IP Office Ports

Most PC firewalls will request the user to allow various exceptions when a newly installed application is first run. However this may not always be the case, especially if the firewall is located elsewhere than the user's PC.

Adding Firewall Exceptions

The file avayafw.bat can be used to open up the necessary firewall exceptions for IP Office applications. The file can be downloaded from http://marketingtools.avaya.com/knowledgebase/tools/firewall.

It only works for:

- The default Windows XP/Windows 2003 firewall.
- The application must be installed for the exception to be created.
- The application must be installed in the default location.

Whilst avayafw.bat only works subject to the conditions above, for other firewalls study of this file will indicate the necessary application files and ports for which exceptions need to be created.

Ports Used

The list below details many of the IP ports used by IP Office control units and IP Office applications. Many of these are standard ports for different IP traffic protocols.

◀ Indicates a listening port on the IP Office control unit. ▶ indicates a port to which the IP Office sends, for example to a PC running an IP Office application.

* Indicates that the port and or protocol can be changed.

Port		Protocol		Function
25*	▶	SMTP	TCP	Email system alarms from the IP Office to SMTP server. For IP Office 4.2 also used for Voicemail Email on Embedded Voicemail.
37	▶	Time	UDP	Time requests from the IP Office to a Time Server (RFC868).
53	◀	DNS	UDP	Domain Name Service responses.
67	◀	BOOTP/DHCP	UDP	DHCP server operation.
68	▶	BOOTP/DHCP	UDP	DHCP client operation.
69	◀	TFTP	UDP	File requests to the IP Office.
69	▶	TFTP	UDP	File requests by the IP Office.
80	◀	HTTP	TCP	HTTP File requests.
161*	◀	SNMP	UDP	From SNMP applications.
162*	▶	SNMP Trap	UDP	To addresses set in the IP Office configuration.
500	◀	IKE	UDP	Key exchange for IPSec protocol.
389*	▶	LDAP	TCP	Lightweight Directory Access Protocol.
520	▶	RIP	UDP	To and from the IP Office to other RIP devices. For RIP1 and RIP2 (RIP1 compatible) the destination address is a subnet broadcast, eg. 192.168.42.255. For RIP2 Multicast the destination address is 224.0.0.9.
520	◀	RIP	UDP	
1701	◀	L2TP	UDP	Layer 2 tunneling protocol.
1718	◀	H.323	UDP	H.323 Discovery
1719	◀	H.323 RAS	UDP	H.323 Status. VoIP device registering with the IP Office.
1720	▶	H.323/H.245	UDP	H.323 Signalling. Data to a registered VoIP device.
2127	▶	(UDP)	UDP	PC Wallboard to CCC Wallboard Server.
3478	▶	SIP	UDP	Port used for STUN requests from the IP Office to the SIP provider.
5005	◀	RTCPMon	UDP	RTCP Monitoring information from Avaya H323 phones.
5060	◀▶	SIP	UDP/TCP*	SIP Line Signalling
8080	▶	HTTP	TCP	Browser access to the Delta Server application.
8089	▶	Enconf	UDP	From the IP Office to the Conferencing Center Server Service. User access to the Conferencing Center is direct via HTTP sessions.
8888	▶	HTTP	TCP	Browser access to the IP Office ContactStore (VRL) application.

49152 to 53247*	◀▶	RTP/RTCP	UDP	Dynamically allocated ports used during VoIP calls for RTP and RTCP traffic. The port range can be adjusted through the System | Gatekeeper tab.
50791	▶	IPO Voicemail	UDP	To voicemail server address.
50793	◀	IPO Solo Voicemail	UDP	From IP Office TAPI PC with Wave drive user support.
50794	◀	IPO Monitor	UDP	From the IP Office Monitor application.
50795	◀	IPO Voice Networking	UDP	Small Community Network signalling (AVRIP) and BLF updates. Each system does a broadcast every 30 seconds. BLF updates are sent required up a maximum of every 0.5 seconds.
50796	◀	IPO PCPartner	UDP	From an IP Office application (for example Phone Manager or SoftConsole). Used to initiate a session between the IP Office and the application.
50797	◀	IPO TAPI	UDP	From an IP Office TAPI user PC.
50798	▶	(UDP)	UDP	*BT Fusion variant. No longer used.*
50799	▶	IPO BLF	UDP	Broadcast to the IP Office LAN and the first 10 IP addresses registered from other subnets.
50800	▶	IPO License Dongle	UDP	To the License Server IP Address set in the IP Office configuration.
50801	◀	EConf	UDP	Conferencing Center Service to IP Office.
50802	◀	Discovery	TCP	IP Office discovery from Manager.
50804*	◀	Service Access Protocol	TCP	IP Office configuration settings access.
50805*	◀		TCP	" TLS Secure.
50808*	◀		TCP	IP Office system status access.
50812*	◀		TCP	IP Office security settings access.
50813*	◀		TCP	" TLS Secure.

- CDR/SMDR from the IP Office is sent to the port number and IP address defined during configuration and using either TCP or UDP as selected.

Ports

IP Office Monitor can be used to display IP packet details including the source and destination Port numbers. As well as displaying the port numbers (in decimal), IP Office Monitor also displays the names of more commonly used ports including IP Office specific ports.

For example "src = 23" is interpreted as "src = 23 (Telnet)".

The list below details the ports currently decoded by IP Office Monitor. For a full list of assigned non-IP Office ports see http://www.iana.org/assignments/port-numbers.

- 20 File Transfer [Default Data]
- 21 File Transfer [Control]
- 23 Telnet
- 25 Simple Mail Transfer
- 37 Time
- 43 Who Is
- 53 Domain Name Server
- 67 Bootstrap Protocol Server
- 68 Bootstrap Protocol Client
- 69 Trivial File Transfer
- 70 Gopher
- 79 Finger
- 80 World Wide Web-HTTP
- 115 Simple File Transfer Protocol
- 156 SQL Service
- 161 SNMP
- 162 SNMPTRAP
- 179 Border Gateway Protocol
- 1719 H.323Ras
- 1720 H.323/H.245
- 50791 IPO Voicemail
- 50792 IPO Network DTE
- 50793 IPO Solo Voicemail (i.e. Wave driver for TAPI)
- 50794 IPO Monitor
- 50795 IPO Voice Networking
- 50796 IPO PCPartner
- 50797 IPO TAPI
- 50798 IPO Who-Is response

- 123 Network Time Protocol
- 137 NETBIOS Name Service
- 138 NETBIOS Datagram Service
- 139 NETBIOS Session Service
- 50799 IPO BLF
- 50800 IPO License Dongle
- 50801 EConf

Protocols
IP Office Monitor, as well as displaying the Protocol number (in decimal) of packets, also displays the names of the more common Protocols. For example "pcol = 1" is decoded as "pcol = 1 (ICMP)".

Protocol numbers currently decoded by IP Office Monitor are:

- 1 - Internet Control Message [ICMP]
- 2 - Internet Group Management [IGMP]
- 6 - Transmission Control [TCP]
- 8 - Exterior Gateway Protocol [EGP]
- 9 - Interior Gateway Protocol [IGP]
- 17 - User Datagram [UDP]
- 41 - Ipv6 [IPV6]
- 46 - Reservation Protocol [RSVP]
- 47 - General Routing Encapsulation [GRE]
- 58 - ICMP for IPv6 [IPv6-ICMP]
- 111 - IPX in IP[IPX-In-IP]
- 115 - Layer Two Tunneling Protocol [L2TP]
- 121 - Simple Message Protocol [SMP]

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http://marketingtools.avaya.com/knowledgebase/businesspartner/ipoffice/mergedProjects/installation/ports.htm
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