



INTELLIGENT COMMUNICATIONS

The background of the slide features a photograph of a person's hands typing on a silver laptop. The laptop is open and positioned in the lower-left quadrant. The person is wearing a dark-colored shirt. In the background, there is a window with a view of a landscape, possibly a city or a natural scene, under a bright sky. The overall lighting is soft and natural, suggesting an office or home workspace environment.

**IP Office Release 6.0  
Essential Edition  
PARTNER<sup>®</sup> Version**

**Delta Training**

# Introduction



Welcome to the Avaya IP Office Release 6.0 Essential Edition – PARTNER®  
Version Technical Delta Training!

This course is designed to provide an overview of the new features and the enhancements made to the latest version of IP Office, and more specifically on the Essential Edition – PARTNER® Version mode. The highlights are summarized and discussed under different headings like new and enhanced hardware, applications and additional solutions.



# Course Objectives



At the end of this course, you will be able to:

- ▶ Recognize the New and Enhanced IP Office Hardware supported with Software Release 6.0.
- ▶ Explain the different use of IP Office 500v2 Hardware for Essential Edition – PARTNER® Version and the new Simplified Manager.
- ▶ Understand some of the new features and functionality that the IP Office Essential Edition – PARTNER® Version provides.
- ▶ Duration of this course: 3 Hours





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A photograph showing the back of a person's head and shoulder as they talk on a mobile phone. The person has short, grey hair and is wearing a dark suit jacket. The background is a blurred office interior with large windows and white columns.

# Module 1: Enhanced & New Hardware IP Office 500v2 Platform Support

# Module Objectives



At the end of this module, you will be able to:

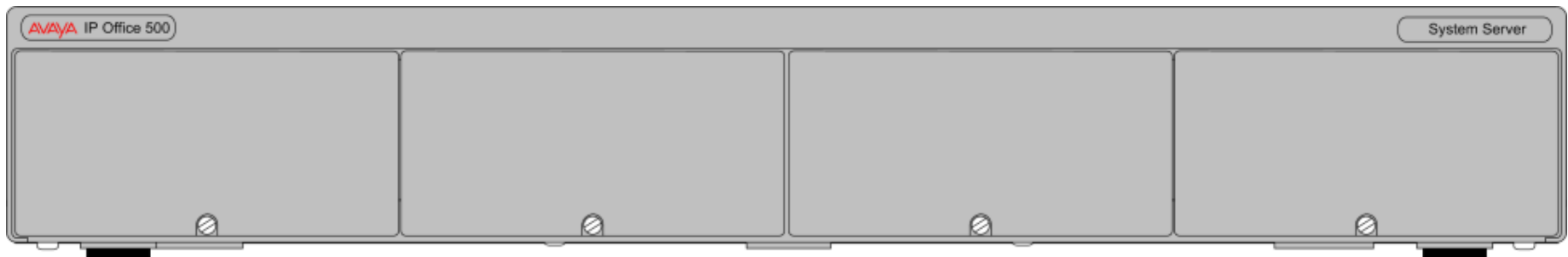
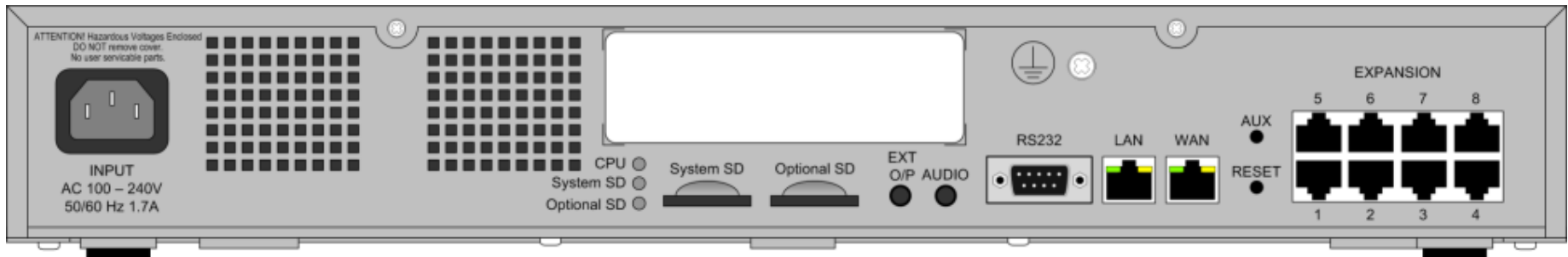
- ▶ Describe the new IP Office 500v2 Hardware and the new PARTNER<sup>®</sup> ETR and Combination Cards.
- ▶ Understand the functionality of the Secure Digital (SD) Card and its content.
- ▶ Understand the start up operation of IP Office 500v2.
- ▶ Describe licensing and upgrade options and procedures.
- ▶ Explain how to access the System Status Application (SSA) via the Web.



# IP500v2 Overview



- ▶ The IP500v2 is an evolution of the existing IP500 base unit with enhancements to add features and usability.



## IP500v2 – Features (cont.)



- ▶ Feature key smart card, compact flash and firmware storage are replaced with a new Secure Digital (SD) Card.
- ▶ Second SD card is used for resilience, redundant backup, PC-less upgrades including firmware, configuration and licences.
- ▶ Integrated Embedded Voicemail/Auto Attendant – includes 2 ports and expandable to 4 or 6 ports via licenses.
- ▶ Supports IP Office and PARTNER Version operating modes.
- ▶ Back panel AUX button additional boot and shutdown controls.
- ▶ Other capabilities as per the IP500 - users, extensions, performance, etc.

# PARTNER<sup>®</sup> Version – Features

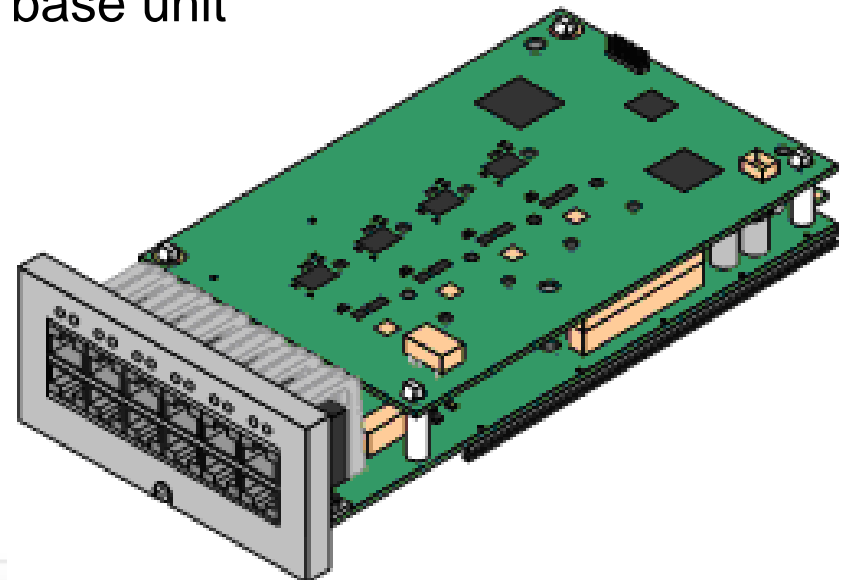


- ▶ Supports up to 48 extensions, 56 trunks
- ▶ Supports up to 12 analog trunks; up to 20 SIP trunk channels, and a full PRI / T1 channel.
- ▶ Supports PARTNER<sup>®</sup> ACS ETR telephones, new digital 1400 series telephones, and analog devices.
- ▶ Supports a new Combination Card for cost effective extensions, trunks and VCM constructs.
- ▶ Supports a new ETR-6 expansion card (PARTNER Version mode only).
- ▶ Supports existing IP Office expansions cards, including DS8, Phone 2, Phone 8
- ▶ Expansion cards can support optional daughter cards, including the ATM-4 and the PRI/T1 card
- ▶ Supports a single Expansion Unit – the DS16 or the Phone16

# IP500v2 – Combination Card



- ▶ Provides:
  - ▶ 6 digital stations (DS)
  - ▶ 2 analog extensions (POTS)
  - ▶ 4 analog trunk ports
  - ▶ includes 10 Voice Compression Module (VCM) channels.
- ▶ Maximum two per IP500v2
- ▶ Supported **only** in the IP Office 500v2 base unit



# IP500v2 – ETR6 Expansion Card



- ▶ Supports 6 ETR (PARTNER(R) ACS) stations
- ▶ Supports addition of ATM-4 or PRI/T1 daughter card
- ▶ When ATM-4 is added, ports 7 & 8 become Power Failure Transfer ports.
- ▶ Supported only on the IP500v2 base unit in PARTNER Version mode.
- ▶ All ports support full ETR functionality (e.g. PARTNER<sup>®</sup> ACS telephones, bridging of analog device to AUX port of PARTNER<sup>®</sup> ACS telephone, direct connection of an analog device to the ETR extension port.)



# IP500v2 – ETR6 Expansion Card



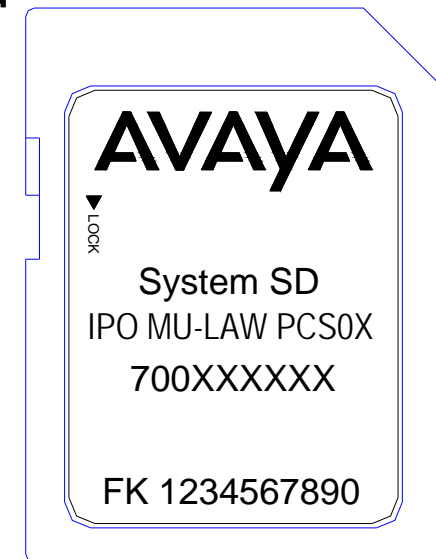
- ▶ Supports current “Euro 2” style PARTNER ACS telephones (34D / 18D / 6D) and older “Euro” style PARTNER telephones (6 Button non-display, 18 Button non-display, 18D and 34D sets)
- ▶ Supports 3910/3920 wireless phones
- ▶ Maximum 4 34-D phones per base unit, with a limit of 2 per ETR-6 module.
- ▶ Maximum three ETR-6 cards per IP500v2 base unit



# IP500v2 – SD Cards



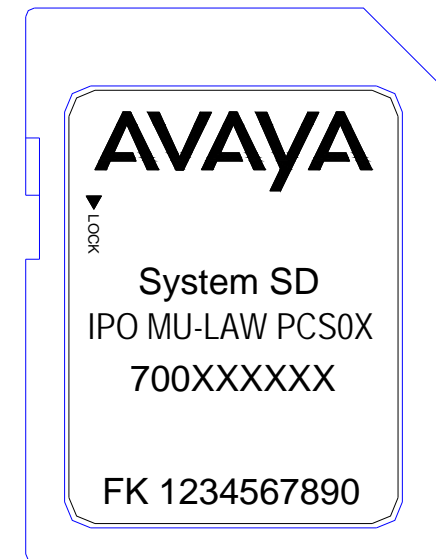
- ▶ Two cards: System and Optional.
- ▶ System SD card must be present at all times (some exceptions)
- ▶ System SD card is Avaya supplied and delivered separate from base unit.
- ▶ Three types of System SD card. The SD card defines the operating mode:
  - IP Office A-Law
  - IP Office  $\mu$ -Law
  - IP Office Partner



## IP500v2 – SD Cards (cont.)



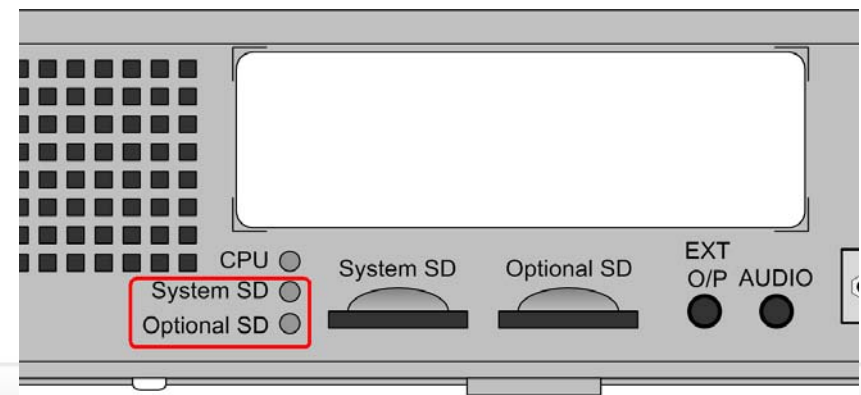
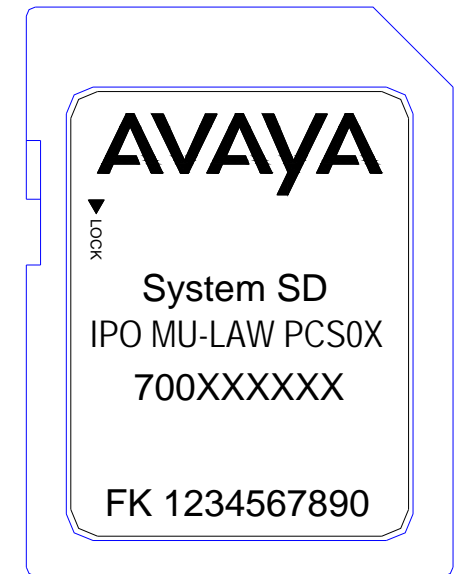
- ▶ Contains all firmware, software, configuration, Voicemail/AA prompts & recording.
- ▶ Firmware includes all current expansion and phone binaries.
- ▶ Software includes System Status Application (SSA).
- ▶ Some information is still stored on the base unit: e.g. Non-Volatile configuration, security.



# IP500v2 – SD Cards (cont.)



- ▶ System SD card watermarked:
  - don't reformat outside of IP Office or manager.
- ▶ Optional SD card to aid administration and resilience:
  - Can use commercial SDHC cards (class 4).
- ▶ SD card commands to invoke backup/restore, shutdown etc.
- ▶ Each card slot has an associated LED:
  - don't remove while LED on or flashing.
  - Use card or system shutdown command.



# IP 500v2 – SD Card Commands



- ▶ SD Commands can be run from a number of sources: SSA, Manager, DTE port, Avaya phones.
- ▶ **Backup:** Make local copy of system files on System SD.
- ▶ **Restore:** Restore local copy of system files on System SD.
- ▶ **Upgrade:** Copy binaries or configuration from Optional to System SD card
- ▶ **Copy:** Make copy of System SD onto Optional SD
- ▶ **Shutdown System:** Stop system - ready for power removal.
- ▶ **Start up/Shutdown Card:** Stops/starts SD card
- ▶ **MUST** shutdown an IP500v2 – don't just pull the power

# IP500v2 – Start-up



- ▶ Boot loader can load from different locations: Two from the System and two from the Optional SD card.
- ▶ System/primary is always initial choice. Others may be used due to corruption, constant reboots, image or SD card not present.
- ▶ BOOTP still used if no valid location. (AT-X still causes BOOTP)
- ▶ System Alarm is raised if not running from system/primary location.

## IP500v2 – Start-up (cont.)



- ▶ AUX button on back panel may be used to force use of the backup location.
- ▶ All expansion units and phones will automatically be upgraded (if necessary) with firmware present on the SD card – reduces system issues due to mismatched software.
- ▶ Non-Volatile Configuration and Security Settings loaded from flash.

# IP500v2 - Licensing



- ▶ Licensing is similar to the IP500, except the licence key is part of the System SD card.
- ▶ 2 hr grace period if System SD card is removed to allow maintenance activities.
- ▶ Installation of license keys either via Manager, or 'keys.txt' file in system/primary directory of SD card.
- ▶ Keys.txt file will be merged at start-up.

# IP500v2 - Upgrades



- ▶ Similar procedure to IP500.
- ▶ Use of Upgrade Wizard to upgrade IP Office firmware.
- ▶ Optional SD backup command prior to upgrade.
- ▶ Use of Embedded File Manager mechanism to upgrade other system files.

# IP500v2 – Run-time Licensing

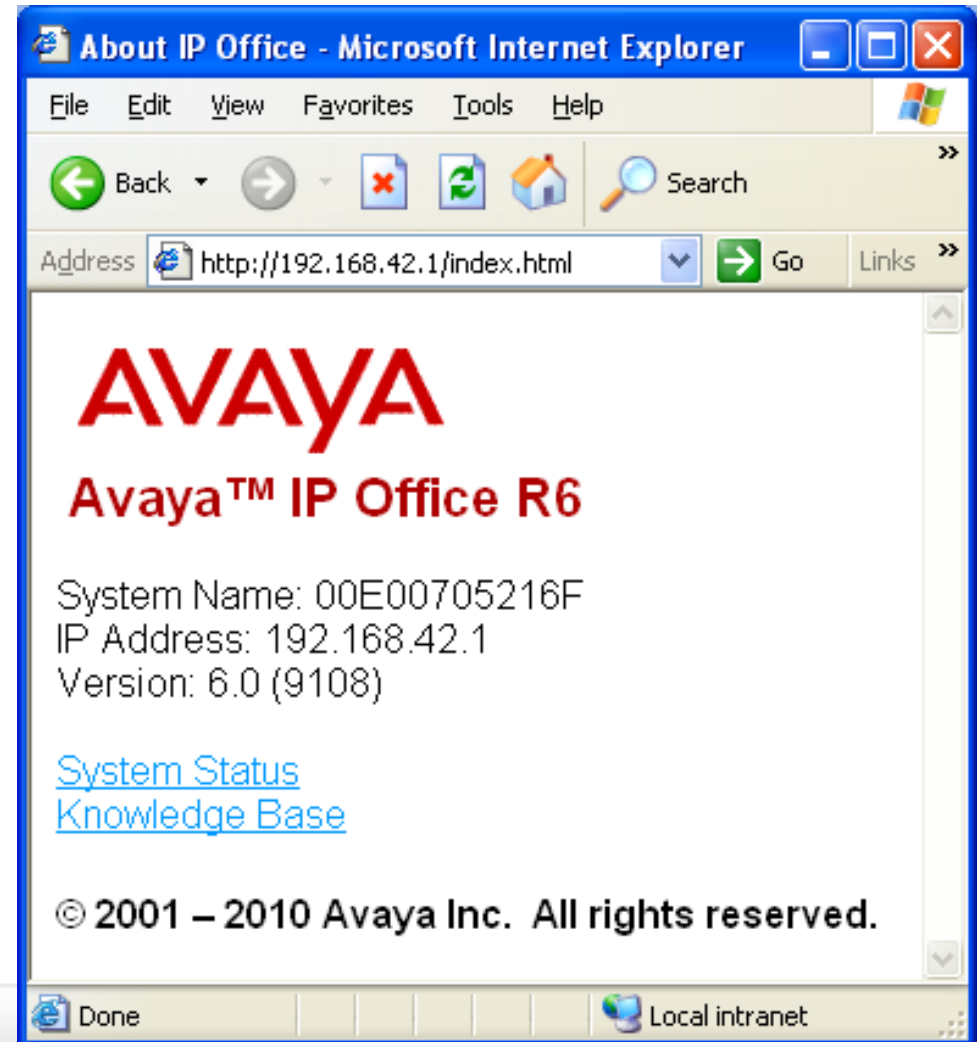


- ▶ IP500v2 has a 90 day entitlement period during which the highest version of running software is recorded.
- ▶ This version determines what level of software can be run without a 'Software Upgrade' licence.
- ▶ The period is actually 100 days, and starts on the first call.
- ▶ Just power on time is included. There is no external indication of the elapsed time.
- ▶ The version is recorded on the base unit and cannot be reset in the field.

# IP500v2 – Home Page



- ▶ Point web browser at IP Office IP address.
  - IP Office responds with home page:
- ▶ Simple home page, not a file on SD card. Not customizable.
- ▶ Can start the relevant SSA version from link.
- ▶ Access the online IP Office knowledge base locally.



## IP500v2 – Misc.



- ▶ Alarm log has been increased from 8 to 32 entries
- ▶ Configuration max size now 2MB from 1MB.
- ▶ DS phone firmware upgrades follow the IP phone process (try on SD card, then manager / TFTP server).
- ▶ 15 hours maximum Embedded Voicemail storage.

# IP500v2 – Manager

- ▶ Embedded file manager supports: Viewing/editing SD card contents plus file attributes, and executing SD card commands:

The screenshot displays the Avaya IP Office R6 Manager - Embedded File Management interface. The window title is "Avaya IP Office R6 Manager - Embedded File Management - 00E00705219D [6.0 (9097)] [Administrator]". The interface is divided into three main sections:

- Folders:** A tree view showing the directory structure of the SD card. It includes two SD cards (SDC1 and SDC2), each with a SYSTEM folder and subfolders for BACKUP, DYNAMIC, LVMAIL, SMDR, PRIMARY, and TEMP. The SSA folder is highlighted under SDC1.
- Files:** A table listing files in the selected folder. The table has columns for Name, Size, and Type.
- index.html:** A detailed view of the selected file, showing its name, date modified, size, and various data fields.

Name	Size	Type
index.html	829	Firefc
JH.JAR	531676	WinF
ssaviewer.jar	1883319	WinF
SSS.JAR	2443628	WinF
SSS_DE.JAR	1817631	WinF
sss_es_MX.jar	1816920	WinF
SSS_FR.JAR	1879844	WinF
SSS_IT.JAR	1774361	WinF
SSS_NL.JAR	1778086	WinF
sss_pt_BR.jar	1691084	WinF

**index.html**

Name: index.html  
Date Modified: 16/06/2009 13:23:00  
Size (bytes): 829

Announcement Data

Label: 1  
Format: 0

VoiceMail Data

Format: 1

Total Space Used (bytes): 505741312  
Space Remaining (bytes): 3446865920

12.80%

Received TFTP request for HoldMusic.wav from 135.64.184.158:23070

## IP500v2 – Manager (cont.)



- ▶ Manager also supports command to rebuild a system SD card locally from installed directory
- ▶ IP500v2 security settings unchanged from IP500
- ▶ IP500v2 configuration settings unchanged from IP500

# IP500v2 – SSA



- ▶ IP500v2 SD cards can be displayed in SSA including card information and commands:

The screenshot displays the AVAYA IP Office System Status web interface. The title bar indicates the system is IP Office R6 System Status - 00E00705219D (192.168.42.1) - IP500 V2 6.0 (9097). The main content area is titled "System Hardware Summary" and provides the following information:

- Control Unit: IP500 V2
- Current Firmware: 6.0 (9097)
- Mode: IP Office
- Boot Location: System Primary

SD Card Slots:

Slot Name	Card Information
System	SD04G, 4096 MB
Optional	SD04G, 4096 MB

Control Unit Slots:

Slot Number	Base	Daughter card
1	Base: Combo DS 6/Phone 2/VCM10	Daughter card: ATM4
2		Empty
3		Empty
4		Empty

External Modules:

Module Number	Type	Current Firmware
1	Phone 30 V2	8.0 (11209)

At the bottom of the interface, there are buttons for "Summary", "Shutdown System", "Backup System Files", "Restore System Files", and "Upgrade Binaries". The status bar at the bottom right shows the time as 20:48:02 and the system is Online.

# IP500v2 – SSA (cont.)



- ▶ New IP500v2 Alarms include system not running from primary location and invalid SD card fitted:

The screenshot shows the 'IP Office System Status' web interface. The title bar indicates the system is 'IP Office R6 System Status - 00E00705219D (192.168.42.1) - IP500 V2 6.0 (9097)'. The main heading is 'IP Office System Status'. A navigation menu on the left includes 'System', 'Memory Cards', 'Control Unit (IP500 V)', 'Expansion Modules', 'H.323 Extensions', 'Alarms (6)', 'Configuration (0)', 'Service (6)', 'Trunks (0)', 'Link (0)', 'Call Quality of Service', 'Extensions (71)', 'Trunks (4)', 'Active Calls', 'Resources', 'Voicemail', and 'IP Networking'. The 'Service Alarms' section is active, displaying a table with the following data:

Last Date Of Error	Occurrences	Error Description
16/09/2009 16:24:39	7	Attempt to use a feature for which no license is installed. License Type: Avaya IP Endpoints
16/09/2009 20:49:05	18	Attempt to use a feature for which no license is installed. License Type: 3rd Party IP Endpoints
▶ 16/09/2009 16:25:43	1	The System was unable to connect to the Feature Key Server. Feature Key Server IP Address: 255.255.255.255
▶ 16/09/2009 19:10:57	1	System running secondary software
16/09/2009 19:10:57	1	Incompatible or invalid SD card fitted: Optional
16/09/2009 19:10:57	1	No License Feature Key dongle

At the bottom of the table are buttons for 'Clear', 'Clear All', 'Print...', and 'Save As...'. The status bar at the bottom right shows the time '20:51:34' and the system status 'Online'.

# IP500v2 - SNMP



- ▶ New system object ID for IP500v2 unit
- ▶ Different when in PARTNER Version mode
- ▶ IP500v2 alarms supported as traps (also SMTP and Syslog), including:
  - System running backup software
  - Incompatible or Invalid SD Card fitted
  - No Licence feature key dongle
  - Voicemail Event - storage nearly full (~ 90%)
  - Voicemail Event - storage full

- ▶ Which of the following statements is false regarding the IP Office 500 Version 2 in PARTNER Version mode?
  - A. Supports up to 3 Combination Cards
  - B. Supports up to 3 ETR-6 Cards
  - C. Supports Full PRI/T1 capability
  - D. Supports up to 20 SIP channels

- ▶ Which of the following statements is false regarding the IP Office 500 Version 2 in PARTNER Version mode?
  - A. **Supports up to 3 Combination Cards**
  - B. Supports up to 3 ETR-6 Cards
  - C. Supports Full PRI/T1 capability
  - D. Supports up to 20 SIP channels

*The system supports up to 2 Combo cards .*

- ▶ Which of the following telephones are not supported on the IP Office Essential Edition – PARTNER® Version?
  - A. PARTNER ACS telephones
  - B. 3920 / 3910 wireless
  - C. 14xx series digital telephones
  - D. 16xx series IP telephones

- ▶ Which of the following telephones are not supported on the IP Office Essential Edition – PARTNER® Version?
  - A. PARTNER ACS telephones
  - B. 3920 / 3910 wireless
  - C. 14xx series digital telephones
  - D. **16xx series IP telephones**



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A photograph showing the back of a person's head and shoulder. They are holding a black mobile phone to their ear with their right hand. The background is a blurred office interior with windows and door frames.

## Module 2: Enhanced & New Hardware Combination Card for IP Office 500v2

# Module Objectives



At the end of this module, you will be able to:

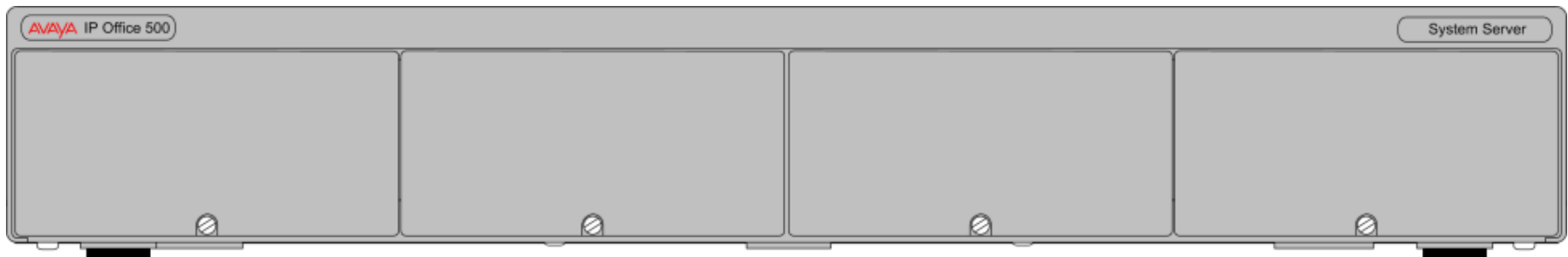
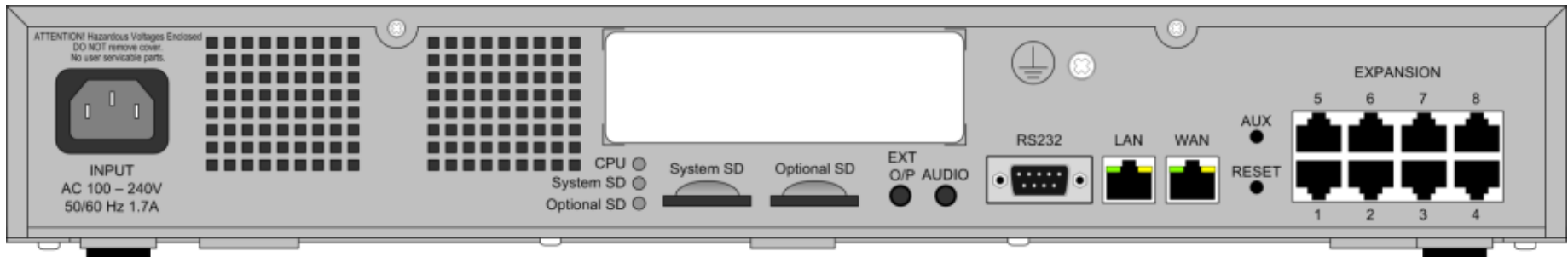
- ▶ Describe the new Combination Card for IP Office 500v2.
- ▶ List the functionality of the station, trunk and Voice compression channels.
- ▶ Understand the restrictions and allowable combinations in the base unit.



# IP500v2 Overview



- ▶ Only in the IP500v2 hardware it is possible to use the new Combination Card.



# IP500v2 – Combination Card

- ▶ Provides:
  - ▶ 6 digital extensions (DS)
  - ▶ 2 analog extensions (POTS)
  - ▶ 4 analog trunk ports
  - ▶ 10 Voice Compression Module (VCM) channels
- ▶ Up to 2 Combination Cards can be installed in a PARTNER Version system.
- ▶ The Combination Card is only compatible with the IP 500v2 base unit.



- ▶ How many Combination Cards are supported in the IP Office 500v2?
  - A. 1
  - B. 2
  - C. 3
  - D. 4

- ▶ How many Combination Cards are supported in the IP Office 500v2?
  - A. 1
  - B. **2**
  - C. 3
  - D. 4

- ▶ Which of the following statements is correct?
  - A. Combination Card includes 20 VCM
  - B. Combination Card includes 6 analog trunks
  - C. Combination Card includes 8 DS Ports
  - D. Combination Card includes 2 POTS Ports

- ▶ Which of the following statements is correct?
  - A. Combination Card includes 20 VCM
  - B. Combination Card includes 6 analog trunks
  - C. Combination Card includes 8 DS Ports
  - D. **Combination Card includes 2 POTS Ports**



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A close-up, side-profile photograph of a person with short, graying hair talking on a black mobile phone. The person's hand is visible, holding the phone to their ear. The background is a blurred office interior with white walls and a doorway.

## **Module 3: Enhanced & New Hardware ETR6 Expansion Card for IP Office 500v2**

# Module Objectives



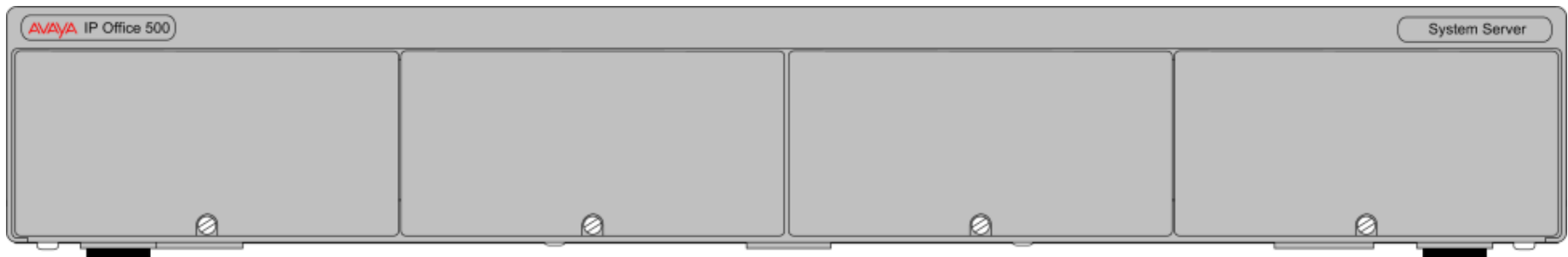
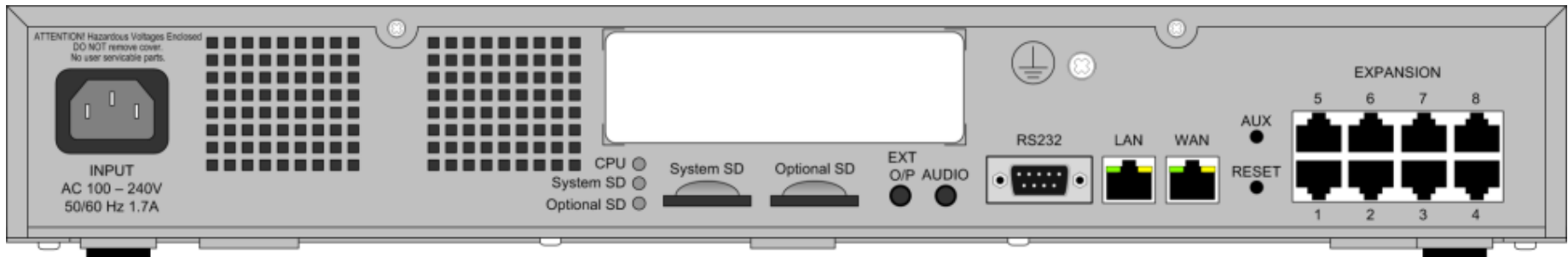
- ▶ At the end of this module, you will be able to:
- ▶ Recognize the new ETR6 card for IP Office 500v2.
- ▶ Understand the functionality of the ETR6 card
- ▶ List the phones that are compatible with the ETR6 card.



# IP500v2 Overview



- ▶ Using IP500v2 hardware it is possible to use the new ETR6 card.



# IP500v2 – ETR6 Expansion Card



- ▶ 6 port ETR phone card
- ▶ IP500v2 in IP Office Essential Edition – PARTNER® Version mode only
- ▶ Maximum three per IP500v2 (18 ports total)
- ▶ Supports the addition of a daughter card (e.g. ATM-4 or PRI/T1)
- ▶ When ATM-4 is added, ports 7 & 8 become Power Failure Transfer ports.

# Phones compatible with ETR6



- ▶ Supports the current line of PARTNER ACS “Euro 2” telephones: 6D / 18D / 34D sets
- ▶ Supports the previous “Euro-style” ETR telephones: 6 Button non-display; 18 Button non-display; 18 D and 34D sets.
- ▶ Supports 3920 / 3910 wireless phones
- ▶ Maximum of four 34D sets per base unit
- ▶ Maximum of two 34D sets per ETR module



- ▶ Which wireless phone types are supported with the ETR6 card?
  - A. 3910/3920
  - B. 3720/3725
  - C. 2508/2510
  - D. 1808/1816

- ▶ Which wireless phone types are supported with the ETR6 card?
  - A. **3910/3920**
  - B. 3720/3725
  - C. 2508/2510
  - D. 1808/1816

- ▶ How many ETR6 cards will be supported in the IP Office 500v2?
  - A. 1
  - B. 2
  - C. 3
  - D. 4

- ▶ How many ETR6 cards will be supported in the IP Office 500v2?
  - A. 1
  - B. 2
  - C. **3**
  - D. 4



INTELLIGENT COMMUNICATIONS

A close-up, over-the-shoulder shot of a person with short, graying hair talking on a black mobile phone. The person's hand is visible, holding the phone to their ear. The background is a blurred office interior with windows and architectural details.

## Module 4: Enhanced & New Hardware 1400 Series Telephone Support

# Module Objectives



- ▶ At the end of this module, you will be able to:
- ▶ Describe the IP Office 500 support of the new digital 1400 series phones.
- ▶ List the features supported.
- ▶ Describe the BM32 module connection.



# Avaya 1400 Phones



- ▶ Release 6.0 introduces IP Office support of three new digital phones similar in appearance to the 1600i series of IP phones.



*1403 Digital Phone*



*1408 Digital Phone*



*1416 Digital Phone*

# Avaya 1400 Phones



- ▶ Built-in features include: language setting, personalized ring, call timer, Visual Voice Mail, Contacts.
- ▶ A Button Module 32 (BM32) is available for use with the 1416 telephone. Up to 2 BM32 per 1416 set and up to 10 BM32 per system is supported.
- ▶ BM32 connects to a dedicated port on the back of the 1416 sets.
- ▶ 1400 series sets are Digital, using 1-pair wire



- ▶ Which 1400 series digital phone will support the BM32?
  - A. 1403
  - B. 1405
  - C. 1408
  - D. 1416

- ▶ Which 1400 series digital phone will support the BM32?
  - A. 1403
  - B. 1405
  - C. 1408
  - D. **1416**

- ▶ How many different variants are available with the 1400 series digital phones?
  - A. 1
  - B. 2
  - C. 3
  - D. 4

- ▶ How many different variants are available with the 1400 series digital phones?
  - A. 1
  - B. 2
  - C. **3**
  - D. 4



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A photograph showing the back of a person's head and shoulder as they talk on a mobile phone. The person has short, dark hair and is wearing a dark suit jacket. The background is a blurred office interior with large windows and columns.

# **Module 5: New and Enhanced Features & Application Licensing**

# Module Objectives



At the end of this module, you will be able to:

- ▶ Recognize the new system and user licenses.
- ▶ Understand when licensing is required.



- ▶ There are five system licenses used for the IP Office Essential Edition – PARTNER® Version system:
  - CTI
  - Additional Sip Trunk Channels
  - Additional PRI/T1 Channels
  - Additional Voice Mail Ports
  - Additional Mobility Users

# Licensing (Cont.)



## ▶ CTI RFA License

- Needed only if CTI applications are needed (e.g. Telcomp “Pickups” screen pop).
- Only one CTI license is needed for the entire system

## ▶ SIP Trunk RFA License:

- The PARTNER Version includes support for 3 SIP trunk channels. Licenses needed for additional channels.
- Licenses are available in 1, 5, 10 and 20 channel increments.

## ▶ PRI/T1 Channel RFA License:

- The PARTNER Version includes support for 8 PRI/T1 channels. Licenses needed for additional channels.
- Licenses are available in 2 and 8 channel increments.

# Licensing (Cont.)



- ▶ Embedded Messaging Voice Mail Ports
  - The Embedded Messaging provides 2 ports. Licenses needed for additional channels.
  - Licenses are available for an additional 2 ports.
  - Up to 4 additional ports can be added.
  
- ▶ Mobile Worker RFA License:
  - The PARTNER Version includes support for 3 Mobility occurrences. Licenses needed for additional occurrences.
  - Remote Call Forwarding does not require licensing.
  - Licenses are available in 1, 5, and 20 increments.

- ▶ Which of the following statements is false?
  - A. The Embedded Messaging can support 6-ports.
  - B. The PRI/T1 card does not need additional licenses.
  - C. Remote Call Forwarding does not require licensing.
  - D. Only 1 CTI license is needed system-wide

- ▶ Which of the following statements is false?
  - A. The Embedded Messaging can support 6-ports.
  - B. The PRI/T1 card does not need additional licenses.**
  - C. Remote Call Forwarding does not require licensing.
  - D. Only 1 CTI license is needed system-wide

*The PRI/T1 card provides the first 8 channels only. Additional channels will require licenses.*

- ▶ Which of the following is **not** an option for Essential Edition – PARTNER<sup>®</sup> Version licensing?
  - A. Additional SIP Channels
  - B. Additional PRI/T1 Channels
  - C. Additional IP Softphones
  - D. Additional Voice Mail Ports

- ▶ Which of the following is **not** an option for Essential Edition – PARTNER® Version licensing?
  - A. Additional SIP Channels
  - B. Additional PRI/T1 Channels
  - C. **Additional IP Softphones**
  - D. Additional Voice Mail Ports



INTELLIGENT COMMUNICATIONS

A photograph showing the back of a person's head and shoulder as they talk on a mobile phone. The person is wearing a dark suit jacket. The background is a blurred office interior with large windows and columns.

# Module 6: IP Office Essential Edition PARTNER® Version System Overview

# Module Objectives



At the end of this module, you will be able to:

- ▶ Recognize the new hardware and functionality.
- ▶ List the capacity of the system.
- ▶ Understand the trunking options.
- ▶ Describe the terminal that can be used.
- ▶ Understand the voicemail options.



# PARTNER Version - Overview



- ▶ Delivers a simple, modern, key system offer, on the IP Office platform, to the North America market currently served by PARTNER® ACS
- ▶ Inherits PARTNER® ACS primary success attributes:
  - Familiar key system operation,
  - “Set and Forget” installation with Out-of-the-Box operation,
  - Simple and easy administration via both a PC GUI application (Simplified Manager) and the Telephone User Interface (TUI).
- ▶ Is a separate mode of IP Office running on an IP500v2.
- ▶ Is provisioned using a pre-programmed SD card that will launch the system in 'PARTNER Version' mode.

# System Overview



- ▶ **Delivers Capacity:**
  - 48 stations / 56 trunks
- ▶ **Trunks Supported:**
  - Analog / T1/PRI / SIP
- ▶ **Terminals Supported:**
  - 1400 series phones
  - ETR phones
  - Analog devices (POTS, fax machines, etc.)
- ▶ **Fixed 2-digit dial plan**
- ▶ **Embedded Voice Mail is provided for all users.**

# Take Note



- ▶ The IP500v2 in IP Office Essential Edition – PARTNER® Version mode will only support the following cards:
  - ▶ Combination Card (ATM4)
  - ▶ ETR-6
  - ▶ DS8
  - ▶ PHONE 2 and PHONE 8
- ▶ Only 1 Expansion module (DS16 or PHONE 16) is supported in slot 1.

# Take Note



- ▶ If the end user requires any of the following:
  - ▶ **station and trunk growth beyond the Essential Edition – PARTNER® Version capabilities**
  - ▶ **IP Telephones**
  - ▶ **Preferred Edition messaging**
  - ▶ **Customer Call Reporting (CCR), Multi-Site Networking**
  - ▶ **Avaya one-X® Portal for IP Office**

then the system must be upgraded to IP Office mode.

These features are not available in PARTNER® Version.

# ETR6 Module

- ▶ A new ETR6 module is required to connect ETR telephones.
  - This module is only supported in 'PARTNER Version' mode.
- ▶ Each ETR6 module provides support for six ETR ports, and a connector for a daughter trunk card (e.g. ATM4 or a PRI/T1)
- ▶ When an ATM4 daughter card is installed, the two analog station ports (#7 and #8) are power fail transfer ports coupled to the last line port (#12).



## ETR6 Module (Cont.)

- ▶ An ETR phone and/or an analog phone can be plugged into the ports on the ETR6 module.
- ▶ A maximum of three ETR6 modules are supported on the IP500v2 (max 18 ETR phones).



# ETR Supported Telephones



- ▶ PARTNER ACS “Euro 2” sets:
  - 34 button Display Telephone
  - 18 button Display Telephone
  - 6 button Display Telephone
  - 3920 Wireless Telephone
  - 3910 Wireless Telephone



# ETR Supported Telephones (Cont.)



- ▶ PARTNER ACS “Euro” sets:
  - 34 button Display Telephone
  - 18 button Display Telephone
  - 18 button non-display Telephone
  - 6 button non-display Telephone



# ETR Supported Telephones (Cont.)



## ▶ NOTE:

- There is a limit of four 34 Button PARTNER display sets of any type per IP500v2 control unit. Connection of additional 34 Button sets will cause the backlighting to illuminate, but the station will not come out of reset mode.
- CA-48 and MLS telephones are not supported.
- 6 Button Display/non-display, 18 button non-display, 3910, and 3920 phones can not enter Individual Telephone programming. These telephones must be programmed using Centralized Telephone Programming from a System Phone.

# ETR 18-D Button Layout



- Soft keys default out of the box to the following functions:

- Last Number Redial, Drop, Voice Mail Access, and Recall (CO hook flash).



2 x 24 backlit display

Line Appearances/Programmable Feature Buttons

Feature

Conference

Transfer

Hold

Mic/HFAI

Speaker

AUX RJ45 jack (on back)

Volume/Backlighting Adjust

Intercom 1

Intercom 2

# ETR Functionality



- ▶ Key system functionality and button layout in the same manner as the current PARTNER ACS R8:
  - 2 fixed Intercom buttons in the same locations as they appear on the PARTNER ACS system
  - Line appearances for each analog line port installed, starting from bottom left to right; as they default currently on PARTNER ACS.
  - If PRI / T1 and/or SIP lines installed, the Simplified Manager program must be used to assign lines / channels to button appearances.



## ETR Functionality (Cont.)



- ▶ Key system functionality and button layout in the same manner as the current PARTNER ACS R8:
  - The top four buttons (softkeys without LED's) under the display on 18 and 34 button phones default with the following features pre-assigned:
    - Last Number Redial
    - Drop
    - Voice Mail Access
    - Recall (CO hook flash)



## ETR Functionality (Cont.)



- ▶ Fixed "Feature" button can be used to activate/deactivate features, enter TUI programming, program individual features to a button.
- ▶ Fixed Hold, Conference, and Transfer buttons that function like PARTNER ACS R8
- ▶ Fixed Speaker/Mic buttons which function like PARTNER ACS R8
- ▶ COMBO mode supported like PARTNER ACS R8 through built-in AUX jack.



# Call Handling



- ▶ ETR and 1400 series phones have similar look and feel
  - Conference, Transfer, and Hold usage similar to PARTNER ACS R8.
  - Audible and visual feedback during call handling similar to PARTNER ACS R8.
    - Dial Tone the same
    - Lamp states the same between two phone families:
      - I-Use, They-Use, I-Hold, They-Hold, Alerting, Conference



# Display Behavior



- ▶ 1400 series and ETR phones have similar display behavior on idle and alerting screens.
- ▶ 1400 series displays being larger, provide more information than ETR in general, during all phases of call handling.
- ▶ ETR users will recognize the displays as PARTNER with some enhancements:
  - More information provided during alerting to allow better call handling:
    - Source, destination, if the call was redirected



## Display Behavior (Cont.)



- ▶ ETR users will recognize the displays as PARTNER with some enhancements:
  - Call information now available when re-accessing inside calls (picking up an inside call, re-accessing held call, returning parked call, etc.)— shows you the number of who you are connected to.
  - Caller ID Number and Name presented just like in PARTNER ACS R8.
  - Call Timer will be familiar to PARTNER ACS users on ETR phones. Differs on 1400 series phones since the call timer is a function local to the phone and not under control of system software.



# ETR COMBO Mode

- ▶ COMBO mode provides the capability to cost-effectively connect both analog devices and multi-button digital telephones to the same system jack and share the same system resources, while providing capabilities unique to each type of phone
  - FAX Machines
  - Wireless Headsets
  - Credit Card Readers
  - Modems



## ETR COMBO Mode (Cont.)



- ▶ Connects an industry standard analog phone to the AUX jack of an ETR phone.
  
- ▶ Has:
  - One addressable endpoint (one extension number)
  - One voice path
  - The extension is “off-hook” if either the ETR or T/R phone is off-hook
  - The ETR telephone’s visuals (LEDs) reflect the combined status of the endpoint.
  - Button depressions from either telephone will be serviced

# Avaya 1400 Series Phones



- ▶ Firmware downloads use the binary available on the SD card.
- ▶ Differences are mainly in the button layout (bottom-up) and softkey layout.
- ▶ Three Softkeys – Status, Feature, Admin available via buttons under the display
- ▶ Feature softkey emulates Feature button on ETR phones.



# Avaya 1400 Series Phones (Cont.)



- ▶ Admin softkey is used to access TUI configuration items.
- ▶ Buttons are programmed for various features and the format of the forms displayed are the same across ETR and 1400 series phones.
- ▶ LED behavior is different than IP Office mode and is the same as ETR phones.
- ▶ Support for two BM32 modules per set.



# POTS Support



- ▶ Industry standard analog phones are supported
  - Connected to PHONE or Combination Card module
  - Connected to ETR6 module
  - Connected to AUX jack of ETR phone (COMBO)
- ▶ Major features work the same, wherever they are connected: Hold, Conference, Transfer, Call Waiting, Message Waiting
- ▶ All analog phones have access to all the dial-code features familiar to PARTNER users: call/line pickup, forwarding activation/deactivation, etc.
- ▶ However, analog phone connected to PHONE or Combination Card do not have line appearances.

# Out-of-the-Box Operation



- ▶ Goal is to have a system up and running in Key System mode with analog trunk support.
- ▶ Customers can place/receive calls without any further programming once the system is installed.
- ▶ All ETR/1400's will have Line Appearance buttons preconfigured for all the analog trunks.



## Out-of-the-Box Operation (Cont.)



- ▶ Incoming lines will ring on all phones with Line Appearances, dial 9 is not required to access an outside line, default Automatic Line Selection operation is to seize a line.
- ▶ The dial plan is pre-configured.
- ▶ Everyone has voicemail access provided by embedded voicemail.

# Out-of-the-Box Operation (Cont.)

- ▶ Extension numbering is fixed based on eight ports per slot.

The screenshot shows a dialog box titled "FormPartnerPortNumbering". It is divided into two main sections: "DS16" and "IP500".

**DS16 Section:** This section contains two rows of input fields. The first row contains fields for extension numbers 42, 43, 44, 45, 46, 47, 48, and 49. The second row contains fields for extension numbers 50, 51, 52, 53, 54, 55, 56, and 57.

**IP500 Section:** This section is divided into four columns, each representing a card. Each card has two rows of input fields for extension numbers:

- Card 1:** Row 1: 10, 12, 14, 16; Row 2: 11, 13, 15, 17.
- Card 2:** Row 1: 18, 20, 22, 24; Row 2: 19, 21, 23, 25.
- Card 3:** Row 1: 26, 28, 30, 32; Row 2: 27, 29, 31, 33.
- Card 4:** Row 1: 34, 36, 38, 40; Row 2: 35, 37, 39, 41.

At the bottom right of the dialog box, there are "Ok" and "Cancel" buttons.

- ▶ In a slot with an ETR6 card, two extension numbers will be skipped.

- ▶ Which phone is supported on IP Office running Essential Edition – PARTNER® Version mode?
  - A. Avaya 9620 phone
  - B. Avaya 1616 phone
  - C. PARTNER MLS 34 phone
  - D. PARTNER 6D

- ▶ Which phone is supported on IP Office running Essential Edition – PARTNER® Version mode?
  - A. Avaya 9620 phone
  - B. Avaya 1616 phone
  - C. PARTNER MLS 34 phone
  - D. PARTNER 6D**

- ▶ Which IP Office control unit will support Essential Edition – PARTNER® Version mode?
  - A. IP500v2
  - B. IP500
  - C. IP412
  - D. All are supported

- ▶ Which IP Office control unit will support Essential Edition – PARTNER® Version mode?
  - A. **IP500v2**
  - B. IP500
  - C. IP412
  - D. All are supported

- ▶ Which feature is supported in IP Office running PARTNER Version mode?
  - A. Preferred Edition
  - B. 4 digit extensions
  - C. SIP Trunking
  - D. SIP Phones

- ▶ Which feature is supported in IP Office running PARTNER Version mode?
  - A. Preferred Edition
  - B. 4 digit extensions
  - C. **SIP Trunking**
  - D. SIP Phones

*SIP trunking along with analog and T1/PRI are all supported.*



INTELLIGENT COMMUNICATIONS

A photograph showing the back of a person's head and shoulder as they talk on a mobile phone. The person is wearing a dark suit jacket. The background is a blurred office hallway with white walls and doors.

# Module 7: IP Office Essential Edition PARTNER<sup>®</sup> Version Telephone User Interfaces

# Module Objectives



At the end of this module, you will be able to:

- ▶ Understand the TUI administration.
- ▶ Describe the limitations of the TUI.



# Telephone User Interface (TUI)



- ▶ Alternative way to do administration and programming on an IP Office Essential Edition – PARTNER® Version system:
- ▶ Simplified Manager, a PC GUI application, can also be used to administer your system running in PARTNER Version mode.
  - Some advanced features, such as SIP and T1/PRI, are only administrable in Simplified Manager.
- ▶ TUI consists of System Administration, Centralized Programming, and Individual Programming.

## Telephone User Interface (Cont.)



- ▶ Only stations 10 and 11, which are System Phones, and either ETR 18D, ETR 34D, 1408, or 1416, can do System Administration and Centralized Programming.
- ▶ Individual Programming can be done by any station as long it is one of the above four station types.
- ▶ TUI is based on the existing PARTNER ACS TUI, but with some improvements.
- ▶ For System Administration on ETR and 1400 series sets, the buttons become soft-keys which are used to navigate and change the administration items.

## Telephone User Interface (Cont.)



- ▶ The are also shortcut codes which enable the administrator to jump to particular administration items.
- ▶ Centralized Programming is similar to System Administration, but it is used to administer buttons and a few other options for any phone in the system.
- ▶ The BM32 DSS module is also fully programmable though centralized programming.
- ▶ Individual Programming is almost the same as Centralized Programming except it is done by the station user to set their own buttons.

- ▶ Where is SIP Trunking administered when using an IP Office running Essential Edition – PARTNER® Version mode?
  - A. SIP Trunk Administration in the Simplified Manager
  - B. Centralized Programming using the TUI on a System Phone
  - C. On the system tab in the IP Office Manager
  - D. SIP Trunking is not supported in Essential Edition – PARTNER® Version

- ▶ Where is SIP Trunking administered when using an IP Office running Essential Edition – PARTNER® Version mode?
  - A. **SIP Trunk Administration in the Simplified Manager**
  - B. Centralized Programming using the TUI on a System Phone
  - C. On the system tab in the IP Office Manager
  - D. SIP Trunking is not supported in Essential Edition – PARTNER® Version

***SIP Trunking must be administered using the Simplified Manager when running PARTNER® Version.***

- ▶ Which phone supports PARTNER system administration through the Telephone User Interface (TUI)?
  - A. PARTNER 6D phone
  - B. PARTNER 18D phone
  - C. Avaya 1403 phone
  - D. Avaya 1432 phone

- ▶ Which phone supports PARTNER system administration through the Telephone User Interface (TUI)?
  - A. PARTNER 6D phone
  - B. PARTNER 18D phone**
  - C. Avaya 1403 phone
  - D. Avaya 1432 phone



INTELLIGENT COMMUNICATIONS

A photograph showing the back of a person's head and shoulder as they talk on a mobile phone. The person is wearing a dark suit jacket. The background is a blurred office hallway with glass doors and bright lighting.

# Module 8: IP Office Essential Edition PARTNER<sup>®</sup> Version SIP Trunking

# Module Objectives



At the end of this module, you will be able to:

- ▶ Understand SIP Trunking on a IP Office Essential Edition - PARTNER<sup>®</sup> Version.
- ▶ Describe the SIP Trunking advanced parameters.
- ▶ List licensing requirements.
- ▶ Recognize incoming call targeting.



# SIP on the Key System



- ▶ SIP on IP Office Essential Edition – PARTNER® Version is implemented as if the SIP line is a collection of analog trunks. In order to make a call, you select a Trunk using a Line Appearance, dial the digits and the call is made. When a call is received, the Lamp on the trunk flashes, and you can answer it by pressing the Line Appearance button.
- ▶ Each line appearance can be represented by a SIP Channel, and each SIP Channel is individually configured. Everyone who uses a particular SIP channel makes exactly the same call.

# SIP on the Key System



- ▶ Each SIP Channel configuration
  - Line Appearance Number
  - Local URI / Alias
  - Anonymous (Caller ID Restriction/CLIR)
  
- ▶ Multiple SIP Channels can have the same Local URI.

# Licenses



- ▶ Essential Edition – PARTNER® Version supports licensing of SIP trunks.
- ▶ Note: What is licensed is the number of simultaneous calls that can be made or received over SIP.
- ▶ If a call comes in and there are insufficient licenses, the caller will receive 'Busy'.
- ▶ If a call is being made to a non-emergency destination, the call will be rejected.

# User Configuration



- ▶ The only thing that needs to be configured on a user is access to a SIP Channel, which is done as a Line Appearance.

Line  
Appearances  
for 3 x SIP  
Channels



## User Configuration (Cont.)



- ▶ Press a Line Appearance to hear CO dial tone (generated inside IP Office). Dial '2125551212'.
- ▶ INVITE is sent at the 10th digit.
- ▶ The experience is just like using an analog Trunk.



# SIP Trunk Configuration



SIP Trunk Setup

	Descriptive Name	Domain Name	Authentication Name	Password	No Of Channels	Transport Protocol	Send Port	Listen Port
	Domestic Servic	easysip.co.uk			3	UDP	5060	5060
	Business Servic	216.18.109.90	xdgf987e56c	3546jklidf	5	UDP	5060	5060
▶	<New>	<New>	<New>	<New>	10	UDP	5060	5060

## ▶ Domestic Trunks

- The ‘domestic service provider’ offers individual user accounts. Each Local URI registers separately.

## ▶ Business Trunks

- The ‘business service provider’ performs a single registration on the service and each Local URI uses the same common registration

# SIP Channel configuration



SIP Trunk Channel Setup

Channel	Appearance	Direction	Display Name	Local URI	Password	Anonymous	Coverage Destination	Ring Pattern
1	29	Bothway	Alice Tinker	2128091234	cberwe2...	<input type="checkbox"/>	None	1
2	30	Bothway	Alice Tinker	2128091234		<input type="checkbox"/>	None	1
3	31	Bothway	Hugo Hor...	2128091235	Drg8945...	<input checked="" type="checkbox"/>	None	5
4	32	Bothway				<input type="checkbox"/>	None	1

Each channel can register individually, but if the Local URI on two channels is the same, only one registration will occur, using the password of the first entry.

Calls made and received on Appearances 29 and 30 will be on the “Alice Tinker” account.

Alice can receive 2 calls (max)

Calls made and received on Appearance 31 will be on the “Hugo Horton” account – calls made on this Appearance will anonymous by default.

Hugo can receive 1 call (max)

When calls are received on Appearance 31, all handsets with this Appearance configured will play a distinctive ring pattern (Pattern 5).

## Trunks - SIP Trunk Administration

Trunk Parameters

Proxy Server Address	<input type="text"/>
Mobility Caller ID Format	None <input type="button" value="v"/>
Use Tel URI	<input type="checkbox"/>

### ▶ Proxy Server Address

If a proxy server address is not specified, it is assumed that the Domain Name and the Proxy Server Address are the same. The Proxy Server Address can be an IP Address or an address which requires DNS resolution.

# SIP Advanced Parameters (Cont.)

## Trunks - SIP Trunk Administration

Trunk Parameters

Proxy Server Address	<input type="text"/>
<b>Mobility Caller ID Format</b>	<input type="text" value="Remote Party ID"/>
Use Tel URI	<input type="text"/>

Remote Party ID  
Remote Party ID  
P Asserted ID  
None

▶ Mobility Caller ID format

The fields have the same values and behaviour as they do on IP Office.

# SIP Advanced Parameters (Cont.)



Trunk Name : Test

VOIP Parameters			
Compression mode	Automatic Select		VOIP Silence Suppression <input type="checkbox"/>
Call Initiation Timeout	4*		Reinvite Supported <input type="checkbox"/>
DTMF Support	RFC2833		Use Offered Codec <input type="checkbox"/>
Registration Expiry	60	(min)	

## ▶ VoIP Parameters

The fields have also the same values and behaviour as they do on IP Office.

# SIP Advanced Parameters (Cont.)



## Trunks - SIP Trunk Administration

Trunk Name : Test

Trunk Parameters		VOIP Parameters	
Proxy Server Address	<input type="text"/>	Compression mode	Automatic Select <input type="button" value="v"/>
Mobility Caller ID Format	Remote Party ID <input type="button" value="v"/>	Call Initiation Timeout	4" <input type="button" value="v"/>
Use Tel URI	<input type="checkbox"/>	DTMF Support	RFC2833 <input type="button" value="v"/>
		Registration Expiry	60 <input type="button" value="v"/> (min)
		VDIP Silense Suppression	<input type="checkbox"/>
		Reinvite Supported	<input type="checkbox"/>
		Use Offered Codec	<input type="checkbox"/>

- ▶ Transport Protocol, Send port and Listen port  
The fields have the same values and behaviour as they do on IP Office.

# SIP Advanced Parameters



## Advanced Parameters

STUN Settings for Network


Enable STUN	<input type="checkbox"/>	STUN Server IP Address	69 . 90 . 168 . 13
STUN Port	3478	Binding Refresh Time (secs)	0
Run STUN	Cancel		
Firewall/NAT Type	Full Cone NAT	Public IP Address	168 . 103 . 66 . 161
Public Port	5060		

### ► STUN

This is configured in the System “Advanced Parameters” page on Simplified Manager. If “Enable STUN” is set, all the SIP Trunks will use it automatically.

# SIP Advanced Parameters (Cont.)


Dial Plan

	Number	Result	Action
	xxxxxxxxxxN	N	Dial
	0N;	0N	Dial
	1N;	1N;	Dial
	N;	N	Dial
	911	911	Barred
	*2xxN	*2N	Dial
	*3xxN	*3N	Dial
	*xxN	*N	Dial
	*65		Explicitly not Ano...
	*67		Call Anonymously

- ▶ This is an example dial plan appropriate for USA. In this example, you cannot dial 911 on this trunk.
- ▶ If you dial \*67, you get back to dial tone, but the call you make subsequently will be anonymous, overriding the setting on the channel for this particular call.

# SIP Advanced Parameters (Cont.)

Dial Plan

	Number	Result	Action
	xxxxxxxxxxN	N	Dial
	0N;	0N	Dial
	1N;	1N;	Dial
	N;	N	Dial
	911	911	Dial
	*2xxN	*2N	Dial Local

- ▶ A Tel URI can be specified for a particular destination by using Action = 'Dial' instead of Action = 'Local Dial'

# SIP Advanced Parameters (Cont.)

Incoming Number Filter

	Incoming Number	Result ▼	Include In Dial Plan
	+1N	N	<input type="checkbox"/>
	bishop@cathedral.c...	5552129011	<input checked="" type="checkbox"/>
	archbishop@palace....	5552129012	<input checked="" type="checkbox"/>
▶*			<input type="checkbox"/>

- ▶ The Incoming Number Filter Table allows incoming CLI content (SIP “**From:**”) to be changed into a format which is appropriate for dialing out. So if the CLI of calls coming in all start with ‘+1’ then this can be removed to manipulate the number into an appropriate format.
- ▶ Calls from non-telephony sources can be substituted for numbers starting with ‘555’.

# SIP Advanced Parameters (Cont.)

Incoming Number Filter

	Incoming Number	Result	Include In Dial Plan
	+1N	N	<input type="checkbox"/>
	bishop@cathedral.c...	5552129011	<input checked="" type="checkbox"/>
	archbishop@palace....	5552129012	<input checked="" type="checkbox"/>
▶*			<input type="checkbox"/>

**Include in Dial plan**

Dial 5552129012  
and you call this SIP  
destination

# Incoming Call Targeting



SIP Trunk Channel Setup

	Channel	Appearance	Direction	Display Name	Local URI	Password	Anonymous	Coverage Destination	Ring Pattern
▶	1	21	Bothway ▼				<input type="checkbox"/>	None ▼	1 ▼
	2	22	Bothway ▼				<input type="checkbox"/>	None ▼	1 ▼
	3	23	Bothway ▼				<input type="checkbox"/>	None ▼	1 ▼

- ▶ Using 'Coverage destination' allows calls to be routed to a Hunt group, or the Auto attendant.

## Coverage Destination = None

Calls are not explicitly targeted. The call just arrives on a Line Appearance and anyone observing that Line Appearance can pick up the call.

# Incoming Call Targeting (Cont.)



SIP Trunk Channel Setup

Channel	Appearance	Direction	Display Name	Local URI	Password	Anonymous	Coverage Destination	Ring Pattern
1	21	Bothway				<input type="checkbox"/>	None	1
2	22	Bothway				<input type="checkbox"/>	None	1
▶ 3	23	Bothway				<input type="checkbox"/>	None	1
		Bothway Incoming Call-by-Call						

- ▶ “Call by Call”:  
This is for Local URI s which are never used for making calls but offer a service like “Sales” or “Support”

# Incoming Call Targeting (Cont.)



Call By Call Table

	Local URI	Password	Display Name	Destination	Ring Pattern
	2129092222	cberwe23ws_A	Buttercup Sales	Hunt Group 2	2
	2129092244	Df78g4e_02_	Buttercup Special O	Hunt Group 5	1

- ▶ These are like DID numbers. They also register individually on the Service provider if the Service provider offers a 'domestic' type service.

You can have as many Sales calls as there are "Incoming Call-By-Call" channels which could be up to 24 (if all channels were assigned as "Call-By-Call"). These channels are contended amongst Call-By-Call services. Each call needs a license!

- ▶ What must be configured for a user to be able to access a SIP trunk?
  - A. License loaded for the user
  - B. Local URI configured for the user
  - C. Button programmed as “Dial Local”
  - D. Button programmed as a Line Appearance

- ▶ What must be configured for a user to be able to access a SIP trunk?
  - A. License loaded for the user
  - B. Local URI configured for the user
  - C. Button programmed as “Dial Local”
  - D. Button programmed as a Line Appearance**

*A Line Appearance button is all that is needed to connect to a configured SIP channel.*

- ▶ What will happen to incoming calls that are not routed to a specific Hunt Group or Auto Attendant?
  - A. The caller will receive a busy signal
  - B. The call will be routed to voicemail
  - C. The call will display on a Line Appearance
  - D. The call will route to the default Hunt Group

- ▶ What will happen to incoming calls that are not routed to a specific Hunt Group or Auto Attendant?
  - A. The caller will receive a busy signal
  - B. The call will be routed to voicemail
  - C. The call will display on a Line Appearance**
  - D. The call will route to the default Hunt Group

*The call will show up on any configured line appearance for the SIP channel.*



INTELLIGENT COMMUNICATIONS

A photograph showing the back of a person's head and shoulder as they talk on a mobile phone. The person is wearing a dark suit jacket. The background is a blurred office hallway with white walls and doors.

# Module 9: IP Office Essential Edition PARTNER<sup>®</sup> Version New Features

# Module Objectives



At the end of this module, you will be able to:

- ▶ Describe some of the new features on the IP Office Essential Edition - PARTNER<sup>®</sup> Version system.



# Common Features



- ▶ Many key PARTNER® ACS R8 features carried over into IP Office Essential Edition - PARTNER® Version, including:
  - ▶ Account Codes
  - ▶ Allowed / Disallowed / Emergency Lists
  - ▶ Automatic Daylight Savings Time Adjustment
  - ▶ Automatic Line Selection
  - ▶ Doorphone and Hotline Extensions
  - ▶ Network Time Synchronization
  - ▶ Night Service

# Embedded Messaging (New)



- ▶ Included on the System Secure Digital (SD) card
- ▶ Does not take up any expansion slots
- ▶ 15 Hours of voice mail storage
- ▶ 2 port automated attendant, expandable to 6 ports via licenses
- ▶ Out of the box - provides voice mailboxes for all users
- ▶ Enhanced functionality over PARTNER® Voice Messaging

# Embedded Messaging (continued)



## Visual Voice Mail

- ▶ Supported on all DS telephones
- ▶ Provides visual feedback including:
  - ▶ # of New / Saved / Old messages in mailbox
  - ▶ Caller ID name / number / date / time
  - ▶ Message management (play / pause / rewind / delete / forward) via soft keys
- ▶ Visual prompts for recording personal greeting; record and forward messages to other users; turn on / off voice mail to e-mail forwarding

# Embedded Messaging (continued)



## Message Forwarding options

- ▶ Ability to forward a voice mail message from your mailbox to another users mailbox
- ▶ Ability to record a message from your extension and forward to 1 or more users

# Embedded Messaging (continued)



## Voice Mail to E-mail

- ▶ No server required
- ▶ SMTP setup screen
- ▶ Options include: Copy, Forward or Alert
- ▶ Voice mails forwarded as .wav files
- ▶ Header information includes Caller ID Name, Number and duration of message.

# Embedded Messaging (continued)



## DTMF Breakout from users mailbox

- ▶ During the message greeting, caller can dial \*0, \*2 or \*3 and be transferred to another extension
- ▶ Can be personalized on an extension by extension basis

# Call Conferencing (New / Enhanced)



- ▶ Up to 64-party conference calling.
- ▶ Limit of 2 analog CO lines per conference
- ▶ Can have multiple simultaneous conference calls, limited to facilities and extensions, for example:
  - ▶ 1 – 64 party call
  - ▶ 2 – 32 party calls
  - ▶ 10 – 6-party calls
- ▶ Digital sets provide selective drop capability – allows you to choose which party you want to drop off call.

# System Speed Dial and Contacts (New)

(on DS Sets)



- ▶ Like PARTNER® ACS R8, IP Office Essential Edition – PARTNER® Version provides up to 100 system-wide speed dial numbers
- ▶ System Speed Dial List management now includes a “Name” field supporting dial-by-name capability
- ▶ DS sets have a dedicated contacts button. Used for:
  - ▶ Looking up internal or speed dial contacts by name
  - ▶ Soft keys under display provide auto dialing of contact



# Call Logs (New / Enhanced)



- ▶ Up to 3 phones support Log All Calls
- ▶ All other sets log calls to their extensions
- ▶ ETR sets must program a button to use
- ▶ Digital sets have a dedicated, illuminated button



# Redial (New)

- ▶ ETR sets support Last # Redial via a programmable button
- ▶ DS sets have dedicated Redial button
  - ▶ Recalls last 20 incoming and outgoing calls
  - ▶ Soft key allows you to return call to any of the numbers



# Mobility (Twinning) (New)



- ▶ IP Office Essential Edition – PARTNER® Version includes 3 Mobility occurrences (Twinning)
  - ▶ Requires PRI / T1 or SIP trunks to utilize
- ▶ Additional occurrences available via licenses
- ▶ Remote Call Forwarding is unaffected – no licenses needed

# Network Time Synchronization



- ▶ Automatically synchronizes the system time with the time received from incoming analog ICLID calls received on the first line in system.
- ▶ When the system time is updated, all phones and the Embedded Voicemail time are updated.
- ▶ The option for Network Time Synchronization can be turned off.

- ▶ Which is true about Embedded Messaging?
  - A. Supports up to 100 hours of storage by using 2<sup>nd</sup> SD card
  - B. Voice Mail to E-mail service does not require a server
  - C. Provides up to 4 separate Automated Attendants
  - D. Supports Centralized Voice Mail

- ▶ Which is true about Embedded Messaging?
  - A. Supports up to 100 hours of storage by using 2<sup>nd</sup> SD card
  - B. Voice Mail to E-mail service does not require a server**
  - C. Provides up to 4 separate Automated Attendants
  - D. Supports Centralized Voice Mail

- ▶ Which is true about the IP Office Essential Edition – PARTNER® Edition Auto Attendant?
  - A. Requires a runtime license
  - B. Requires a second Secure Digital card
  - C. Supports multiple auto attendants
  - D. Supports multiple time-of-day greetings

- ▶ Which is true about the IP Office Essential Edition – PARTNER® Edition Auto Attendant?
  - A. Requires a runtime license
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  - D. **Supports multiple time-of-day greetings**



INTELLIGENT COMMUNICATIONS

A photograph showing the back of a person's head and shoulder as they talk on a mobile phone. The person is wearing a dark suit jacket. The background is a blurred office hallway with white walls and doors.

# Module 10: IP Office Essential Edition PARTNER<sup>®</sup> Version Simplified Manager

# Module Objectives



At the end of this module, you will be able to:

- ▶ List the new features of the Simplified Manager.
- ▶ Describe the navigation of the Simplified Manager.
- ▶ Understand programming options.
- ▶ Describe how to change mode to Simplified Manager.



# What's New



- ▶ Support for IP Office Essential Edition – PARTNER® Version.
- ▶ Single executable for both Simplified Manager and IP Office Manager.
- ▶ Automatic Discovery and Connection to IP Office 500 v2 control unit.
- ▶ Effective Error Handling:
  - Errors and Warning displayed against invalid fields
  - Allows user to focus on Error/Warning condition
- ▶ Ease of Navigation
  - Navigation is through hyperlinks and keyboard shortcuts.

# What's New (continued)



## ▶ Simplified look and feel of Administration

- Simplified menu structure
- Main Welcome Screen to provide administration and inventory snapshot of the entire system
- Administration Task Pane for navigation
- Graphical Button Programming
- Offline configuration creation
- Graphical representation of the installed hardware
- User friendly tool tips
- Conversion of control units Essential Edition PARTNER<sup>®</sup> Version to IP Office Mode.

# Single Executable

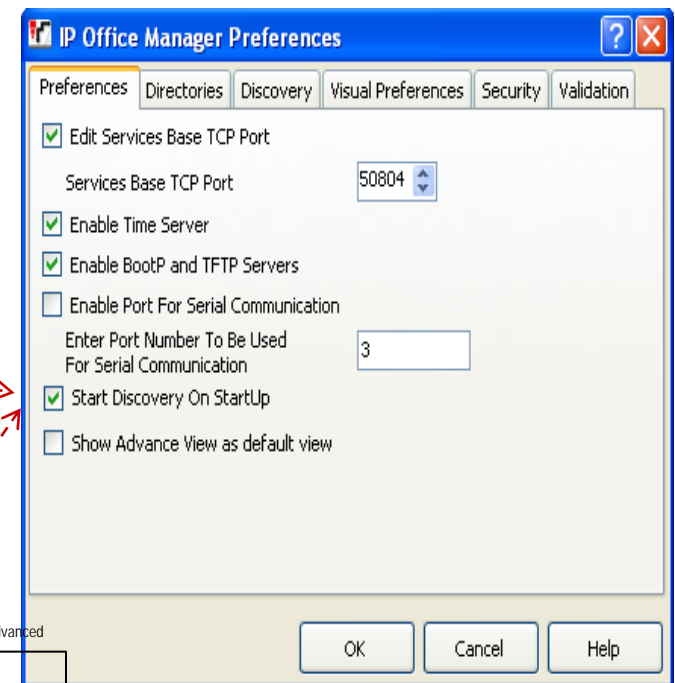
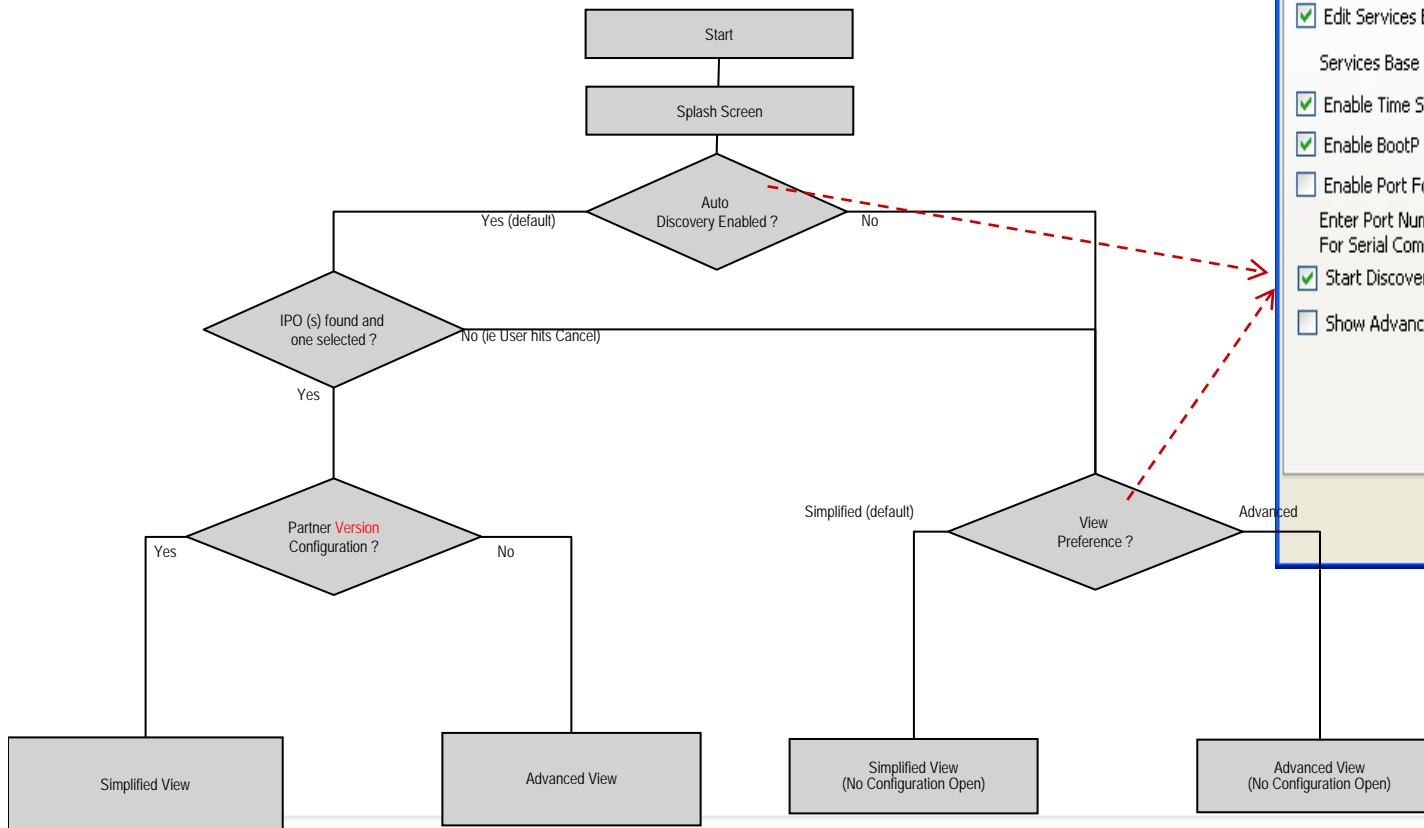


- ▶ Application Mode changes based on the configuration type and the Preference settings
  - Advanced View (current IP Office Manager look-and-feel) is opened for non PARTNER Configurations
  - Simplified View is opened for PARTNER configurations

# Single Executable

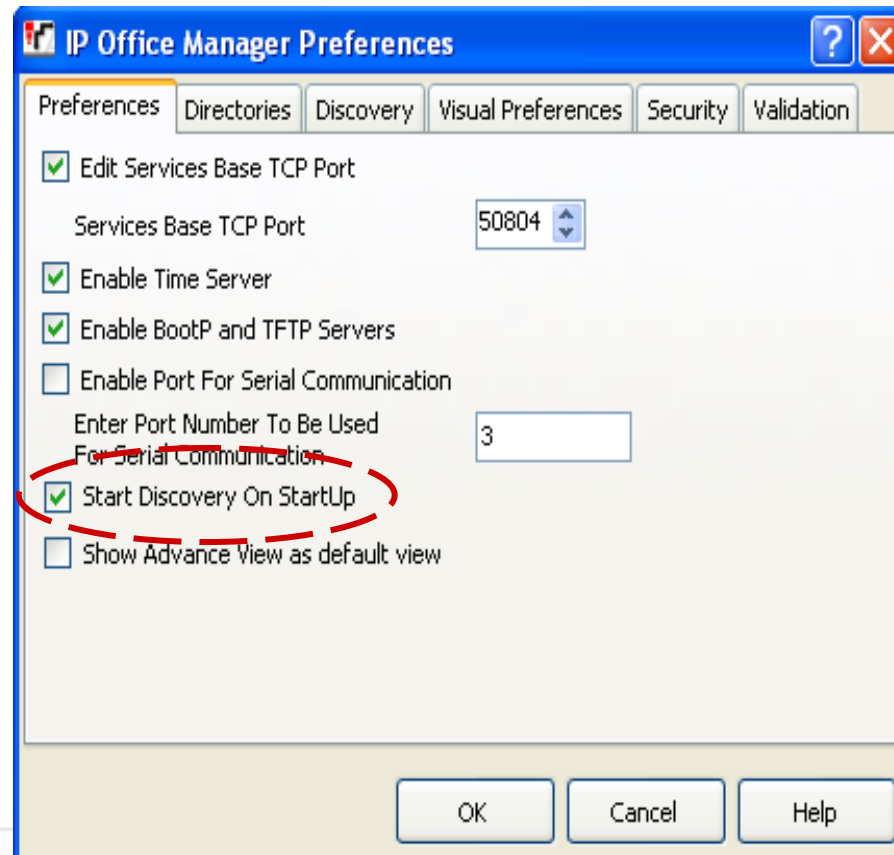
▶ Application Mode changes based on the configuration type and the Preference settings

– Launch sequence as follows:



# Auto Discovery and Connect

- ▶ When Manager is starting up, the discovery process begin in the background
  - Auto Discovery can be disabled from the preference dialog



# Auto Discovery and Connect (continued)



- ▶ When Simplified Manager and PARTNER Version are connected directly, the auto connect feature will load the configuration automatically
- ▶ When a single IP Office is detected, Simplified Manager will attempt to login using the default credentials (Administrator / Administrator)
  - For PARTNER Version, there is only a service user called “Administrator”.

# Simplified View – Main Screen



- ▶ Hyperlinks allow user to :
  - Create an offline configuration
  - Open a configuration from the device on the network
  - Open a configuration from a file



**WELCOME to IP Office Administration**

**What would you like to do ?**

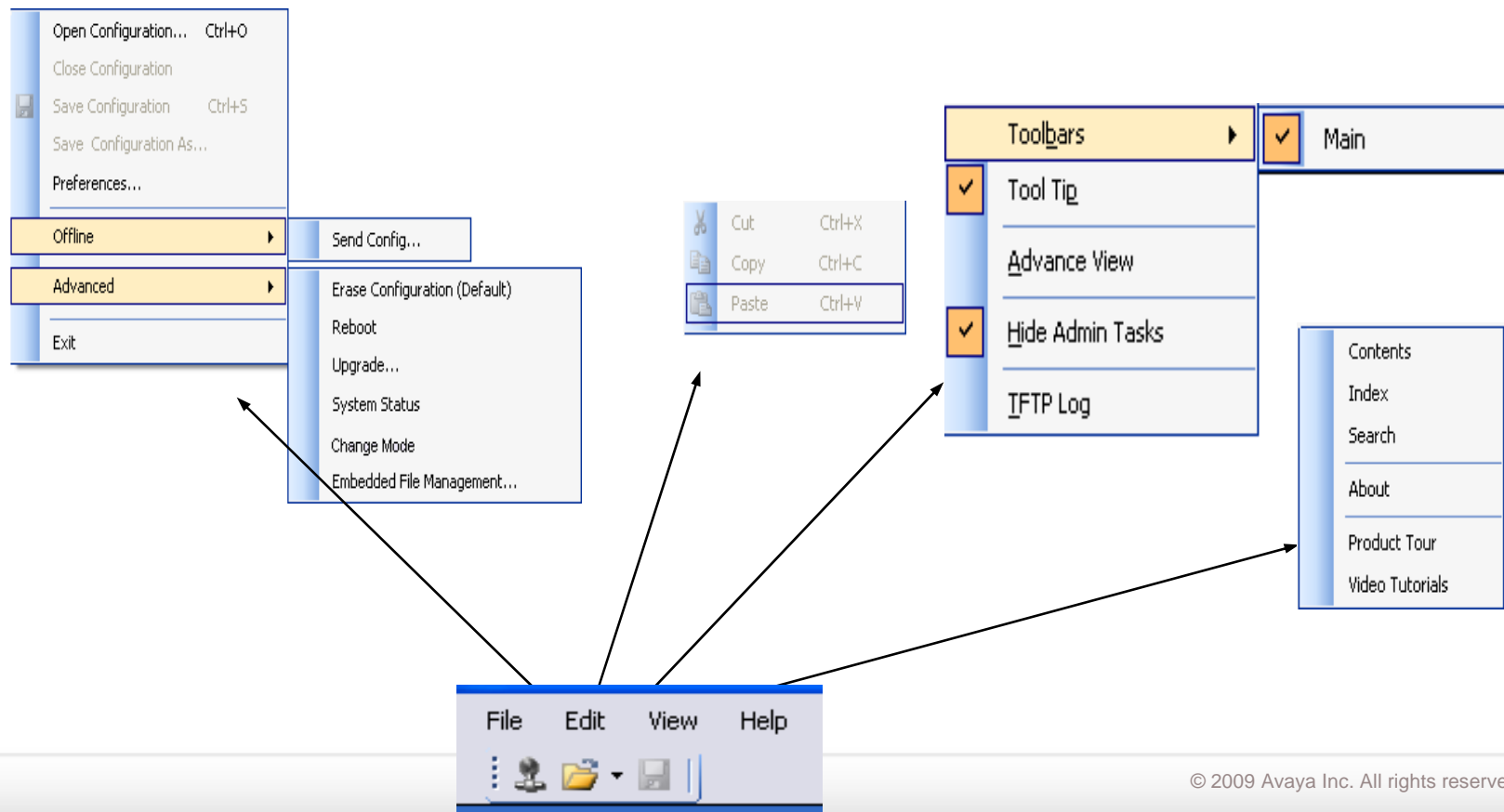
[Create an Offline Configuration](#)

[Open Configuration from System](#)

[Read a Configuration from File](#)

# Simplified View – Main Screen (continued)

- ▶ File Menus allow user to :
  - Toggle between Simplified and Advanced View
  - Simplified Menu and tool bar items



# Simplified View – Navigation



## ► Welcome Screen

- Hyperlinks for frequently used administration tasks
- Inventory snapshot of the current configuration
- Graphical representation of the hardware installed

Avaya IP Office R6 Manager 00E007052168 [6.0(11024)] [Administrator(Unknown) E:\SIP.cfg]

File Edit View Help

**System**

Welcome to IP Office PARTNER Edition Administration

What would you like to do ?

- [Change Remote / Administration Password](#)
- [Change System Settings](#)
- [Create Calling Lists](#)
- [Administer Speed Dial](#)
- [User Settings](#)
- [Configure User Button Programming](#)
- [Manage Hunt Groups](#)
- [Administer Auto Attendant](#)
- [Setup Auxiliary Equipments](#)
- [Update Trunk Configurations](#)

Please review the current IP Office Setup below ...

- Expansion Modules : NONE
- Feature Key : None
- Serial Number : 00e00705216b
- System Settings**
  - IP Address : 192.168.42.251
  - Sub-Net Mask : 255.255.255.0
  - System Locale : United States (US English)
  - Number assigned to first Extension : 10
  - Number of Extensions on System : 14
- Features Configured**
  - Daylight Saving : Enabled
  - System Trunks per phones : 4
  - Licenses Installed : NONE
  - ETR | Digital Extensions Connected : 10
  - Hunt Group Extensions**
  - Pickup Group Extensions**
  - Calling Group Extensions**
    - Night Service Group Extensions : NONE Assigned (Configure)
  - Allowed List Extensions**
  - Disallowed List Extensions**
    - Emergency List Configured : 911
    - Extensions NOT Configured for VoiceMail : NONE
    - Extensions excluded from Directory Listing : NONE
    - Extensions assigned for Twinning : NONE
    - Extensions barred from making Outgoing Calls : NONE

Sent 100% of HoldMusic.wav to 192.168.42.1:4132

# Simplified View – Navigation (continued)



Avaya IP Office R6 Manager 00E00705216B [6.0(11024)] [Administrator(Unknown) E:\SIP.cfg]

File Edit View Help

**System**

Welcome to IP Office PARTNER Edition Administration

What would you like to do ?

- [Change Remote / Administration Password](#)
- [Change System Settings](#)
- [Create Calling Lists](#)
- [Administer Speed Dial](#)
- [User Settings](#)
- [Configure User Button Programming](#)
- [Manage Hunt Groups](#)
- [Administer Auto Attendant](#)
- [Setup Auxiliary Equipments](#)
- [Update Trunk Configurations](#)

Please review the current IP Office Setup below ...


Expansion Modules : NONE  
Feature Key : None  
Serial Number : 00e00705216b

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- IP Address : 192.168.42.251
- Sub-Net Mask : 255.255.255.0
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**Features Configured**

- Daylight Saving : Enabled
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- Hunt Group Extensions**
- Pickup Group Extensions**
- Calling Group Extensions**
  - Night Service Group Extensions : NONE Assigned (Configure)
- Allowed List Extensions**
- Disallowed List Extensions**
  - Emergency List Configured : 911
  - Extensions NOT Configured for VoiceMail : NONE
  - Extensions excluded from Directory Listing : NONE
  - Extensions assigned for Twinning : NONE
  - Extensions barred from making Outgoing Calls : NONE



Apply Cancel

Sent 100% of HoldMusic.wav to 192.168.42.1:4132

# Simplified View – Navigation (continued)

## ▶ Administration Tasks Pane

- Categorized administration tasks and sub-tasks
- Can be displayed/hidden from the “View” menu
- Used by administrators who know what to configure and how to get there.

The screenshot displays the Avaya System Setup interface. On the left is the 'Admin Tasks' pane, and on the right is the 'System - System Setup' configuration window.

**Admin Tasks Pane:**

- System
- System Setup
- List Management
- Speed Dial Setup
- License Management
- User Setup
- Group Management
- Trunks
- Auxiliary Equipment
- Auto Attendant Setup
- Advanced Parameters

**System Details:**

<b>Name</b>	00E00705216B
<b>IP Address</b>	192.168.42.251
<b>Version</b>	6.0(11024)
<b>Mode</b>	Partner Edition
<b>Status</b>	Offline
<b>Feature Key</b>	None

**System - System Setup:**

**Installed Hardware:**

Number	Type	Name
1	Control Unit	IP 500 V2
2	Internal	COMB06210/ATM4
3	Internal	ETRG/PRIS U
4	Internal	Unknown/Unknown
5	Internal	Unknown/Unknown

**System Parameters:**

- System Name: 00E00705216B
- Locale: United States (US English)
- Receive IP Address Via DHCP Server:
- IP Address: 192 . 168 . 42 . 251
- Sub-Net Mask: 255 . 255 . 255 . 0
- Default Gateway: 0 . 0 . 0 . 0
- Automatic Daylight Saving Time:
- Lines per phone: 4
- System Password: [Empty]
- Log All Caller ID Calls for Users: None

# Simplified View – Navigation (continued)

### Admin Tasks

- System
- System Setup
- List Management
- Speed Dial Setup
- License Management
- User Setup
- Group Management
- Trunks
- Auxiliary Equipment
- Auto Attendant Setup
- Advanced Parameters

### System - System Setup

#### Installed Hardware

Number	Type	Name
1	Control Unit	IP 500 V2
2	Internal	COMBO6210/ATM4
3	Internal	ETR6/PRIS U
4	Internal	Unknown/Unknown
5	Internal	Unknown/Unknown

#### System Parameters

System Name: 00E00705216B

Locale: United States (US English)

Receive IP Address Via DHCP Server:

IP Address: 192 . 168 . 42 . 251

Sub-Net Mask: 255 . 255 . 255 . 0

Default Gateway: 0 . 0 . 0 . 0

Automatic Daylight Saving Time:

Lines per phone: 4

System Password:

Log All Caller ID Calls for Users: None None None

#### System Details

**Name** 00E00705216B  
**IP Address** 192.168.42.251  
**Version** 6.0(11024)  
**Mode** Partner Edition  
**Status** Offline  
**Feature Key** None

Apply Cancel

# Simplified View – Programming



## ▶ Graphical Button Programming

- Graphical interface to program feature buttons
- Copy/Paste functionality for programmed multiple buttons on same handset
- Copy features buttons from one user to multiple users
- Ability to print single / multiple handset labels

**Admin Tasks**

- System
- User Setup
- Button Prog**
- Advanced
- Group Manag
- Trunks
- Auxiliary Equi
- Auto Attendar
- Advanced

**System Details**

Name	00E00705
IP Address	192.168.4
Version	6.0(11024)
Mode	Partner E
Status	Offline
Feature Key	None

**User Setup - Button Programming**

User Buttons

User: 14:  
Handset: Avaya 1516 +1BM

Copy and Print

Available Users

- 10:
- 11:
- 12:
- 13:
- 15:
- 18:
- 19:

Select All

Copy Feature Buttons Print Labels

Enable ALS Programming

Print Label for this Extension

Apply Cancel

# Simplified View – Programming (continued)



### Admin Tasks

- System
- User Setup
- Button Programming**
- Advanced
- Group Management
- Trunks
- Auxiliary Equipment
- Auto Attendant
- Advanced

### User Setup - Button Programming

User Buttons

User: 14:

Handset: Avaya 1516 +1BM

Copy and Print

Available Users

- 10:
- 11:
- 12:
- 13:
- 15:
- 18:
- 19:

Select All

Copy Feature Buttons | Print Labels

Enable ALS Programming

Print Label for this Extension

### System Details

Name	00E00705
IP Address	192.168.4
Version	6.0(11024
Mode	Partner Ed
Status	Offline
Feature Key	None

Apply Cancel

# Simplified View – Programming (continued)



## ► Create Offline Configuration

- Supported in PARTNER Version and IP Office modes

### Offline Configuration Creation

Please specify System Parameters

PARTNER Configuration :

Locale :


Extension Number Length :

Select Extension and Daughter Cards

Slot	Extension/VCM	Trunk
1	<input type="text" value="None"/>	<input type="text" value="None"/>
2	<input type="text" value="None"/>	<input type="text" value="None"/>
3	<input type="text" value="None"/>	<input type="text" value="None"/>
4	<input type="text" value="None"/>	<input type="text" value="None"/>

Which type of IP Office Units would you like to deploy ?

System Units

1  

Expansion Modules

1



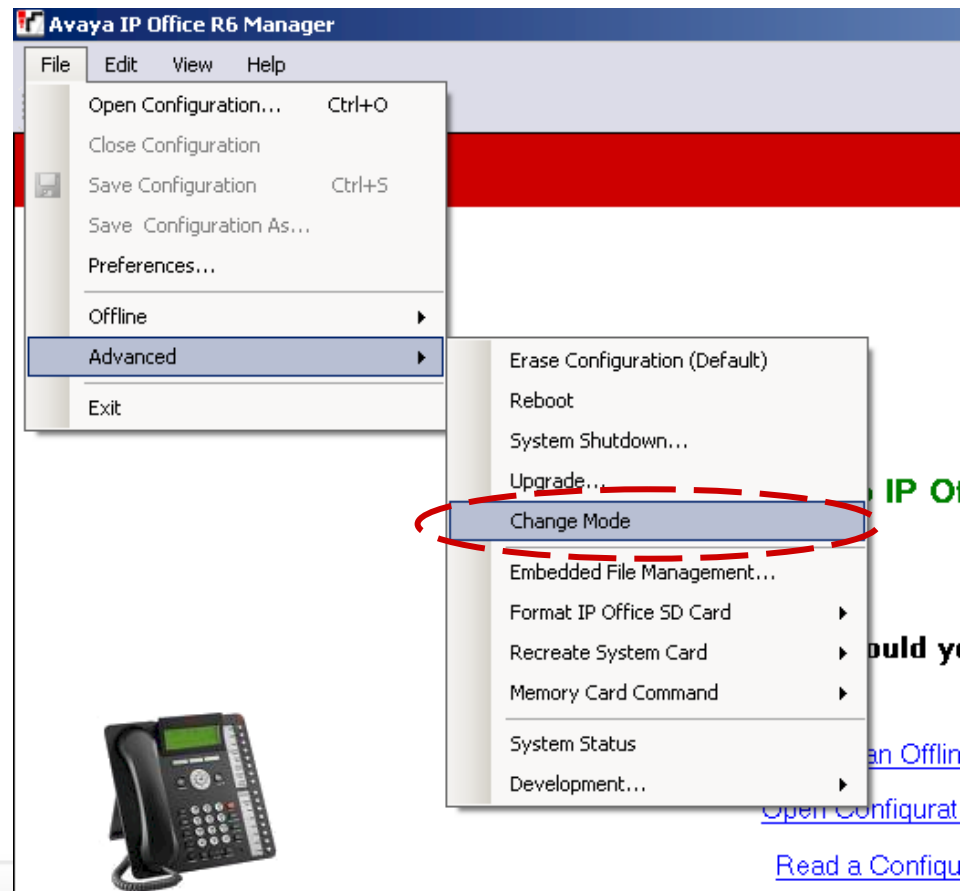
Ok

Cancel

# Change Mode – New Service Command



- ▶ Toggles IP500v2 Modes between PARTNER Version and IP Office Mode.
- ▶ Once the Mode is changed, the configuration is defaulted to “out of the box” (all existing programming is reset to defaults)



- ▶ Which is true about the PARTNER Version Simplified Manager?
  - A. It will automatically discover and connect to an attached unit.
  - B. It will automatically create an offline configuration if no unit is detected.
  - C. Must manually change mode in IP Office Manager to enable Simplified Manager.
  - D. A separate application must be launched for PARTNER Version.

- ▶ Which is true about the PARTNER Version Simplified Manager?
  - A. **It will automatically discover and connect to an attached unit.**
  - B. It will automatically create an offline configuration if no unit is detected.
  - C. Must manually change mode in IP Office Manager to enable Simplified Manager.
  - D. A separate application must be launched for PARTNER Version.

- ▶ Which two items are displayed on the Welcome Screen of the Simplified Manager? (Choose Two)
  - A. Inventory of the current configuration.
  - B. Graphical representation of the attached phones.
  - C. Hyperlink to the System Status Application.
  - D. Hyperlink to common administration tasks.
  - E. Alarms that have not been cleared.

- ▶ Which two items are displayed on the Welcome Screen of the Simplified Manager? (Choose Two)
  - A. **Inventory of the current configuration.**
  - B. Graphical representation of the attached phones.
  - C. Hyperlink to the System Status Application.
  - D. **Hyperlink to common administration tasks.**
  - E. Alarms that have not been cleared.



INTELLIGENT COMMUNICATIONS

A photograph showing the back of a person's head and shoulder. They are holding a black mobile phone to their ear with their right hand. The background is a blurred office interior with windows and door frames.

# Module 11: IP Office Essential Edition PARTNER<sup>®</sup> Version Conclusion

# Course Summary



## Congratulations!

- ▶ You have now completed the Avaya IP Office Release 6.0 Essential Edition – PARTNER Version Technical Delta Course!
- ▶ Now that you have completed this course, you should be able to:
  - Recognize the New and Enhanced IP Office Hardware supported with Software Release 6.0.
  - Understand the New and Enhanced Features and Application.
  - Understand what IP Office Essential Edition – PARTNER® Version can and can not do.

