

8-/16-/48-Port Advanced Console Servers Quick Start Guide

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QS1. Introduction

This Quick Start Guide walks you through installation, configuration, and local operation or your LES1208A, LES1216A, and LES1248A 8-/16-/48-Port Advanced Console Servers. For more details, please refer to the user's manual on the CD-ROM.

QS2. What's Included

Your package should contain the following items. if anything is missing or damaged, contact Black Box at 724-746-5500.

- Console Server
- (2) UTP cables
- (1) DB9F-RJ45S straight cable
- (1) DB9F-RJ45S crossover cable
- (1) Power cable
- Printed Quick Start Guide
- User's manual and SDT connector tool software on CD-ROM

QS3. Connect the Hardware

- 1. Plug the Advanced Console Server into the AC power. The Advanced Console Server has dual universal AC power supplies with automatic failover built in.
- 2. Connect the NETWORK1 port on the console server to your network. Connect your serial devices to the SERIAL PORTS 1-8/16/48.
- NOTE: If you plan to use out-of-band (OoB) dial-in access, connect an external modem to the phone line. If you plan to use broadband OoB, connect the access device (such as DSL modem) to NETWORK2.

QS4. Set Up the Advanced Console Server

The default console server IP Address is 192.168.0.1 (subnet mask 255.255.255.0). Using a Web browser on any computer that is LAN connected to the Console Server:

- 1. Enter https://192.168.0.1 into the address bar.
- 2. Log in using the default system user name root and the default password. A Welcome screen listing the basic configuration steps is displayed.
- 3. Select "System: Administration," enter and confirm a new System Password and click "Apply."

NOTE: The computer connected to the LAN must have an IP address in the same network range (192.168.0.xxx) as the Advanced Console Server. Alternately, you can use the ARP ping command to set the IP address (refer to the user's manual). The embedded DHCP client is enabled by default, so it will automatically accept any network IP address assigned by any DHCP server on your network—and will then respond at both 192.168.0.1 and its DHCP address.

	SERVICES	Uptime: 0 days, 0 hours, 32 mins, 46 secs Current User: root Badup Log Ov
		System: Administration
Serial & Network		
Serial Port	System Name	ACSdoc
Users & Groups		An ID for this device.
Authentication	System Description	
Trusted Networks		The physical location of this device
Cascaded Ports	System Password	
UPS Connections		•••••
RPC Connections		The secret used to gain administration access to this device.
Environmental Managed Devices	Confirm System Password	*******
manageu Devices		Re-enter the above password for confirmation

Figure QS-1. System Administration screen.

4. To assign your Console Server a static IP address or to permanently enable DHCP, select "System: IP" and check "DHCP or Static for Configuration Method."

The Advanced Console Server also has a second Ethernet network port (Network 2) that you can configure as a management gateway/LAN port (with firewall/router isolation and DHCP server) or as a failover/OoB access port. By default, this port is inactive.

To activate broadband failover/OoB, refer to the user's manual, otherwise leave Failover Interface at its default selection, None.

To use Network 2 as the management LAN gateway:

- 1. Select "System: IP" then "Network 2" and uncheck "Disable."
- 2. Enter the IP Address and Subnet Mask for this segment of the Management LAN (leaving Gateway and DNS fields blank). Refer to the user's manual if you want to enable the DHCP server.

QS5. Configure Serial and Network Devices

1. Select "Serial & Network: Serial Port" to display the labels, modes, and protocol options currently set for each serial port—by default all serial ports are set in Console Server mode (refer the user's manual if other modes are required).

2. To configure a serial port, click "Edit." Configure the Common Settings (Baud Rate, Parity, Data Bits, Stop Bits, and Flow Control) to match those of the device being controlled.

	(BOX services	•	System Name: AC Uptime: 0 days, 0	Sdoc Model: hours, 52 mir	LES1216A Firm Is, 27 secs Curr	ware: 2.8.0u2 rent User: root	Backup Log
					Serial 8	Network:	Serial Po
Serial & Network Serial Port Users & Groups Authentication Network Hosts	Port #	Label	Ports 1-8 Ports Mode	9-16 Logging Level	Parameters	Flow Control	
Trusted Networks Cascaded Ports UPS Connections RPC Connections Environmental	1	Port 1	Console (Unconfigured)	0	9600-8-N-1	None	Edit
	2	Port 2	Console (Unconfigured)	0	9600-8-N-1	None	Edit
	3	Port 3	Console (Unconfigured)	0	9600-8-N-1	None	Edit

Figure QS-2. Serial and Network: Serial Port.

- 3. Select the console server protocols (Telnet, SSH, TCP, and RFC2217) that are to be used for the data connection to that port.
- 4. You may also set a Logging Level to specify the level of information to be logged and monitored for each that port. Click "Apply."
- 5. To access locally networked computers (referred to as Hosts) through the console servers, select "Serial & Network: Network Hosts" and click "Add Host."

		tem Name ACSdoc Model LES1216A Firmware 28.0u2 🚵 🛈 ptime: 0 days, 2 hours, 13 mins, 1 secs Current User. root Bedup Log Ou Bedup Log Ou
		Serial & Network: Network Hosts
Serial & Network Serial Port Users & Groups Authentication Network Hosts Trusted Networks Cascaded Ports UPS Connections RPC Connections Environmental	IP Address/DNS Name Host Name Description/Notes	The hosts IP Address or DNS name. A descriptive name to identify the host. A brief description of the host.
Alanaged Devices Alerts & Logging Port Log Alerts SMTP & SMS SNIP	Permitted Services	22/tro (stah - 0 23/tro (stah - 0 80/tro (sta) - 0 43/tro (sta) - 0 1494/tro (sta) - 0 3389/tro (rop - 0 5900/tro (vmc) - 0 Remove

Figure QS-3. Serial and Network: Network Hosts screen.

- 6. Enter the IP address/DNS Name of the host.
- Edit the Permitted Services used for accessing this host, for example, HTTPS (TCP Port 443), VNC (TCP Port 5990), or add custom TCP or UDP port numbers. Only the services specified here are tunneled to the host, all other services are blocked.

- 8. At this stage, you may also specify the level of information to be logged and monitored for each host access.
- 9. Click "Apply."

QS6. Add New Users

NOTE: We recommend that you set up a new Administrator user (in the admin group with full access privileges) and log in as this new user for all ongoing administration functions (instead of continuing as root).

BLACK	BOX BERVICES	System Hame: 4/CSdoc: Model: LES1215A Firmware: 28.0u2 Uptime: 0 days, 1 hours, 2 mins, 8 secs Current User: root Bedue Log Out		
		Serial & Network: Users & Groups		
Serial & Network Serial Port	Add a New u	ser		
Users & Groups Authentication Network Hosts Trusted Networks Cascaded Ports UPS Connections RPC Connections Environmental Managed Devices	Username	A unique name for the user.		
	Description	A brief description of the users role.		
	Groups	admin (Provides users with unlimited configuration and management privileges) users (Provides users with basic management privileges)		
Alerts & Logging		A group with predefined privileges the user will belong to.		
Port Log Alerts SMTP & SMS SNMP	Password	The users authentication secret. Note: A password may not be required if remote authentication is being used.		
	Confirm			
System		Re-enter the users password for confirmation.		
Administration SSL Certificates Configuration Backup	Accessible H	lost(s)		
IP Date & Time	No hosts curr	ently configured.		
Dial Services DHCP Server	Accessible P	ort(s)		

Figure QS-4. Serial and Network: Users and Groups screen.

- 1. For each new user, select "Serial & Network: Users & Groups" and click "Add User."
- 2. Enter a Username and enter and confirm a Password, and name the Accessible Hosts and Accessible Ports the user is allowed to access.
- 3. Click "Apply."
- NOTE: The Console Server comes with a default certificate for initial configuration only. When you first browse to the Console Server, you will receive a message that the certificate is "untrusted." Initially, you'll need to direct your browser to (temporarily) proceed and accept this untrusted certificate.

We recommend that you generate and install a new trusted certificate as soon as possible thereafter. To produce the unique CSR and later upload the newly issued certificate, select "System: SSL Certificates."

QS7. Advanced Configurations

The Advanced Console Server offers many more advanced functions including:

- The Alerts & Logging: Alerts facility that monitors serial ports, hosts, user logins, UPSs and PDUs. You can specify a broad selection of trigger events (such as data patterns, temperature, or battery levels). When triggered, a warning e-mail, SMS, Nagios[®], or SNMP alert is sent to a nominated destination.
- Extensive management of third-party UPSs and PDUs using open source NUT and Powerman tools. The Manage: Power facility enables both administrators and regular users to monitor and control attached PDU power strips, and servers with embedded IPMI BMCs.
- Historical logs of all communications with serial and network attached devices, system activity, UPS and PDU power status, environmental status, etc. The level of logging is set as ports and devices are configured. Alerts & Logging: Port Log enables this history to be saved locally or remotely. Logs can be viewed from the Status and Manage menus.
- Other advanced features, such as Dashboard, Serial Port Cascading, remote Authentication, Trusted Networks, Secure Tunneling, Nagios Distributed Monitoring, and the Command Line interface are covered in detail in the User's Manual on the CD-ROM.
- NOTE: On the CD-ROM, you will also find the SDT Connector software tool. Once you have configured the console server, this tool provides you with secure, point-and-click access to it and all its attached managed devices. Refer to the provided SDT Connector Quick Start Guide for details on setting up remote management of the console server and connected devices.

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