



IP Office Release 6.0

System Status Application

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Documentation information

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Chapter 1.

System Status Application

1. System Status Application

The System Status Application (SSA) is a diagnostic tool for system managers and administrators, in order to monitor and check the status of IP Office systems. SSA shows both the current state of an IP Office system and details of problems that have occurred.

To assist with fault finding and diagnosis, the information reported is a combination of real-time and historical events as well as status and configuration data.

SSA provides real-time status, historic utilization and alarm information for ports, modules and expansion cards on the system.

SSA connects to all variants of IP Office 4.0 and higher software, using an IP connection that can be remote or local.

SSA provides information on the following:

- **Alarms**
SSA displays all alarms which are recorded within IP Office for each device in error. The number of occurrences and the date and time of the last occurrence are recorded.
- **Call Details**
Information on incoming and outgoing calls; including call length, call reference and routing information.
- **Extensions**
SSA details all extensions (including device type and port location) on the IP Office system. Information on the current status of a device is also displayed.
- **Trunks**
IP Office trunks and connections (VoIP, analog and digital) and their current status are displayed.
- **System Resources**
IP Office includes central resources that are utilized to perform various functions. Diagnosing these resources is often critical to the successful operation of the system. Those resources include:
 - Voicemail Channels
 - Conference Channels
 - Data Channels
 - VCM Channels
 - Modem Channels

Notes

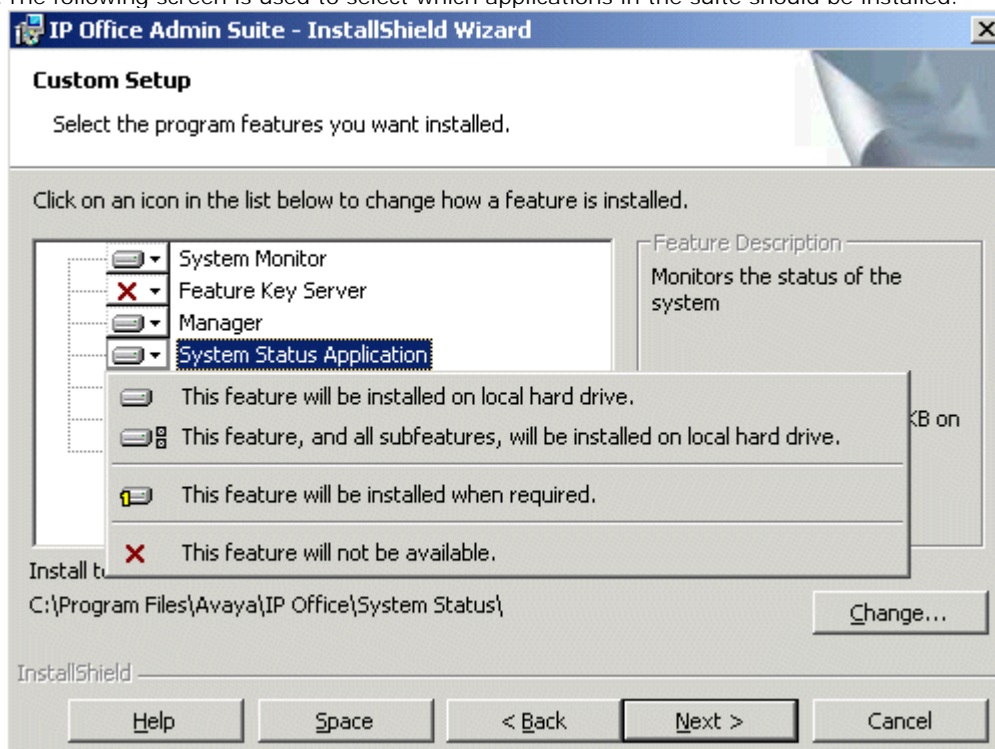
- SSA is not a configuration tool for IP Office systems. For information on configuration, refer to IP Office Manager.
- There can be up to two SSA clients connected to an IP Office unit at one time. However, two connections are not permitted from clients at the same IP address. The IP Office Customer Reporter application uses the same interface to the IP Office control unit as SSA and so is subject to the same restriction.

1.1 Installing the Application

SSA is a component of the IP Office 4.0+ suite of applications. This suite is supplied on the IP Office Applications DVD. For IP500 V2 systems, it can also be launched by browsing to the systems IP address without needing to install the application.

To install SSA:

1. If a pre-4.0 version of the IP Office Admin suite is installed, it must be removed. To do this:
 - From the Windows Control Panel, click Add or Remove Programs.
 - Click IP Office Admin Suite and then click Remove.
2. Insert the CD. The installation process should auto start. If it does not auto start, open the CD contents and double-click setup.exe.
3. Select the language you want to use for the installation process and click Next.
4. Select whether only the current Windows logon account should be able to run the Admin suite applications or whether they will be available to all users of the PC. Click Next.
5. If required, select the destination to which the applications should be installed. Avaya recommends that you accept the default destination. Click Next.
6. The following screen is used to select which applications in the suite should be installed:



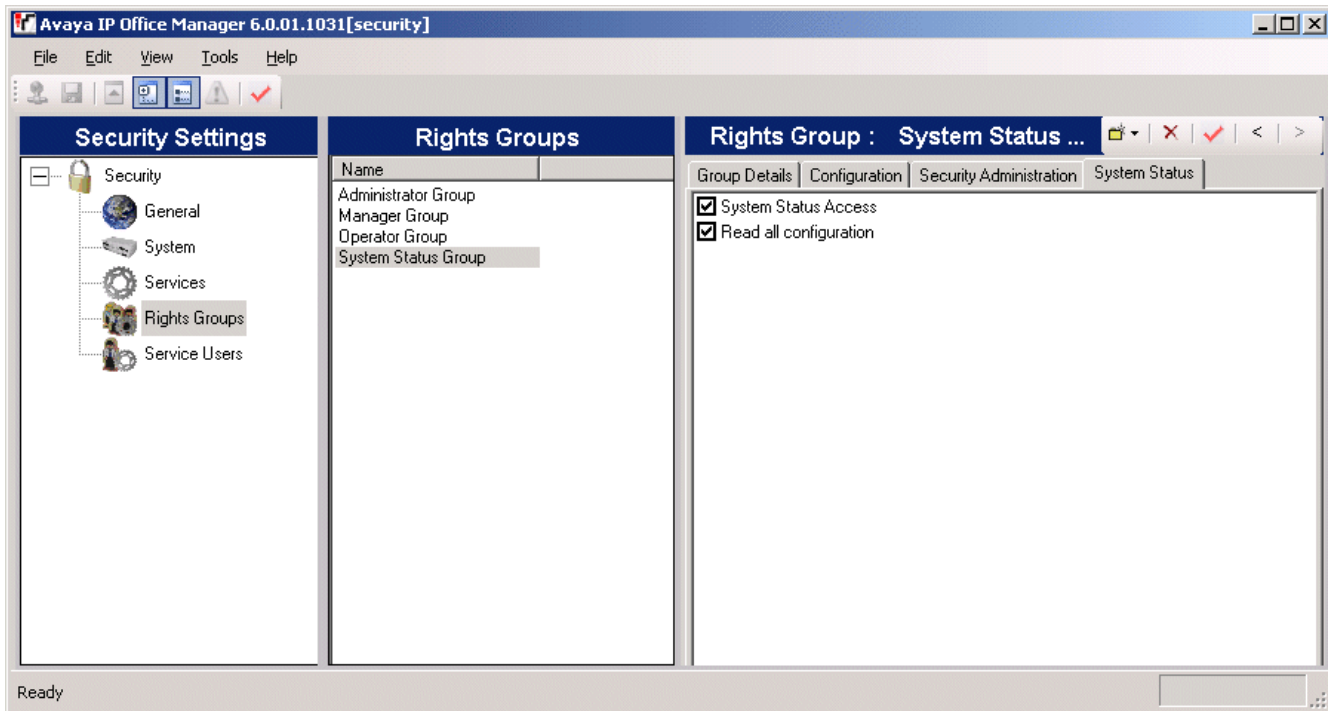
Clicking on each application will display a description. To change the installation selection, click ▼ next to each application. When you have selected the installations required, click Next.

7. Click Install.
8. Following installation, you will be prompted whether you want to run the IP Office Admin Suite. To run the suite, click Yes.

1.2 Assigning Security Settings

For new IP Office installations or where the security settings have been defaulted, then the default IP Office service users (Administrator, Manager and Operator) all have SSA access rights. For full details of security settings refer to the IP Office Manager application documentation or help.

For an IP Office service user to be able to use SSA to logon to a system, they must belong to a Rights Group on that system that has System Status Access enabled. In addition if they want to take snap shots that include a copy of the system configuration Read all configuration must be enabled.



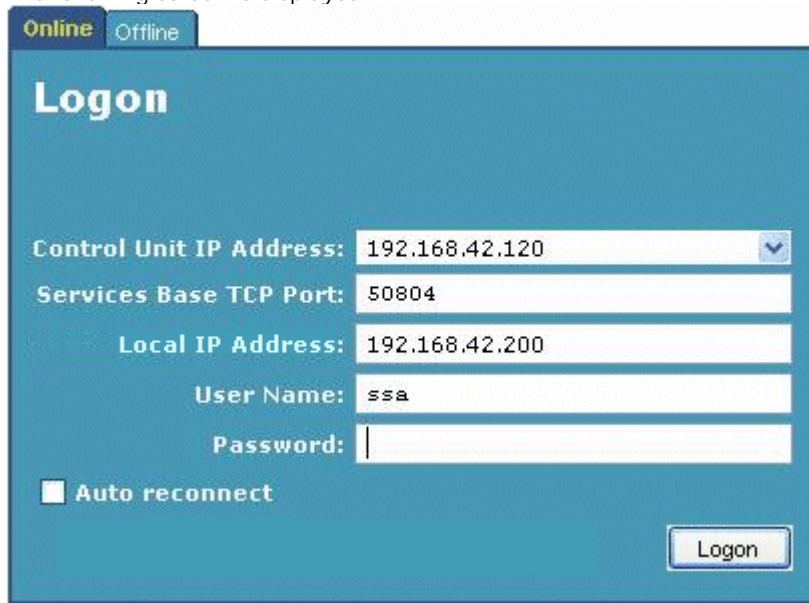
1.3 Starting SSA

SSA can be launched independently or via Manager. For IP500 V2 systems, it can also be launched by browsing to the systems IP address without needing to install the application.

1. Use one of the following methods to start SSA:

- Click the Windows Start icon and select Programs | IP Office | System Status.
- From within the IP Office Manager application, select File | Advanced | System Status.
- Using a browser, enter the IP address of the IP Office control unit, for example <http://192.168.42.1>. The web page should show details of the IP Office system. Select the System Status link.

2. The following screen is displayed:



- **Control Unit IP Address**
Enter the IP address of the IP Office control units LAN interface or use the drop down to select a previously used address.
- **Services Base TCP Port**
This should match the Services Base TCP Port setting of the IP Office system, set in that systems security settings. The default is 50804.
- **Local IP Address: Default = Automatic**
If the PC has more than one IP address assigned to its network card or multiple network cards, the address to use can be selected if necessary. This allows SSA to be run on a PC that is already running an SSI connection to the IP Office for the IP Office Customer Call Reporter application.
- **User Name/Password**
Enter a user name and password that has been provided for SSA usage. This must be the name of an IP Office service user name that has been configured for system status access in the IP Office's security settings. See [Assigning Security Settings](#) ⁹⁴.
- **Auto Reconnect**
If selected, SSA will attempt to reconnect using the same settings if connection to the IP Office is lost.

3. Once all the details are set, click Logon.

Note

- If SSA fails to start up on Windows 2000 Advanced Server, run CMD and select the directory in which the SSA components are installed (by default this will be C:\Program Files\Avaya\IP Office\System Status). Then run the following command:
`java -Dsun.java2d.noddraw=true -jar ssaviewer.jar`

This disables the use of DirectX from Java. If SSA starts up, this suggests your system has a DirectX problem. Possible reasons for DirectX problems:

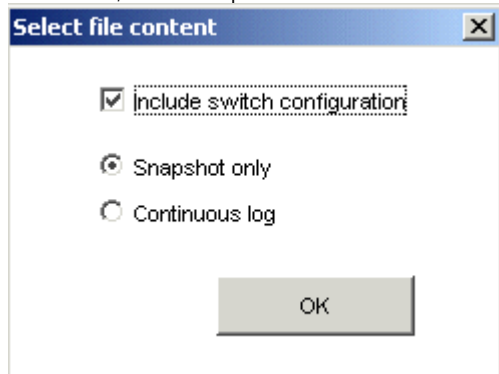
- DirectX is not properly installed (e.g. an installation or a de-installation of a program has corrupted one or more DirectX files). Test the DirectX setup by calling the dxdiag tool from the command line. Re-install DirectX or the latest service pack for your system.
- The driver of the graphics card is not fully compatible with the installed DirectX version. Update to the latest driver version.

1.4 Snapshot

Snapshot allows the IP Office system status to be captured and saved. The snapshot can then be viewed offline at a later time.

To take a snapshot

1. From SSA, click Snapshot:



2. The options include switch configuration and Snapshot only are selected by default.

- Include switch configuration

The user must have Read All Configuration enabled in the System Status Rights Groups (see [Assigning Security Settings](#)). The same snapshot file can be opened in SSA (to examine the status of the system at the time of the snapshot) and in Manager (to examine the configuration of the system at the time of the snapshot).

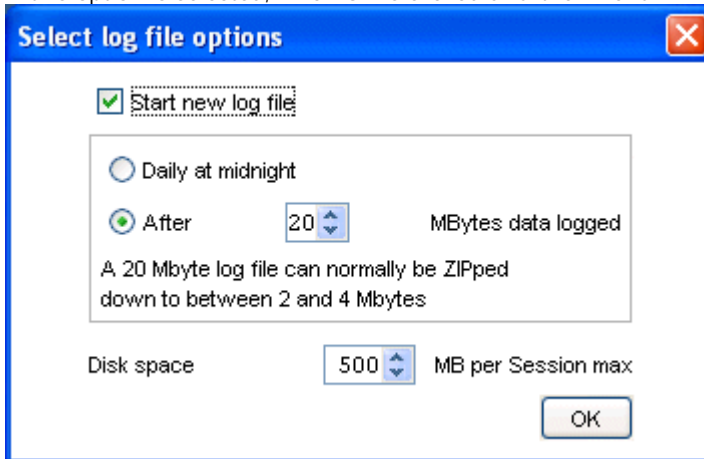
- Snapshot only/Continuous log

Select either a single snapshot of the current status or a continuous log of the status until logging is stopped. Note that with continuous logging, SSA must be left running and cannot be used for other activities without first stopping the logging.

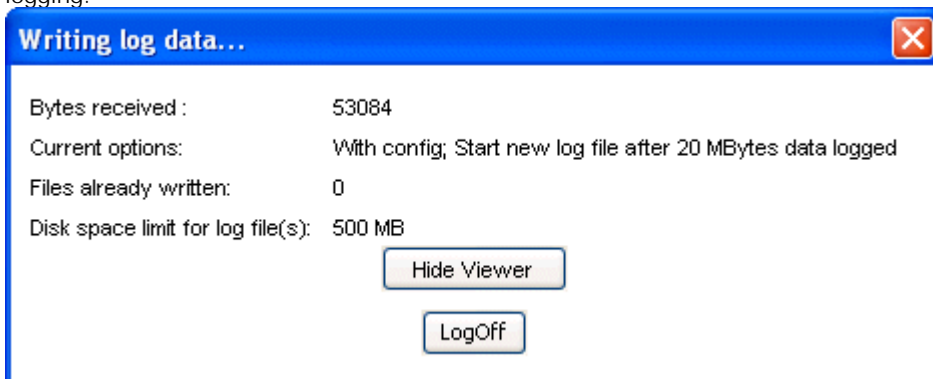
- Snapshot only

If this option is selected, when OK is clicked, SSA will request where you want to save the snapshot .ssh file. A default file name that includes the system name, date and time is shown but this can be replaced if required.

- Continuous log
If this option is selected, when OK is clicked a further menu will ask for the logging settings to be used.



Select the settings required and click OK. SSA will then request where the .slo file should be saved. Once logging has started, the following menu is displayed. Selecting LogOff will close SSA and end the logging.



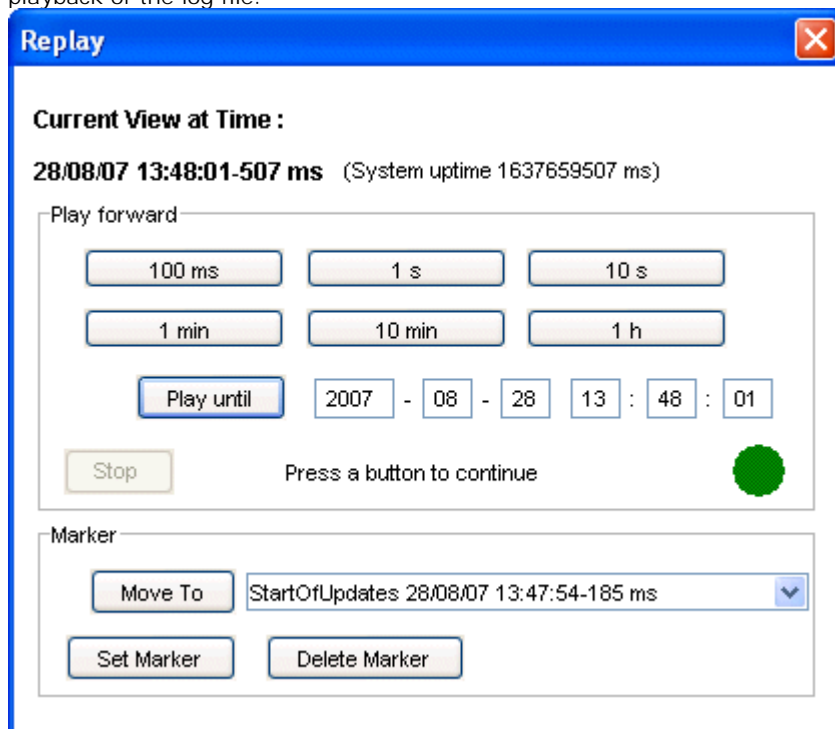
To open a snapshot

The menu options and buttons that relate to live information capture (such as Refresh) or that alter the IP Office state (such as Clear Alarms) are not available. The menu options Snapshot and LogOff are replaced by Properties and Close. Properties shows when the snapshot was taken and by whom.

1. From the Logon screen, click the Offline tab:



2. Click Select a file...
3. Locate the saved snapshot .ssh or .slo file and click Open to display the file.
4. For .slo continuous log files, the menu bar option Replay can be used to display a menu for controlling the playback of the log file.



1.5 Using The Application

This section describes how to navigate and access the features available in SSA. The following screen shows the layout of the application:

IP Office System Status - F-075-IP406-1 (192.168.42.1)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

MENU BAR

System

Alarms (6)

Extensions (22)

280

299

601

602

603

604

605

606

607

608

609

610

6666

6667

6747

6748

6749

6750

6751

6752

6753

6754

Trunks (26)

Active Calls

Resources

NAVIGATION PANEL

Extension Summary

You can get more information about an extension by double-clicking the Home Extension Number.

INFORMATION PANEL

Home Extension Number	Current User Extension	Current User Name	Module/ Slot/ IP Address	Port Number/ MAC Address	Telephone Type	Number of New Messages
6747	6747	Extn6747	Module: 5	1	POT (CLI On)	0
6748	6748	Extn6748	Module: 5	2	POT (CLI On)	0
6749	6749	Extn6749	Module: 5	3	POT (CLI On)	0
6750	6750	Extn6750	Module: 5	4	POT (CLI On)	0
6751	6751	Extn6751	Module: 5	5	POT (CLI On)	0
6752	6752	Extn6752	Module: 5	6	POT (CLI On)	0
6753	6753	Extn6753	Module: 5	7	POT (CLI On)	0
6754	6754	Extn6754	Module: 5	8	POT (CLI On)	0
601	601	Doris Salaam	Control Unit - Phone Ports	1	POT (CLI On)	0
602	602	Isla Wight	Control Unit - Phone Ports	2	POT (CLI Off)	0
603	603	Alice Ababa	Control Unit - DS Ports	1	2420	0
604	604	Boris Aeris	Control Unit - DS Ports	2	2410	0
605	605	TristramDaCunha	Control Unit - DS Ports	3	9040 or 3810	0
606	606	Sam Jose	Control Unit - DS Ports	4	2402	0
607	607	Kate Cod	Control Unit - DS Ports	5	Unsupported Classm...	0
608			Control Unit - DS Ports	6	unplugged	
609	609	MontyCarlo	Control Unit - DS Ports	7	T3 Comfort	0
610			Control Unit - DS Ports	8	unplugged	
280	280	Ken Tucky	192.168.42.42	00-09-6E-08-13-B6	5610	0
299	299	Ben Becula	192.168.42.20	00-09-6E-07-B6-C9	5602	0
6666	6666	Steven Edge	IP DECT module		DECT IP	0
6667	6667	Peter Burrow	IP DECT module		DECT IP	0

Refresh

Print...

BUTTON BAR

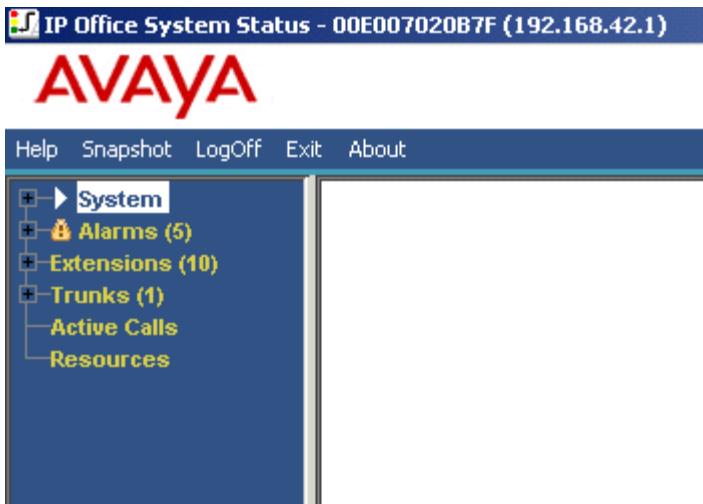
STATUS BAR

10:14:45 AM

Online

1.5.1 Navigation Panel

The Navigation Panel displays a list of items on which information can be selected and displayed in the information panel.





To view more options, expand the structure by clicking + next to the feature.

To view summary and specific details in the Information Panel:

- **Summary**
To view summary information, click a feature in the navigation panel. For example; click Extensions and the Extension Summary screen is displayed.
- **Specific**
To view detailed information, double-click a feature in the navigation panel to display a list of items and then click an item to view specific details in the information panel. For example; double-click Extensions to display a list of extensions and then click an extension to view the Extension Status screen.

1.5.2 The Menu Bar

From the menu bar, you can select the following options:

- [Help](#) 
Opens the SSA help system.
- LogOff
Logs off of the control unit and returns to the login screen.
- Exit
Closes the SSA application.
- About
Displays the SSA version number and copyright information. To close, click OK.
- [Snapshot](#) 
Captures the complete status of an IP Office system at a particular time and saves this to file. SSA can then be used offline to browse this information.

1.5.2.1 Help

To open the help system, click Help from the menu bar. Alternatively, click F1.

If applicable, the help will open at the page relating to the screen currently displayed, otherwise About this Guide is displayed.

1.5.3 Button Bar

The table below provides a description of the various buttons available from the Button Bar:

Button	Description
Abandoned Calls	The Active Calls screen splits to display a list of incoming calls on a trunk where the caller disconnected before the call was first answered
Absolute Time	Applies to the 24 Hour Performance History. Each line shows the absolute time at which the reported 15 minute period started (HH:MM in 24 hour clock format). See also Relative Time.
Back	Returns to the previously selected screen.
Call Details	Displays call details/traces. Only valid when a single row showing an active call is selected.
Clear	Clears all the alarms that have been selected. Any alarm still active will remain with the count of 1.
Clear Abandoned Calls	Clears all listed abandoned calls, updates the date and time and enables further abandoned calls to be logged.
Clear All	Clears all listed alarms. Any alarm still active will remain with the count of 1.
Conference Details	Available for call details when the call is connected to a conference.
Details	Available from the IP 500 System Hardware Summary. Shows more information about the system, e.g. Loader, FPGA and PCB versions.
Disconnect	Clears the current call.
Full Details	Applies to Active Calls. Resumes the full display.
Pause	Stops the screen from updating. Applies to screens that are continually updated. See also Resume.
Ping	Pings the IP address of the displayed extension or trunk.
Print	Prints all information available in the current screen (including any information currently scrolled off).
Refresh	Updates the screen. Applies to screens that are not automatically updated, such as Extension Summary.
Relative Time	Applies to the 24 Hour Performance History. Indicates how far into the 15 minute interval the line is (e.g. 3 minutes will show as 00:03). The times following that will be displayed in relationship to the current time as HH:MM (e.g. subtract 15 minutes from the current interval to get the next one).
Reset	Applies to the Utilization Summary. Resets all counters and timers to 0.
Resume	Resumes updating screen in real time.
Save As	Saves all information that is available on the screen. By default, the information is saved as a .txt file. For screens that include traces, the trace only can be saved as a .csv file.
Show Blanks	Applies to 24 Hour Performance History. 0 error values for each line appear as blanks.

Show Zeros	Applies to 24 Hour Performance History. 0 error values for each line are displayed.
Summary	Returns to the System Hardware Summary. See also Details.
Trace	Starts a trace of the rows selected. The trace is displayed for each call associated with the selected trunk ports or extension button.
Trace All	Starts a trace for the whole trunk group or extension. The trace is displayed for all calls associated with the trunk or extension.
Trace Clear	Clears the trace and continues tracing.

Chapter 2.

Screens

2. Screens

2.1 System

2.1.1 Hardware Summary

When you first log on to SSA, the System Hardware Summary screen is displayed, detailing information about the system modules. The format and layout of the screen will vary according to the type of IP Office control unit.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
 - Slot 1 DS Phones
 - Slot 2 Trunk Mod
 - Slot 3 POT Phone
 - Slot 3 Trunk Mod
- VoIP Trunks (2)
- H.323 Extensions
- Alarms (10)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
 - Licenses
 - Directory
 - Control Unit Audit
- Voicemail
 - Mailboxes
- IP Networking
 - IP Routes
 - Tunnels

System Hardware Summary

Control Unit: IP500 Current Firmware: 4.2 (11007)
Mode: Professional Compact Flash: CompactFlash 512M

Control Unit Slots:

Slot Number	Base	Daughter card
1	Base: DS 8	Daughter card: None
2	Base: VCM64	Daughter card: Quad BRI
3	Base: Phone 8	Daughter card: ATM4
4	Empty	

External Modules:

Module Number	Type	Current Firmware
1	not present	
2	not present	
3	not present	

Details Shutdown System Backup System Files Restore System Files Upgrade Binaries

08:32:15 Online

- **Details (IP500 and IP500 V2 only)**
This button allows additional information to be displayed. This additional information can be hidden again by clicking on the Summary button.
- **Shutdown System**
This command can be used to shutdown the IP Office for a period of time after which it will automatically restart. Alternately it can be shutdown until power is removed and then reapplied.
- **Backup System Files (IP500 V2 only)**
Backup the files currently being used by the control unit to the backup folder on the System SD card.
- **Restores System Files (IP500 V2 only)**
Restore the files from the backup folder on the System SD card. A system shutdown will be required for the restored files to be used following the system restart.
- **Upgrade Binaries (IP500 V2 only)**
Copy the files, other than system configuration files, on the Optional SD card in the system to the System SD card.

Click Details for more information.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

- System
 - Control Unit (IP500)
 - Slot 1 DS Phones
 - Slot 2 Trunk Mod
 - Slot 3 POT Phone
 - Slot 3 Trunk Mod
 - VoIP Trunks (2)
 - H.323 Extensions
- Alarms (10)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
 - Licenses
 - Directory
 - Incoming Call Route
 - Control Unit Audit
- Voicemail
 - Mailboxes
- IP Networking
 - IP Routes
 - Tunnels

System Hardware Details

Control Unit: IP500 Current Firmware: 4.2 (11007)

Loader Version: CPU Version: MPC8248 CPU Revision 0x0c10

Board Version: 0xA0 PLD Version: 0x17

Options Present: 0x802 FPGA: Id=0x1, Issue=0x0, Build=0x5E

NAND Flash: 64M, Hynix RTC Battery: present

RTC Last Update: 05/02/2008 07:46:34

LAN1 MAC Address: 00-E0-07-02-6F-AC LAN2 MAC Address: 00-E0-07-82-6F-AC

Mode: Professional Compact Flash: CompactFlash 512M, STI Flash 7.0.0

Control Unit Slots:

Slot Number	Base	Board version	PLD version	Daughter card
1	DS 8	0xC0	0x5	None
2	VCM64	0x1	0x10	Quad BRI, Board version=0x
3	Phone 8	0x1	0x3	ATM4, Board version=0x0
4	Empty			

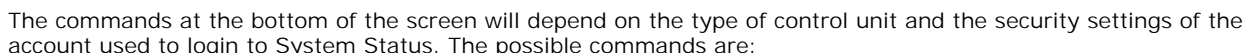
External Modules:

Module Number	Type	Current Firmware
1	not present	

Summary

08:34:19 Online

For IP Office Release 6, this option is shown for IP Office systems where the control unit is fitted with an additional memory card. The memory card can be selected and its details viewed within SSA.



- Refresh
Update the displayed information.
- Shutdown
This command can be used to shutdown the service provided by the memory card, including embedded voicemail if being used. Once shutdown, the card LED on the control unit is extinguished and the card can be safely removed from the control unit.
- Start Up
If the memory card has been shutdown, this command can be used to re-enable operation of the card.
- Copy System Card
This option is available for IP500 V2 control units fitted with a System SD and Optional SD card. When selected, the contents of the System SD card are copied to the Optional SD card. Note that this process can take several hours as it is done as a low priority task so as to not affect normal IP Office operation.
- Format
This option is available for IP500 V2 control unit memory cards. When selected, the card is formatted. All contents of the card are erased by this process.
- Print
Prints the screen (including any information currently scrolled off).
- Save As
Save all the information on the screen as a .txt file.

2.1.3 Control Unit Port

This screen shows the devices installed in the control unit ports. The number of available ports and the types of devices will vary according to the type of control unit. Select a device to display information on it.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
 - Slot 1 DS Phones
 - Slot 2 Trunk Module
 - Slot 3 POT Phones
 - Slot 3 Trunk Module
- VoIP Trunks (2)
- H.323 Extensions
- Alarms (10)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
 - Licenses
 - Directory
 - Control Unit Audit
- Voicemail
 - Mailboxes
- IP Networking
 - IP Routes
 - Tunnels

Select an internal module to display its ports

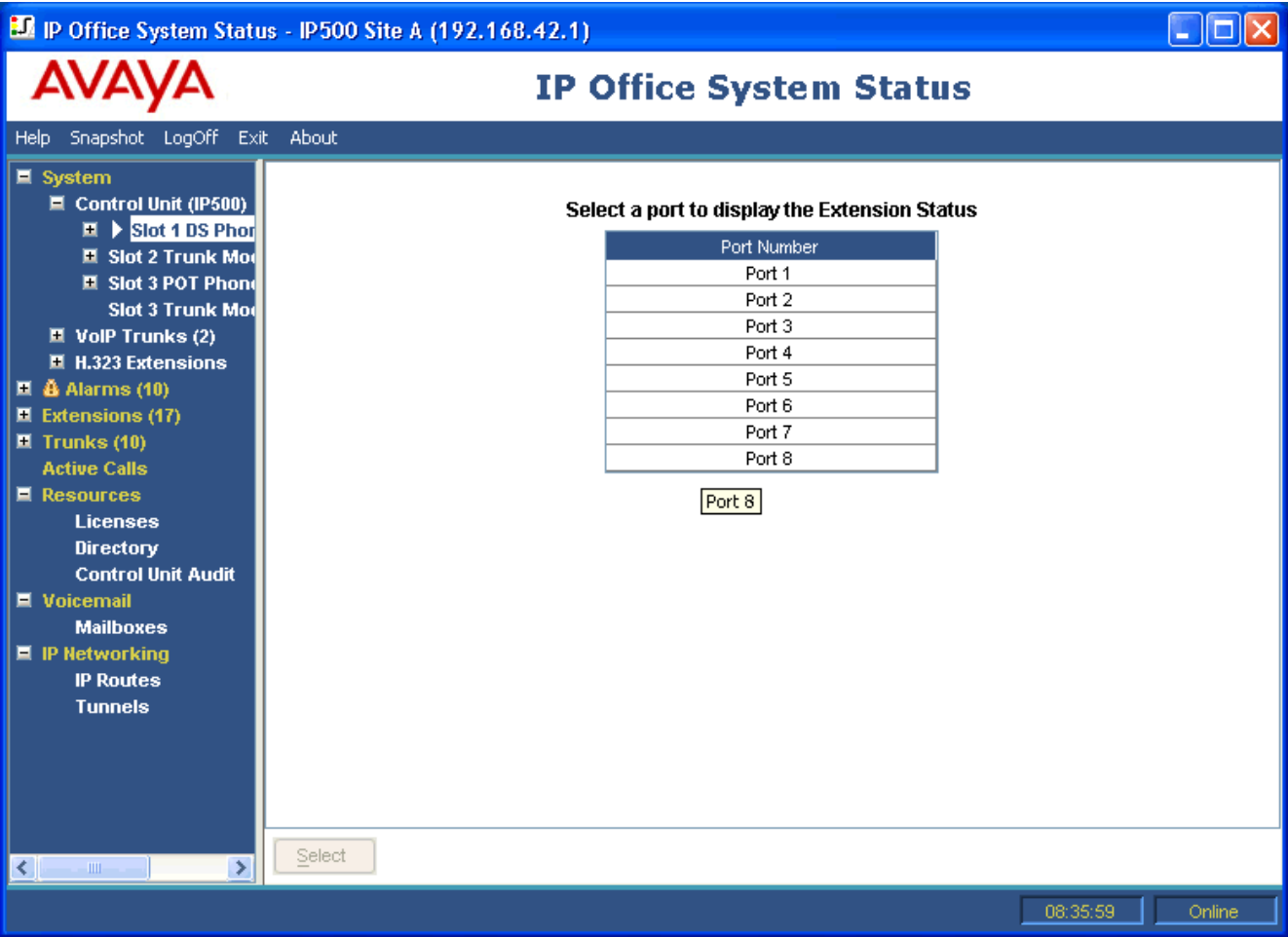
Module
Slot 1 DS Phones Module (8)
Slot 2 Trunk Module (Quad BRI)
Slot 3 POT Phones Module (8)
Slot 3 Trunk Module (ATM4)

Select

08:34:51 Online

2.1.4 Extension Ports

This screen shows the individual ports on the selected device in a control unit slot. The number of available ports and the types of devices will vary according to the type of control unit.



Select a device to display information on it.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
 - Slot 1 DS Phone
 - Port 1
 - Port 2
 - Port 3**
 - Port 4
 - Port 5
 - Port 6
 - Port 7
 - Port 8
 - Slot 2 Trunk Line
 - Slot 3 POT Phone
 - Slot 3 Trunk Line
 - VoIP Trunks (2)
 - H.323 Extensions
- Alarms (10)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
 - Licenses
 - Directory
 - Control Unit Audio
- Voicemail

Extension Status

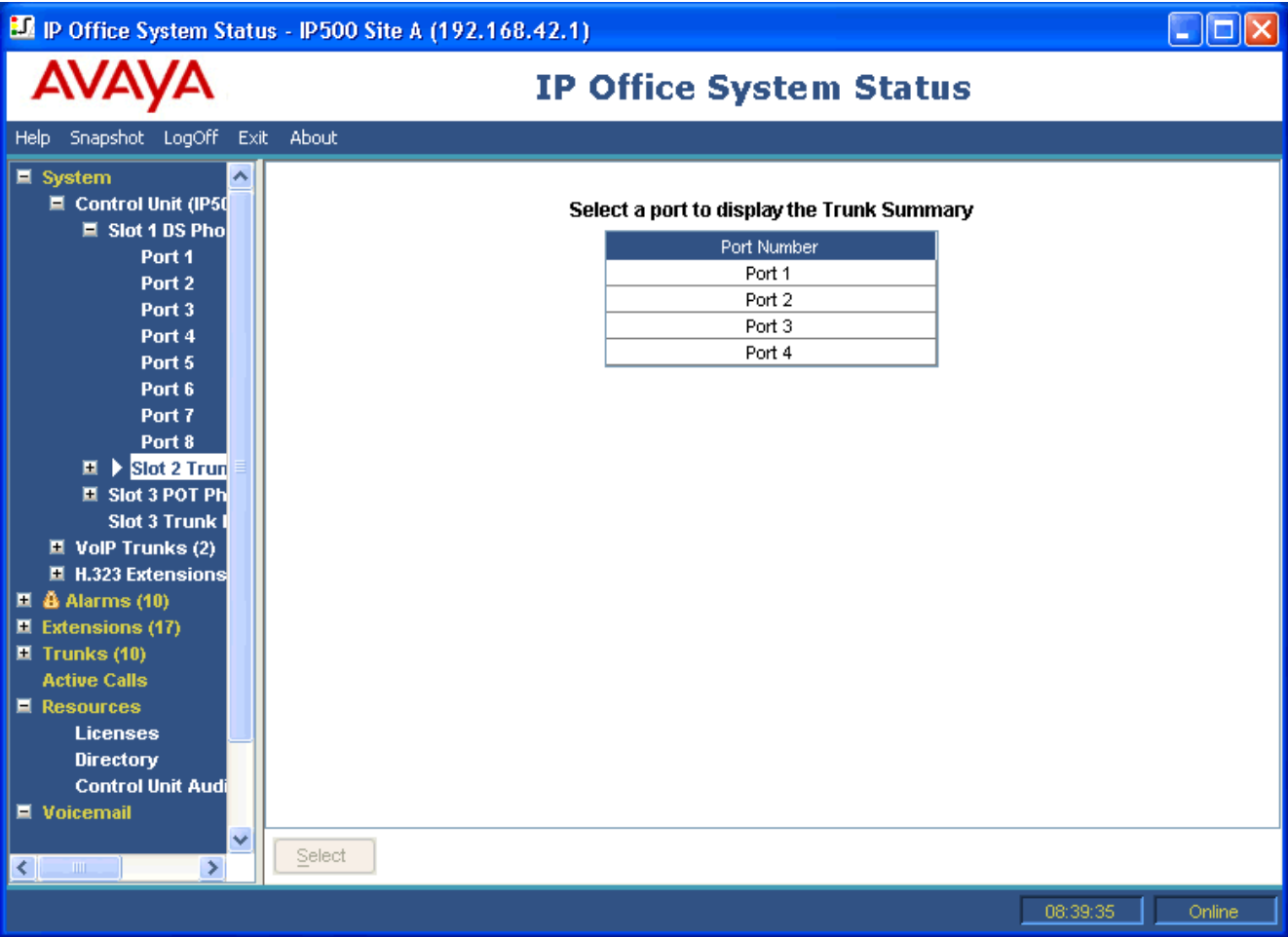
Extension Number: 203
 Slot: 1
 Port: 3
 Telephone Type: 5410
 Current User Extension Number: 203
 Current User Name: Extn203
 Forwarding: Off
 Twinning: Off
 Do Not Disturb: Off
 Message Waiting: On
 Number of New Messages: 1
 Phone Manager Type: None

Button Number	Button Type	Call Ref	Current State	Time in State	Calling Number or Called	Direction	Other Party on Call
1	CA		Idle	00:29:35			
2	CA		Idle				
3	CA		Idle				

08:38:41 Online

2.1.5 Trunk Ports

Select a port to display data for digital trunks. The number of available ports and the types of devices will vary according to the type of control unit.



Select a device to display information on it. For trunks this consists of a number of tabs. For full details refer to the [Trunks](#)⁵³ section.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
 - Slot 1 DS Phone
 - Port 1
 - Port 2
 - Port 3
 - Port 4
 - Port 5
 - Port 6
 - Port 7
 - Port 8
 - Slot 2 Trunk
 - Port 1**
 - Port 2
 - Port 3
 - Port 4
 - Slot 3 POT Phone
 - Slot 3 Trunk
- VoIP Trunks (2)
- H.323 Extensions
- Alarms (10)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
- Licenses

Status Utilization Summary Alarms

Digital Trunk Summary

Line: 5 Slot: 2 Port: 1

Line Type: BRI

Line Subtype: ETSI

Number of Channels: 2

Number of Administered Channels: 2

Number of Channels in Use: 0

Channel Number	Call Ref	Current State	Time in State	Routing Digits	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1		Idle	21:54:08				
2		Idle	21:54:08				

Trace Trace All Pause Call Details Print... Save As...

08:40:14 Online



IP Office System Status

Help Snapshot LogOff Exit About

System

Control Unit (IP500)

Slot 1 DS Phone

Port 1

Port 2

Port 3

Port 4

Port 5

Port 6

Port 7

Port 8

Slot 2 Trunk

Port 1

Port 2

Port 3

Port 4

Slot 3 POT Phone

Slot 3 Trunk

VoIP Trunks (2)

H.323 Extensions

Alarms (10)

Extensions (17)

Trunks (10)

Active Calls

Resources

Licenses

Status Utilization Summary Alarms

Utilization Summary for Line: 5

Module: Quad BRI

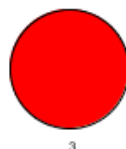
Line: 5 Slot: 2 Port: 1

Line Type: BRI

Line Sub Type: ETSI

Counters started: 04/02/2008 10:46:34

Call Type	Number of Calls	Total Call Duration
Outgoing	0	0:00:00
Incoming	0	0:00:00
Incoming Abandoned	3	



Incoming
Outgoing
Abandoned



Reregister

08:41:57

Online

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

- Port 7
- Port 8
- Slot 2 Trunk 1
- Port 1
- Port 2
- Port 3
- Port 4
- Slot 3 POT Phone
- Slot 3 Trunk 1
- VolP Trunks (2)
- H.323 Extensions
- Alarms (10)
 - Configuration (0)
 - Service (6)
 - Trunks (3)
 - Line: 5 (0)
 - Line: 6 (1)
 - Line: 7 (1)
 - Line: 8 (1)
 - Line: 9 (0)
 - Line: 10 (0)
 - Line: 11 (0)
 - Line: 12 (0)
 - Line: 13 (0)
 - Line: 14 (0)
 - Link (1)

Status Utilization Summary **Alarms**

Alarms for Line: 8 Slot: 2 Port: 4

Last Date Of Error	Occurrences	Error Description
04/02/2008 10:46:36	1	Trunk out of Service

Clear Clear All Print... Save As...

08:42:46 Online

2.1.6 Expansion Modules

This screen lists the external expansion modules installed in the system.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

System

Control Unit (IP500)

Expansion Modules

Module 1 (DS30V2)

VoIP Trunks (2)

H.323 Extensions

Alarms (10)

Extensions (47)

Trunks (10)

Active Calls

Resources

Voicemail

IP Networking

Select a module to display its ports

Module Number	Type
1	DS30 V2

Select

09:46:11

Online

To view details of an individual port, use the navigation pane or select the port and click Select.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
- Expansion Modules
 - Module 1 (192.168.42.1)
 - Port 1
 - Port 2
 - Port 3
 - Port 4
 - Port 5
 - Port 6
 - Port 7
 - Port 8
 - Port 9
 - Port 10
 - Port 11
 - Port 12
 - Port 13
 - Port 14
 - Port 15
 - Port 16
 - Port 17
 - Port 18
 - Port 19
 - Port 20
 - Port 21
 - Port 22

Select a port to display the Extension Status

Port Number
Port 1
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8
Port 9
Port 10
Port 11
Port 12
Port 13
Port 14
Port 15
Port 16
Port 17
Port 18
Port 19
Port 20
Port 21

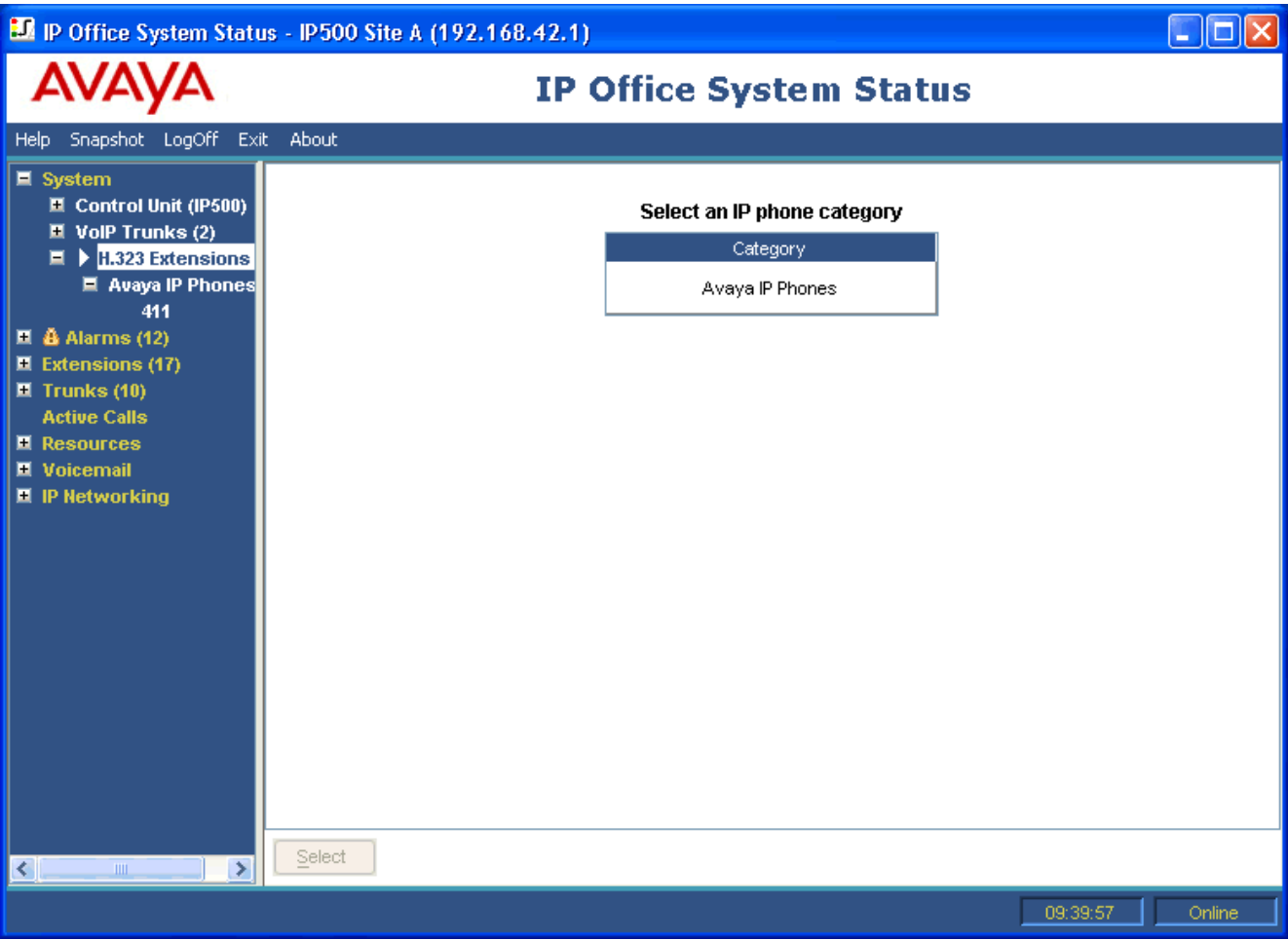
Select

09:46:49 Online

An individual port can then be selected to view its details.

2.1.7 H.323 Extensions

This screen will list the different types of IP phone devices being supported by the IP Office.



To see further detail use the navigation pane or select the type of phones required and click Select.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
- VoIP Trunks (2)
- H.323 Extensions
 - Avaya IP Phone
 - 411
- Alarms (12)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
- Voicemail
- IP Networking

Select an extension to display the Extension Status

Home Extension Number	IP Address	MAC Address	Firmware Version
411	192.168.42.206	00-09-6E-04-31-01	2.300

Select Reregister

09:40:20 Online

To view details of an individual extension port, use the navigation pane or select the port and click Select. See [Extension Status](#) ⁵⁰⁷.

The Reregister option can be used to force Avaya H.323 IP phones to both reregister with the IP Office and to restart, including checking their current firmware against that available on the configured TFTP or HTTP file server. Since this process is monitored in real-time by the SSA, it is recommended that only small groups, up to 15 phones, are forced to reregister at any time. Attempting to reregister larger numbers of phones will cause SSA to appear to be paused.

2.1.8 VoIP Trunks

This screen lists the VoIP trunks configured within the system.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

System

Control Unit (IP500)

VoIP Trunks (2)

Line: 13

Line: 14

H.323 Extensions

Alarms (12)

Extensions (17)

Trunks (10)

Active Calls

Resources

Voicemail

IP Networking

Select a line to display the Trunk Summary

Line	Type	Address / Domain
13	H.323	192.168.44.1
14	H.323	192.168.46.1

Select

09:38:53

Online

To view details of an individual trunk, use the navigation pane or select the port and click Select. See [Status \(VoIP Trunk\)](#)

2.1.9 Extension Selection

This screen will show extension provided by a control unit (see Expansion Modules to access extension ports provided by an external expansion module).

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
 - Slot 1 DS Phone
 - Slot 2 Trunk Mod
 - Slot 3 POT Phone
 - Slot 3 Trunk Mod
- VoIP Trunks (2)
- H.323 Extensions
 - Avaya IP Phones
- Alarms (12)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
- Voicemail
- IP Networking

Select a port to display the Extension Status

Port Number
Port 1
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8

Select


09:37:57 Online

To view details of an individual extension port, use the navigation pane or select the port and click Select. See Extension Status.

2.2 Alarms

Alarms are recorded within IP Office for each device in error. The number of occurrences and the date and time of the last occurrence is recorded. Alarms are listed on the display, by category and by trunk. Trunk alarms have a separate count for each alarm that happens on a particular trunk.

SSA distinguishes between the following alarm types:

- **Active**
Current alarms are displayed in red with a  symbol. If an alarm is no longer active, the alarm changes to black but the count will remain the same. When an alarm goes from historical to active, the count is increased by one.
- **Historic**
Alarms which are no longer occurring or which are instantaneous events are displayed in black. IP Office will hold at least 50 historic alarms. If historic alarms are discarded due to memory limitations, IP Office keeps a count of the number of discards and the corresponding number of occurrences. This is represented as 'Lost Alarms', which is displayed as a configuration alarm that is never automatically discarded.

Notes

- Alarms can be cleared using the Clear or Clear All buttons. If an alarm is still active, it will remain in the list with an occurrence count of 1.
- Alarms are not preserved after a control unit reboot.

To view the alarms in a specific category:

1. In the navigation panel, click + next to Alarms.
2. The alarm categories are displayed followed by the number of alarms (in brackets).
 - [Last System Restart](#) ³⁷
Shows alarms caused by potential problems with the IP Office configuration.
 - [Configuration](#) ³⁸ (IP Office 4.2+)
Shows alarms caused by potential problems with the IP Office configuration.
 - [Service](#) ³⁹
Shows alarms for internal services such as licenses, music on hold, network clock, etc.
 - [Trunks](#) ⁴²
Shows a summary table of the trunks and any trunk alarms. Trunk alarms can be further expanded to display alarms for individual trunks.
 - [Link](#) ⁴⁶
Shows alarms for non-trunk links to IP Office such as extensions and expansion modules.
3. To view a specific alarm, click the alarm or trunk type. The alarm details are displayed in the information panel.

2.2.1 Last System Restart

This screen list details of the last system restart. The Alarm History button can be pressed to display further alarms.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
 Alarms (12)
 Extensions (17)
 Trunks (10)
 Active Calls
 Resources
 Licenses
 Directory
 Control Unit Audit
 Voicemail
 IP Networking

Last System Restart

Date: 06/02/2008 09:15:31
 Reason: Saved Configuration
 User Name: Administrator

2 Alarm Events since 06/02/2008 09:27:52

Event	Type	Line	Date	Occurrences	Error Description
Alarm o...	Service		06/02/2008 0...	3	Failed to load Hold Music source file
Alarm o...	Service		06/02/2008 0...	5	Attempt to use a feature for which no license is installed. License Type: IP500 Universal PRI (Additional Channels)

Pause Print... Save As... Clear Alarm History

Refresh after config change done. 09:28:53 Online

- Date
Date and time the system was last restarted.
- Reason
Why the system restarted. The reasons may be:
 - User Initiated
The user has selected File | Advanced | Reboot in Manager. The Manager operator name is displayed.
 - Saved Configuration
A configuration save has required a reboot. The Manager operator name is displayed.
 - Software Upgrade
The software upgrade has caused a reboot.
 - Normal Power-up
The switch has restarted after power outage.
 - Abnormal Termination
The switch has restarted for any other reason. The stack trace is displayed.

2.2.2 Configuration Alarms

This screen displays configuration alarms. These do not necessarily match errors listed by the IP Office Manager application when that application is used to view and edit the system configuration. They are configuration errors that arise during operation of the system. For example:

- Incoming call routes to a Voicemail Pro start point that does not exist.
- Small Community Network duplicate numbers.
- Calls arriving on a line for which no valid routing has been configured.

2.2.3 Quality of Service Alarms

IP Office 5.0+ supports Quality of Service (QoS) monitoring for IP Office extensions. This is enabled through the Enable RTCP Monitoring on Port 5005 (*System / LAN1 / VoIP*) setting within the IP Office configuration.

The current quality of service information for a call is displayed within SSA on the extension's [Extension Status](#)^[50] form. That information is displayed for Avaya H323 IP phones registered with the IP Office. It is also displayed for other extension when they are on a call involving an IP Office VCM channel.

The thresholds for quality of service alarms are set within the IP Office configuration (*System / System Events / QoS Parameters*). Separate thresholds are set for Round Trip Delay (default 350ms), Jitter (default 20ms) and Packet Loss (0.5%). At the end of a call where any one of the thresholds has been exceeded, the IP Office will output an QoS alarm containing details of the call and the maximum value of each of the QoS measures during the call.

Call Quality of Service Alarms

Last Date Of Error	Occurrences	Error Description
23/01/2009 10:05:21	1	Call Id: 1, IP Address: 192.168.42.111, Peer IP Address: 192.168.42.8, Extension Number: 293, Jitter: 2500, Round Trip Delay: 789000, Packet Loss: 1230
23/01/2009 10:05:21	1	Call Id: 1, IP Address: 192.168.42.8, Peer IP Address: 192.168.42.111, Extension Number: 300, Jitter: 0, Round Trip Delay: 789000, Packet Loss:

For calls that are held or parked and then resumed, separate QoS alarms may be output for each segment of the call. If the call involves several extension, separate alarms may also be output for each extension.

2.2.4 Service Alarms

The Service Alarm screen contains an entry for each service error. Alarms that are a current problem are displayed in red. If an alarm is no longer active, it is displayed in black. Service alarms are updated in real time.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Alarms (10)
 - Configuration (0)
 - Service (6)
 - Trunks (3)
 - Link (1)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
- Voicemail
- IP Networking

Service Alarms

Last Date Of Error	Occurrences	Error Description
06/02/2008 07:59:32	1	The following system resources are all in use: Modem Channels
06/02/2008 07:59:55	1	Attempt to use a feature for which no license is installed. License Type: RAS LRQ Support(Rapid Response)
06/02/2008 07:59:56	1	8kHz clock source changed. Previous source was Internal
06/02/2008 08:09:31	3	Attempt to use a feature for which no license is installed. License Type: UMS Web Services
06/02/2008 08:09:31	3	Attempt to use a feature for which no license is installed. License Type: Additional Voicemail Pro (ports)
06/02/2008 09:04:26	12	Failed to load Hold Music source file

Clear Clear All Print... Save As...

09:04:58 Online

The following information is displayed:

- **Last Date of Error**
The last time the error that caused a particular alarm occurred.
- **Occurrences**
How many times the alarm has occurred since the control unit was last restarted or the alarm was last cleared.
- **Error Description**
A description of the error that caused the alarm.

Note

- Some service alarms are also shown in the System Resources screen. Clearing the alarms from this screen will also clear them in the System Resources screen.

2.2.4.1 Logon Failure Due to User ID/Password

An alarm is displayed when attempted access has failed:

- Manager
A login has been attempted from Manager to the control unit with an invalid user ID or password.
- Monitor
A login has been attempted from Monitor to the control unit with an invalid password.
- User
The user has attempted to login with the wrong code.
- Voicemail Box
The user has attempted to access their voicemail box with the wrong code.
- Voicemail System
VoiceMail Pro/Lite has failed to connect to the control unit due to invalid passcode.
- SNMP
A management system has attempted to execute an SNMP request with the wrong community string.
- H.323 Extension
An invalid extension or passcode has been entered on the telephone.
- RAS
A dial-in user attempted to connect with the wrong password.
- SSA
A login has been attempted from SSA with an invalid user ID or password.

If an alarm has additional information, the following is displayed:

Logon failed due to incorrect userId/password.

Application: YYYYYYYYYY

Additional information

The following table lists what is displayed as additional information:

Logon Failure	Information
Manager	Operator name and the IP address of the PC running Manager
Monitor	IP address of the PC running Monitor
User	User number and name
Voicemail Box	User number and name
Voicemail System	IP address of PC running voicemail
SNMP	IP address of the host attempting SNMP access
H.323 Extension	User and extension number attempted
RAS	RAS user name
SSA	User name and the IP address of the host running SSA

2.2.4.2 Feature Key Server Connection Failure

If the system cannot connect to the Feature Key Server, the following is displayed:

"The system was unable to connect to the Feature Key Server. "

Feature Key Server IP Address: XXX.XXX.XXX.XXX

2.2.4.3 Resources Not Available

This alarm is generated when a request is made to access a resource and is denied because there are no resources available. The following is displayed:

"The following system resources are all in use"

The following table lists what is displayed as additional information:

Resource	Data Line
VCM	
Modem Channels	
Data Channels	
Conference Channels	
Outgoing Trunk Group*	Outgoing Group ID: XX (XX will indicate the Outgoing Group ID)
Voicemail Channels	
Voicemail Storage	"Voicemail Storage Nearly Full" or "Voicemail Storage Full"

* This occurs when all the lines associated with a particular shortcode have calls on them.

2.2.5 Trunk Alarms Summary

This screen displays a summary of the trunks in the system and the number of alarms for each. Double-click a line to display its individual [trunk alarms](#)^[43].

The screenshot shows the AVAYA IP Office System Status application window for IP500 Site A (192.168.42.1). The interface includes a menu bar with 'Help', 'Snapshot', 'LogOff', 'Exit', and 'About'. A left-hand navigation pane lists various system components: System, Alarms (10), Configuration (0), Service (6), Trunks (3), and Link (1). The 'Trunks (3)' section is expanded, showing a list of lines (5 through 14) with their respective alarm counts in parentheses. The main display area is titled 'Select a line to display the alarm information' and contains a table with the following data:

Line	Module / Slot / Type	Port Number / Address / D...	Alarms
5	Slot: 2	1	0
6	Slot: 2	2	1
7	Slot: 2	3	1
8	Slot: 2	4	1
9	Slot: 3	9	0
10	Slot: 3	10	0
11	Slot: 3	11	0
12	Slot: 3	12	0
13	H.323	192.168.44.1	0
14	H.323	192.168.46.1	0

Below the table is a 'Select' button. The bottom status bar shows the time '08:58:52' and the status 'Online'.

2.2.6 Trunk Alarms

The Trunk Alarm screen contains an entry for each trunk. There is always an entry in the navigation panel for each trunk regardless of whether it has alarms. Trunk alarms are updated in real time.

The screen displays two tabs for digital trunks:

- [Alarms](#) ^[36]
Any current alarms are reported in red on the Alarm tab. If an alarm is no longer active, the alarm changes to black but the count will remain the same. When an alarm goes from historical to active, the count is increased by one.
- [24 Hour Performance History](#) ^[45]
This tab provides a 24 hour view of errors that occur on the line. If no errors have occurred within the last 24 hours, the table displays zero or blank values.

2.2.6.1 Alarms

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

Port 7
Port 8
Slot 2 Trunk 1
Port 1
Port 2
Port 3
Port 4
Slot 3 POT Phone
Slot 3 Trunk 1
VoIP Trunks (2)
H.323 Extensions
Alarms (10)
Configuration (0)
Service (6)
Trunks (3)
Line: 5 (0)
Line: 6 (1)
Line: 7 (1)
Line: 8 (1)
Line: 9 (0)
Line: 10 (0)
Line: 11 (0)
Line: 12 (0)
Line: 13 (0)
Line: 14 (0)
Link (1)

Status Utilization Summary **Alarms**

Alarms for Line: 8 Slot: 2 Port: 4

Last Date Of Error	Occurrences	Error Description
04/02/2008 10:46:36	1	Trunk out of Service

Clear Clear All Print... Save As...

08:42:46 Online

The following information is displayed:

- Last Date of Error
The last time the error that caused a particular alarm occurred.
- Occurrences
How many times the alarm has occurred since the control unit was last restarted or the alarm was last cleared.

2.2.6.1.1 Error Descriptions

The table below details a description of the error that caused the alarm:

Error	Description
Insufficient DID Digits	A user can administer routes based on DID digits by using the MSN routing form. On this form, the user administers how many digits are expected (the Presentation Digits field). If a call is received and the number of digits received do not match the number in the Presentation Digits field, the following is displayed: There was a mismatch in the number of DID digits Expected number of digits: XX Digits Received: YYYYY
Incoming Call on Outgoing Trunk	On T1/PRI and analog lines, the direction for each channel can be administered to be incoming, outgoing or both. If the channel is outgoing and an incoming call arrives on the channel, the following is displayed: An incoming call arrived on the channel that is administered for Outgoing calls. Channel Number: XX (for digital lines) Port Number: XX (for analog lines)
Trunk Went Out of Service	If the trunk is not administered to be out of service but goes down, the following is displayed: Trunk out of service.
Red Alarm Active on Trunk	When a red alarm is reported on a T1/PRI trunk, the following is displayed: Red Alarm A red alarm indicates lost synchronization.
Blue Alarm Active on Trunk	When a blue alarm is reported on a T1/PRI trunk, the following is displayed: Blue Alarm A blue alarm indicates a signal failure has occurred.
Yellow Alarm Active on Trunk	When a yellow alarm is reported on a T1/PRI trunk, the following is displayed: Yellow Alarm A yellow alarm indicates a transmission problem.
Loss of Signal on Trunk	When a loss of signal is reported, the following is displayed: Loss of Signal.
Caller ID not received	For analog loop start trunks administered with ICLID.
Seize Failure	When there is no loop current detected when trying to seize the trunk.
Response Failure	This alarm is generated when IP Office sends a TCP Sync to the remote end of an H.323 trunk and fails to receive an acknowledgement from the remote end, also when IP Office sends an INVITE over a SIP trunk and times out on no response. No response to IP trunk call request. IP Trunk Line Number: xxx Remote end IP address: yyy.yyy.yyy.yyy

2.2.6.2 24 Hour Performance History

The first line in the table displays the current 15 minute interval and represents 0-15 minutes worth of data. Subsequent lines display the last 24 hours divided in to 15 minute intervals (fewer lines will be shown if the system has been running for less than 24 hours).

IP Office System Status - F-075-IP500-1 (192.168.42.120)

IP Office System Status

Help Snapshot LogOff Exit About

- System
- Alarms (12)
 - Service (5)
 - Trunks (6)
 - Line: 1 (1)
 - Line: 2 (1)
 - Line: 3 (1)
 - Line: 4 (1)
 - Line: 5 (2)**
 - Line: 9 (0)
 - Line: 13 (0)
 - Line: 14 (0)
 - Line: 15 (0)
 - Line: 16 (0)
 - Link (1)
- Extensions (73)
- Trunks (10)
- Active Calls
- Resources

Alarms for Line: 5 Slot: 2 Port: 1

Alarms
24 Hour Performance History

The number in each line indicates the number of times during the 15 minutes interval that the error occurred. By default, the first row is the current 15 minute interval.

Interval Start Time	Error Seconds	Bursty Error Seconds	Severely Errored Seconds	Failed/Unavailable Seconds	Bipolar Violation	Clock Slips	Missed Frame
12:00							
11:45	1					1	
11:30	1					1	
11:15	2					2	
11:00	1					1	
10:45	1					1	
10:30	2					2	
10:15	1					1	
10:00	1					1	
09:45	2					2	
09:30	1					1	
09:15	1					1	
09:00	1					1	

Relative Time
Show Zeros
Print...
Save As...

12:00:53
Online

The table is displayed regardless of whether there are errors on the trunk.

2.2.7 Link Alarms

The Link Alarms screen contains an entry for devices linked to the IP Office control unit such as expansion modules and extension devices. Alarms that are a current problem are displayed in red. If an alarm is no longer active, it is displayed in black. Link Alarms are updated in real time.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Alarms (12)
 - Configuration (0)
 - Service (8)
 - Trunks (3)
 - Link (1)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
 - Licenses
 - Directory
 - Control Unit Audit
- Voicemail
- IP Networking

Link Alarms

Last Date Of Error	Occurrences	Error Description
06/02/2008 09:16:10	1	Delta Server down

Clear Clear All Print... Save As...

09:33:03 Online

The following information is displayed:

- Last Date of Error
The last time the error that caused a particular alarm occurred.
- Occurrences
How many times the alarm has occurred since the control unit was last restarted.
- Error Description
A description of the error that caused the alarm.

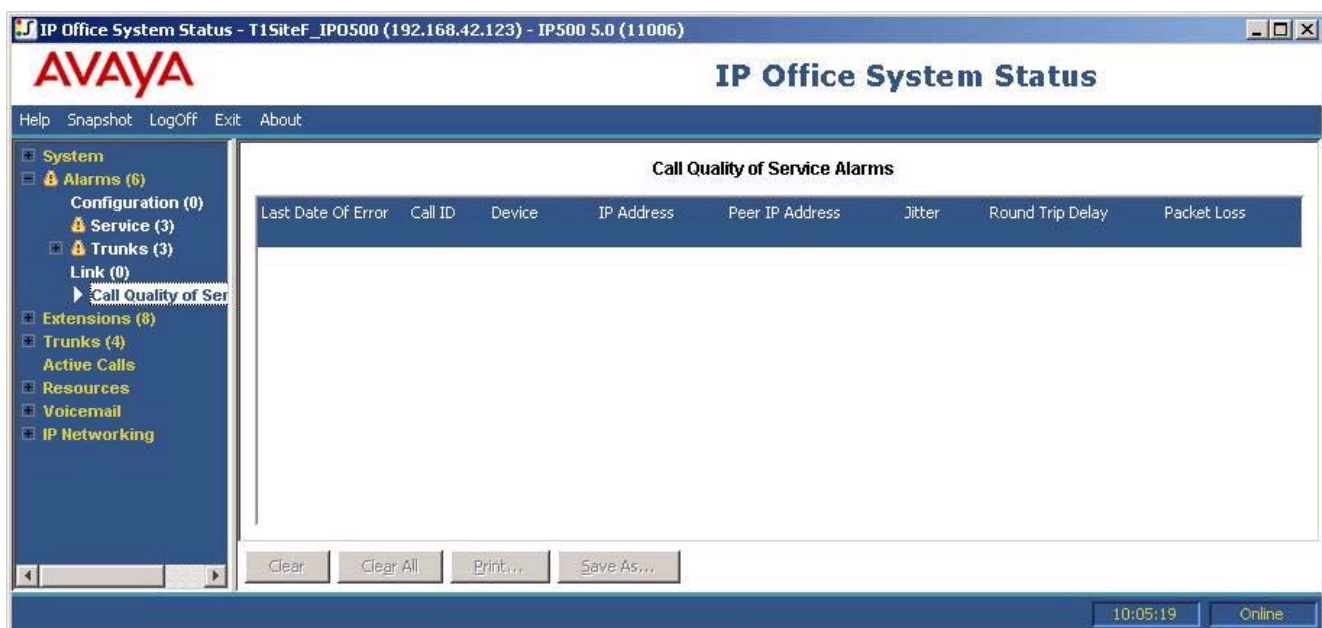
2.2.8 Call Quality of Service

Previous SSA only displayed QoS measurements for calls on IP trunks (H323, SIP, SES). IP Office 5.0 systems can be enabled to provide QoS reporting for extensions and also QoS alarms. This is configured by enabling the Enable RTCP Monitoring on Port 5005 within the IP Office configuration.

Once enabled, the SSA application will display QoS statistics for calls made by H323 IP extensions (1600 Series, 4600 Series and 5600 Series) registered to the IP Office. It will also display QoS statistics other extension types when the call being made by the extension involves an IP Office VCM channel. The QoS information for the extensions current call is displayed by SSA in the [Extension Status](#) ⁵⁰ screen.

Within the IP Office configuration, alarm thresholds can be configured for jitter (default 20ms), round trip delay (default 350ms) and packet loss (default 0.5%). If any of the thresholds is exceeded during a call segment, an alarm is generated reporting the device and call involved and the maximum values of the QoS measurements during the call.

- Round Trip Delay (msec): Default = 350.
Less than 160ms is high quality. Less than 350ms is good quality. Any higher delay will be noticeable by those involved in the call. Note that, depending on the compression codec being used, some delay stems from the signal processing and cannot be removed: G711 = 40ms, G723a = 160ms, G729 = 80ms.
- Jitter (msec): Default = 20.
Jitter is a measure of the variance in the time for different voice packets in the same call to reach the destination. Excessive jitter will become audible as echo.
- Packet Loss (%): Default = 0.5.
Excessive packet loss will be audible as clipped words and may also cause call setup delays.



- If the call involves another IP Office extension, separate alarms may occur for both extensions.
- No alarms are generated for QoS measurements during the first 5 seconds of a call.
- Alarms are output at the end of a call segment in which a threshold is exceeded. For example, if a call is held and then unheld, each part of the call is treated as a separate call segment.
- Only one alarm is generated, even if more than one threshold is exceeded. The alarm contains the maximum value of all 3 measured QoS values.

2.3 Extensions

Information on the status of a specific extension can be accessed from the navigation panel either:

- Via a port that is associated with an analog or digital extension.
- By selecting an H.323 extension.
- By double-clicking Extensions and then selecting a specific extension from the navigation panel.

Alternatively, double-click an extension from the Extension Summary screen.

The following is used to indicate an analog or digital extension:

- If the extension is on the control unit (except IP Office 500), the designation is Control Unit followed by either Phone Port X (where X is the port number) or DS Port X (where X is the port number 1-8).
- If the extension is on a module in an IP Office 500 slot, the designation is Slot: [1-4], followed by Port X (where X is the port number 1-8).
- If the extension is on an expansion module, the designation is Module XX (where XX is the port number 1-12) followed by Port X (where X is the port number 1-30).

For example:

Extension: 201	Control Unit	DS Port: 1
Extension: 231	Slot: 4	Port: 7
Extension: 271	Module: 4	Port: 1

The port number will always match any number printed against the physical port connector.

For H.323 extensions, the designation is the home user's extension number, the IP address of the extension and the MAC address (only shown if IP Office and the phone are on the same subnet). For example:

Extension:	IP Address:	MAC Address:
371	192.168.44.2	AA:AA:AA:AA:AA:AA

2.3.1 Extension Summary

The Extension Summary screen displays all extensions in the system.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

Extension Summary

You can get more information about an extension by double-clicking the Home Extension Number.

Home Extension Number	Current User Extension	Current User Name	Module/ Slot/ IP Address	Port Number/ MAC Address	Telephone Type	Number of New Messages
411	411	Extn411	192.168.42.206	00-09-6E-04-31-01	4602	0
201	201	Extn201	Slot: 1	1	2410	
202			Slot: 1	2	unplugged	
203	203	Extn203	Slot: 1	3	5410	1
204			Slot: 1	4	unplugged	
205			Slot: 1	5	unplugged	
206			Slot: 1	6	unplugged	
207			Slot: 1	7	unplugged	
208			Slot: 1	8	unplugged	
209	209	Extn209	Slot: 3	1	POT (CLI On)	0
210	210	Extn210	Slot: 3	2	POT (CLI On)	0
211	211	Extn211	Slot: 3	3	POT (CLI On)	0
212	212	Extn212	Slot: 3	4	POT (CLI On)	0
213	213	Extn213	Slot: 3	5	POT (CLI On)	0
214	214	Extn214	Slot: 3	6	POT (CLI On)	0
215	215	Extn215	Slot: 3	7	POT (CLI On)	0
216	216	Extn216	Slot: 3	8	POT (CLI On)	0

Refresh Print...

08:37:44 Online

For detailed information about an extension, double-click a specific extension number to display the [Extension Status](#) screen.

2.3.2 Extension Status

The Extension Status screen provides specific details on an extension, depending on its configuration.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

Alarms (10)

Extensions (17)

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

411

Trunks (10)

Active Calls

Resources

Licenses

Directory

Extension Status

Extension Number: 203

IP address: 192.168.42.16

MAC address: 00-1B-4F-06-F2-AA

Firmware Version: 1.042

Telephone Type: 1608

Current User Extension Number: 5802

Current User Name: Extn5802

Forwarding: Off

Trinning: Off

Do Not Disturb: Off

Message Waiting: Off

Number of New Messages: 0

Phone Manager Type: None

PacketLoss: 0%

Jitter: 17.4ms

Round Trip Delay: 4ms

Button Number	Button Type	Call Ref	Current State	Time in State	Calling Number or Called	Direction	Other Party on Call
1	CA	31	Connected	00:00:49	5201	Outgoing	Extn 5201, Extn5201
2	CA		Idle				
3	CA		Idle				

Trace Trace All Pause Back Call Details Print... Save As...

09:15:11 Online

The following information is displayed:

- Extension Number
The default extension number for this telephone.
- Module/Slot/IP Address
Module number, slot details or IP address.
- Port/MAC Address
Port number or MAC address of the control unit.
- Telephone Type
The telephone model.
- Current User Extension Number
The extension of the user currently logged into the telephone.
- Current User Name
The name of the user currently logged into the telephone.
- Forwarding
Set to 'Off' or one or more of the following options:
 - Forward Unconditional + Number
 - Forward On Busy + Number
 - Forward On No Answer + Number
 - Follow Me + Number
- Twinning
Set as one of the following options:
 - Twinned as Primary with + Secondary User Name/Number
 - Twinned as Secondary with + Primary User Name/Number
 - Twinned to External Number + External Number

- Off
- Do Not Disturb
Either On or Off.
- Message Waiting
If the user has an unread message, this will be On. If the personal messages have been read, this will be Off.
- Number of New Messages
The number of new messages for the current user. This does not include hunt group messages.
- Phone Manager Type
Lite, Pro, IP or None - the Phone Manager type that is currently being used.

2.3.2.1 Extension Quality of Service Information

The following addition items are available for calls by H323 phones. They are also available for other extension types when the current call is using an IP Office VCM channel. The values required the Enable RTCP Monitoring on Port 5005 option to be selected in the IP Office 5.0+ configuration.

- Packet Loss
- Jitter
- Round Trip Delay

2.3.2.2 Call Information

The information displayed in the table below, will depend on whether the extension has call appearances. The following appears for a telephone with call appearances:

- Button Number
The number associated with the button on the telephone, if applicable.
- Button Type
Call, Line, Bridged or Cover Appearance button, if applicable.
- Call Ref
Any call associated with a button.
- Current State
Defined when there is a call associated with a button.
- Time in State
Reset to 0 each time there is a state change.
- Calling Number or Called Number
 - Incoming Calls
The Caller ID name and number. If there is no Caller ID, None is displayed.
 - Outgoing Calls
The digits that are sent to the central office (not including the dial-out code).
- Direction
Incoming or outgoing.
- Other Party on Call
Contains one of the following:

Where Call was Originated/Answered	Displayed Value
User	User name and number
VoiceMail Call flow	Start Point name
Voicemail Box	Voicemail - user name or hunt group name of the mailbox or announcement
Conference	Conference name
Trunk	Line ID/URI Group/Channel number as appropriate
Park Slot	Park Slot - when the other end has parked the call
Announcement	Announcement - the hunt group associated with the announcement number
Hunt Group	Hunt group - name and number, when a call is in a hunt group queue (not alerting)

For an extension without call appearances (e.g. T3, softphone, third party H.323 or analog), the table shows as many rows as there are currently calls, or a single row if the phone is idle.

When a trace is in progress, any calls on the extension will show (i) next to the Call Ref. If you select Call Details while a trace is in progress, the screen remains unchanged and a pop-up window appears which contains details about the selected call.

The pop-up shows the state of the call at the time of selection and does not update.

2.4 Trunks

Trunk information (via the Status tab) can be accessed from the navigation panel by either:

- Double-clicking Trunks and then selecting a line from the navigation panel or the information panel.
- Clicking System and then Control Unit and double-clicking a trunk port.

Depending on the line selected, one of the following is displayed:

- Digital Trunk Summary
- Analog Trunk Summary
- H.323 Trunk Summary
- SIP Trunk Summary

2.4.1 Trunks Line Selection

Select and then double-click a line to display the trunk data.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

Alarms (10)

Extensions (17)

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

411

Trunks (10)

Active Calls

Resources

Licenses

Directory

Select a line to display the Trunk Summary

Line	Module / Slot / Type	Port Number / Address / Domain
5	Slot: 2	1
6	Slot: 2	2
7	Slot: 2	3
8	Slot: 2	4
9 - 12	Slot: 3	9 - 12
13	H.323	192.168.44.1
14	H.323	192.168.46.1

Select

09:20:15 Online

2.4.2 Status (Digital Trunk)

The Digital Trunk Summary can be accessed by clicking Trunks on the navigation panel and is displayed under the Status tab. Alternatively, click System and then Control Unit and double-click the line. Digital trunks are reported on a per line basis.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (10)
Extensions (17)
Trunks (10)
 ▶ Line: 5
 Line: 6
 Line: 7
 Line: 8
 Lines: 9 - 12
 Line: 13
 Line: 14
Active Calls
Resources
 Licenses
 Directory
 Control Unit Audit
Voicemail
 Mailboxes
IP Networking
 IP Routes
 Tunnels

Status Utilization Summary Alarms

Digital Trunk Summary

Line: 5 Slot: 2 Port: 1
Line Type: BRI
Line Subtype: ETSI
Number of Channels: 2
Number of Administered Channels: 2
Number of Channels in Use: 0

Channel Number	Call Ref	Current State	Time in State	Routing Digits	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1		Idle	00:49:18				
2		Idle	22:45:41				

Trace Trace All Pause Call Details Print... Save As...

09:31:48 Online

The following information is displayed under the Status tab:

- Line/Slot/Port
The line, slot and port number.
- Line Type
See Line Protocols.
- Line Subtype
See Line Protocols.
- Number of Channels
The number of channels that can be supported with a digital trunk.
- Number of Administered Channels
Number of channels from the line form that are administered to be in service.
- Number of Channels in Use
The total number of channels currently in use.

Below this information, a table displays the following details:

- Channel Number
To view details of the call, click on the row.
- Call Ref
Call reference, assigned by IP Office and associated with the line in use.
- Current State
The state is defined when there is a call associated with a button. See [Call States](#) ⁷⁸.
- Time in State
Reset to zero each time there is a state change.
- Routing Digits
The directed inward dialed digits that are sent by the central office.
- Caller ID or Dialed Digits
 - Incoming Calls
The Caller ID name and number. If there is no Caller ID, None is displayed.
 - Outgoing Calls
The digits that are sent to the central office.
- Other Party on Call
Contains one of the following:

Where Call was Originated/Answered	Displayed Value
User	User name and number
VoiceMail Call flow	Start Point name
Voicemail Box	Voicemail - user name or hunt group name of the mailbox
Data Service	RAS - service name
Conference	Conference name
Trunk	Line ID/URI Group/Channel number
Park Slot	Park Slot - when the other end has parked the call
Announcement	Announcement - the hunt group associated with the announcement number
Hunt Group	Hunt Group - name and number when a call is in a hunt group queue (not alerting)

- Direction of Call
Displays the call as either Incoming or Outgoing.

When a trace is in progress, any calls on the trunk will show (i) next to the Call Ref. If you select Call Details while a trace is in progress, the screen remains unchanged and a pop-up window appears which contains details about the selected call.

The pop-up shows the state of the call at the time of selection and does not update.

To display further information on a call, select one or more rows in the table and click the Call Details button. See [Button Bar](#) ¹⁶.

2.4.3 Status (Analog Trunk)

The Analog Trunk Summary is accessed by clicking Trunks on the navigation panel and is displayed under the Status tab. Alternatively, click System and then Control Unit and click on a row to show the call details.

Analog trunks are displayed by card or module. Therefore, the number of trunks on a card is reported.

The screenshot shows the AVAYA IP Office System Status application window for IP500 Site A (192.168.42.1). The left navigation pane includes System, Alarms (10), Extensions (17), Trunks (10), Active Calls, Resources, Voicemail, and IP Networking. The main content area displays the Status tab with the Analog Trunk Summary. The summary shows Slot/Module: Slot: 3, Number of Trunks: 4, Number of Administered Trunks: 4, and Number of Trunks in Use: 0. Below this is a table with columns: Port, Line ID, Line Type, Call Ref, Current State, Time in State, Caller ID or Dialed Digits, Other Party on Call, and Direction of Call. The table lists four trunks (9, 10, 11, 12) all in an Idle state. At the bottom, there are buttons for Trace, Trace All, Pause, Call Details, Print..., and Save As..., along with a timestamp of 09:32:36 and an Online status indicator.

Port	Line ID	Line Type	Call Ref	Current State	Time in State	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
9	Line: 9 Slot: 3 P...	Loop Start CLI		Idle	22:46:29			
10	Line: 10 Slot: 3 ...	Loop Start CLI		Idle	22:46:29			
11	Line: 11 Slot: 3 ...	Loop Start CLI		Idle	22:46:29			
12	Line: 12 Slot: 3 ...	Loop Start CLI		Idle	22:46:29			

The following information is displayed under the Status tab:

- Slot/Module
Slot or module number.
- Number of Trunks
Total number of trunks.
- Number of Administered Trunks
Number of channels from the line form that are administered to be in service.
- Number of Trunks in Use

Below this information, a table displays the following details:

- Port
The port number.
- Line ID
The line, module and port number.
- Line Type
The type of line protocol. See Line Protocols.
- Call Ref
Call reference assigned by IP Office and associated with the line in use.
- Current State
See [Call States](#) ⁷⁸.
- Time in State
Reset to zero each time there is a state change.
- Caller ID or Dialed Digits
 - Caller ID
The Caller ID name and number. If there is no Caller ID, None is displayed.
 - Dialed Digits
The digits that are sent to the central office.
- Other Party on Call
Contains one of the following:

Where Call was Originated/Answered	Displayed Value
User	User name and number
Voicemail Call flow	Start point name
Voicemail Box	Voicemail - user name or hunt group name of the mailbox
Data Service	RAS - service name
Conference	Conference name
Trunk	Line ID/URI Group/Channel number.
Park Slot	Park Slot - when the other end has parked the call
Announcement	Announcement - the hunt group associated with the announcement number
Hunt Group	Hunt Group - name and number when a call is in a hunt group queue (not alerting)

- Direction of Call
Incoming or Outgoing.

When a trace is in progress, any calls on the trunk will show (i) next to the Call Ref. If you select Call Details while a trace is in progress, the screen remains unchanged and a pop-up window appears which contains details about the selected call.

The pop-up shows the state of the call at the time of selection and does not update.

To display further information on a call, select one or more rows in the table and click the Call Details button. See [Button Bar](#) ¹⁶.

2.4.4 Status (VoIP Trunk)

The VoIP Trunk Summary is accessed by clicking Trunks on the navigation panel and is displayed under the Status tab as either H.323 Trunk Summary or SIP Trunk Summary. Alternatively, click System and then Control Unit and double-click the line.

2.4.4.1 H.323 Trunk

The screenshot shows the AVAYA IP Office System Status application window. The title bar reads "IP Office System Status - IP500 Site A (192.168.42.1)". The main window has a menu bar with "Help", "Snapshot", "LogOff", "Exit", and "About". On the left is a navigation tree with categories: System, Alarms (10), Extensions (17), Trunks (10), Active Calls, Resources, Voicemail, and IP Networking. Under Trunks (10), "Line: 14" is selected. The main content area has tabs for "Status", "Utilization Summary", and "Alarms". The "Status" tab is active, displaying the "H.323 Trunk Summary".

H.323 Trunk Summary

IP Address: 192.168.46.1
Line Number: 14
Number of Administered Channels: 20
Number of Channels in Use: 0
Administered Compression: Auto
Small Community Networking: Up
Direct Media Path: On
Enable Faststart: Off
Silence Suppression: Off

Channel Number	Call Ref	Current State	Time in State	Remote Address	Code	Connection Type	Caller ID Dialed	Other Party on Call	Direction of Call	Round Delay	Receive Jitter	Receive Loss F	Transmit Jitter	Transmit Loss F
1		Idle	22:4...											
2		Idle	22:4...											
3		Idle	22:4...											
4		Idle	22:4...											
5		Idle	22:4...											
6		Idle	22:4...											

At the bottom of the window, there are buttons for "Trace", "Trace All", "Pause", "Ping", "Call Details", "Print...", and "Save As...". The status bar at the bottom right shows the time "09:33:07" and the word "Online".

- IP Address
The gateway IP address from the VoIP form.
- Line Number
Fixed line number, defined by the user.
- Number of Administered Channels
Number of channels from the VoIP line tab.
- Total Channels in Use
Total of all the channels that have associated call references.
- Administered Compression
The compression mode from the VoIP form.
- Small Community Networking
One of the following is displayed:
 - If this feature is not administered in Manager, (Voice Networking option on the VoIP form is off), Disabled is displayed.
 - If the feature is administered and the other end is responding, Up is displayed.
 - If the feature is administered and the other end is not responding, Down is displayed.
- Direct Media Path
Either On or Off.
- Enable Faststart
Either On or Off.
- Silence Suppression
Either On or Off.

- Below this information, a table containing the following information is displayed:

- Channel Number
Click on the row to view details of the call.
- Call Ref
Call reference assigned by IP Office and associated with the line in use.
- Current State
See [Call States](#) ⁷⁸.
- Time in State
Reset to zero each time there is a state change.
- RTP IP Address from Connection
IP address of the remote end of the RTP Media Stream.
- CODEC
Available via H.323 message and may change throughout the call.
- Connection Type
Either DirectMedia, RTP Relay or VCMs.
- Caller ID or Dialed Digits
 - Caller ID
The Caller ID name and number. If there is no Caller ID, None is displayed.
 - Dialed Digits
The digits that are sent to the central office.
- Other Party on Call
Contains one of the following:

Where Call was Originated/ Answered	Displayed Value
User	User name and number
VoiceMail Call Flow	Start point name
Voicemail Box	Voicemail user name or hunt group name of the mailbox
Data Service	RAS service name
Conference	Conference name
Trunk	Line ID/URI Group/Channel number
Park Slot	Park Slot - when the other end has parked the call
Announcement	Announcement - the hunt group associated with the announcement number
Hunt Group	Hunt group name and number when a call is in a hunt group queue (not alerting)

- Direction of Call
Incoming or Outgoing.
- QoS
Receive and transmit details. Normal data packets can prevent or delay voice data from getting across the link, causing unacceptable speech quality. The QoS settings are:
 - Round Trip Delay
 - Receive Jitter
 - Transmit Jitter
 - Receive Packet Loss
 - Transmit Packet Loss

To display further information on a call, select one or more rows in the table and click on one of the buttons at the bottom of the screen.

2.4.4.2 SIP Trunk

For SSA and IP Office 5.0, SSA will display the configured and free SIP Channel license count in the top of the SIP trunk screen. Also where the SIP Trunk requires registration, the status of the Primary and secondary registration will also be displayed in the top/summary section of the Trunk Status Screen for the SIP trunk.

IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (7)
Extensions (22)
Trunks (26)
Line: 1
Line: 2
Line: 3
Line: 4
Lines: 5 - 8
Line: 9
Line: 10
Lines: 901 - 916
Active Calls
Resources

SIP Trunk Summary

Peer Domain Name: FreeCallsRUs.co.uk
Gateway Address: 192.168.42.251
Line Number: 3
Number of Administered Channels: 40
Number of Channels in Use: 1
Administered Compression: Auto
Silence Suppression: Off

Channel Number	URI Group	Call Ref	Current State	Time in State	Remote RTP Address	Codec	Connection Type	Caller ID or Dialed Digits	Other Party on Call	Direction of Call	Round Trip Delay	Receive Jitter	Receive Loss Fraction	Transmit Jitter	Transmit Loss Fraction
1	4	50	Connect...	00:00:48	192.168.4...	G72...	RTP Relay	Vickie@SIP...	Extn 299, Ben B	Incoming					
2			Idle	2 days ...											
3			Idle	2 days ...											
4			Idle	2 days ...											
5			Idle	2 days ...											
6			Idle	2 days ...											
7			Idle	2 days ...											
8			Idle	2 days ...											
9			Idle	2 days ...											
10			Idle	2 days ...											
11			Idle	2 days ...											
12			Idle	2 days ...											
13			Idle	2 days ...											

Trace All Ping Call Details Print... Save As...

4:08:24 PM Online

- Peer Domain Name
The name of the service from the line form.
- Gateway Address
Gateway IP address from the VoIP form.
- Line Number
Fixed line number, defined by the user.
- Number of Administered Channels
The number of channels from the line form.
- Total Channels in Use
The total number of channels that have associated call references.
- Administered Compression
The compression mode from the VoIP form.
- Silence Suppression
Either On or Off.

Below this information, a table displays the following details:

- Channel Number
Click on the row to view details of the call.
- URI Group
The URI Group via which the call was routed in or out of the trunk. If there is no Call Ref, the URI Group is blank.
- Call Ref
Call Ref associated with the line in use.
- Current State
See [Call States](#) ⁷⁸.
- Time in State
Reset to zero each time there is a state change.
- IP Address from Connection
DirectMedia (H.323 only), RTP Relay or VCMs.

- CODEC
Available via SIP message and may change throughout the call.
- Connection Type
Either RTP Relay or VCM.
- Caller ID or Dialed Digits
 - Caller ID
The Caller ID name and number. If there is no Caller ID, None is displayed.
 - Dialed Digits
The digits that are sent to the central office.
- Other Party on Call
Contains one of the following:

Where Call was Originated/ Answered	Displayed Value
User	User name and number
VoiceMail Call flow	Start point name
Voicemail Box	Voicemail user name or hunt group name of the mailbox
Data Service	RAS service name
Conference	Conference name
Trunk	Line ID/URI Group/Channel number
Park Slot	Park Slot - when the other end has parked the call
Announcement	Announcement - the hunt group associated with the announcement number
Hunt Group	Hunt group name and number when a call is in a hunt group (not alerting)

- Direction of Call
Incoming or Outgoing.
- Quality of Service (QoS)
Normal data packets can prevent or delay voice data from getting across the link, causing unacceptable speech quality. SSA provides the following information about the VoIP connection and how it is being impacted by other traffic. These statistics are calculated as defined in RFC 1889.
 - Round Trip Delay
 - Receive Jitter
 - Transmit Jitter
 - Receive Packet Loss
 - Transmit Packet Loss

When a trace is in progress, any calls on the trunk will show (i) next to the Call Ref. If you select Call Details while a trace is in progress, the screen remains unchanged and a pop-up window appears which contains details about the selected call:

The screenshot displays the AVAYA IP Office System Status application. The main window has a menu bar (Help, Snapshot, LogOff, Exit, About) and a left-hand navigation pane with categories: System, Alarms (7), Extensions (22), Trunks (26), Active Calls, and Resources. Under Trunks, Line 9 is selected. The main content area shows the 'Status' tab for Line 9, displaying various system parameters and a table of call channels.

System Parameters:

- IP Address: 192.168.42.120
- Line Number: 9
- Number of Administered Channels: 20
- Number of Channels in Use: 1
- Administered Compression: Auto
- Small Community Networking: Up
- Direct Media Path: On
- Enable Faststart: On
- Silence Suppression: Off

Call Channels Table:

Channel Number	Call Ref	Current State	Time in State	Remote RTP Address	Codec	Connection Type	Call Direction
1	54	Connect...	00:00:04	192.168.4...	G72...	VCM	
2		Idle	00:37:46				
3		Idle	00:01:17				
4		Idle	2 days 0...				
5		Idle	2 days 0...				
6		Idle	2 days 0...				

Trace Output - All Channels:

```

1/11/07 4:47:17 PM-753ms Line = 9, Channel = 1, Line Ref = 1172, Q.931 Me
1/11/07 4:47:17 PM-781ms Line = 9, Channel = 1, Q.931 Message = SetupAc
1/11/07 4:47:17 PM-784ms Call Ref = 54, Originator State = Dialling, Type = L
1/11/07 4:47:18 PM-793ms Line = 9, Channel = 1, Q.931 Message = Alerting,
1/11/07 4:47:18 PM-798ms Call Ref = 54, Alerting, Line = 9, Channel = 1
1/11/07 4:47:18 PM-800ms Call Ref = 54, Originator State = Ringback, Type =
1/11/07 4:47:21 PM-484ms Line = 9, Channel = 1, Q.931 Message = Connect
1/11/07 4:47:21 PM-502ms Call Ref = 54, Originator State = Connected, Type
1/11/07 4:47:21 PM-502ms Call Ref = 54, Answered, Line = 9, Channel = 1
  
```

A pop-up window titled 'Information Snapshot for Call Ref 54' is displayed, showing detailed call information:

- Call Ref:** 54, **Call length:** 00:00:11
- Originator:**
 - Current State: Connected, Time in State: 00:00:04
 - Currently at: Extn 604, BorisAeris
 - Button Number: 1
 - Button Type: Call Appearance (CA)
 - Dialed Digits: 6704
- Destination:**
 - Current State: Connected, Time in State: 00:00:04
 - Trunk Used: Line: 9 H.323 192.168.42.120 Channel: 1
 - Digits sent to Central Office: 6704
 - Caller ID sent from Central Office: 6704
 - Codec: G729 A
 - Round Trip Delay: 0ms
 - Receive Jitter: 0ms
 - Receive Packet Loss Fraction: 0%
 - Transmit Jitter: 0ms
 - Transmit Packet Loss Fraction: 0%
- Call target / Routing information:**
 - RTP Connection Type: VCM
 - Call Recording: No
 - Redirected to Twin: No
 - Routed across SCN trunk: Yes
 - Retargeting Count: 0

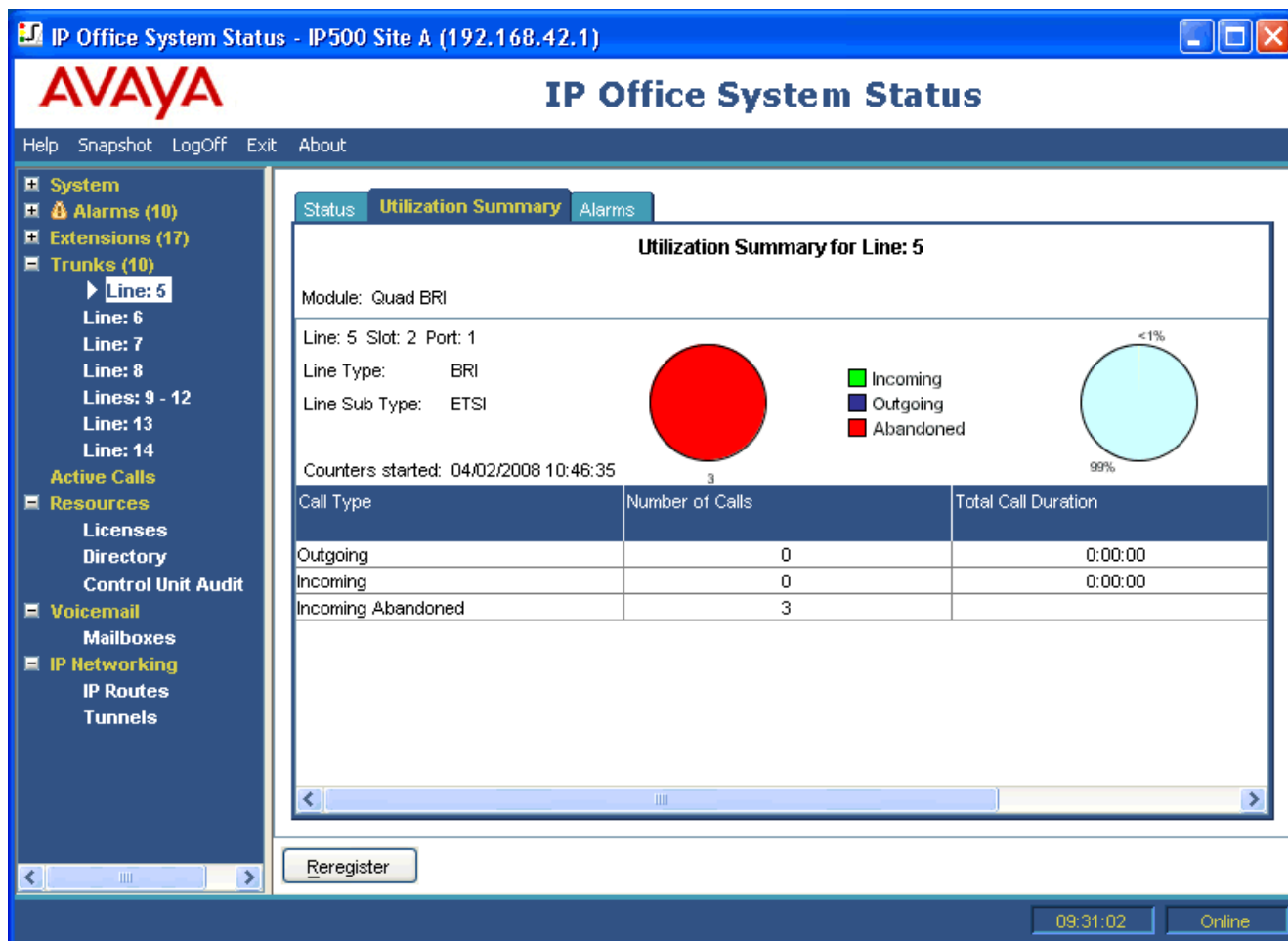
The bottom of the application window features buttons for 'Trace Clear', 'Ping', 'Call Details', 'Print...', and 'Save As...'. The status bar at the bottom right shows '4:47:26 PM' and 'Online'.

The pop-up shows the state of the call at the time of selection and does not update.

2.4.5 Utilization Summary

The Utilization Summary tab is accessed by clicking Trunks on the navigation panel. Alternatively, click System and then Control Unit and double-click an expansion module or VoIP trunk.

The Utilization Summary provides a usage history for each trunk. The counts are reset either when the Reset button is clicked (at which point all values are reset to zero) or when the system reboots.



The following information is shown:

- Module
Type of trunk module.
- Line
Line ID.
- Line Type
See Line Protocols.
- Line Sub Type
See Line Protocols.
- Counters Started
Date and time the counts began.

Below this information, a table displays the following details:

- Call Type
 - Outgoing
The count of all Outgoing calls.
 - Incoming
The count of Incoming calls, excludes Incoming Abandoned calls.
 - Incoming Abandoned
Calls where the caller disconnected before the call was answered. Total Call Duration is blank for Incoming Abandoned calls.
- Number of Calls
Total number of calls by Call Type.

-
- Total Call Duration
Hours, minutes and seconds format. For Outgoing calls, measured from the start of the call. For Incoming calls, measured from when the call was answered.
 - Total Ring Time
Hours, minutes and seconds format.

2.4.6 Trunk Alarms

The Trunk Alarm screen contains an entry for each trunk. There is always an entry in the navigation panel for each trunk regardless of whether it has alarms. Trunk alarms are updated in real time.

The screen displays two tabs for digital trunks:

- [Alarms](#) ^[36]
Any current alarms are reported in red on the Alarm tab. If an alarm is no longer active, the alarm changes to black but the count will remain the same. When an alarm goes from historical to active, the count is increased by one.
- [24 Hour Performance History](#) ^[45]
This tab provides a 24 hour view of errors that occur on the line. If no errors have occurred within the last 24 hours, the table displays zero or blank values.

2.4.6.1 Alarms

The screenshot shows the AVAYA IP Office System Status application window. The title bar reads "IP Office System Status - IP500 Site A (192.168.42.1)". The application has a menu bar with "Help", "Snapshot", "LogOff", "Exit", and "About". A left-hand navigation pane lists various system components, including "Port 7", "Port 8", "Slot 2 Trunk", "Port 1", "Port 2", "Port 3", "Port 4", "Slot 3 POT Ph", "Slot 3 Trunk", "VoIP Trunks (2)", "H.323 Extensions", "Alarms (10)", "Configuration (0)", "Service (6)", "Trunks (3)", "Line: 5 (0)", "Line: 6 (1)", "Line: 7 (1)", "Line: 8 (1)", "Line: 9 (0)", "Line: 10 (0)", "Line: 11 (0)", "Line: 12 (0)", "Line: 13 (0)", "Line: 14 (0)", and "Link (1)". The "Alarms" tab is selected in the main content area, which is titled "Alarms for Line: 8 Slot: 2 Port: 4". Below the title is a table with three columns: "Last Date Of Error", "Occurrences", and "Error Description". The table contains one row of data: "04/02/2008 10:46:36", "1", and "Trunk out of Service". At the bottom of the application window, there are buttons for "Clear", "Clear All", "Print...", and "Save As...", along with a status bar showing the time "08:42:46" and the status "Online".

Last Date Of Error	Occurrences	Error Description
04/02/2008 10:46:36	1	Trunk out of Service

The following information is displayed:

- Last Date of Error
The last time the error that caused a particular alarm occurred.
- Occurrences
How many times the alarm has occurred since the control unit was last restarted or the alarm was last cleared.

2.4.6.1.1 Error Descriptions

The table below details a description of the error that caused the alarm:

Error	Description
Insufficient DID Digits	A user can administer routes based on DID digits by using the MSN routing form. On this form, the user administers how many digits are expected (the Presentation Digits field). If a call is received and the number of digits received do not match the number in the Presentation Digits field, the following is displayed: There was a mismatch in the number of DID digits Expected number of digits: XX Digits Received: YYYYY
Incoming Call on Outgoing Trunk	On T1/PRI and analog lines, the direction for each channel can be administered to be incoming, outgoing or both. If the channel is outgoing and an incoming call arrives on the channel, the following is displayed: An incoming call arrived on the channel that is administered for Outgoing calls. Channel Number: XX (for digital lines) Port Number: XX (for analog lines)
Trunk Went Out of Service	If the trunk is not administered to be out of service but goes down, the following is displayed: Trunk out of service.
Red Alarm Active on Trunk	When a red alarm is reported on a T1/PRI trunk, the following is displayed: Red Alarm A red alarm indicates lost synchronization.
Blue Alarm Active on Trunk	When a blue alarm is reported on a T1/PRI trunk, the following is displayed: Blue Alarm A blue alarm indicates a signal failure has occurred.
Yellow Alarm Active on Trunk	When a yellow alarm is reported on a T1/PRI trunk, the following is displayed: Yellow Alarm A yellow alarm indicates a transmission problem.
Loss of Signal on Trunk	When a loss of signal is reported, the following is displayed: Loss of Signal.
Caller ID not received	For analog loop start trunks administered with ICLID.
Seize Failure	When there is no loop current detected when trying to seize the trunk.
Response Failure	This alarm is generated when IP Office sends a TCP Sync to the remote end of an H.323 trunk and fails to receive an acknowledgement from the remote end, also when IP Office sends an INVITE over a SIP trunk and times out on no response. No response to IP trunk call request. IP Trunk Line Number: xxx Remote end IP address: yyy.yyy.yyy.yyy

2.4.6.2 24 Hour Performance History

The first line in the table displays the current 15 minute interval and represents 0-15 minutes worth of data. Subsequent lines display the last 24 hours divided in to 15 minute intervals (fewer lines will be shown if the system has been running for less than 24 hours).

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Alarms (12)
 - Service (5)
 - Line: 1 (1)
 - Line: 2 (1)
 - Line: 3 (1)
 - Line: 4 (1)
 - Line: 5 (2)**
 - Line: 9 (0)
 - Line: 13 (0)
 - Line: 14 (0)
 - Line: 15 (0)
 - Line: 16 (0)
 - Link (1)
- Extensions (73)
- Trunks (10)
- Active Calls
- Resources

Alarms for Line: 5 Slot: 2 Port: 1

Alarms 24 Hour Performance History

The number in each line indicates the number of times during the 15 minutes interval that the error occurred. By default, the first row is the current 15 minute interval.

Interval	Error Seconds	Bursty Error Seconds	Severely Errored Seconds	Failed/Unavailable Seconds	Bipolar Violation	Clock Slips	Missed Frame
12:00							
11:45	1					1	
11:30	1					1	
11:15	2					2	
11:00	1					1	
10:45	1					1	
10:30	2					2	
10:15	1					1	
10:00	1					1	
09:45	2					2	
09:30	1					1	
09:15	1					1	
09:00	1					1	

Relative Time Show Zeros Print... Save As...

12:00:53 Online

The table is displayed regardless of whether there are errors on the trunk.

2.5 Active Calls

The Active Calls screen provides a summary of all the calls in the system. From the navigation panel, click Active Calls:

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Alarms (10)
- Extensions (17)
- Trunks (10)
 - Line: 5
 - Line: 6
 - Line: 7
 - Line: 8
 - Lines: 9 - 12
 - Line: 13
 - Line: 14
- Active Calls**
- Resources
 - Licenses
 - Directory
 - Control Unit Audit
- Voicemail
 - Mailboxes
- IP Networking
 - IP Routes
 - Tunnels

Active Calls: 1

Call Ref	Call Length	Originator End Party	Current State	Time in State	Incoming Caller ID	Destination End Party	Current State	Time in State	Dialed Digits
6	00:00:09	Line: 5 Slot: 2 ...	Connected	00:00:06		Extn 203, Extn2...	Connected	00:00:06	

Pause Disconnect Call Details Abandoned Calls

09:34:47 Online

The following information is displayed:

- Call Ref
Call reference for incoming trunks, assigned by IP Office and associated with the line in use.
- Call Length
Total length of the call.

The following information is displayed for the call originator:

- Originator End Party
Trunk or 'Currently At' information. See [Call Details](#)^[72].
- Current State
The originator's current state. See [Call States](#)^[78].
- Time in State
The originator's time in state. Reset to zero every time there is a state change.
- Incoming Caller ID
The caller name and number.

The following information is displayed for the call destination:

- Destination End Party
Trunk or 'Currently At' information. See [Call Details](#)^[72].
- Current State
The destination's current state. See [Call States](#)^[78].
- Time in State
The destination's time in state. Reset to zero every time there is a state change.
- Connected Caller ID
For outgoing trunks only. The connected caller name and number.

Note

- The Disconnect button cannot be used to stop alerting calls for calls on Loop Start, T1 Loop Start and T1 Ground Start lines.

2.5.1 24 Hour Performance History

The first line in the table displays the current 15 minute interval and represents 0-15 minutes worth of data. Subsequent lines display the last 24 hours divided in to 15 minute intervals (fewer lines will be shown if the system has been running for less than 24 hours).

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Alarms (12)
 - Service (5)
 - Trunks (6)
 - Line: 1 (1)
 - Line: 2 (1)
 - Line: 3 (1)
 - Line: 4 (1)
 - Line: 5 (2)**
 - Line: 9 (0)
 - Line: 13 (0)
 - Line: 14 (0)
 - Line: 15 (0)
 - Line: 16 (0)
 - Link (1)
 - Extensions (73)
 - Trunks (10)
 - Active Calls
 - Resources

Alarms for Line: 5 Slot: 2 Port: 1

Alarms 24 Hour Performance History

The number in each line indicates the number of times during the 15 minutes interval that the error occurred. By default, the first row is the current 15 minute interval.

Interval Start Time	Error Seconds	Bursty Error Seconds	Severely Errored Seconds	Failed/Unavailable Seconds	Bipolar Violation	Clock Slips	Missed Frame
12:00							
11:45	1					1	
11:30	1					1	
11:15	2					2	
11:00	1					1	
10:45	1					1	
10:30	2					2	
10:15	1					1	
10:00	1					1	
09:45	2					2	
09:30	1					1	
09:15	1					1	
09:00	1					1	

Relative Time Show Zeros Print... Save As...

12:00:53 Online

The table is displayed regardless of whether there are errors on the trunk.

2.5.2 Abandoned Calls

If the Abandoned Calls button is selected, the Active Calls screen splits to display a list of Abandoned Calls (below the Active Calls list). The Abandoned Calls table lists incoming calls on a trunk where the caller disconnected before the call was first answered.

The screenshot shows the AVAYA IP Office System Status application window. The title bar reads "IP Office System Status - IP500 Site A (192.168.42.1)". The AVAYA logo is in the top left, and the title "IP Office System Status" is in the top center. A menu bar includes "Help", "Snapshot", "LogOff", "Exit", and "About". A left-hand navigation pane lists various system components: System, Alarms (10), Extensions (17), Trunks (10) (with sub-items Line: 5, Line: 6, Line: 7, Line: 8, Lines: 9 - 12, Line: 13, Line: 14), Active Calls (selected), Resources (Licenses, Directory, Control Unit Audit), Voicemail, Mailboxes, and IP Networking (IP Routes, Tunnels). The main content area is divided into two sections. The top section, titled "Active Calls: 1", contains a table with 10 columns: Call Ref, Call Length, Originator End Party, Current State, Time in State, Incoming Caller ID, Destination End Party, Current State, Time in State, and Dialed Digits. It shows one active call with Call Ref 9, a length of 00:00:05, originating from "Line: 5 Slot: 2 ...", in a "Connected" state for 00:00:04, with an incoming caller ID and destination party of "Extn 203, Extn2...". The bottom section, titled "1 Abandoned Calls since 05/02/2008 12:37:53", contains a table with 6 columns: Date and Time, From Trunk, Incoming Caller ID, Incoming DID, Ringing/Queueing At, and Wait. It shows one abandoned call on "05/02/2008 12:38:05" from "Line: 5 Slot: 2 Port: 1 ...", with an incoming caller ID, incoming DID of 200, ringing/queueing at "Extn 203, Extn203", and a wait time of 00:00:03. At the bottom of the main area are buttons for "Pause", "Disconnect", "Call Details", and "Clear Abandoned Calls". The status bar at the very bottom shows the time "12:38:20" and the status "Online".

The following information is displayed for disconnections that have occurred since the time the Abandoned Calls button was selected:

- **Date and Time**
Date and time the call started.
- **From Trunk**
The line/channel information about the calling party.
- **Incoming Caller ID**
The name and/or number as shown in the Active Calls list.
- **Incoming DID**
The number as displayed in the Call Details screen. See [Call Details](#).
- **Ringing/Queueing At**
The alerting parties (if any) on the call at the time of disconnection. Otherwise (if the call was in a queue), the hunt group name.
- **Wait**
The call duration until disconnection occurred.

Clicking the Clear Abandoned Calls button clears the Abandoned Calls list, updates the date and time and enables further abandoned calls to be logged.

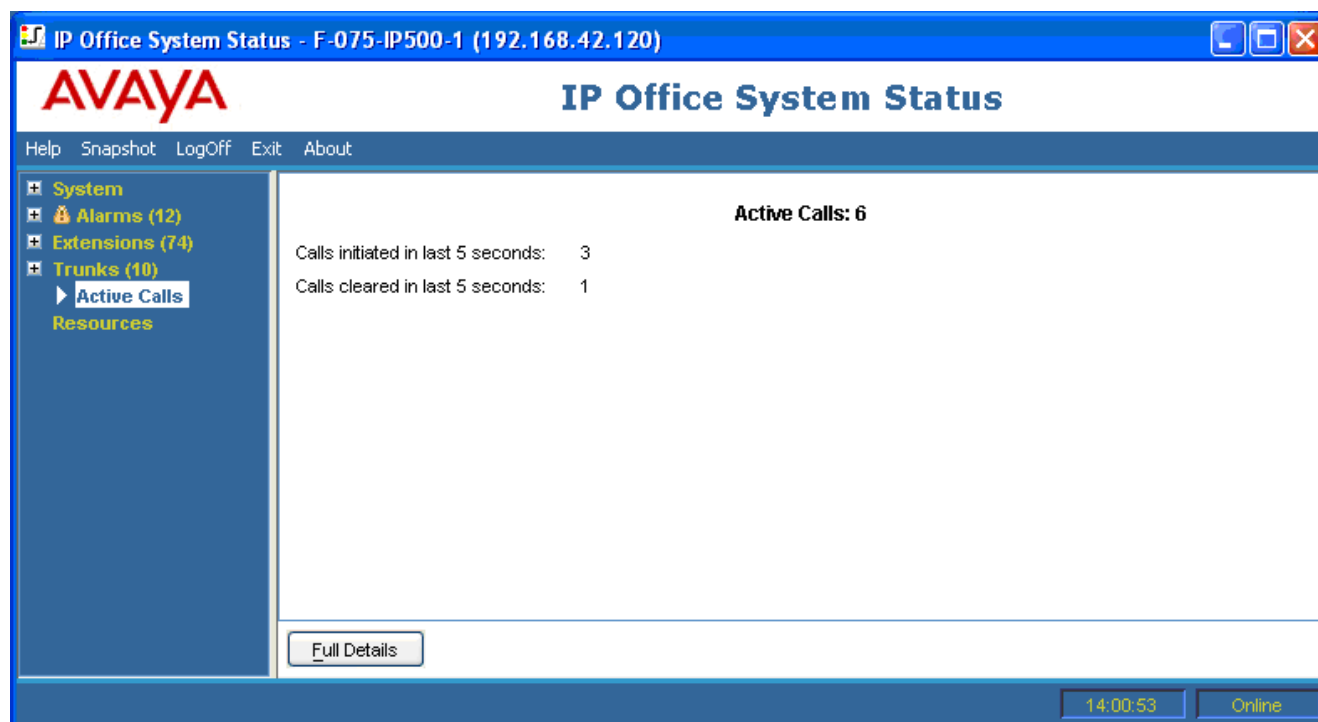
Note

- If the viewer restarts whilst an Abandoned Calls list is displayed, the list is cleared. After the restart, the viewer updates the time in the header to indicate that the list displays Abandoned Calls since the time of the restart.

2.5.3 Reduced Active Calls

If you are viewing the Active Calls information for a heavily loaded IP Office (using a communications link with insufficient bandwidth or running SSA with insufficient CPU power), SSA will automatically reduce the amount of information displayed, to accommodate the high call rate.

Reduced information similar to the following is displayed:

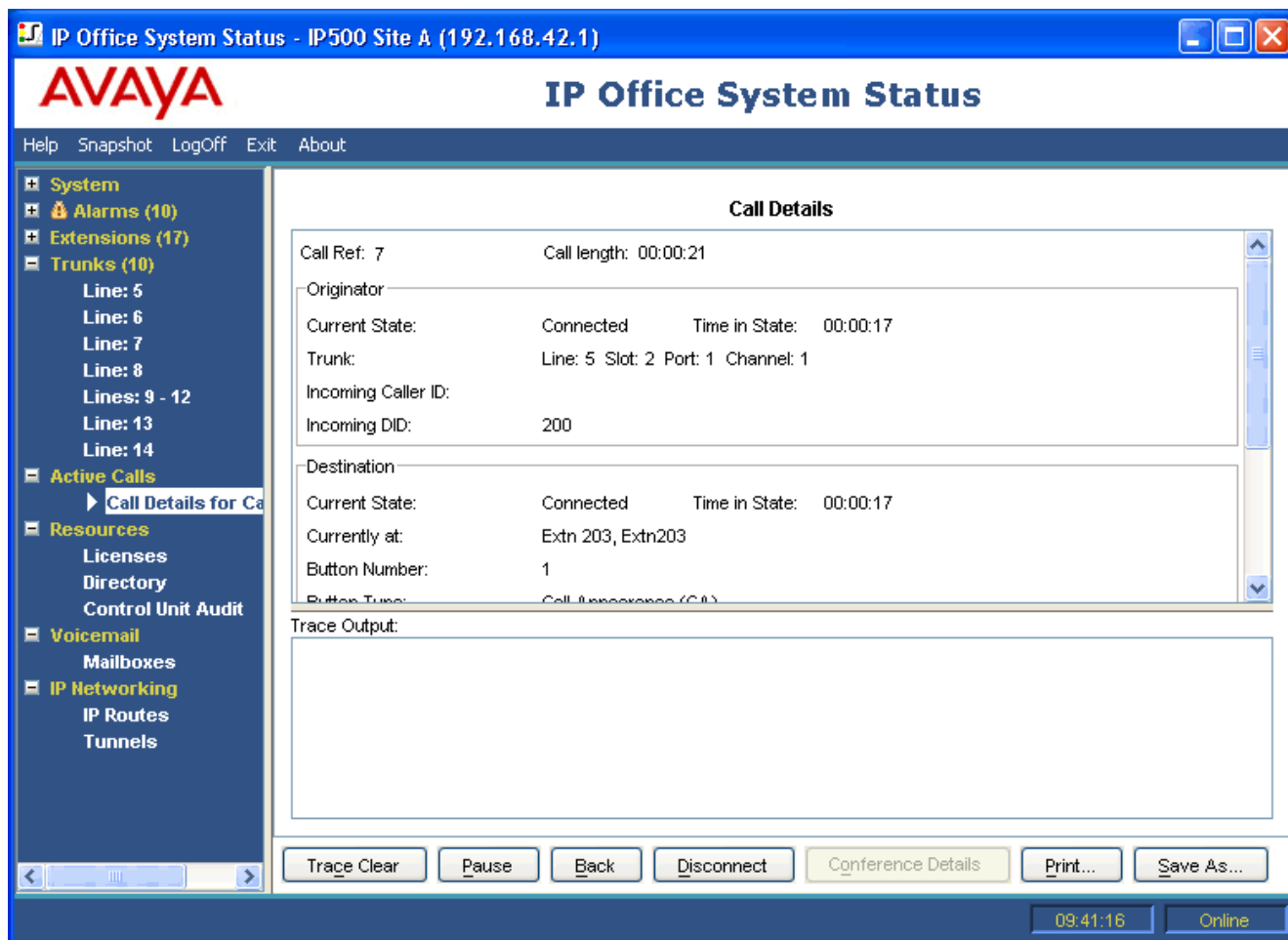


When the call initiation/setup rate has reduced, the Full Details button can be selected to resume the full display. If you want to view IP Office activity during the high load, the snapshot facility can be used to obtain a complete instantaneous view of the system.

2.5.4 Call Details

The Call Details screen is only displayed if a call is active. The Call Details screen can be accessed as follows:

- Select a current call in the Active Calls screen.
- Click Extensions and then click the relevant extension.
- Click System and then Control Unit and double-click a line.



The following information is displayed:

- Call Ref
Call reference assigned by IP Office and associated with the line in use.
- Call Length
Total length of the call.
- For further details see the following sections:
 - [Originator Information](#) ⁷⁴.
 - [Destination Information](#) ⁷⁵.
 - [Call Target Information](#) ⁷⁷.
 - [Conference Details](#) ⁷³.
 - [Call States \(Extension Ports\)](#) ⁷⁸.
 - [Call States \(Trunk Ports\)](#) ⁸⁰.
 - [Callback and Returning Calls](#) ⁸¹.

The bottom section of the screen contains trace information and a scroll bar, enabling you to view the trace. Tracing enables you to view details of specific calls and is useful for problem solving. For more information, see [Tracing](#) ⁹⁴.

Notes

- The names shown for voicemail destinations are those supplied by IP Office to voicemail, when the connection is made. Any subsequent activities within the voicemail Telephone User Interface (TUI), for example; logging in to an alternative mailbox, will not be reflected in the information shown for the destination.
- A call that is both alerting/queuing and listening to an announcement will indicate information about both.

2.5.5 Conference Details

When a call is connected to a conference, an additional Conference Details button shows all connected calls on the conference. The screen also displays whether the conference is a Conferencing Center or ad-hoc type and whether the conference is being recorded.

The screenshot shows the AVAYA IP Office System Status application window. The title bar reads "IP Office System Status - IP500 Site A (192.168.42.1)". The AVAYA logo is in the top left, and the title "IP Office System Status" is in the top center. A menu bar includes "Help", "Snapshot", "LogOff", "Exit", and "About".

A left-hand navigation pane contains the following items:

- System
- Alarms (10)
- Extensions (17)
- Trunks (10)
- Active Calls
 - Call Details for Call [ID]
 - Conference C
- Resources
- Voicemail
- IP Networking

The main content area is titled "Conference Details" and displays the following information:

Name: Conf 100
Type: Ad Hoc
Call Recording: No

Call Ref	State	Party
3	Connected	Extn 411, Extn411
4	Connected	Extn 201, Extn201
5	Connected	Extn 203, Extn203

At the bottom of the main area are buttons for "Pause", "Back", "Print...", and "Save As...". The bottom status bar shows the time "08:26:23" and the status "Online".

2.5.6 Call Information

2.5.6.1 Originator Information

The following information displayed is based on whether the originating end is a trunk or not.

Originating End is a Trunk

Includes all incoming calls on analog, dialog or VoIP trunks. The following is reported for the Originator (trunk):

- Trunk
Includes fixed line number, URI group (SIP lines) and channel (for digital and VoIP lines).
- Current State and Time in State
See [Call States](#) ⁷⁸.
- Incoming Caller ID
The caller ID name and number.
- Incoming DID
The incoming DID digits (when applicable).
- Codec
Selected via H.323/SIP messages and may change during the call.
- VoIP Trunk (H.323, SCN or SIP)
Normal data packets can prevent or delay voice data from getting across the link, causing unacceptable speech quality. SSA provides the following information about the VoIP connection and how it is being impacted by other traffic. These statistics are calculated as defined in RFC 1889.
 - Round Trip Delay
 - Receive Jitter
 - Transmit Jitter
 - Receive Packet Loss
 - Transmit Packet Loss

Originating End is not a Trunk

The following information is reported for the Originator:

- Current State and Time in State
The state is defined when there is a call associated with a button.
- Currently At:
 - Users
The user name and number is listed. For multi-line sets, the button number and button type (Call, Line and Bridged Appearance or Call Coverage) are displayed.
 - Voicemail Call flow
When voicemail is the originator end, no call flow name will be shown.
 - Data Service
The service name.
 - Park Slot
The park slot number.
 - Conference
The conference number.
 - Multicast
Multicast.
 - Dialed Digits
The digits that were dialed by the user.
- Codec (if applicable)
Selected via H.323/SIP messages and may change during the call.

2.5.6.2 Destination Information

The information displayed is based on whether the destination end is a trunk or not.

Destination End is a Trunk

Includes the following types of calls that involve trunks:

- Call to an outside number from the switch
- VoiceMail Pro calling an outside number (for a callback)
- External forwarding
- SCN call

The following information is reported for the Destination:

- Trunk Used
Includes fixed line number, URI group (SIP lines) and channel (for digital and VoIP lines).
- Current State and Time of State
The state is defined when there is a call associated with a button.
- Digits sent to Central Office
These are the digits that IP Office has sent to the central office or the To: URL, sent in the INVITE for a SIP trunk.
- Caller ID sent from Central Office
Some central offices send the connected Caller ID (versus who was called).
- Codec
Selected via H.323/SIP messages and may change during the call.
- VoIP Trunk (H.323, SCN or SIP)
Normal data packets can prevent or delay voice data from getting across the link, causing unacceptable speech quality. SSA provides the following information about the VoIP connection and how it is being impacted by other traffic. These statistics are calculated as defined in RFC 1889.
 - Round Trip Delay
 - Receive Jitter
 - Transmit Jitter
 - Receive Packet Loss
 - Transmit Packet Loss

Destination End is not a Trunk

The following information is reported for the Destination:

- Current State and Time in State
The state is defined when there is a call associated with a button.
- Currently At
One of the following:
 - Group of Users
For paging and some hunt group calls, listed by user name and number. If the call is alerting/connected for both users and SCN trunks, all will be listed.
 - User
The user name and number are listed. For multi-line sets the button number and button type (Call, Line and Bridged Appearance and Call Coverage) are displayed.
 - Voicemail Call flow
The call flow name.
 - AutoAttendant
The string Automated Attendant followed by the Automated Attendant number is listed.
 - Park Slot
The park slot and park slot number/name.
 - Mailbox
The mailbox and mailbox name.
 - Voicemail Announcement
This will be Announcement plus the group/username and the announcement number.
 - Conference
The conference name. See [Conference Details](#) ⁷³.
 - RAS
The user name.
 - Hunt Group Queue
The hunt group name and number when a call is in a hunt group queue but not alerting.
- Codec
Selected via H.323/SIP messages and may change during the call.

2.5.6.3 Call Target/Routing Information

- RTP Connection Type (if applicable)
DirectMedia, RTPRelay or VCM.
- Shortcode Matched (if applicable)
Includes the shortcode name, feature and the type (System, User, LCR, Line).
- Original Target (if applicable)
One of the following:
 - Destination is a User
The user name or extension number is listed.
 - Destination is a Hunt Group
The hunt group name or extension number is listed.
 - Destination is a shortcode
The shortcode and feature are listed along with the type (System, User, LCR, Line).
 - Destination is an embedded Automated Attendant
The string Automated Attendant, followed by the Automated Attendant number is listed.
- Call Recording
Call recording in progress (Yes or No).
- Call was Redirected to a Twin
Yes or No.
- Call Routed Across SCN Trunk
Yes or No. Set to Yes only when the call becomes connected.
- Retargeting Count
The number of times the call has been retargeted. A call is retargeted, for example; on expiry of a no answer timeout. Retargeting means that the current destination(s) stop alerting and a new destination is selected instead.
- Transfer Count (if appropriate)
The number of times a call has been transferred.
- Redirecting Station (if appropriate)
The station from which a call was re-directed on Forwarding, Follow Me, coverage or twinning.

2.5.6.4 Call States (Extension)

Call States are shown for both ends of a call. The valid states for extension ports are listed in the following table:

State	Extension
Idle	There is no call or call attempt on this extension or button.
Connected	A call is connected on this port.
Held	The call is on regular hold. This could be the result of pressing the Hold button, or a flash hook.
Held for Transfer/Conference	The call is on hold as the result of a user pressing the fixed Transfer or Conference button.
Parked	The call has been parked at a park slot.
Seized	A call is being originated, the port has been seized but the call is not yet connected. No digits have been dialed.
Dialling	A call is being originated, the port has been seized but the call is not yet connected. At least one digit has been dialed.
WrapUp	The user on this port is in the Wrapup state. This might be the automatic call time or set for call center agent.
In Use Elsewhere	This means that another person is active on a Call or Bridged Appearance. For Line Appearance, this means that another user is active on the call.
On Hold Elsewhere	This means that another person has placed a call on hold at a Call or Bridged Appearance. For Line Appearance, this means another user has placed a call on hold.
In Use Inaccessible	This means that the Call or Bridged Appearance cannot be accessed. For example: <ul style="list-style-type: none">• The Call Appearance on the chain is associated with a user who is not logged in.• The longest internal member on the call has Cannot Be Intruded active.• The Call Appearance on the chain is on a button that has no LEDs. A Line Appearance cannot be accessed. For example: <ul style="list-style-type: none">• The longest internal member on the call has Cannot Be Intruded active.• The line associated with the Line Appearance is Out of Service.
Alerting	When a call is visually or audibly alerting on a telephone.
Ringback*	For outgoing calls, this is the state after the user has completed dialling and is listening to ringback.
Call Listen	Indicates the call is listening to this extension
Paging	Indicates one or more output points of a paging call.
Recording	A surrogate call is being used to record the call whose ID is indicated.
Hold Reminder	Extension is alerting with a hold reminder notification.
Park Reminder	Extension is alerting with a park reminder notification.
Transfer Return	Extension is alerting with a transfer return call notification.
Voicemail Ringback	Extension is alerting with a voicemail ringback notification.
Auto Callback	Extension is alerting with a callback/reminder notification.
Held at Central Office	For European ISDN lines, the central office has the call on hold. It will free the B-channel which will be seen as idle in SSA.
Holding	Indicates that the other party on the call is in one of the Held states: Held, Held for Transfer, Held for Conference, Held at Central Office, Hold Reminder.
Connected Blind	Indicates that this end of the call is connected and that the other party on the call is alerting with either a blind transferred call or a transfer return.
Queuing	Indicates that the call is held in a hunt group queue and is not alerting at any extension. The other end will be in Ringback/Incoming Alerting or Connected Announcement state.
Alerting Announcement	Indicates that the call is alerting at one or more extensions or trunks and is also currently connected to voicemail for a queuing announcement.
Queuing Announcement	Indicates that the call is held in a hunt group queue, is not alerting at any extension and is currently connected to voicemail for a queuing announcement.
Connected Announcement	Indicates that this end of the call is connected because the call is or has been listening to a queuing announcement.
Number Unobtainable	States that an extension can be left in by a failed/cleared call.
Busy	States that an extension can be left in by a failed/cleared call.
Disconnected	States that an extension can be left in by a failed/cleared call.

* When a call is alerting, one endpoint will be in the alerting state and the other will be in the ringback state. From the view of the call model, Ringback and Incoming Alerting are equivalent states. Also, Alerting and Outgoing Alerting are equivalent states.

Trunk Summary and Extension Status screens will show a direction for each call. For a trunk, the call is shown as outgoing (if IP Office initiated the call) and incoming (if the central office or network initiated the call). For an extension, the call is shown as outgoing (if the extension initiated the call) and incoming (if another party initiated the call).

For examples of call sequences that include announcements, see [Tracing](#)⁹⁴.

2.5.6.5 Call States (Trunk)

Call States are shown for both ends of a call. The valid states for trunk ports are listed in the following table:

State	Trunk
Idle	There is no call or call attempt on this port or channel.
Out of Service	The port has been set to Out of Service or the digital circuit (that this channel is on) is down.
Connected	A call is connected on this port.
Connected WAN	This time slot in use to deliver WAN interface - digital trunks only.
Parked	The call has been parked at a park slot.
Seized	A call is being made and the system selects a particular line.
Dialling	A call is being originated from this port, the trunk has been seized but the call is not yet connected. On analog trunks, 'connected' may be an implied state based on a timeout.
Clearing	The call is in the process of terminating or is in the post call timeout period.
Pre-Alert	This is when an incoming call arrives on a trunk and the system is waiting for Caller ID.
Outgoing Alerting	When an outgoing call is being made and the far end is alerting.
Incoming Alerting	When an incoming trunk call is visually or audibly alerting or is in a hunt group queue.
Paging	Indicates one or more output points of a paging call.
Recording	A surrogate call is being used to record the call whose ID is indicated.
Held at Central Office	For European ISDN lines, the central office has the call on hold. It will free the B-channel which will be seen as idle in SSA.
Holding	Indicates that the other party on the call is in one of the Held states: Held, Held for Transfer, Held for Conference, Held at Central Office, Hold Reminder.
Connected Blind	Indicates that this end of the call is connected and that the other party on the call is alerting with either a blind transferred call or a transfer return.
Queuing	Indicates that the call is held in a hunt group queue and is not alerting at any extension. The other end will be in Ringback/Incoming Alerting or Connected Announcement state.
Alerting Announcement	Indicates that the call is alerting at one or more extensions or trunks and is also currently connected to voicemail for a queuing announcement.
Queuing Announcement	Indicates that the call is held in a hunt group queue, is not alerting at any extension and is currently connected to voicemail for a queuing announcement.
Connected Announcement	Indicates that this end of the call is connected because the call is or has been listening to a queuing announcement.

* When a call is alerting, one endpoint will be in the alerting state and the other will be in the ringback state. From the view of the call model, Ringback and Incoming Alerting are equivalent states. Also, Alerting and Outgoing Alerting are equivalent states.

Trunk Summary and Extension Status screens will show a direction for each call. For a trunk, the call is shown as outgoing (if IP Office initiated the call) and incoming (if the central office or network initiated the call). For an extension, the call is shown as outgoing (if the extension initiated the call) and incoming (if another party initiated the call).

For examples of call sequences that include announcements, see [Tracing](#) ⁹⁴.

2.5.6.6 Callback and Returning Calls

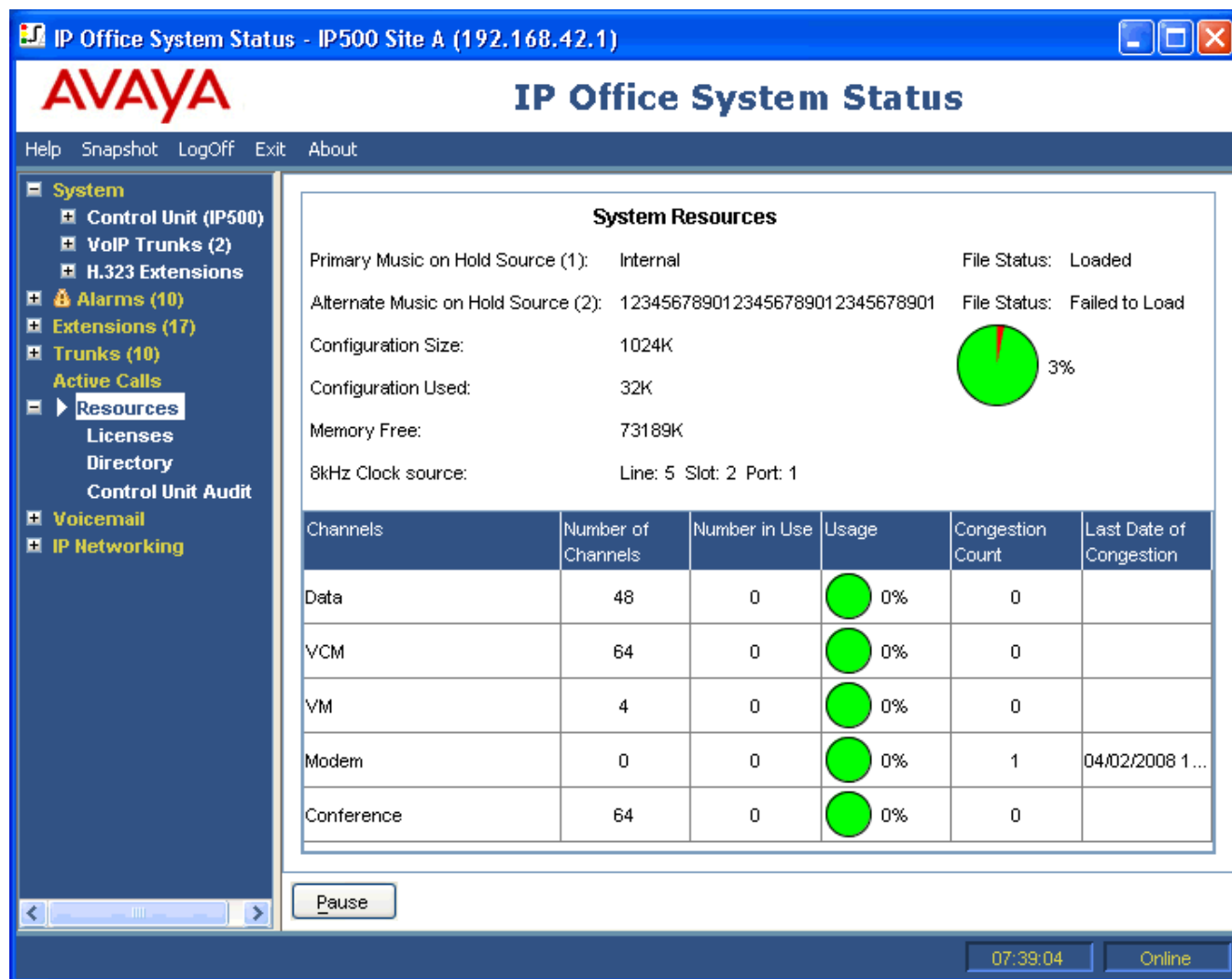
The following table shows what is reported as the originator:

Call Type	Originator
Transfer Return	Transferee
Hold Reminder	The party that was the originator before the hold was initiated.
Park Reminder	The park slot. The reminder is a new call. If the reminded party picks this call up, parked and new calls will combine in the same way as a transfer completion.
Automatic Callback*	The party that requested the callback.
Voicemail Ringback	The party receiving the callback.

* While alerting at the telephone who originated the callback.

2.6 Resources

The System Resources screen provides a summary of key resources and their current usage in the system.



The following information is displayed:

- **Music on Hold Source**
Music on Hold (MOH) is provided by IP Office as either an internally stored file or an externally connected audio input. For IP Office 4.2+ details of the configured alternate music on hold sources are also shown.
- **Configuration Size**
The maximum available Kbytes size available for a configuration file. This varies depending on the control unit.
- **Configuration Used**
The total number of Kbytes that have been used in the configuration file.
- **Memory Free**
The number of free Kbytes in IP Office.
- **8kHz Clock Source**
For systems with digital trunks this will indicate the trunk being used as the clock source for the IP Office system. If no clock source has been configured the IP Office will default to using its own clock.
- **Channels**
One of the following:
 - **VCM Channels**
Voice compression channels are used for calls between IP and non-IP devices (trunks and or extensions). For most control units, voice compression channels are provided by the installation of VCM cards.
 - **Data Channels**
Data Channels is used for Remote Access (RAS), Internet Access, and Voicemail sessions. A data channel is an internal signaling resource used whenever a call is made from the IP network to an exchange line (Central Office). For example, four people surfing the Internet will use a single data channel since they all share the same line to the ISP. Two people remotely accessing the Office LAN from home will use two data channels since they have dialed in on separate lines. IP extensions do not use data channels.

- **Modem Channels**
This is the internal IP400 modem card. The 'private' modem in a Small Office Edition base unit or an ATM4 card is not included in these channels.
- **Conference Channels**
The number of channels available for conference members (parties) varies with the IP Office control unit type. These channels are used for conference calls and for features such as call intrusion and call recording.
- **VM Channels**
The number of voicemail channels available and the number in use. For Voicemail Pro the number available is based on the voicemail licenses installed.
- **Number of Channels**
The total number of resources available in the system.
- **Number in Use**
The number of resources that are currently in use.
- **Usage**
The percentage of the resource currently being used.
- **Congestion Count**
The total number of times that all of the resources were in use. For example; if there are 4 voicemail channels and there has been an attempt to access a fifth channel, the congestion count will display 1.
- **Last Date of Congestion**
When a request for a resource has failed.

IP Office 4.2+. This screen shows the current installed licenses and the status of those licenses. The type and serial number of the Feature Key Dongle is also shown.



- Note that the consumption of some licenses (ie. the difference between Available Instances and Instances) is not controlled by the IP Office itself, for example CCC licenses. In those cases the Available Instances and congestion events are not known.

2.6.2 Directory

For IP Office 5.0, this screen is split several parts.

The first part is a table indicating the system directory number sources being used by the IP Office.

- **System**
Directory entries stored as part of the IP Office configuration. These are entered and edited using IP Office Manager. They can also be edited by a system phone user using a 1608/1616 phone
- **LDAP**
Directory entries imported using LDAP from an LDAP server. The IP Office needs to be configured to use LDAP Directory Services and how often to import using LDAP.
- **HTTP**
Directory entries imported using HTTP from another IP Office. The IP Office needs to be configured to use HTTP Directory Services and how often to import using HTTP.
- **Total**
The total number of current directory entries and the overall system maximum.

For LDAP and HTTP directories; the time, date and status of the last import are shown. Also the number of records imported and the number discarded. Records are discarded if they have a blank name or number, match an existing record or exceed the total capacity of the IP Office system.

- **Last Update**
The last time the Update Status (below) was changed.
- **Update Status**
The status or result of the last update:
 - **Success:** The last update was successful.
 - **Success with Overflow:** The last update was successful but some entries were not imported because the maximum was exceeded.
 - **Failure:** The last update attempt was not successful.
 - **In Progress:** The IP Office is currently importing records.
 - **Not Configured:** The IP Office does not have an import source configured.
- **Imported**
The number of entries imported during the last successful update.
- **Discard**
The number of entries discarded, due to being invalid or duplicate, during the last successful update.

For hunt groups, the hunt group can be selected and the Membership button pressed to display the users who are members of that hunt group.

If there are conflicting Small Community Network entries, the Conflicts button can be used to locate those entries.



IP Office System Status

[Help](#) [Snapshot](#) [LogOff](#) [Exit](#) [About](#)

- System
- Alarms (4)
- Extensions (9)
- Trunks (7)
- Active Calls
- Resources
 - Licenses
 - Directory**
 - Control Unit Audit
- Voicemail
- IP Networking

Directory

Sources:

Directory	Running	Maximum	Last Update	Update Status	Imported	Discarded
System	3	2500				
LDAP	0	5000	10/03/2009 09...	Not Configured	0	0
HTTP	0	5000	10/03/2009 09...	Not Configured	0	0
Total	3	5000				

Number of Remote Small Community Network Sites: Not Networked

Number of Local User Entries: 15

Number of Local Group Entries: 2

Number of Remote User Entries: 0

Number of Remote Group Entries: 0

Total Number of User and Group Entries: 17

Users and Groups:

Name	Number	Type	Source of Entry	Current Location
RemoteManager		User	Local	
NoUser		User	Local	
Extn201	201	User	Local	
Extn202	202	User	Local	
Extn203	203	User	Local	
Extn204	204	User	Local	
Extn205	205	User	Local	
Extn206	206	User	Local	
Extn207	207	User	Local	
Extn208	208	User	Local	
Extn299	299	User	Local	
Extn298	298	User	Local	

Refresh

Membership

Conflicts

09:30:26

Online

2.6.3 Control Unit Audit

IP Office 4.2+. This screen displays the control unit audit trail. It shows who has accessed the system configuration and the type of actions they have been performing.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
- VoIP Trunks (2)
- H.323 Extensions
- Alarms (10)
- Trunks (10)
- Active Calls
- Resources
 - Licenses
 - Directory
 - Control Unit Audit**
- Voicemail
- IP Networking

Control Unit Audit

Date and Time	Event Type	Item Changed	Outcome	IP Office Account	PC IP Address	PC MAC Address	PC Login Username
21/06/2007 ...	Security Login		Success	Operator			
18/01/2008 ...	Write with I...	System	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
18/01/2008 ...	Write with I...	System	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
18/01/2008 ...	Warm Start		Success	System Re...			
18/01/2008 ...	Write with I...	System	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
18/01/2008 ...	Warm Start		Success	System Re...			
18/01/2008 ...	Write with M...	System	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
23/01/2008 ...	Write with M...	User Extn203	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
23/01/2008 ...	Write with M...	User Extn203	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
23/01/2008 ...	Write with M...		Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
23/01/2008 ...	Write with M...	User Extn203	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
23/01/2008 ...	Write with M...	User Extn203	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
29/01/2008 ...	Write with I...	User Extn203	Success	Administrator	192.168.42...	00-01-6C-E...	Administrator
29/01/2008 ...	Warm Start		Success	System Re...			
04/02/2008 ...	Upgrade		Success				
04/02/2008 ...	Warm Start		Success	System Re...			

Refresh

07:50:14 Online

2.7 Voicemail

IP Office 4.2+. This screen displays the status of the voicemail server configured for the IP Office. The details shown will vary according to the type of voicemail server.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
- VoIP Trunks (2)
- H.323 Extensions

Alarms (10)

Extensions (17)

Trunks (10)

Active Calls

Resources

- Licenses
- Directory
- Control Unit Audit

Voicemail

Mailboxes

IP Networking

Voicemail Status

Voicemail Type: Voice Mail Pro

Licenses:

License Type	Available Instances	Number of Licenses in use
Voicemail Pro (4 Ports)	Unlimited	0
AUDIX Voicemail	Unlimited	0

Total Number of Voicemail Ports: 4

Total Number of Voicemail Ports in use: 1

Last date and time port allocation failed:

Active Voicemail Ports:

Call Ref	Service Type	Name	Call State	Time in State	Direction	Other Party on Call
1	Mailbox	?Extn203	Connected	00:00:05	Incoming	Extn 203, Extn203

Pause

Call Details

25%

08:08:32

Online

2.7.1 Mailboxes

IP Office 4.2+. This screen displays details of the voicemail mailboxes on the voicemail server. It includes the number of messages and the current status of basic voicemail settings for the associated mailbox user or hunt group.

IP Office System Status - IP500 Site A (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

- Control Unit (IP500)
- VoIP Trunks (2)
- H.323 Extensions

Alarms (10)

Extensions (17)

Trunks (10)

Active Calls

Resources

- Licenses
- Directory
- Control Unit Audit

Voicemail

- Mailboxes**

IP Networking

Mailbox Status

Number of Mailboxes: 26

Name	Voicemail Status	Hunt Group Broadcast	Email Options	Email Address	Text to Speech	Number of New Messages	Number of Read Messages	Number of Saved Messages
RemoteMan...	On	Not Applica...	Off		Off	0	0	0
NoUser	On	Not Applica...	Off		Off	0	0	0
Extn201	Off	Not Applica...	Off		Off	0	0	0
Extn202	On	Not Applica...	Off		Off	0	0	0
Extn203	On	Not Applica...	Off		Off	1	2	2
Extn204	On	Not Applica...	Off		Off	0	0	0
Extn205	On	Not Applica...	Off		Off	0	0	0
Extn206	On	Not Applica...	Off		Off	0	0	0
Extn207	On	Not Applica...	Off		Off	0	0	0
Extn208	On	Not Applica...	Off		Off	0	0	0
Extn209	On	Not Applica...	Off		Off	0	0	0
Extn210	On	Not Applica...	Off		Off	0	0	0
Extn211	On	Not Applica...	Off		Off	0	0	0
Extn212	On	Not Applica...	Off		Off	0	0	0
Extn213	On	Not Applica...	Off		Off	0	0	0
Extn214	On	Not Applica...	Off		Off	0	0	0
Extn215	On	Not Applica...	Off		Off	0	0	0
Extn216	On	Not Applica...	Off		Off	0	0	0

Pause

08:09:05 Online

2.8 IP Networking

2.8.1 IP Routes

IP Office 4.2+. This screen shows the IP routes known by the IP Office. This includes both configured static routes and routes learnt through RIP if enabled.

The screenshot shows the AVAYA IP Office System Status application window. The title bar reads "IP Office System Status - IP500 Site A (192.168.42.1)". The AVAYA logo is in the top left, and the title "IP Office System Status" is in the top right. A menu bar includes "Help", "Snapshot", "LogOff", "Exit", and "About".

The left sidebar contains a tree view with the following items:

- System
 - Control Unit (IP500)
 - VoIP Trunks (2)
 - H.323 Extensions
- Alarms (10)
- Extensions (17)
- Trunks (10)
- Active Calls
- Resources
 - Licenses
 - Directory
 - Control Unit Audit
- Voicemail
 - Mailboxes
- IP Networking
 - IP Routes (selected)
 - Tunnels

The main content area is titled "IP Routes". It displays summary statistics:

- Total Number of Administered IP Routes: 5
- Total Number of IP Routes: 5
- Route Priority: Prefer Static

Below the statistics is a table with the following columns: Destination, Subnet Mask, Next Hop IP Address, Interface Name, Interface Type, Metric, IP Route Type, Source IP Address, and Source IP Mask.

Destination	Subnet Mask	Next Hop IP Address	Interface Name	Interface Type	Metric	IP Route Type	Source IP Address	Source IP Mask
192.168.42.0	255.255.25...		LAN1	LAN		Directly Att...		
192.168.43.0	255.255.25...		LAN2(WAN)	LAN		Directly Att...		
192.168.99.0	255.255.25...		RemoteMa...	DialUp		Static		
192.168.44.0	255.255.25...	192.168.44.1	LAN1	LAN	1	Static		
192.168.46.0	255.255.25...	192.168.46.1	LAN1	LAN	1	Static		

At the bottom of the main area are "Pause" and "Ping" buttons. The status bar at the very bottom shows the time "08:10:00" and the status "Online".

2.8.2 Tunnels

IP Office 4.2+. This screen display details of the VPN tunnels (IPSec and L2TP) configured on the IP Office.

The screenshot shows the Avaya IP Office System Status application window. The title bar reads "IP Office System Status - IP500 Site A (192.168.42.1)". The Avaya logo is in the top left, and the title "IP Office System Status" is in the top center. A menu bar includes "Help", "Snapshot", "LogOff", "Exit", and "About". A left-hand navigation pane lists various system components: "System", "Alarms (9)", "Extensions (17)", "Trunks (10)", "Active Calls", "Resources", "Voicemail", "IP Networking" (which is expanded to show "IP Routes" and "Tunnels"), and "Tunnels" is selected. The main content area is titled "Tunnel Status" and displays "Total Number of Administered Tunnels: 2". Below this is a table with four columns: "Tunnel Name", "Tunnel Type", "Remote Tunnel Endpoint", and "Association". The table contains two entries: "Site B" (L2TP, 192.168.50.1, None) and "RemoteD" (IPSec, 192.168.56.1, None). A "Pause" button is located at the bottom left of the main area. The bottom status bar shows a timer at "08:00:24" and the status "Online".

Tunnel Name	Tunnel Type	Remote Tunnel Endpoint	Association
Site B	L2TP	192.168.50.1	None
RemoteD	IPSec	192.168.56.1	None

Chapter 3.

Tracing

3. Tracing

SSA enables traces to be generated for calls, lines and extensions.

Trace information is presented at the bottom of the screen. The Pause button and scroll bar enable you to view the information whilst the application continues to record new trace events. The Resume button displays all the events recorded when a trace is paused, as well as further new events as they occur.

When a trace is displayed, the option to Print and/or Save As are available. A trace can be saved to file either as a .txt or .csv file. If the trace is paused, only the information currently displayed will be saved and/or printed.

This section provides examples and descriptions of traces generated for calls, lines and extensions.

- If the viewer restarts whilst a trace is being generated and the trunk/channel/extension/buttons being traced are still valid, the viewer retains the trace before loss of connection. A line is added to the trace as follows: [time and date] Connection to the Control Unit restarted. The trace continues to generate.

3.1 Using Traces for Troubleshooting

To diagnose problems with a call, it is generally best to trace the source of the call; e.g. trace the trunk for an incoming call or the extension for an outgoing call. By following this guideline, you will see all trace information from the very start of the call. The initial events often contain the most important diagnostic information. Since a trace also shows events relating to parties that are on the same call as the trunk or extension, a trace from a trunk or extension will allow you to see the whole history of the call.

3.2 Call Traces

You can trace a call from the Call Details screen. The trace of a call will show changes of state for that call and events relating to both ends of the call. For example; it will indicate if a button is pressed on an extension that is on the call or if a protocol message is sent or received for a trunk channel that is on the call. These events will be shown for as long as the extension/trunk is associated with the call. For example; if one extension transfers a call to another, you will see the transfer being carried out by the first extension; events relating to the second extension will then be shown.

3.3 Extension Traces

You can trace all or any selection of appearance buttons on an extension. For extensions without appearance buttons, you can trace all or any calls currently associated with the extension.

The trace for an extension will show events relating to that extension (e.g. button presses) and traces of all calls associated with the selected buttons, for as long as they are associated.

The trace information for a call which is associated with an extension button will show the same information as for a call traced from the Call Details screen. In other words, it will show changes of state for that call and events relating to both ends of the call.

3.4 Trunk Traces

You can trace all or any selection of channels on a trunk. The trace will show events relating to these channels (such as protocol messages), plus traces of all calls associated with these channels, for as long as they are associated.

The trace information for a call which is associated with a trunk channel will show the same information as a call traced from the Call Details screen. In other words, it will show changes of state for that call, plus events relating to both ends of the call.

In some territories, a call can be held at the central office rather than IP Office. In such cases, the call stops being associated with a particular channel; it may then be un-held and become associated with the same or a different channel. If such a call is initially associated with a trunk channel that is being traced, it will continue to be shown in the trace for as long as it is associated with the trunk, even if it is re-associated with a different channel or is associated with no channel at all.

3.5 Analog Trunk

3.5.1 Tracing Incoming Calls on Analog Lines

SSA can be used to troubleshoot calls that are being disconnected.

The following example shows how SSA traces an incoming call which rings at an extension and then transfers to voicemail:

The screenshot displays the AVAYA IP Office System Status application. The left sidebar shows a navigation menu with options like System, Alarms (2), Extensions (12), and Trunks (7). The main window is titled 'IP Office System Status' and shows the 'Status' tab. Under 'Status', there are sub-tabs for 'Utilization Summary' and 'Alarms'. The 'Analog Trunk Summary' section shows a table with columns: Port, Line ID, Line Type, Call Ref, Current State, Time in State, Caller ID or Dialed Digits, Other Party on Call, and Direction of Call. Below this, the 'Trace Output - All Ports' section shows a list of call events with timestamps and details. The events are: 26/01/07 13:42:23-641ms Line = 1, Pre-Alerting; 26/01/07 13:42:24-263ms Line = 1, Alerting, Call Ref = 63, Caller ID Name = Extn211, Number = 211; 26/01/07 13:42:24-269ms Call Ref = 63, Originator State = Dialing, Type = Trunk, Destination State = Alerting, Type = Target List; 26/01/07 13:42:24-269ms Call Ref = 63, Alerting, Extension = 210, Button = 1; 26/01/07 13:42:24-295ms Call Ref = 63, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List; 26/01/07 13:42:39-279ms Call Ref = 63, Retargeting; 26/01/07 13:42:39-303ms Call Ref = 63, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = Mailbox; 26/01/07 13:42:39-303ms Call Ref = 63, Answered, Mailbox #Extn210; 26/01/07 13:42:45-711ms Call Ref = 63, Originator State = Clearing, Type = Trunk, Destination State = Connected, Type = Mailbox; 26/01/07 13:42:45 711ms Call Ref = 63, Disconnect from Originator End.

Port	Line ID	Line Type	Call Ref	Current State	Time in State	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1	Line: 1 Front Panel Port: 1	Loop Start CLI		Idle	00:43:22			
2	Line: 2 Front Panel Port: 2	Loop Start CLI		Idle	00:44:31			
3	Line: 3 Front Panel Port: 3	Loop Start CLI		Idle	02:54:18			
4	Line: 4 Front Panel Port: 4	Loop Start CLI		Idle	02:54:18			

Trace Output - All Ports:

- 26/01/07 13:42:23-641ms Line = 1, Pre-Alerting
- 26/01/07 13:42:24-263ms Line = 1, Alerting, Call Ref = 63, Caller ID Name = Extn211, Number = 211
- 26/01/07 13:42:24-269ms Call Ref = 63, Originator State = Dialing, Type = Trunk, Destination State = Alerting, Type = Target List
- 26/01/07 13:42:24-269ms Call Ref = 63, Alerting, Extension = 210, Button = 1
- 26/01/07 13:42:24-295ms Call Ref = 63, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List
- 26/01/07 13:42:39-279ms Call Ref = 63, Retargeting
- 26/01/07 13:42:39-303ms Call Ref = 63, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = Mailbox
- 26/01/07 13:42:39-303ms Call Ref = 63, Answered, Mailbox #Extn210
- 26/01/07 13:42:45-711ms Call Ref = 63, Originator State = Clearing, Type = Trunk, Destination State = Connected, Type = Mailbox
- 26/01/07 13:42:45 711ms Call Ref = 63, Disconnect from Originator End

1. The call rings in to IP Office.
2. The call is assigned a Call Ref of 63.
3. The call rings at extension 211.
4. The call is redirected to the user's voicemail box.
5. The call is then disconnected by the outside caller (originator) of the call.

3.5.2 Tracing Outgoing Call

3.5.2.1 Call Disconnected by the IP Office User

Call Disconnected by the IP Office User

The following example shows an extension dialling out on an analog trunk:

The screenshot displays the AVAYA IP Office System Status application window. The title bar indicates the system is at F-075-50E-1 (192.168.42.250). The left sidebar contains a navigation menu with options: System, Alarms (2), Extensions (12), Active Calls, and Resources. The main pane is titled 'Extension Status' and shows a 'Current User Extension Number' of 210. Below this, a 'Trace Output - All Buttons' section displays a list of call events with timestamps and details. The trace shows extension 210 dialing digit 8, matching shortcode 8N, seizing analog line 4, dialing 123456789, and finally being disconnected by the IP Office (Originator). At the bottom of the main pane are buttons for 'Trace Clear', 'Pause', 'Call Details', 'Print...', and 'Save As...'. The status bar at the bottom right shows the time 16:25:52 and the system is 'Online'.

IP Office System Status - F-075-50E-1 (192.168.42.250)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (2)
Extensions (12)
Active Calls
Resources

Ext 210 dials the digit '8' for secondarily dial tone
204
IP Office matches the shortcode '8N'
207
Analog Line 4 is seized
210
'123456789' is dialed on Analog line 4
Call is disconnected
Ext 210 hangs up

Extension Status

Current User Extension Number: 210

Trace Output - All Buttons:

24/01/07 16:25:37-955ms Extension = 210, Digit dialed, Digit = 8
24/01/07 16:25:39-012ms My buttons = 1, Call Ref = 21, Originator State = Dialling, Type = User, Destination State = Seized, Type = Target List
24/01/07 16:25:39-013ms Call Ref = 21, Short Code Matched = System, 8N
24/01/07 16:25:39-030ms Line = 4, Seized, Call Ref = 21
24/01/07 16:25:39-224ms My buttons = 1, Call Ref = 21, Originator State = Dialling, Type = User, Destination State = Seized, Type = Trunk
24/01/07 16:25:39-725ms Line = 4, Wait for Dialtone Ended, Call Ref = 21
24/01/07 16:25:39-728ms Line = 4, Dialling, Call Ref = 21, Digits =
24/01/07 16:25:39-747ms Call Ref = 21, Alerting, Line = 4
24/01/07 16:25:39-757ms My buttons = 1, Call Ref = 21, Originator State = Connected, Type = User, Destination State = Connected, Type = Trunk
24/01/07 16:25:39-757ms Call Ref = 21, Answered, Line = 4
24/01/07 16:25:40-254ms Extension = 210, Digit dialed, Digit = 1
24/01/07 16:25:40-516ms Extension = 210, Digit dialed, Digit = 2
24/01/07 16:25:40-755ms Extension = 210, Digit dialed, Digit = 3
24/01/07 16:25:41-026ms Extension = 210, Digit dialed, Digit = 4
24/01/07 16:25:41-316ms Extension = 210, Digit dialed, Digit = 5
24/01/07 16:25:41-566ms Extension = 210, Digit dialed, Digit = 6
24/01/07 16:25:41-866ms Extension = 210, Digit dialed, Digit = 7
24/01/07 16:25:42-126ms Extension = 210, Digit dialed, Digit = 8
24/01/07 16:25:42-367ms Extension = 210, Digit dialed, Digit = 9
24/01/07 16:25:44-899ms Extension = 210, Switchhook, Status = On
24/01/07 16:25:44-903ms My buttons = 1, Call Ref = 21, Originator State = Clearing, Type = User, Destination State = Connected, Type = Trunk
24/01/07 16:25:44-903ms Call Ref = 21, Disconnect from Originator End
24/01/07 16:25:44-907ms Extension = 210, State = Disconnected
24/01/07 16:25:44-917ms Extension = 210, Button = 1, Idle
24/01/07 16:25:44-920ms Extension = 210, State = Busy Wrap Up
24/01/07 16:25:46-922ms Extension = 210, State = Idle

Trace Clear Pause Call Details Print... Save As...

16:25:52 Online

1. Extension 210 dials 8123456789.
2. The trace shows Extension = 210, Digit dialed, digit = 8.
3. IP Office matches the dialed 8, to the system shortcode 8N.
4. The trace shows that the analog line 4 is seized and 123456789 is dialed on the line.
5. The trace shows that extension 210 goes back on hook.
6. The call is then disconnected by IP Office (Originator).

Notes

- Analog lines will go directly from a 'seized' state to a 'connected' state, since the line provides no call progress signalling to IP Office.
- The trace will not show the digits dialled on an analog trunk after shortcode matching, if the pause between digits dialled exceeds an 'inter-digit' timeout.

3.5.2.2 Call Disconnected by Outside Caller

The following example describes an outgoing call on an analog line, where the call is disconnected by an outside caller:

IP Office System Status - F-075-SOE-1 (192.168.42.250)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (2)
Extensions (12)
 Ext 210 goes 'Off Hook'
 202
 Ext 210 dials the digit '8' for secondary dial tone
 206
 207
 208
 IP Office matches the shortcode '8N' for secondary dial tone
 210
 Analog Line 4 is seized
 Active Calls
 123456789
 123456789
 Call is disconnected by the outside caller
 Ext 210 hangs up

Extension Status

Extension Number: 210

Trace Output - All Buttons:

```

24/01/07 17:36:49-890ms Extension = 210, Switchhook, Status = Off
24/01/07 17:36:52-810ms Extension = 210, Digit dialed, Digit = 8
24/01/07 17:36:52-814ms My buttons = 1, Call Ref = 28, Originator State = Dialling, Type = User, Destination Type = none
24/01/07 17:36:53-838ms My buttons = 1, Call Ref = 28, Originator State = Dialling, Type = User, Destination State = Seized, Type = Target List
24/01/07 17:36:53-839ms Call Ref = 28, Short Code Matched = System, 8N
24/01/07 17:36:53-856ms Line = 4, Seized, Call Ref = 28
24/01/07 17:36:54-041ms My buttons = 1, Call Ref = 28, Originator State = Dialling, Type = User, Destination State = Seized, Type = Trunk
24/01/07 17:36:54-544ms Line = 4, Wait for Dialtone Ended, Call Ref = 28
24/01/07 17:36:54-547ms Line = 4, Dialing, Call Ref = 28, Digits =
24/01/07 17:36:54-566ms Call Ref = 28, Alerting, Line = 4
24/01/07 17:36:54-575ms My buttons = 1, Call Ref = 28, Originator State = Connected, Type = User, Destination State = Connected, Type = Trunk
24/01/07 17:36:54-575ms Call Ref = 28, Answered, Line = 4
24/01/07 17:36:56-262ms Extension = 210, Digit dialed, Digit = 1
24/01/07 17:36:56-802ms Extension = 210, Digit dialed, Digit = 2
24/01/07 17:36:57-411ms Extension = 210, Digit dialed, Digit = 3
24/01/07 17:36:58-212ms Extension = 210, Digit dialed, Digit = 4
24/01/07 17:36:58-771ms Extension = 210, Digit dialed, Digit = 5
24/01/07 17:36:59-421ms Extension = 210, Digit dialed, Digit = 6
24/01/07 17:37:00-471ms Extension = 210, Digit dialed, Digit = 7
24/01/07 17:37:01-012ms Extension = 210, Digit dialed, Digit = 8
24/01/07 17:37:01-811ms Extension = 210, Digit dialed, Digit = 9
24/01/07 17:37:06-420ms My buttons = 1, Call Ref = 28, Originator State = Connected, Type = User, Destination State = Clearing, Type = Trunk
24/01/07 17:37:06-420ms Call Ref = 28, Disconnect from Destination End
24/01/07 17:37:06-444ms Extension = 210, State = Disconnected
24/01/07 17:37:06-448ms Extension = 210, Button = 1, Idle
24/01/07 17:37:06-450ms Extension = 210, State = Busy Wrap Up
24/01/07 17:37:08-455ms Extension = 210, State = Idle
  
```

Trace Clear Pause Call Details Print... Save As...

17:37:09 Online

1. Extension 210 dials 8123456789.
2. The trace shows Extension = 210, Digit dialed, digit = 8.
3. IP Office matches the dialed 8, to the system shortcode 8N.
4. The trace shows that the analog line 4 is seized and 123456789 is dialed on the line.
5. The trace shows that the call is disconnected by the outside caller (Destination End).
6. Extension 210 is disconnected.

This type of trace is useful when customer report calls are being disconnected.

Notes

- Extension 210 is the 'Originator' of the call, the extension dialed out and the outside party is the 'Destination End'.
- The trace does not display what occurs to digits collected after extension 210 dials 8.
- The trace does not display calls answered on analog lines.

3.6 Extension

3.6.1 Incoming Outside Call

Disconnected by Outside Caller

The following example details an incoming call that has been answered and then dropped by the outside caller:

The screenshot displays the AVAYA IP Office System Status application. The left sidebar shows a tree view with 'System', 'Alarms (0)', and 'Extensions (12)'. Under 'Extensions', extension 210 is selected. The main area shows the 'Extension Status' for extension 210, including details like Module, Port, Telephone Type, and Current User. Below this is a table showing call history for buttons 1, 2, and 3, all in an 'Idle' state. At the bottom, a 'Trace Output - All Buttons' section shows a sequence of events: an incoming alerting call, extension 210 answering, the caller hanging up, and extension 210 returning to an idle state. The status bar at the bottom right shows the time as 11:49:27 and the system is 'Online'.

Button Number	Button Type	Call Ref	Current State	Time in State	Calling Number or Called Number	Direction	Other Party on Call
1	CA		Idle	00:00:26			
2	CA		Idle				
3	CA		Idle				

Trace Output - All Buttons:

- 26/01/07 11:48:52-116ms Call Ref = 18, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List
- 26/01/07 11:48:52-117ms Call Ref = 18, Alerting, Extension = 210, Button = 1
- 26/01/07 11:48:54-307ms Extension = 210, Switchhook, Status = Off
- 26/01/07 11:48:54-318ms My buttons = 1, Call Ref = 18, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = User
- 26/01/07 11:48:54-318ms Call Ref = 18, Answered, Extension = 210
- 26/01/07 11:48:58-724ms My buttons = 1, Call Ref = 18, Originator State = Clearing, Type = Trunk, Destination State = Connected, Type = User
- 26/01/07 11:48:58-724ms Call Ref = 18, Disconnect from Originator End
- 26/01/07 11:48:58-742ms Extension = 210, State = Disconnected
- 26/01/07 11:48:58-744ms Extension = 210, Button = 1, Idle
- 26/01/07 11:48:58-746ms Extension = 210, State = Busy Wrap Up
- 26/01/07 11:49:00-750ms Extension = 210, State = Idle

1. The outside call rings at extension 210.
2. Extension 210 answers the call.
3. The outside call (originator of the call) hangs up.
4. Extension 210 goes back on hook.

Disconnected by IP Office User

The following example details an incoming call that has been dropped by extension 210:

IP Office System Status - Australia (192.168.42.9)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

System

Alarms (0)

Extensions (12)

209

▶ 210

211

3001

3002

3003

3004

3008

3009

3010

3011

3012

Trunks (6)

Outside call rings Ext 210

Ext 210 answers call

Resources

Ext 210 hangs up

Outside call is disconnected

Ext 210 goes back on hook

Extension Status

Extension Number: 210

Module: Control Unit - D5 Ports

Port: 2

Telephone Type: 5410

Current User Extension Number: 210

Current User Name: Extn210

Forwarding: Off

Twinning: Off

Do Not Disturb: Off

Message Waiting: Off

Number of New Messages: 0

Phone Manager Type: None

Button Number	Button Type	Call Ref	Current State	Time in State	Calling Number or Direction	Other Party on Call
1	CA		Idle	00:00:15		

Trace Output - All Buttons:

26/01/07 07:23:51-362ms Call Ref = 31, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List

26/01/07 07:23:51-363ms Call Ref = 31, Alerting, Extension = 210, Button = 1

26/01/07 07:23:53-260ms Extension = 210, Switchhook, Status = Off

26/01/07 07:23:53-274ms My buttons = 1, Call Ref = 31, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = User

26/01/07 07:23:53-274ms Call Ref = 31, Answered, Extension = 210

26/01/07 07:23:55-246ms Extension = 210, Switchhook, Status = On

26/01/07 07:23:55-250ms My buttons = 1, Call Ref = 31, Originator State = Connected, Type = Trunk, Destination State = Clearing, Type = User

26/01/07 07:23:55-250ms Call Ref = 31, Disconnect from Destination End

26/01/07 07:23:55-253ms Extension = 210, State = Disconnected

26/01/07 07:23:55-275ms Extension = 210, Button = 1, Idle

26/01/07 07:23:55-277ms Extension = 210, State = Busy Wrap Up

26/01/07 07:23:57-279ms Extension = 210, State = Idle

Trace Clear Pause Back Call Details Print... Save As...

07:24:12 Online

1. The outside call (originator) rings at extension 210.
2. Extension 210 (destination end) answers the call.
3. Extension 210 hangs up.
4. The outside call is disconnected.
5. Extension 210 goes back on hook.

SSA is useful in tracing buttons that are pressed at a particular extension.

IP Office System Status - Australia (192.168.42.9)

IP Office System Status

Help Snapshot LogOff Exit About

- System
- Alarms (0)
- Extensions (12)
 - ▶ 209
 - 210
 - 211
 - 3001
 - 3002
 - 3003
 - 3004
 - 3008
 - 3009
 - 3010
 - 3011
 - 3012
- Trunks (7)
- Active Calls
- Resources

Extension Status

Extension Number:	209
Module:	Control Unit - DS Ports
Port:	1
Telephone Type:	5410
Current User Extension Number:	209
Current User Name:	Extn209
Forwarding:	Off
Twinning:	Off
Do Not Disturb:	Off
Message Waiting:	Off
Number of New Messages:	0
Phone Manager Type:	None

Button Number	Button Type	Call Ref	Current State	Time In State	Calling Number or Called Direction Number	Other Party on Call
Trace Output - All Buttons:						
26/01/07 11:33:51-916ms Call Ref = 3, Originator State = Ringback, Type = User, Destination State = Alerting, Type = Target List						
26/01/07 11:33:51-917ms Call Ref = 3, Alerting, Extension = 209, Button = 1						
26/01/07 11:33:53-985ms Extension = 209, Pressed Programmed Button, Button Number = 1, Label = Appearance						
26/01/07 11:33:53-990ms My buttons = 1, Call Ref = 3, Originator State = Connected, Type = User, Destination State = Connected, Type = User						
26/01/07 11:33:53-996ms Call Ref = 3, Answered, Extension = 209						
26/01/07 11:33:59-798ms Extension = 209, Pressed Programmed Button, Button Number = 4, Label = Call Park						
26/01/07 11:33:59-307ms Extension = 209, State = Busy						
26/01/07 11:33:59-310ms Extension = 209, Button = 1, Idle						
26/01/07 11:33:59-312ms Extension = 209, State = Busy Wrap Up						
26/01/07 11:34:01-315ms Extension = 209, State = Idle						
26/01/07 11:34:03-285ms Extension = 209, Pressed Programmed Button, Button Number = 4, Label = Call Park						
26/01/07 11:34:03-309ms Call Ref = 3, Originator State = Connected, Type = User, Destination State = Connected, Type = User						
26/01/07 11:34:08-365ms Extension = 209, Pressed Fixed Feature, Button = Transfer						
26/01/07 11:34:08-391ms My buttons = 1, Call Ref = 3, Originator State = Holding, Type = User, Destination State = Held for Transfer/Conference, Type = User						
26/01/07 11:34:08-394ms Extension = 209, State = Busy Wrap Up						
26/01/07 11:34:08-404ms Extension = 209, State = Idle						
26/01/07 11:34:08-428ms Call Ref = 4, Originator State = Seized, Type = User, Destination Type = none						
26/01/07 11:34:10-413ms Extension = 209, Digit dialed, Digit = 2						
26/01/07 11:34:10-418ms My buttons = 2, Call Ref = 4, Originator State = Dialling, Type = User, Destination Type = none						
26/01/07 11:34:10-800ms Extension = 209, Digit dialed, Digit = 1						
26/01/07 11:34:11-463ms Extension = 209, Digit dialed, Digit = 0						
26/01/07 11:34:12-486ms Call Ref = 4, Alerting, Extension = 210, Button = 1						
26/01/07 11:34:12-488ms My buttons = 2, Call Ref = 4, Originator State = Ringback, Type = User, Destination State = Alerting, Type = Target List						
26/01/07 11:34:14-047ms Extension = 209, Pressed Fixed Feature, Button = Transfer						
26/01/07 11:34:14-858ms Extension = 209, Button = 1, Idle						
26/01/07 11:34:14-882ms Extension = 209, State = Busy						
26/01/07 11:34:14-884ms Extension = 209, Button = 2, Idle						
26/01/07 11:34:14-886ms Extension = 209, State = Busy Wrap Up						
26/01/07 11:34:16-888ms Extension = 209, State = Idle						

Trace Clear Pause Back Call Details Print... Save As...

11:35:35

Online

1. A call rings at extension 209.
2. Extension 209 answers by pressing a call appearance.
3. Extension 209 parks the call on Park 1.
4. Extension 209 takes the call off Park 1.
5. Extension 209 selects the Transfer button.
6. Extension 209 dials extension 210 and selects the Transfer button again.
7. Extension 209 hangs up.

Many trace events relating to an extension that has appearance buttons, will indicate a button number against the event. When troubleshooting, this allows you to understand why, for example; a call alerted on a particular extension.

If you are tracing from the Extension Status screen, you will also see My buttons marked against call state changes. This allows you to understand why this call is being reported in the trace:

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

Alarms (12)

Extensions (74)

4624

6666

6667

6668

6669

6670

6671

6672

6673

6674

6675

6676

6677

6678

Call alerts on Button 1 (Ext 6693) and Button 5 (Ext 4624). Ext 4624 is a Bridged Appearance for Ext 6693

6686

6687

6688

6689

6690

Ext 4624 answers the call, so Button 1 goes to state 'In Use Inaccessible' and becomes idle

6696

The caller clears down. The clearing state is reported since the call is still being tracked by the call appearance, hence the state is marked as 'My buttons=1'

6704

6705

With the call cleared, Button 1 returns to idle

Extension Status

Extension Number: 6693

Slot: 3

Port: 1

Telephone Type: 6424

Current User Extension Number: 6693

Current User Name: Extn6693

Forwarding: Off

Twinning: Off

Do Not Disturb: Off

Message Waiting: On

Number of New Messages: 14

Phone Manager Type: None

Button Number	Button Type	Call Ref	Current State	Time in State	Calling Number or Called Number	Direction	Other Party on Call
1	CA		Idle	00:01:37			
2	CA		Idle				
3	CA		Idle				
8	BA		Idle				
9	LA		Idle				

Trace Output - All Buttons:

26/01/07 15:38:02-058ms Call Ref = 192, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List

26/01/07 15:38:02-058ms Call Ref = 192, Alerting, Extension = 4624, Button = 5

26/01/07 15:38:02-058ms Call Ref = 192, Alerting, Extension = 6693, Button = 1

26/01/07 15:38:09-699ms Extension = 4624, Switchhook, Status = Off

26/01/07 15:38:09-702ms My buttons = 1, Call Ref = 192, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = User

26/01/07 15:38:09-705ms Extension = 6693, State = Busy Wrap Up

26/01/07 15:38:09-706ms Extension = 6693, State = Idle

26/01/07 15:38:09-716ms Extension = 6693, Button = 1, State = In Use Elsewhere

26/01/07 15:38:09-720ms Line = 9, Channel = 1, Q.931 Message = Connect, Call Ref = 192, Direction = From Switch

26/01/07 15:38:09-725ms My buttons = 1, Call Ref = 192, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = User

26/01/07 15:38:09-725ms Call Ref = 192, Answered, Extension = 4624

26/01/07 15:38:22-867ms Extension = 4624, Switchhook, Status = On

26/01/07 15:38:22-869ms My buttons = 1, Call Ref = 192, Originator State = Connected, Type = Trunk, Destination State = Clearing, Type = User

26/01/07 15:38:22-869ms Call Ref = 192, Disconnect from Destination End

26/01/07 15:38:22-884ms Extension = 6693, Button = 1, Idle

Trace Clear Pause Back Call Details Print... Save As...

15:39:46 Online

In some cases, a call may alert on more than one button on the same extension. For example; the extension might have a line appearance for the line originating the call and a coverage appearance for the destination of the call. In this case, only the first alerting button will be shown.

The states of all the buttons on the extension can be examined in the top half of the Extension Status screen.

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

6696
6697
6698
6699
6700
6701
6702
6703
6704
6705
6706
6707
6708
6709
6710
6711
6712
6713
6714
6715
6716
6717
6718
6719
6720
6721
6722
6723
6724
6725

A call alerts on the line appearance

Later, it also alerts on the coverage appearance (where it is answered), so that the line appearance shows 'In Use Elsewhere'. 'My buttons' shows that the call is associated with both of the appearances

Extension Status

Extension Number: 6728
Module: 6
Port: 20
Telephone Type: 6424
Current User Extension Number: 6728
Current User Name: Extn6728
Forwarding: Off
Twinning: Off
Do Not Disturb: Off
Message Waiting: On
Number of New Messages:
Phone Manager Type: None

Button Number	Button Type	Call Ref	Current State	Time in State	Calling Number or Called Number	Direction	Other Party on Call
1	CA		Idle				
2	CA		Idle				
3	CA		Idle				
4	LA	201	In Use Elsewhere	00:00:14			
6	CC	201	Connected	00:00:14		Incoming	Line: 13 Slot: 4 Port: 9

Trace Output - All Buttons:
26/01/07 15:51:09-137ms Call Ref = 201, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List
26/01/07 15:51:09-138ms Call Ref = 201, Alerting, Extension = 6693, Button = 1
26/01/07 15:51:09-138ms Call Ref = 201, Alerting, Extension = 6728, Button = 4
26/01/07 15:51:09-138ms Call Ref = 201, Alerting, Extension = 4624, Button = 5
26/01/07 15:51:22-056ms Extension = 6728, Pressed Programmed Button, Button Number = 6, Label = Coverage Appearance
26/01/07 15:51:22-069ms Call Ref = 201, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = User
26/01/07 15:51:22-069ms Call Ref = 201, Answered, Extension = 6728
26/01/07 15:51:22-073ms Extension = 6728, Button = 4, State = In Use Elsewhere

Trace Clear

Pause

Call Details

Print...

Save As...

15:51:36

Online

System Status Application
IP Office Release 6.0

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3.7 Hunt Group

The trace examples in this section, show which extensions are ringing but not the call being delivered to the hunt group 'Main'. To view details on the call (including the name of the targeted hunt group), see [Call Details](#) ^[72].

- [Hunt Group Calls Sent to Voicemail After Ringing Hunt Group Members](#) ^[104]
- [Hunt Group Calls Being Answered by Hunt Group Member](#) ^[105]
- [Hunt Group Call Being Directed into a Hunt Group's Queue and then Sent to Voicemail](#) ^[106]
- [Call Being Abandoned While in a Hunt Group's Queue](#) ^[107]
- [Hunt Group Call Overflowing to a Second Hunt Group and then Answered by Voicemail](#) ^[108]

3.7.1 Hunt Group Calls Sent to Voicemail

The following example details a call received on IP Office and re-directed to voicemail:

The screenshot displays the AVAYA IP Office System Status application. The left sidebar shows a tree view with 'System', 'Alarms (0)', and 'Extensions (12)' expanded, listing extensions 209 through 3012. A status bar on the left indicates: 'Outside call rings in to the IP Office', 'Line: 25', 'Ext 209 and 210 ring', 'Resources', 'Call is redirected', and 'Call is routed to voicemail'. The main window has tabs for 'Status', 'Utilization Summary', and 'Alarms'. The 'Status' tab is active, showing an 'Analog Trunk Summary' with the following data:

Port	Line ID	Line Type	Call Ref	Current State	Time in State	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1	Line: 1 Front Panel Port: 1	Loop Start CLI		Idle	00:06:03			
2	Line: 2 Front Panel Port: 2	Loop Start CLI		Idle	01:53:50			
3	Line: 3 Front Panel Port: 3	Loop Start CLI		Idle	01:53:50			
4	Line: 4 Front Panel Port: 4	Loop Start CLI		Idle	01:53:50			

Below the summary is a 'Trace Output - All Ports' section with a scrollable list of call events:

- 26/01/07 08:22:10-927ms Line = 1, Pre-Alerting
- 26/01/07 08:22:11-551ms Line = 1, Alerting, Call Ref = 45, Caller ID Name = Extn211, Number = 211
- 26/01/07 08:22:11-576ms Call Ref = 45, Originator State = Incoming Alerting, Type = Trunk, Destination State = Queueing, Type = Queue
- 26/01/07 08:22:11-627ms Call Ref = 45, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List
- 26/01/07 08:22:11-627ms Call Ref = 45, Alerting, Extension = 209, Button = 1
- 26/01/07 08:22:11-627ms Call Ref = 45, Alerting, Extension = 210, Button = 1
- 26/01/07 08:22:41-611ms Call Ref = 45, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = Mailbox
- 26/01/07 08:22:53-464ms Call Ref = 45, Originator State = Clearing, Type = Trunk, Destination State = Connected, Type = Mailbox
- 26/01/07 08:22:53-464ms Call Ref = 45, Disconnect from Originator End

At the bottom of the main window are buttons for 'Trace Clear', 'Call Details', 'Print...', and 'Save As...'. The bottom status bar shows the time '08:28:56' and the status 'Online'.

Hunt group calls sent to voicemail after ringing hunt group members:

1. An outside call is received on IP Office.
2. The call rings at extension 209 and extension 210.
3. The call is re-directed and answered by voicemail.

3.7.2 Answered Hunt Group Call

The following example details a call received on IP Office and answered by a hunt group member:

The screenshot displays the AVAYA IP Office System Status application window. The title bar indicates the system is at 192.168.42.9. The left sidebar shows a navigation menu with options like System, Alarms (0), Extensions (12), and Trunks (6). The main content area is divided into tabs: Status, Utilization Summary, and Alarms. The 'Status' tab is active, showing an 'Analog Trunk Summary' section with a table of trunk details. Below this, a 'Trace Output - All Ports' section provides a detailed timeline of the call events. On the left side of the main content area, there are four status indicators with arrows pointing to specific lines in the trace: 'Call rings at Ext 209 and Ext 210', 'Ext 209 answers the call', 'Ext 209 hangs up', and 'Outside call is disconnected'. The bottom of the window features a status bar with the time 06:21:46 and the word 'Online'.

IP Office System Status - Australia (192.168.42.9)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (0)
Extensions (12)
Trunks (6)
 ▶ **Lines: 1 - 4**
 Line: 25
 Line: 50
Active Calls
Resources

Call rings at Ext 209 and Ext 210

Ext 209 answers the call

Ext 209 hangs up

Outside call is disconnected

Status Utilization Summary Alarms

Analog Trunk Summary

Slot/Module: Front Panel
 Number of Trunks: 4
 Number of Administered Trunks: 4
 Number of Trunks in Use: 0

Port	Line ID	Line Type	Call Ref	Current State	Time in State	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1	Line: 1 Front Panel Port: 1	Loop Start CLI		Idle	00:03:09			
2	Line: 2 Front Panel Port: 2	Loop Start CLI		Idle	00:07:01			
3	Line: 3 Front Panel Port: 3	Loop Start CLI		Idle	00:07:01			
4	Line: 4 Front Panel Port: 4	Loop Start CLI		Idle	00:07:01			

Trace Output - All Ports:

26/01/07 06:18:22-494ms Line = 1, Pre-Alerting
 26/01/07 06:18:23-118ms Line = 1, Alerting, Call Ref = 5, Caller ID Name = Extn211, Number = 211
 26/01/07 06:18:23-143ms Call Ref = 5, Originator State = Incoming Alerting, Type = Trunk, Destination State = Queueing, Type = Queue
 26/01/07 06:18:23-194ms Call Ref = 5, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List
 26/01/07 06:18:23-194ms Call Ref = 5, Alerting, Extension = 209, Button = 1
 26/01/07 06:18:23-194ms Call Ref = 5, Alerting, Extension = 210, Button = 1
 26/01/07 06:18:27-746ms Extension = 209, Switchhook, Status = Off
 26/01/07 06:18:27-781ms Call Ref = 5, Originator State = Connected, Type = Trunk, Destination State = Connected, Type = User
 26/01/07 06:18:27-781ms Call Ref = 5, Answered, Extension = 209
 26/01/07 06:18:36-696ms Extension = 209, Switchhook, Status = On
 26/01/07 06:18:36-700ms Call Ref = 5, Originator State = Connected, Type = Trunk, Destination State = Clearing, Type = User
 26/01/07 06:18:36-700ms Call Ref = 5, Disconnect from Destination End

Trace Clear Call Details Print... Save As...

06:21:46 Online

Hunt group calls being answered by hunt group members:

1. An outside call (originator) rings at extension 209 and extension 210.
2. Extension 209 (destination end) answers the call.
3. Extension 209 hangs up the call.
4. The outside caller is disconnected.

3.7.3 Hunt Group Queued Call Sent to Voicemail

The following example details an incoming call to IP Office, sent to the hunt group's queue and then re-directed to voicemail:

IP Office System Status - Australia (192.168.42.9)

AVAYA

IP Office System Status

Help Snapshot LogOff Exit About

System

Alarms (0)

Extensions (12)

Trunks (6)

Lines: 1 - 4

Line: 25

Line: 50

Active Calls

Resources

Outside call rings in to the IP Office

The call is sent to Queue

Queue message is played

Call is redirected to voicemail

StatusUtilization SummaryAlarms

Analog Trunk Summary

Slot/Module: Front Panel

Number of Trunks: 4

Number of Administered Trunks: 4

Number of Trunks in Use: 0

Port	Line ID	Line Type	Call Ref	Current State	Time in State	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1	Line: 1 Front Panel Port: 1	Loop Start CLI		Idle	00:01:41			
2	Line: 2 Front Panel Port: 2	Loop Start CLI		Idle	00:14:11			
3	Line: 3 Front Panel Port: 3	Loop Start CLI		Idle	00:14:11			
4	Line: 4 Front Panel Port: 4	Loop Start CLI		Idle	00:14:11			

Trace Output - All Ports:

26/01/07 06:47:14-897ms Line = 1, Pre-Alerting

26/01/07 06:47:15-521ms Line = 1, Alerting, Call Ref = 9, Caller ID Name = Extn211, Number = 211

26/01/07 06:47:15-546ms Call Ref = 9, Originator State = Incoming Alerting, Type = Trunk, Destination State = Queueing, Type = Queue

26/01/07 06:47:15-580ms Call Ref = 9, Announcement = Main, Number = 1

26/01/07 06:47:15-582ms Call Ref = 9, Originator State = Connected Announcement, Type = Trunk, Destination State = Queueing Announcement, Type = Queue

26/01/07 06:47:23-738ms Call Ref = 9, Originator State = Connected Announcement, Type = Trunk, Destination State = Queueing, Type = Queue

26/01/07 06:47:25-556ms Call Ref = 9, Originator State = Connected Announcement, Type = Trunk, Destination State = Connected, Type = Mailbox

26/01/07 06:47:35-999ms Call Ref = 9, Originator State = Clearing, Type = Trunk, Destination State = Connected, Type = Mailbox

26/01/07 06:47:35-999ms Call Ref = 9, Disconnect from Originator End

Trace ClearCall DetailsPrint...Save As...

06:49:17Online

Hunt group call being directed into a hunt group's queue and then sent to Voicemail:

1. An outside call is received on IP Office.
2. The call is sent to the hunt group's queue.
3. The queue message is played.
4. The call is re-directed to voicemail.

3.7.4 Call Being Abandoned

The following example details an incoming call to IP Office, sent to the hunt group's queue and then disconnected by the outside caller (Originator):

IP Office System Status - Australia (192.168.42.9)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (0)
Extensions (12)
Trunks (6)
 ▶ **Lines: 1 - 4**
 Line: 25
 Line: 50
Active Calls
Resources

Status Utilization Summary Alarms

Analog Trunk Summary

Slot/Module: Front Panel
 Number of Trunks: 4
 Number of Administered Trunks: 4
 Number of Trunks in Use: 0

Port	Line ID	Line Type	Call Ref	Current State	Time in State	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1	Line: 1 Front Panel Port: 1	Loop Start CLI		Idle	00:00:23			
2	Line: 2 Front Panel Port: 2	Loop Start CLI		Idle	00:19:53			
3	Line: 3 Front Panel Port: 3	Loop Start CLI		Idle	00:19:53			
4	Line: 4 Front Panel Port: 4	Loop Start CLI		Idle	00:19:53			

Outside call rings in to IP Office

The call is sent to Queue

Queue message is played

Outside caller hangs up

Trace Output - All Ports:

```

26/01/07 06:54:28-284ms Line = 1, Pre-Alerting
26/01/07 06:54:28-908ms Line = 1, Alerting, Call Ref = 13, Caller ID Name = Extn211, Number = 211
26/01/07 06:54:28-932ms Call Ref = 13, Originator State = Incoming Alerting, Type = Trunk, Destination State = Queueing, Type = Queue
26/01/07 06:54:28-967ms Call Ref = 13, Announcement = Main, Number = 1
26/01/07 06:54:28-969ms Call Ref = 13, Originator State = Connected Announcement, Type = Trunk, Destination State = Queueing Announcement, Type = Queue
26/01/07 06:54:36-186ms Call Ref = 13, Originator State = Clearing, Type = Trunk, Destination State = Queueing Announcement, Type = Queue
26/01/07 06:54:36-186ms Call Ref = 13, Disconnect from Originator End
  
```

Trace Clear Call Details Print... Save As...

06:54:59 Online

Call being abandoned while in a hunt group's queue:

1. An outside call is received on IP Office.
2. The call is sent to the hunt group's queue.
3. The queue message is played.
4. The call is disconnected by the outside caller.

3.7.5 Hunt Group Call Overflowing

The following example details a call received at one hunt group, re-directed to a second hunt group and then re-directed to voicemail:

The screenshot displays the AVAYA IP Office System Status application. The left sidebar shows a navigation menu with options like System, Alarms (0), Extensions (12), and Trunks (7). The main window is titled 'IP Office System Status' and has tabs for Status, Utilization Summary, and Alarms. The 'Status' tab is active, showing an 'Analog Trunk Summary' table with columns for Port, Line ID, Line Type, Call Ref, Current State, Time in State, Caller ID or Dialed Digits, Other Party on Call, and Direction of Call. Below this, a 'Trace Output - All Ports' section shows a detailed call log. On the left side of the trace, there are annotations with arrows pointing to specific events in the log: 'Outside call rings in to IP Office' points to the first line, 'The call rings at Ext 209 and Ext 210' points to the second line, 'Queue message is played' points to the third line, 'The call is being redirected to the Overflow group' points to the fourth line, and 'The call is sent to the Mailbox of the hunt group' points to the fifth line. The bottom of the application shows a status bar with the time 12:36:33 and the word 'Online'.

Port	Line ID	Line Type	Call Ref	Current State	Time in State	Caller ID or Dialed Digits	Other Party on Call	Direction of Call
1	Line: 1 Front Panel Port: 1	Loop Start CLI		Idle	00:04:45			
2	Line: 2 Front Panel Port: 2	Loop Start CLI		Idle	01:04:43			
3	Line: 3 Front Panel Port: 3	Loop Start CLI		Idle	01:04:43			
4	Line: 4 Front Panel Port: 4	Loop Start CLI		Idle	01:01:13			

Trace Output - All Ports:

- 26/01/07 12:31:22-150ms Line = 1, Pre-Alerting
- 26/01/07 12:31:22-772ms Line = 1, Alerting, Call Ref = 37, Caller ID Name = Extn3008, Number = 3008
- 26/01/07 12:31:22-785ms Call Ref = 37, Originator State = Incoming Alerting, Type = Trunk, Destination State = Queuing, Type = Queue
- 26/01/07 12:31:22-828ms Call Ref = 37, Alerting, Extension = 210, Button = 1
- 26/01/07 12:31:22-878ms Call Ref = 37, Alerting, Extension = 209, Button = 1
- 26/01/07 12:31:22-936ms Call Ref = 37, Announcement = Main, Number = 1
- 26/01/07 12:31:22-839ms Call Ref = 37, Originator State = Connected Announcement, Type = Trunk, Destination State = Alerting Announcement, Type = Target List
- 26/01/07 12:31:30-993ms Call Ref = 37, Originator State = Connected Announcement, Type = Trunk, Destination State = Alerting, Type = Target List
- 26/01/07 12:31:30-993ms Call Ref = 37, Alerting, Extension = 210, Button = 1
- 26/01/07 12:31:30-993ms Call Ref = 37, Alerting, Extension = 209, Button = 1
- 26/01/07 12:31:37-826ms Call Ref = 37, Alerting, Extension = 211
- 26/01/07 12:31:37-834ms Call Ref = 37, Retargeting
- 26/01/07 12:31:42-794ms Call Ref = 37, Originator State = Connected Announcement, Type = Trunk, Destination State = Connected, Type = Mailbox
- 26/01/07 12:31:48-282ms Call Ref = 37, Originator State = Clearing, Type = Trunk, Destination State = Connected, Type = Mailbox
- 26/01/07 12:31:48-282ms Call Ref = 37, Disconnect from Originator End

Hunt group call overflowing to a second hunt group and then answered by Voicemail:

1. A outside call is received on IP Office.
2. The call rings at extension 209 and extension 210.
3. The queue message is played.
4. The call is re-directed to an overflow hunt group.
5. The call rings at extension 211 (a member of the overflow hunt group).
6. The call is then re-directed to the original hunt group's voicemail.

3.8 Announcements

IP Office 4.0 allows calls that are either queuing or alerting, to be played announcements in a pattern that is configured using Manager. When an announcement is heard on a call, the current state is displayed as Connected Announcement and this state will remain until the call is either answered or cleared. SSA displays the type of announcement as well as details of the queue or alerting parties.

Example:

1. Call 37 is alerting at two extensions, as well as listening to Announcement 2 for the hunt group 'just two'.
2. Call 38 is queuing for the hunt group 'just two', as well as listening to Announcement 2 for the hunt group 'just two'.
3. Call 39 is queuing for the hunt group 'just two'. The originator state is Connected Announcement because an announcement has played to this call but at present no announcement is being played.

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA **IP Office System Status**

Help Snapshot LogOff Exit About

System
Alarms (11)
Extensions (74)
Trunks (10)
Active Calls
Resources

Active Calls: 3

Call Ref	Call Length	Originator End Party	Current State	Time in State	Incoming Caller ID	Destination End Party	Current State	Time in State	Connected Caller
37	00:00:46	Line: 9 H.323 192.168.42.1 Channel: 1	Connected Announcement	00:00:35	604, Boris Aeris	Extn 6693, Extn6693 Extn 6694, Extn6694 Extn 4624, Extn4624 Announcement just two	Alerting Anno...	00:00:06	
38	00:00:42	Line: 9 H.323 192.168.42.1 Channel: 2	Connected Announcement	00:00:31	280, Ken Tucky	Group 302, just two Announcement just two	Queueing An...	00:00:02	
39	00:00:27	Line: 9 H.323 192.168.42.1 Channel: 3	Connected Announcement	00:00:15	299, Ben Becula	Group 302, just two	Queueing	00:00:07	

Pause Disconnect Call Details Abandoned Calls

18:46:38 Online

The following trace shows the same call sequence, traced from the trunk from which the call originated:

The screenshot displays the 'IP Office System Status' application window. The title bar shows 'IP Office System Status F 075 IP500 1 (192.168.42.120)'. The interface includes a menu bar (Help, Snapshot, LogOff, Exit, About) and a left-hand navigation pane with options like System, Alarms (42), Extensions (74), and Trunks (10). The main content area is titled 'H.323 Trunk Summary' and shows a list of call events for IP Address 192.168.42.1. The events are timestamped and include details such as Line, Channel, Originator State, and Direction. At the bottom of the window, there are buttons for 'Trace Clear', 'Ping', 'Call Details', 'Print...', and 'Save As...'. The status bar at the very bottom shows the time '14:10:13' and the word 'Online'.

IP Office 4.0 supports both synchronous and asynchronous announcements. The examples in this section are typical of asynchronous announcements. For synchronous announcements, IP Office sets up a call between voicemail and a multicasting point. Each call that is listening to the same announcement connects to the same multicasting point.

The multicasting call is set up as soon as there is a call that will require it, even if it is not yet time to play the announcement. A multicasting call that is currently playing an announcement will show the announcement details and a state of 'Connected'. A multicasting call that is waiting to play an announcement will show the announcement details and a state of 'Waiting Announcement'.

A call that is listening to an announcement will indicate the call reference of the multicasting call to which it is linked.

Example:

1. Call 47 is the multicasting call for Announcement 1 of the hunt group 'just one'. This announcement is being played on call 49, which is queuing for hunt group 'just one'.
2. Call 49 is the multicasting call for Announcement 2 of the hunt group 'just two'. It has been created in readiness to play to call 45. Call 45 is alerting at two extensions. Announcement 1 of the hunt group 'just one' has already been played to it and it is waiting for Announcement 2 to begin.

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System Alarms (11) Extensions (74) Trunks (10) **Active Calls** Resources

Active Calls: 4

Call Ref	Call Length	Originator End Party	Current State	Time in State	Incoming Caller ID	Destination End Party	Current State	Time in State	Connected Caller ID
45	00:00:30	Line: 9 H.323 192.168....	Connected An...	00:00:19	604, Boris.Ae...	Extn 6693, Extn6693 Extn 4624, Extn4624	Alerting	00:00:12	
47	00:00:12	Line: 9 H.323 192.168....	Connected An...	00:00:01	280, Ken Tuc...	Group 301, just one Announcement Call Ref 49	Queueing Ann...	00:00:01	
48	00:00:12	Multicast				Announcement just one, Ni	Waiting Annou...	00:00:12	
49	00:00:11	Multicast				Announcement just one, Ni	Connected	00:00:01	

Pause Disconnect Call Details Abandoned Calls

18:54:50 Online

The following trace shows the same call sequence, traced from the trunk from which the calls originated:

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System Alarms (12) Extensions (74) Trunks (10) **Line: 9** Lines: 13 - 16 Active Calls Resources

Status Utilization Summary Alarms

H.323 Trunk Summary

IP Address: 192.168.42.1

Trace Output - All Channels:

```

26/01/07 14:19:33-935ms Line = 9, Line Ref = 32847, Q.931 Message = Setup, Direction = To Switch, Calling Party Number = 604, Called Party Number = 301
26/01/07 14:19:33-949ms Line = 9, Channel Allocated, Channel ID = 1, Call Ref = 186, Line Ref = 32847
26/01/07 14:19:33-949ms Call Ref = 186, Originator State = Dialling, Type = Trunk, Destination Type = none
26/01/07 14:19:33-954ms Line = 9, Channel = 1, Q.931 Message = SetupAck, Call Ref = 186, Direction = From Switch
26/01/07 14:19:34-953ms Call Ref = 186, Originator State = Incoming Alerting, Type = Trunk, Destination State = Queueing, Type = Queue
26/01/07 14:19:34-959ms Line = 9, Channel = 1, Q.931 Message = Alerting, Call Ref = 186, Direction = From Switch
26/01/07 14:19:34-972ms Call Ref = 186, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List
26/01/07 14:19:34-972ms Call Ref = 186, Alerting, Extension = 4624, Button = 5
26/01/07 14:19:34-972ms Call Ref = 186, Alerting, Extension = 6693, Button = 1
26/01/07 14:19:44-981ms Line = 9, Channel = 1, Q.931 Message = Connect, Call Ref = 186, Direction = From Switch
26/01/07 14:19:44-985ms Call Ref = 186, Originator State = Connected Announcement, Type = Trunk, Destination State = Alerting Announcement, Type = Target List
26/01/07 14:19:45-041ms Call Ref = 187, Originator Type = Multicast, Destination State = Connected, Type = Announcement
26/01/07 14:19:45-041ms Call Ref = 187, Announcement = just one, Number = 1
26/01/07 14:19:49-077ms Line = 9, Line Ref = 32848, Q.931 Message = Setup, Direction = To Switch, Calling Party Number = 280, Called Party Number = 301
26/01/07 14:19:49-088ms Line = 9, Channel Allocated, Channel ID = 2, Call Ref = 188, Line Ref = 32848
26/01/07 14:19:49-089ms Call Ref = 188, Originator State = Dialling, Type = Trunk, Destination Type = none
26/01/07 14:19:49-094ms Line = 9, Channel = 2, Q.931 Message = SetupAck, Call Ref = 188, Direction = From Switch
26/01/07 14:19:50-093ms Call Ref = 188, Originator State = Incoming Alerting, Type = Trunk, Destination State = Queueing, Type = Queue
26/01/07 14:19:50-096ms Line = 9, Channel = 2, Q.931 Message = Alerting, Call Ref = 188, Direction = From Switch
26/01/07 14:19:52-574ms Call Ref = 187, Originator Type = Multicast, Destination State = Waiting Announcement, Type = Announcement
26/01/07 14:19:52-578ms Call Ref = 186, Originator State = Connected Announcement, Type = Trunk, Destination State = Alerting, Type = Target List
26/01/07 14:19:52-578ms Call Ref = 186, Alerting, Extension = 4624, Button = 5
26/01/07 14:19:52-578ms Call Ref = 186, Alerting, Extension = 6693, Button = 1
26/01/07 14:20:02-591ms Line = 9, Channel = 2, Q.931 Message = Connect, Call Ref = 188, Direction = From Switch
26/01/07 14:20:02-594ms Call Ref = 188, Originator State = Connected Announcement, Type = Trunk, Destination State = Queueing Announcement, Type = Queue
  
```

Trace Clear Ping Call Details Print... Save As...

14:20:05 Online

Chapter 4.

Troubleshooting

4. Troubleshooting

4.1 ISDN Calls Cutting Off

Issue

User experiences their calls being cut off.

Action

Check the IP Office configuration in Manager to make sure that all trunk parameters are correct. Ensure the parameters match those provided by the central office/network provider.

Procedure

1. Ensure there are no alarms on the trunks. If alarms are present on the trunks, contact your service provider.

Line	Module / Slot / Type	Port Number / Address / Domain	Alarms
1	Slot: 1	1	1
2	Slot: 1	2	1
3	Slot: 1	3	1
4	Slot: 1	4	1
5	Slot: 2	1	2
9	H.323	192.168.42.1	0
13	Slot: 4	9	1
14	Slot: 4	10	1
15	Slot: 4	11	0
16	Slot: 4	12	0

2. If no alarms are present, click Trace All to establish why the calls are being cut off.

Performing a trace should enable you to view the reason why the calls are cutting off.

For example:

In the following screen, the call was set up on Line 1, Channel 1 and the direction was to the switch (originating party):

```
26/01/07 12:31:38-156ms Line = 1, Channel = 1, Q.931 Message = Setup, Direction = To Switch, Calling Party Number = 909, Called Party Number = 2211
26/01/07 12:31:38-204ms Call Ref = 9, Alerting, Extension = 603, Button = 1
26/01/07 12:31:38-206ms Call Ref = 9, Originator State = Incoming Alerting, Type = Trunk, Destination State = Alerting, Type = Target List
```

In the following screen, the disconnect direction is to the switch (Cause Code 16 - call was cleared from the originator):

```
26/01/07 12:31:43-270ms Call Ref = 9, Answered, Extension = 603
26/01/07 12:31:49-760ms Line = 1, Channel = 1, Q.931 Message = Disconnect, Call Ref = 9, Direction = To Switch, Cause Code = 16
26/01/07 12:31:49-763ms Line = 1, Channel = 1, Q.931 Message = Release, Call Ref = 9, Direction = From Switch
26/01/07 12:31:49-959ms Line = 1, Channel = 1, Q.931 Message = ReleaseComplete, Call Ref = 9, Direction = To Switch
26/01/07 12:31:49-964ms Call Ref = 9, Originator State = Clearing, Type = Trunk, Destination State = Connected, Type = User
26/01/07 12:31:49-964ms Call Ref = 9, Disconnect from Originator End
26/01/07 12:31:49-985ms Line = 1, Idle, Channel ID = 1
```

If another cause code is shown, it indicates that there is an error condition on the line.

4.2 Delay Between Analog Line and Extension

Issue

Incoming analog line rings several times before the call is presented to the extension.

Actions

1. If the analog trunk is configured to wait for caller ID (CLI/ICLID) information from the central office and the information is not being provided, there will be a delay between the time the line/trunk rings and the call being presented to the extensions.
2. Check the IP Office configuration in Manager and ensure the analog trunk parameters are correct and that they match those provided by the central office.

Procedure

1. In the Analog Trunk Summary, click the Alarms tab:

The screenshot shows the 'IP Office System Status' application window. The left sidebar displays a tree view with 'System' expanded, showing 'Alarms (11)', 'Service (3)', 'Trunks (7)', 'Line: 1 (1)', 'Line: 2 (1)', 'Line: 3 (1)', 'Line: 4 (1)', 'Line: 5 (2)', 'Line: 9 (0)', 'Line: 13 (0)', 'Line: 14 (1)', 'Line: 15 (0)', 'Line: 16 (0)', 'Link (1)', 'Extensions (73)', and 'Trunks (10)'. The main pane shows the 'Analog Trunk Summary' for Slot 4, with fields for Slot/Module, Number of Trunks, Number of Administered Trunks, and Number of Trunks in Use. Below this is a table with columns: Port, Line ID, Line Type, Call Ref, Current State, Time in State, Caller ID or Dialed Digits, Other Party on Call, and Direction of Call. The table lists four trunks (Ports 9, 10, 11, 12) all in an 'Idle' state. At the bottom, there are buttons for 'Trace All', 'Call Details', 'Print...', and 'Save As...'. The status bar at the bottom right shows '18:32:55' and 'Online'.

If the central office is not providing Caller ID information, No Caller ID received is displayed under the Error Description.

2. From Manager, change the configuration to Loop Start only, as follows:
 - a) Log on to Manager and open the IP Office configuration.
 - b) From the configuration tree, select Line and double-click the analog trunk in question.
 - c) On the Line tab, change Line SubType to Loop Start.

The screenshot shows the 'IP Office System Status' application window with the 'Alarms' tab selected. The main pane displays 'Alarms for Lines: 13 - 16 Slot: 4'. It contains a table with columns: Last Date Of Error, Occurrences, and Error Description. The table shows one error entry: '25/01/2007 18:31:02' with '1' occurrence and the description 'No Caller ID received Port Number: 10'. Below the table are buttons for 'Clear', 'Clear All', 'Print...', and 'Save As...'. The status bar at the bottom right shows '18:32:55' and 'Online'.

Alternatively, have the central office enable CLI/ICLID on the trunks.

4.3 Expansion Units Constantly Rebooting

Issue

IP Office expansion units constantly reboot.

Action

1. Check the power supply for failure or faulty power bricks.
2. As a precaution, replace the power brick.
3. Check that the blue TDM cable is correctly connected at the rear of both the IP Office Control Unit and the module that is resetting.
4. Change the module with another module or plug the TDM cable in to another spare slot.

Procedure

1. View error messages by clicking Alarms and then the link.

The screenshot shows the 'IP Office System Status' application window. The title bar reads 'IP Office System Status - F-075-IP500-1 (192.168.42.120)'. The AVAYA logo is on the left, and the title 'IP Office System Status' is on the right. Below the title bar is a menu bar with 'Help', 'Snapshot', 'LogOff', 'Exit', and 'About'. On the left is a tree view with the following items: 'System' (expanded), 'Alarms (10)' (expanded), 'Service (3)', 'Trunks (6)', 'Link (1)' (selected), 'Extensions (73)', 'Trunks (10)', 'Active Calls', and 'Resources'. The main area is titled 'Link Alarms' and contains a table with three columns: 'Last Date Of Error', 'Occurrences', and 'Error Description'. The table has one row of data: '25/01/2007 18:27:20', '8', and 'Link/resource down Expansion 6'. Below the table are four buttons: 'Clear', 'Clear All', 'Print...', and 'Save As...'. At the bottom right of the window, there is a status bar showing '18:27:56' and 'Online'.

Last Date Of Error	Occurrences	Error Description
25/01/2007 18:27:20	8	Link/resource down Expansion 6

The total number of times that IP Office has lost contact with the module is displayed in the Occurrences column.

4.4 User Receives Busy When Calling

Issue

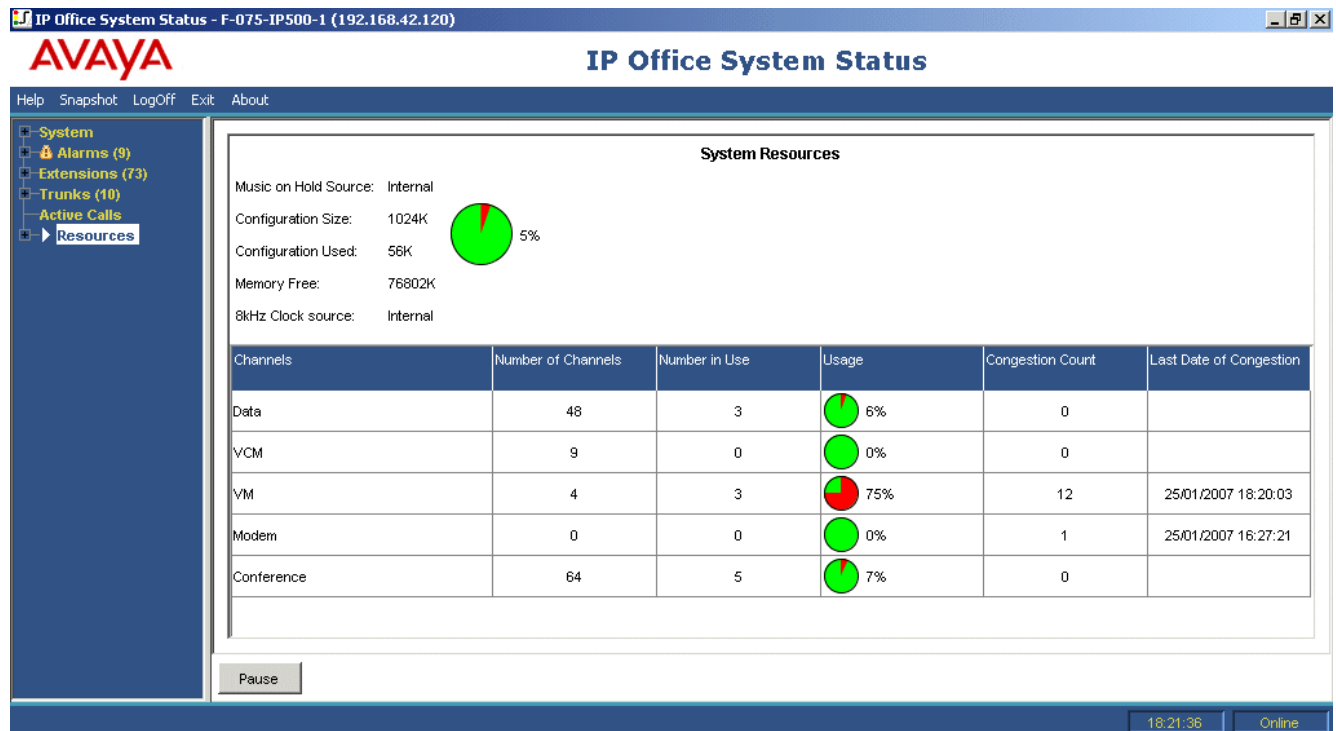
User receives Busy when calling voicemail (internal and external).

Action

1. Check that Voicemail Pro/Lite/Embedded is running.
2. If you are running Voicemail Pro, check that you have correctly configured Voicemail Channel Reservation:

Procedure

1. To view the number of times all voicemail channels have been in use, click Resources:



2. When all voicemail channels are in use, the system returns Busy to the caller.
3. Inform the user that they need to purchase more voicemail channels.

4.5 SCN VoIP Calls Echo or Have Poor Speech Quality

Issue

Calls over Small Community Network (SCN) VoIP trunks, echo or have poor speech quality.

Action

Check the IP Office configuration in Manager and make sure all VoIP trunk parameters are correct and that they match the remote end of the SCN.

Procedure

1. Click System and then VoIP Trunks.
2. To view the details of the call, click one of the channels:

IP Office System Status - F-075-IP500-1 (192.168.42.120)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (8)
Extensions (73)
Trunks (10)
Active Calls
 Call Details for Call Ref = 1
Resources

Call Details

Call Ref: 1	Call length: 00:05:35
Originator	
Current State:	Connected Time in State: 00:05:31
Trunk:	Line: 9 H.323 192.168.42.1 Channel: 1
Incoming Caller ID:	604, BorisAeris
Incoming DID:	6693
Codec:	G729 A
Round Trip Delay:	3ms
Receive Jitter:	0ms
Receive Packet Loss Fraction:	50%
Transmit Jitter:	0ms
Transmit Packet Loss Fraction:	60.15%

3. Check the Originator figures for the following:

- Round Trip Delay
- Receive Jitter
- Receive Packet Loss
- Transmit Jitter
- Transmit Packet Loss

4. Open another System Status Application and click on the channel to monitor the Destination figures:

IP Office System Status - F-075-IP406-1 (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System
Alarms (10)
Extensions (23)
Trunks (26)
Active Calls
 Call Details for Call Ref = 71
Resources

Call Details

Destination	
Current State:	Connected Time in State: 00:08:26
Trunk Used:	Line: 9 H.323 192.168.42.120 Channel: 1
Digits sent to Central Office:	6693
Caller ID sent from Central Office:	6693
Codec:	G729 A
Round Trip Delay:	3.5ms
Receive Jitter:	0ms
Receive Packet Loss Fraction:	73.82%
Transmit Jitter:	0ms
Transmit Packet Loss Fraction:	71.09%

5. If the figures are high, consult your network administrator to make the necessary changes to the network to improve the situation.

4.6 Phone User Unable to Dial Out

Issue

Phone user without caller display is unable to dial out.

Action

From Manager, check that the user is not barred from making outside calls.

Procedure

1. Click Extensions and then double-click the specific extension.

IP Office System Status - Australia (192.168.42.9)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System

Alarms (2)

Extensions (12)

- 209
- 210
- 211
- 3001
- 3002**
- 3003
- 3004
- 3008
- 3009
- 3010
- 3011
- 3012

Trunks (7)

- Lines: 1 - 4
- Line: 25
- Line: 50
- Active Calls
- Resources

Extension Status

Extension Number: 3002
 Module: Control Unit - Phone Ports
 Port: 2
 Telephone Type: POT (CLI On)
 Current User Extension Number:
 Current User Name: NoUser
 Forwarding: Off
 Twinning: Off
 Do Not Disturb: Off
 Message Waiting: Off
 Number of New Messages: 0
 Phone Manager Type: None

Call Ref	Current State	Time in State	Calling Number or Called Number	Direction	Other Party on Call
	Idle	00:00:51			

Trace Output:

```

26/01/07 13:09:49-755ms Extension = NoUser, Switchhook, Status = Off
26/01/07 13:09:49-782ms Call Ref = 47, Originator State = Seized, Type = User, Destination Type = none
26/01/07 13:09:51-331ms Extension = NoUser, Digit dialed, Digit = 9
26/01/07 13:09:51-334ms Call Ref = 47, Originator State = Dialling, Type = User, Destination Type = none
26/01/07 13:09:52-335ms Call Ref = 47, Short Code Matched = System, SN
26/01/07 13:09:52-348ms Extension = NoUser, State = Call Barred
26/01/07 13:09:55-072ms Extension = NoUser, Switchhook, Status = On
26/01/07 13:09:55-075ms Extension = NoUser, State = Busy Wrap Up
26/01/07 13:09:57-075ms Extension = NoUser, State = Idle
    
```

Trace Clear Pause Back Call Details Print... Save As...

13:10:48 Online

This Extension Status screen shows that the user has not logged on and this is reason the user cannot dial out.

4.7 PRI Line is Out of Service

Issue

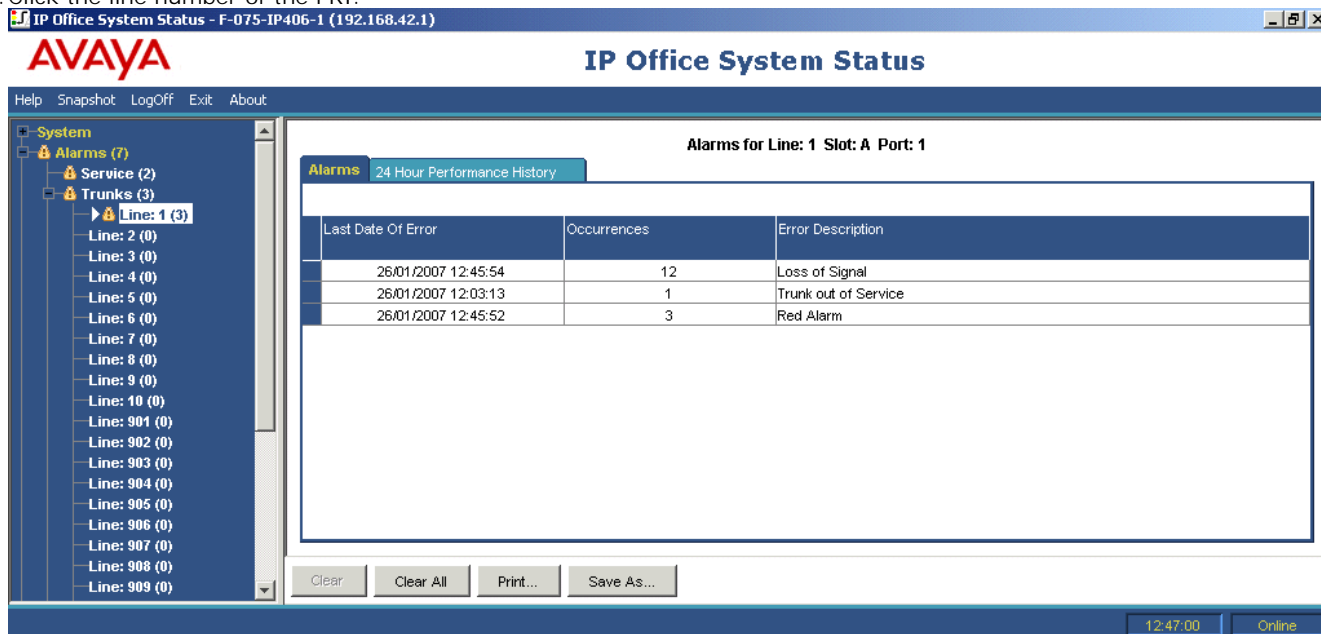
IP Office PRI lines (set for N12 protocol) experience out of service and callers are unable to dial out or place a call into IP Office.

Action

Unplugging and plugging the PRI cord from the PRI slot will bring the line back in to service and allow calls to go out.

Procedure

1. Click Alarms and then Trunks.
2. Click the line number of the PRI.



IP Office System Status - F-075-IP406-1 (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System (7)
Alarms (7)
Service (2)
Trunks (3)
Line: 1 (3)
Line: 2 (0)
Line: 3 (0)
Line: 4 (0)
Line: 5 (0)
Line: 6 (0)
Line: 7 (0)
Line: 8 (0)
Line: 9 (0)
Line: 10 (0)
Line: 901 (0)
Line: 902 (0)
Line: 903 (0)
Line: 904 (0)
Line: 905 (0)
Line: 906 (0)
Line: 907 (0)
Line: 908 (0)
Line: 909 (0)

Alarms for Line: 1 Slot: A Port: 1

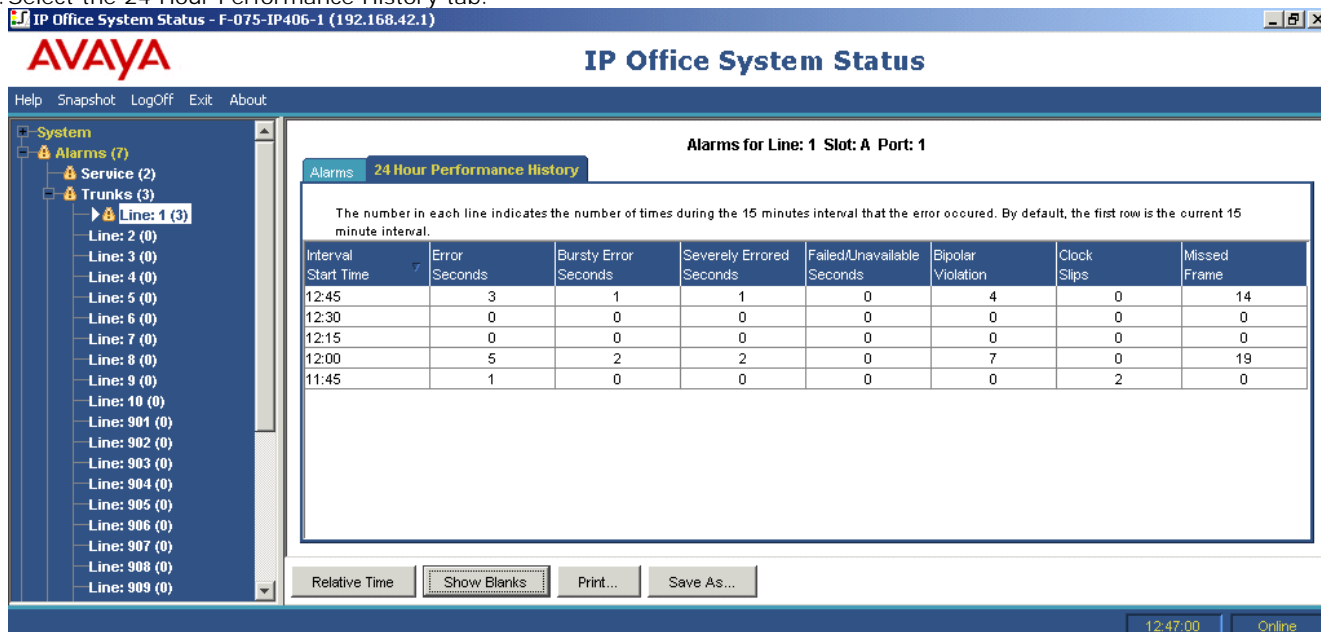
Alarms 24 Hour Performance History

Last Date Of Error	Occurrences	Error Description
26/01/2007 12:45:54	12	Loss of Signal
26/01/2007 12:03:13	1	Trunk out of Service
26/01/2007 12:45:52	3	Red Alarm

Clear Clear All Print... Save As...

12:47:00 Online

3. Select the 24 Hour Performance History tab.



IP Office System Status - F-075-IP406-1 (192.168.42.1)

AVAYA IP Office System Status

Help Snapshot LogOff Exit About

System (7)
Alarms (7)
Service (2)
Trunks (3)
Line: 1 (3)
Line: 2 (0)
Line: 3 (0)
Line: 4 (0)
Line: 5 (0)
Line: 6 (0)
Line: 7 (0)
Line: 8 (0)
Line: 9 (0)
Line: 10 (0)
Line: 901 (0)
Line: 902 (0)
Line: 903 (0)
Line: 904 (0)
Line: 905 (0)
Line: 906 (0)
Line: 907 (0)
Line: 908 (0)
Line: 909 (0)

Alarms for Line: 1 Slot: A Port: 1

Alarms 24 Hour Performance History

The number in each line indicates the number of times during the 15 minutes interval that the error occurred. By default, the first row is the current 15 minute interval.

Interval Start Time	Error Seconds	Bursty Error Seconds	Severely Errored Seconds	Failed/Unavailable Seconds	Bipolar Violation	Clock Slips	Missed Frame
12:45	3	1	1	0	4	0	14
12:30	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0
12:00	5	2	2	0	7	0	19
11:45	1	0	0	0	0	2	0

Relative Time Show Blanks Print... Save As...

12:47:00 Online

The example above shows that the PRI line experienced Clock Slips and Missed Frames. Replacing the wiring from the PRI's Smart Jack and the IP Office will resolve the issue.

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