

## Control Systems — Network Ports, Protocols, and Licenses

This guide contains information about network port requirements and third-party software packages used for Extron Pro Series control products. The [diagram](#) and the tables below show the network ports and protocols that are required for communication between the Extron control software and hardware.

Consult your network administrator to confirm the connectivity for the network ports mentioned in this guide.

### Network Port Information

The following tables provide network port information for network planning and troubleshooting.

- “Inbound/Outbound” refers to the flow of traffic to and from the device.
- “Inbound” indicates that traffic is received on the specified port on the device.
- “Outbound” indicates that the traffic is sent out from the specified port.
- “Both” indicates that traffic is received by and also sent out from the specified port.

#### Hardware and Virtual Hardware:

**IP Link Pro Control Processors**

**IP Link Pro xi Control Processors**

**Control System Expansion Interfaces**

**MediaLink Plus Controllers**

**HC Collaboration Systems**

**Network Button Panels**

**TouchLink Pro Controllers and Touchpanels**

**TLI Pro Interfaces**

**Virtual Control Appliance (VCA) with  
Virtual Control Processors (VCP)**

Port	Protocol	Inbound/Outbound	Service	Description
53	UDP	Both	DNS	DNS service
67	UDP	Both	DHCP	DHCP server
68	UDP	Both	DHCP	DHCP client
80	TCP	Both	HTTP	Port redirects to HTTPS
123	UDP	Both	NTP	NTP service
161	UDP	Both	SNMP	SNMP service
443	TCP	Both	HTTPS	Default web page, GlobalViewer, Extron Control for Web
4502	UDP	Inbound	Discovery	Broadcast network discovery
4503	TCP	Both	SSH	Internal system messaging
4522	TCP	Both	SFTP	Internal system file transfer
22022	TCP	Both	SFTP	Secure file transfer

**Global Configurator Plus and  
Global Configurator Professional Software**

**Global Scripter**

**ControlScript Deployment Utility  
Room Agent**

Port	Protocol	Inbound/Outbound	Service	Description
4503	TCP	Both	SSH	Internal system messaging
4504	UDP	Inbound	Trace	Extron trace messages
4522	TCP	Both	SFTP	Internal system file transfer

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## Toolbelt Software

Port	Protocol	Inbound/Outbound	Service	Description
4502	UDP	Outbound	Discovery	Broadcast network discovery
4503	TCP	Both	SSH	Internal system messaging
4504	UDP	Inbound	Trace	Extron trace messages
4522	TCP	Both	SFTP	Internal system file transfer

## Extron Control for iOS

Port	Protocol	Inbound/Outbound	Service	Description
443	TCP	Inbound	HTTPS	Internal system file transfer
4503	TCP	Both	SSH	Internal system messaging
4522	TCP	Inbound	SFTP	Internal system file transfer

## Extron Control for Web 2.0 with HTML5

Port	Protocol	Inbound/Outbound	Service	Description
443	TCP	Both	HTTPS	Internal system file transfer Internal system messaging

## Extron Control for Android

Port	Protocol	Inbound/Outbound	Service	Description
443	TCP	Inbound	HTTPS	Internal system file transfer
4503	TCP	Both	SSH	Internal system messaging

## Extron Control for Microsoft® Teams® Room Software

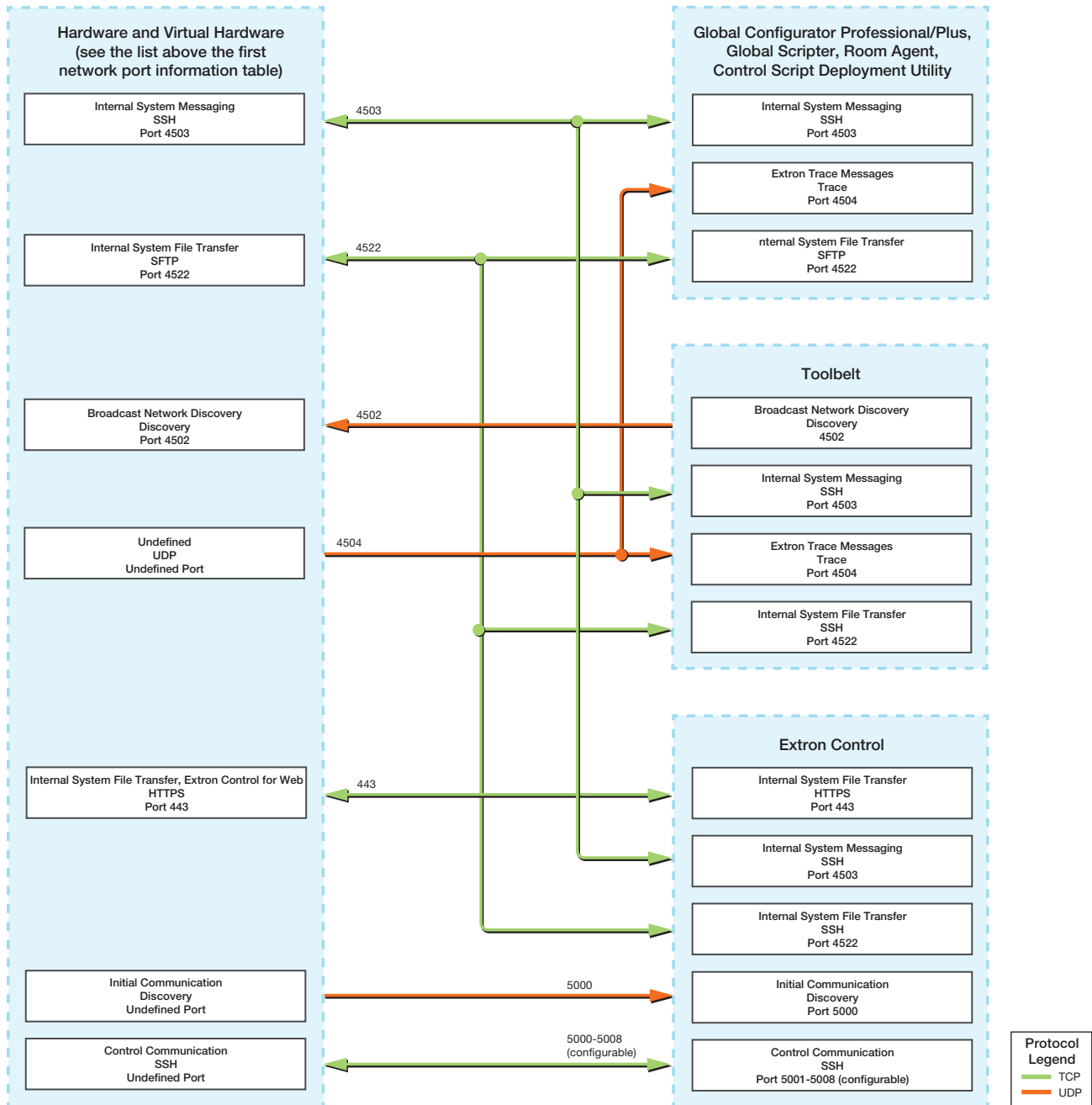
Port	Protocol	Inbound/Outbound	Service	Description
443	TCP	Outbound	HTTPS	Internal system file transfer
4503	TCP	Both	SSH	Internal system messaging
5000	UDP	Inbound	Discovery	Initial communication
5001-5008*	TCP	Both	SSH	Control communication

\*Configurable

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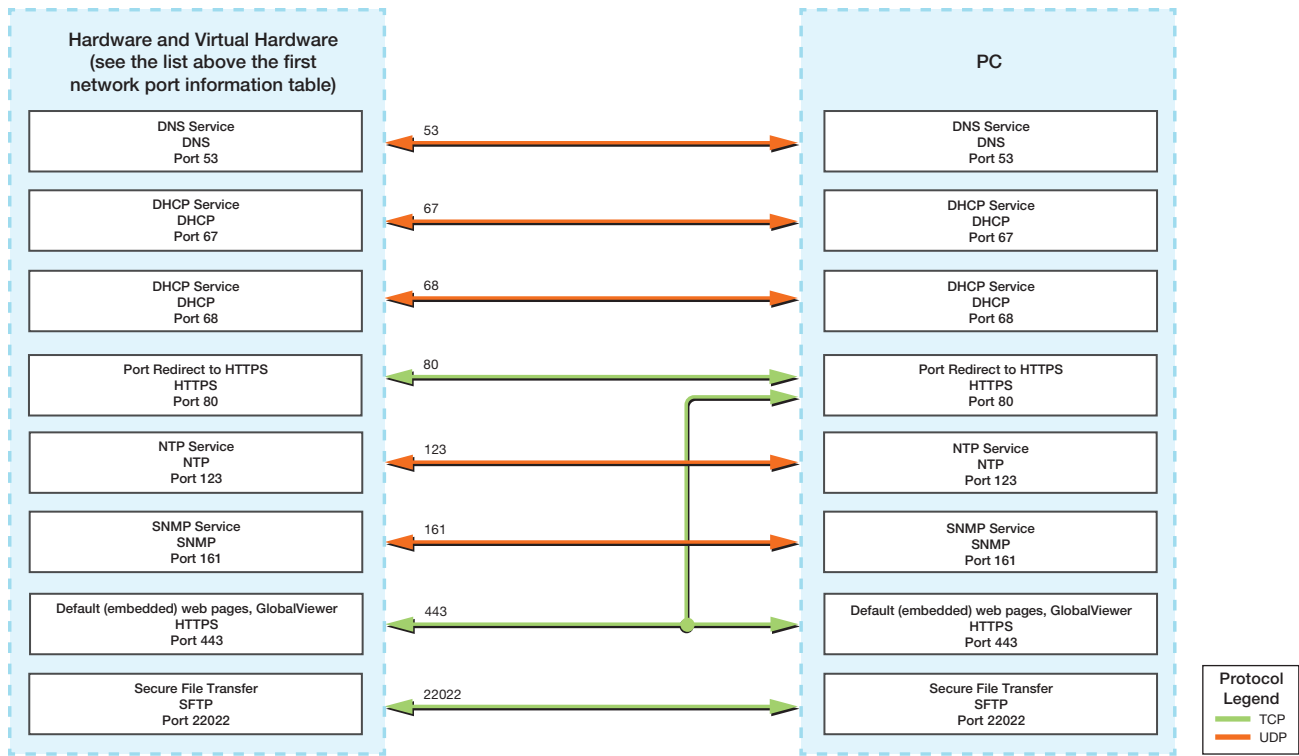
## Network Traffic Overview

The following diagrams show the interaction of network functions, protocols, and ports.



### Extron Pro Series Control Products, Part 1

# Control System — Network Ports, Protocols, and Licenses



Extron Pro Series Control Products, Continued

# Control System — Network Ports, Protocols, and Licenses

## License Information

The following table lists the licensed third-party software packages used by all Pro Series control products.

**NOTE:** Licensed third-party software packages are subject to change without notice.

Licensed Third-Party Software					
Package	License	Package	License	Package	License
aufs2-util	GNU GPL v2	json4lua	MIT	nginx	BSD-2c
alsa-lib	LGPL v2.1+	keyutils	GPL v2+ LGPL v2.1+	ngx_echo	BSD-2c
alsa-utils	GNU GPL v2	ldconfig	GPL v2+	ntp	MIT
audit	GPL v2 (programs), LGPL v2.1 (libraries)	libassuan	GNU LGPL v2.1	openssh	BSD
avahi	GNU LGPL v2.1	libcgicc 3.2.3	GNU LGPL v2.1	openssl	OpenSSL
bstrlib	BSD	libcurl	ICS	paho-mqtt-c	EPL-2.0 or BSD-3c
busybox	GNU GPL v2	libdaemon	GNU GPL v2.1	pcre	BSD
bzip2	BSD	libdnet	BSD	pexpect	MIT
can-utils	unknown	libelf	LGPLv2.1+	pixman	MIT
cjson	MIT	libevent	BSD-3c OpenBSD	popt	MIT
cracklib	LGPLv2.1+	libfcgi	fcgi	psmisc	GNU GPL v2
compat-wireless	GNU GPL v2	libffi	MIT	pyexchange	Apache
Curl	ICS	libglib2	LGPLv2.1+	pylibssh2	LGP v2.1
devmem2	GNU GPL v2	libgpg-error	GNU LGPL v2.1	python-evdev	python-evdev
dosfstools	GNU GPL v2	libnl	GNU LGPL v2.1	python-lxml	BSD
ecryptfs-utils	GNU GPL v2	libnspr	MPLv2.0	python3	PSF
eudev	GPL v2+ LGPL v2.1+	libnss	GNU GPL v2	pytz	pytz
expat	MIT	libpcap	BSD	qt	GNU LGPL v2.1
fbset	GNU GPL v2	libpng	libpng license	rapidjson	MIT
fcgi	fcgi	librsync	LGPL v2.1+	shadow	BSD-3c
fgciwrap	MIT	libsocketcan	GNU LGPL v2.1	socat	GNU GPL v2
Flex	FLEX	libsoup	LGPL v2.1+	spawn-fcgi	BSD
freetype	FreeType license	libssh2	BSD	sqlite	public domain
fontconfig	fontconfig	libusb	GNU LGPL v2.1	syslog-ng	LGPL-2.1 (syslog-ng core), GPL-2.0 (modules)
gnupg-1.4.7	GNU GPL v2	libxml2	MIT	tcpdump	BSD
gpgme	GNU LGPL v2.1	libxslt	MIT	tzdata	public domain
gststreamer	GNU GPL v2	lighttpd	BSD	uboot	GNU GPL v2
htop	GPL v2	Linux	GNU GPL v2	udev	GNU GPL v2
i2c-tools	GNU GPL v2	Linux-PAM	BSD	util-linux	GPL v2, BSD-4c, libblkid and libmount LGPL v2.1, libuuid BSD-3c
ifplugd	GNU GPL v2	lua	MIT	wireless_tools	GNU GPL v2
jo	MIT (json.[ch]), GPL v2 (rest)	minicom	GNU GPL v2	wpa_supplicant	GPL v2 / BSD-3c
iperf	iperf	mtid	GNU GPL v2	xinetd	custom
iproute2	GPL v2	ncurses	MIT	zlib	zlib
iptables	GPL v2	net-snmp	BSD		
jpeg	libjpeg	neon	LGPL v2.1+ GPL v2+		

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**NOTE:** Go to [www.extron.com](http://www.extron.com) for the complete user guide, installation instructions, and specifications.

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the [Extron Safety and Regulatory Compliance Guide](#) on the Extron website.