Flashing</td> <td>Initializing.</td> </tr> <tr> <td>Red</td> <td>On</td> <td>Error.</td> </tr> <tr> <td>Orange</td> <td>Regular Flash</td> <td>Base card okay.</td> </tr> </tbody> </table>	Green	On	Expansion module present.	Red	Flashing	Initializing.	Red	On	Error.	Orange	Regular Flash	Base card okay.
Green	On	Expansion module present.											
Red	Flashing	Initializing.											
Red	On	Error.											
Orange	Regular Flash	Base card okay.											
IP500 Combination	<p>LEDs 1 to 6</p> <ul style="list-style-type: none"> <li>• Green On - Phone detected.</li> </ul>												

### Trunk Daughter Card LEDs

Trunk Daughter Card	LEDs 9 to 12 Usage
All cards	<ul style="list-style-type: none"> <li>• LED 9 is used for daughter card status. <ul style="list-style-type: none"> <li>• Red On = Error</li> <li>• Red Flash every 5 seconds = Card okay.</li> <li>• Red Slow Flash = Initializing.</li> <li>• Red Fast Flash = System shutdown.</li> </ul> </li> </ul>
Analog Trunk	<ul style="list-style-type: none"> <li>• Green on: Card fitted.</li> <li>• Green flashing: Trunk in use.</li> </ul>
PRI Trunk	<ul style="list-style-type: none"> <li>• Off: No trunk present.</li> <li>• Green on: Trunk present.</li> <li>• Green flashing: Trunk in use.</li> <li>• Red/Green Fast Flash (port 9) or Green Fast Flash (port 10): Alarm indication signal (AIS) from the trunk remote end.</li> <li>• Red with Green Blink (port 9) or Green Blink (port 10): Port in loopback mode (set through IP Office System Monitor).</li> </ul>

### External Expansion Module LEDs

- Green on = Module okay.
- Red on = Error.
- Red flashing = Module starting up.

## Telephone Problems

Problem...	Check this...
Telephone does not ring	Ringer volume may be too low. Do Not Disturb or Call Forwarding may be turned on. Line Ringing may not be set to Immediate. Telephone may be faulty; switch telephones and try again.
Display shows only 16 characters per line	Possible power outage; unplug the modular telephone cord and replug.
Display time and date are not correct	Is your system clock correct? Use System Date (#101) and System Time (#103) to set the date and time.
Caller ID does not work	Are you subscribed to Caller ID? Is the line connected to a module that supports Caller ID? Did someone activate Call Coverage? If so, their extension number will appear.
Telephone does not Work	Is the telephone cord plugged into the right jack on the bottom of the telephone? Telephone may need to be reset; unplug the cord, and with the handset hung up, re plug. Telephone cord may be defective; switch cords and try again. Telephone may be defective; switch telephones and try again. There may be a problem with the control unit; switch to a different port and try again.
Intercom Autodialer does not work	Is the telephone cord plugged into the correct jack of the DSS? Is the Intercom Autodialer plugged into an electric outlet? Telephone cord may be defective; switch cords and try again.
Cannot record a call	Two calls may already be recording. Make sure you have a four-port mail system. You may not have enough ports programmed in Hunt Group.
Standard phone message waiting light does not light	Telephone may be part of a combination extension that includes a system telephone with Background Music on; turn it off. The message waiting light may not be compatible with the system; only phones with LEDs, not neon lights, support message waiting lights. Or, the telephone may not be connected to the proper module.
Cannot make outside calls	Is Forced Account Code Entry assigned to this extension? Has someone changed the Outgoing Call Restriction for the extension? Did someone lock the extension with Station Lock? Use Station Unlock from extension 10 or 11 to unlock it. Local telephone company may not be receiving signals accurately. If problem is on just one telephone, see "Telephone does not Work" above. Too many tip/ring devices may be trying to dial at once. Local telephone company line may be faulty; unplug each line from its module and test it by using a single-line telephone:  <ul style="list-style-type: none"> <li>• If the trouble does not occur on the single-line telephone, the problem is in your control unit.</li> <li>• If the trouble occurs on the single-line telephone, switch the line cord and try again. If this does not work, call the telephone company.</li> </ul>
Cannot make outside calls from pool buttons on pooled extensions	Is Forced Account Code Entry assigned to this extension? Is your dial mode incorrect? Use Dial Mode (#201) to reset it. Has someone changed the Pool Access Restriction for the extension? Pool may not be assigned to the extension. There may not be enough lines assigned to the pool to support the usage. One or more local telephone company lines may be faulty; test each line from extension 10.
Calls are answered automatically (a call rings once then disappears as if answered)	Automatic System Answer and/or Direct Extension Dial is turned on, turn it off. an auxiliary device (fax, modem, voice messaging system, answering machine) answers when it should not; either: <ul style="list-style-type: none"> <li>• Check the device and adjust it to answer on a later ring or turn off auto-answer.</li> <li>• Set the extension's Line Ringing to Delayed Ring.</li> </ul>
Auxiliary device does not answer	Device may not recognize the system ringing pattern: <ul style="list-style-type: none"> <li>• Change the extension's ring pattern by using Distinctive Ring (#308).</li> <li>• Change the setting for Intercom Dial Tone (#309) to Machine; the system will generate an outside dial tone for the extension.</li> </ul>

Problem...	Check this...
Trouble hearing the person you called	If you are using a speakerphone, try using the handset. If you have touch-tone dialing, you may have a faulty telephone or cord.
Automatically dialed calls beginning with star codes are miss dialed	Setting may not be inserting a long enough pause; increase setting. Recall feature is not working. Increase Recall Timer Duration (#107) by 100 milliseconds. If using the feature disconnects the call, decrease Recall Timer Duration by 100 milliseconds.
Calls on hold are disconnected	CO Disconnect Time (#203) setting may be too short.
Call on Hold hangs up, but line does not disconnect	CO Disconnect Time (#203) may be too long; try resetting it. Local telephone company does not send a hold release signal; you may need the help of our hotline.
All telephones dead; no dial tone or lights	Power may have been interrupted to the control unit; check the power cord, the on/off switch, and the LEDs on the modules. Power outlet may be faulty; test the outlet with an appliance like a lamp.
Multiple telephones dead; no dial tone or lights	one or more system modules may be out; try reseating the module in the control unit.



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