

Table of Contents

for the EN-2000™ Reference Manual

List of Headings

Document 1	EN-2000 Hardware Description and Specifications	1-1
Section 1.1	Hardware Overview	1-1
Section 1.1.1	EN-2000 Chassis Front Panel	1-2
Section 1.1.2	EN-2000 Chassis Back Panel	1-3
Section 1.1.3	RJ45 10-Base-T/100-Base-T Ethernet Port	1-4
Section 1.1.4	LED Codes	1-5
Section 1.2	Pin Configuration	1-5
Section 1.3	RJ45 Signaling Conversion	1-6
Section 1.4	EN-2000 Technical Specifications	1-7
Section 1.4.1	General Features	1-7
Section 1.4.1.1	Internet Protocol	1-7
Section 1.4.2	Security Features	1-8
Section 1.4.3	Transport Protocols	1-8
Section 1.4.3.1	WAN and LAN	1-8
Section 1.4.4	EN-2000 Physical Specifications	1-8
Section 1.4.4.1	Chassis Dimensions	1-8
Section 1.4.4.2	Power Supply Options	1-9
Section 1.4.5	SIMs	1-9
Section 1.4.6	Environmental Specifications	1-9
Section 1.4.7	Standards Compliance	1-10
Document 2	Using the EN-2000's Management System	2-1
Section 2.1	Connecting to the EN-2000	2-1
Section 2.2	Activating the Wireless Module	2-2
Section 2.3	Logging In	2-2
Section 2.4	Viewing the EN-2000's Status in enCloud	2-5
Section 2.5	Navigating through the EN-2000's Management System	2-5
Section 2.5.1	Saving or Discarding Changes	2-5
Section 2.5.2	Restarting (Rebooting) the EN-2000	2-6
Section 2.6	Ending the Session	2-7

Document 3	Configuring the EN-2000 for its Network Functions	3-1
Section 3.1	Configuring Network Hosts	3-3
Section 3.2	Setting the APN	3-4
Section 3.3	Routing	3-4
Section 3.4	Firewall Configuration	3-6
Section 3.5	Configuring Traffic Priority	3-8
Section 3.6	Port Forwarding	3-8
Section 3.6.1	Configuring the Port	3-8
Section 3.6.2	Opening the Port for Use	3-11
Section 3.7	Configuring the EN-2000 for VRRP	3-14
Document 4	Configuring Traffic Priority for the EN-2000	4-1
Document 5	Setting Cellular Wireless Parameters in the EN-2000	5-1
Section 5.1	APN Configuration in the USA and North America	5-1
Section 5.2	APN Configuration in the UK and Europe	5-4
Section 5.3	Advanced Settings	5-10
Section 5.4	Physical Settings	5-11
Section 5.5	SIM Management	5-12
Document 6	Configuring the EN-2000's 802.11 Wireless Card	6-1
Section 6.1	Setting Up the EN-2000	6-1
Section 6.2	Configuring an 802.11 Wireless Card in the EN-2000	6-3
Section 6.2.1	WiFi Device Configuration	6-4
Section 6.2.2	WiFi Interface Configuration	6-7
Section 6.3	Configuring the 802.11 Wireless Card's Operating Mode	6-12
Section 6.3.1	Configuring the EN-2000's 802.11 Wireless Card as a Wireless Access Point	6-12
Section 6.3.1.1	Configuring the Wireless Access Point	6-12
Section 6.3.1.2	Connecting Wireless Clients to the Wireless Access Point	6-13
Section 6.3.2	Designating the EN-2000's 802.11 Wireless Access Point as a WiFi Hotspot	6-15
Section 6.3.3	Configuring the EN-2000's 802.11 Wireless Card as a Wireless Client	6-16
Document 7	DMNR in the EN-2000	7-1
Section 7.1	Setting Up DMNR	7-1
Document 8	Configuring Dynamic DNS	8-1
Document 9	Configuring VPNs in the EN-2000	9-1
Section 9.1	Configuring an EN-2000 as a VPN Tunnel Initiator	9-1
Section 9.2	Configuring an EN-2000 as a VPN Tunnel Responder	9-5
Section 9.3	The Next Steps	9-9

Document 10	Configuring the EN-2000's VPN Firewall	10-1
Section 10.1	Configuring the Firewall for an IPsec VPN Tunnel	10-1
Section 10.1.1	Firewall Zones	10-1
Section 10.1.2	Disabling Masquerading on the VPN Tunnel Initiator	10-5
Section 10.1.3	Firewall Traffic Rules	10-8
Section 10.2	Configuring the Source NAT	10-12
Document 11	Configuring IP Passthrough with a SonicWall Firewall	11-1
Section 11.1	Configuring the EN™ Router's LAN Port	11-1
Section 11.2	Configuring the SonicWall Device	11-2
Document 12	Starting and Tracking VPNs in the EN-2000	12-1
Section 12.1	Starting VPN Tunnels	12-1
Section 12.2	Testing and Tracking VPN Connections	12-2
Section 12.2.1	Testing VPN Connections	12-2
Section 12.2.2	Tracking VPN Connections	12-4
Section 12.2.2.1	Tracking Specific Information	12-4
Section 12.2.2.2	Tracking General VPN Activity	12-4
Document 13	Virtual Private Networks	13-1
Section 13.1	Basics of Virtual Private Networks	13-1
Section 13.1.1	A Simple Virtual Private Network	13-3
Section 13.1.2	Tunnel Modes	13-4
Section 13.1.2.1	Tunnel Initiation	13-4
Section 13.1.2.2	Tunnel Termination	13-5
Section 13.1.2.3	Tunnel Passthrough	13-6
Section 13.1.3	Tunnel Support	13-6
Section 13.1.3.1	Tunnel Sharing	13-6
Section 13.1.3.2	Tunnel Switching	13-7
Section 13.1.3.3	Split Tunneling	13-7
Section 13.1.4	Internet Key Exchange	13-8
Section 13.1.4.1	Perfect Forward Secrecy	13-8
Section 13.1.4.2	IKE Version 1	13-8
Section 13.1.4.2.1	Details of IKE Version 1	13-9
Section 13.1.4.3	IKE Version 2	13-9
Section 13.1.4.3.1	Extensible Authentication Protocol	13-10
Section 13.1.4.3.1.1	EAP Authentication	13-10
Section 13.1.4.3.1.2	EAP Exchanges	13-11
Section 13.1.4.3.2	MOBIKE	13-11
Section 13.1.4.3.3	Sample IKEv2 Exchanges	13-11
Section 13.1.4.3.3.1	Overview of IKEv2 Exchanges	13-12
Section 13.1.4.3.3.2	Details of IKEv2 Exchanges	13-12
Section 13.2	Developing a Virtual Private Network	13-15
Section 13.2.1	VPN Configuration Plan	13-16
Section 13.2.1.1	The IP Policy Table	13-16
Section 13.2.1.2	The VPN Profile Table	13-17

Section 13.2.2	Automatic Keying	13-18
Section 13.2.3	Sample Configuration for a Remote User	13-20
Document 14	Monitoring the EN-2000	14-1
Section 14.1	Graphs	14-2
Section 14.2	Routing Information	14-6
Section 14.3	Pings and Other Network Diagnostics	14-6
Section 14.4	Logs	14-8
Document A	Basic Safety Guidelines	A-1
Section A.1	Safety Practices	A-1
Section A.2	Electrostatic Discharge	A-1
Document B	Cloud Management for the EN-2000	B-1
Section B.1	Setting Up the EN-2000 to Send Data to enCloud	B-1
Document C	The Automotive EN-2000™ Router	C-1
Section C.1	Automotive EN-2000 Router Hardware Description	C-2
Section C.1.1	Front Panel of the Automotive EN-2000 Chassis	C-2
Section C.1.2	Back Panel of the Automotive EN-2000 Router	C-3
Section C.2	Installing the Automotive EN-2000 Router in a Vehicle	C-3
Section C.3	Connecting the Automotive EN-2000 Chassis to Automotive Power	C-3
Section C.3.1	Making a Permanent Connection to the Automotive EN-2000	C-4
Section C.3.2	Using a Temporary Connection to the Automotive EN-2000 for Testing and Evaluation	C-6
Document D	Setting the Ignition Power-Off Delay for the Automotive EN-2000™ Router	D-1
Document E	EN-2000 System Administration	E-1
Section E.1	General System Administration	E-2
Section E.1.1	Changing the EN-2000's Password	E-2
Section E.1.2	Configuring the EN-2000 for Recovery	E-2
Section E.2	Configuring the EN-2000's Background Elements	E-4
Section E.2.1	Configuring the Device Name and Time of Day	E-4
Section E.2.2	Configuring System Logging	E-5
Section E.2.3	Setting the Time of Day	E-7
Section E.3	Software Management	E-8
Section E.3.1	Saving or Retrieving the EN-2000's Configuration	E-8
Section E.3.1.1	Backing Up the EN-2000's Configuration	E-9
Section E.3.1.2	Restoring a Previous Configuration to the EN-2000	E-9
Section E.3.1.3	Resetting the EN-2000 to its Default Configuration	E-10
Section E.3.2	Upgrading the EN-2000's Operating Software	E-10
Section E.3.2.1	Preserving the EN-2000's Configuration during a Software Upgrade	E-10
Section E.3.2.2	Loading a Software Upgrade	E-11

Document F	SIM Reactivation	F-1
Document G	Applying a System Software Patch to the EN-2000 Operating Software	G-1
Section Note:	Connecting the EN-2000	1-3
Section v	Selecting the EN-2000's Device Mode	1-5
Section Note:	Returning to the Default Configuration	1-12
Section Note:	Connecting the EN-2000	1-1
Section v	Selecting the EN-2000's Device Mode	1-3
Section Note:	Returning to the Default Configuration	1-10

List of Tables

Document 1	EN-2000 Hardware Description and Specifications	
Table 1-1	10-Base-T/100-Base-T Ethernet Port Pin Configuration	1-4
Table 1-2	Pin Configuration for EN-2000's RS232 Port, DCE	1-5
Table 1-3	Pin Configuration for EN-2000's RS485 Port, Full Duplex	1-5
Table 1-4	Pin Configuration for EN-2000's RS485 Port, Half Duplex	1-5
Table 1-5	Signaling Conversion from EN-2000 RJ45 to DCE DB9	1-6
Table 1-6	Signaling Conversion from EN-2000 RJ45 to DCE DB25	1-6
Table 1-7	Signaling Conversion from EN-2000 RJ45 to DTE DB9	1-6
Table 1-8	Signaling Conversion from EN-2000 RJ45 to DTE DB25	1-7
Table 1-9	Physical Specifications for the EN-2000 Metal Chassis	1-8
Table 1-10	Physical Specifications for the EN-2000 Plastic Chassis	1-9
Table 1-11	Recommended Specifications for SIMs in the EN-2000	1-9
Table 1-12	EN-2000 Environmental Specifications	1-9
Table 1-13	EN-2000 Standards Compliance	1-10
Document 13	Virtual Private Networks	
Table 13-1	IPsec Components Used in the EN-2000	13-2
Table 13-2	Sample Remote User Record	13-6
Table 13-3	Standard EAP Combinations for IKEv2 Authentication	13-11
Table 13-4	Information Required to Configure the EN-2000 for VPNs	13-15
Table 13-5	Sample IP Policy Table	13-16
Table 13-6	Sample VPN Profile Table	13-17
Table 13-7	Sample VPN Profile, Automatic Keying	13-18
Table 13-8	Sample IKEv1 Phase 1 Proposal	13-19
Table 13-9	Sample IKEv1 Phase 2 Proposal	13-19
Table 13-10	Sample Tunnel User Table	13-20

List of Figures

Document 1	EN-2000 Hardware Description and Specifications	
Figure 1-1	EN-2000 Front Panel (All Potential Ports Shown)	1-2
Figure 1-2	Front Panel for Single-SIM EN-2000 without Serial Ports	1-2
Figure 1-3	Front Panel for Dual-SIM EN-2000 with Serial Ports	1-3
Figure 1-4	EN-2000 Back Panel without Serial Port LEDs	1-3
Figure 1-5	EN-2000 Back Panel with Serial Port LEDs	1-4
Figure 1-6	Pin Locations for Female RJ45 Ethernet Connector	1-4
Document 2	Using the EN-2000's Management System	
Figure 2-1	EN-2000 Front Panel	2-2
Figure 2-2	Browser Address Field	2-3
Figure 2-3	EN-2000 Log-In Screen	2-3
Figure 2-4	Message to Enable JavaScript	2-3
Figure 2-5	EN-2000 Status Overview Screen	2-4
Figure 2-6	EN-2000 Status in enCloud	2-5
Figure 2-7	EN-2000 System Reboot	2-6
Figure 2-8	Message while Rebooting	2-6
Figure 2-9	EN-2000 Log-In Screen	2-7
Document 3	Configuring the EN-2000 for its Network Functions	
Figure 3-1	EN-2000 Status Overview Screen	3-2
Figure 3-2	Information for Dual SIMs in the EN-2000	3-3
Figure 3-3	Information for a Single SIM in the EN-2000	3-3
Figure 3-4	Information if No SIM is in the EN-2000	3-3
Figure 3-5	Network Host Names Screen	3-3
Figure 3-6	Network Host Names Add Screen	3-4
Figure 3-7	Static Routes Configuration Screen	3-5
Figure 3-8	Static Routes Table	3-5
Figure 3-9	Firewall General Settings Screen	3-6
Figure 3-10	Firewall General Settings Screen to Add Record	3-6
Figure 3-11	Firewall Port Forward Screen	3-7
Figure 3-12	Firewall Traffic Rules Screen	3-7
Figure 3-13	Quickstart Screen, Device Mode as Cell Router	3-9
Figure 3-14	Port Forwarding Table	3-9
Figure 3-15	Port Forwarding Table, Configured with a New Rule	3-10
Figure 3-16	Port Forwarding Rule Configuration Screen	3-10
Figure 3-17	Table of Firewall Traffic Rules	3-11
Figure 3-18	Table of Firewall Traffic Rules, Entering a Traffic Rule for a Port	3-12
Figure 3-19	Table of Firewall Traffic Rules, Updated with New Rule	3-12
Figure 3-20	Screen to Edit a Traffic Rule	3-13
Figure 3-21	Table of Firewall Traffic Rules	3-13
Figure 3-22	VRRP Configuration Screen	3-14

Document 4	Configuring Traffic Priority for the EN-2000	
Figure 4-1	EN-2000 Status Overview Screen	4-1
Figure 4-2	Quality of Service Configuration Screen	4-2
Document 5	Setting Cellular Wireless Parameters in the EN-2000	
Figure 5-1	EN-2000 Status Overview Screen	5-2
Figure 5-2	Network Interface Screen	5-3
Figure 5-3	Cellular Wireless Common Configuration Screen, General Set-Up for a Chassis with One SIM	5-3
Figure 5-4	Status Overview Screen for a Chassis with One SIM	5-5
Figure 5-5	Status Overview Screen for a Chassis with Two SIMs	5-6
Figure 5-6	Network Interface Screen	5-7
Figure 5-7	Cellular Wireless Common Configuration Screen, General Set-Up for a Chassis with One SIM	5-8
Figure 5-8	Cellular Wireless Common Configuration Screen, General Set-Up for a Chassis with Two SIMs	5-9
Figure 5-9	Cellular Wireless Common Configuration Screen, Advanced Settings for a Chassis with One SIM	5-10
Figure 5-10	Cellular Wireless Common Configuration Screen, Advanced Settings for a Chassis with Two SIMs	5-11
Figure 5-11	Cellular Wireless Common Configuration Screen, Physical Settings	5-12
Figure 5-12	Cellular Wireless Common Configuration Screen, SIM Management	5-13
Document 6	Configuring the EN-2000's 802.11 Wireless Card	
Figure 6-1	EN-2000 Status Overview Screen	6-2
Figure 6-2	802.11 Wireless Network Interfaces	6-3
Figure 6-3	Wireless Network Configuration Screen	6-4
Figure 6-4	Wireless Network Configuration Screen, General Setup for Device Configuration	6-5
Figure 6-5	Wireless Network Configuration Screen, Advanced Settings for Device Configuration	6-6
Figure 6-6	802.11 Wireless Configuration Screen for Advanced Device Setup and General Interface Setup	6-8
Figure 6-7	Wireless Network Configuration Screen, Wireless Security	6-9
Figure 6-8	Additional Fields to Support 802.11 Wireless Encryption	6-9
Figure 6-9	Wireless Network Configuration Screen, MAC Filter	6-10
Figure 6-10	Wireless Network Configuration Screen, Advanced Settings for Interface Configuration	6-11
Figure 6-11	Overview Screen for Wireless Configuration	6-13
Figure 6-12	Overview Screen for Wireless Configuration	6-14
Figure 6-13	EN-2000 as Wireless Access Point	6-14
Figure 6-14	Wireless Overview Screen, Including a List of Associated Stations	6-15
Figure 6-15	Hotspot General Settings	6-15
Figure 6-16	EN-2000 as Wireless Client	6-16
Figure 6-17	Overview Screen for Wireless Configuration	6-17
Figure 6-18	Wireless Network Configuration Screen, General Setup for Interface Configuration	6-17
Figure 6-19	Wireless Network Configuration Screen, EN-2000 as 802.11 Wireless Client	6-18

Figure 6-20	Detail: LAN Port is Still Selected	6-18
Figure 6-21	Detail: Select the WAN Port	6-19
Figure 6-22	Overview Screen for Wireless Client Configuration	6-19
Figure 6-23	Available Wireless Networks	6-19
Figure 6-24	Log-In Screen for a Wireless Network	6-20
Figure 6-25	Wireless Network Client Configuration Screen	6-20
Figure 6-26	Wireless Network Client Configuration Screen, Advanced Settings for Device Configuration	6-21
Figure 6-27	Wireless Network Client Configuration Screen for Wireless Security	6-21
Figure 6-28	Additional Fields to Support 802.11 Wireless Encryption	6-22
Figure 6-29	Wireless Network Client Configuration Screen, Advanced Settings for Interface Configuration	6-22
Figure 6-30	Wireless Network Client Configuration Screen, General Settings for Device Configuration	6-23
Figure 6-31	Completed Configuration as Wireless WAN Client	6-24
Figure 6-32	Firewall Zone Settings Screen	6-24
Figure 6-33	Firewall Zone Settings LAN Screen	6-25
Figure 6-34	Firewall Zone Settings LAN Screen, Advanced Settings	6-25
Figure 6-35	Firewall Zone Settings LAN Screen, General Settings	6-26
Figure 6-36	Interfaces on the EN-2000	6-26
Figure 6-37	Additional Devices on the Wired LAN Using the EN-2000 Wireless Client's Connection to the Internet	6-27
Document 7	DMNR in the EN-2000	
Figure 7-1	DMNR Configuration Screen	7-1
Figure 7-2	Static Routes Screen	7-3
Document 8	Configuring Dynamic DNS	
Figure 8-1	DDNS Configuration Screen	8-1
Figure 8-2	Two DDNS Accounts	8-3
Document 9	Configuring VPNs in the EN-2000	
Figure 9-1	IPsec VPN Tunnel Table for a VPN Tunnel Initiator	9-2
Figure 9-2	IPsec Tunnel Configuration Screen for a VPN Tunnel Initiator	9-2
Figure 9-3	IPsec Defaults Configuration Screen for a VPN Tunnel Initiator	9-4
Figure 9-4	IPsec VPN Tunnel Table for a VPN Tunnel Responder	9-6
Figure 9-5	IPsec Tunnel Configuration Screen for a VPN Tunnel Responder	9-6
Figure 9-6	IPsec Defaults Configuration Screen for a VPN Tunnel Responder	9-8
Document 10	Configuring the EN-2000's VPN Firewall	
Figure 10-1	Firewall Zone Settings Screen for the IPsec VPN Tunnel Responder	10-2
Figure 10-2	General Firewall Settings Screen for the WAN Zone of the VPN Tunnel Responder	10-2
Figure 10-3	Advanced Firewall Settings Screen for the WAN Zone of the VPN Tunnel Responder	10-3
Figure 10-4	Firewall Zone Settings Screen for the IPsec VPN Tunnel Responder	10-4
Figure 10-5	IPsec VPN Tunnel Screen for a VPN Tunnel Initiator, Right Subnet 0.0.0.0/0	10-6

Figure 10-6	Firewall Zone Settings Screen for the IPsec VPN Tunnel Initiator, Right Subnet 0.0.0.0/0	10-6
Figure 10-7	IPsec VPN Tunnel Screen for a VPN Tunnel Initiator, Right Subnet Not 0.0.0.0/0	10-7
Figure 10-8	Firewall Zone Settings Screen for the IPsec VPN Tunnel Initiator, Right Subnet Not 0.0.0.0/0	10-7
Figure 10-9	Advanced Firewall Settings Screen for the WAN Zone of the VPN Tunnel Initiator	10-8
Figure 10-10	Firewall Traffic Rules Screen for an IPsec VPN Tunnel Responder	10-9
Figure 10-11	Firewall Rule Configuration Screen for VPNs, ESP protocol	10-10
Figure 10-12	Firewall Rule Configuration Screen for VPNs, AH protocol	10-11
Figure 10-13	Firewall Rule Configuration Screen for VPNs, IKE	10-11
Figure 10-14	Firewall Rule Configuration Screen for VPNs, IPsec_NAT_T	10-12
Figure 10-15	VPN Responder's Firewall Traffic Rules Screen for a Source NAT	10-13
Document 11	Configuring IP Passthrough with a SonicWall Firewall	
Figure 11-1	Table of Network Interfaces	11-1
Figure 11-2	General Settings for LAN Configuration Screen	11-2
Document 12	Starting and Tracking VPNs in the EN-2000	
Figure 12-1	IPsec VPN Tunnel Table for a VPN Tunnel Initiator	12-2
Figure 12-2	Diagnostics Screen	12-3
Figure 12-3	Ping Set-Up Area (Detail of Diagnostics Screen)	12-3
Figure 12-4	Messages Showing Successful Ping	12-3
Figure 12-5	Message Showing Unsuccessful Ping	12-4
Figure 12-6	Status of IPsec VPN Tunnels	12-4
Figure 12-7	System Log	12-5
Document 13	Virtual Private Networks	
Figure 13-1	EN-2000s as VPN Gateways	13-3
Figure 13-2	Sample IPsec Encryption and Encapsulation	13-4
Figure 13-3	EN-2000 Terminating Tunnel from VPN Client	13-5
Figure 13-4	EN-2000 Tunnel Switching between VPN Client and VPN Host	13-7
Document 14	Monitoring the EN-2000	
Figure 14-1	Status Overview Screen	14-1
Figure 14-2	Realtime Load Performance Graph	14-2
Figure 14-3	Realtime Performance Graph of All EN-2000 Traffic	14-3
Figure 14-4	Realtime Performance Graph of the EN-2000's LAN Port Traffic	14-4
Figure 14-5	Realtime Performance Graph of the EN-2000's WAN Port Traffic	14-4
Figure 14-6	Realtime Performance Graph of the EN-2000's Cellular Wireless Traffic	14-5
Figure 14-7	Realtime Performance Graph of the EN-2000's 802.11 Wireless Traffic	14-5

Figure 14-8	Realtime Performance Graph of Network Connections	14-6
Figure 14-9	Status Routes Screen	14-6
Figure 14-10	Diagnostics Screen	14-7
Figure 14-11	Ping Set-Up Area (Detail of Diagnostics Screen)	14-7
Figure 14-12	Messages Showing Successful Ping	14-7
Figure 14-13	Message Showing Unsuccessful Ping	14-8
Figure 14-14	System Log	14-8
Document A	Basic Safety Guidelines	
Figure A-1	Wrist Strap Grounding	A-2
Document B	Cloud Management for the EN-2000	
Figure B-1	EN-2000 Interface Overview Screen	B-2
Figure B-2	EN-2000 enCloud Configuration Menu	B-2
Document C	The Automotive EN-2000™ Router	
Figure C-1	EN-2000 Front Panel without Serial Ports	C-2
Figure C-2	EN-2000 Front Panel with Two Serial Ports	C-2
Figure C-3	Automotive EN-2000 Back Panel	C-3
Figure C-4	Automotive EN-2000 Power Connection with Immediate Power-Off	C-5
Figure C-5	Automotive EN-2000 Power Connection with Delayed Power-Off	C-5
Figure C-6	Automotive EN-2000 Power Connection with Power Always On	C-6
Document D	Setting the Ignition Power-Off Delay for the Automotive EN-2000™ Router	
Figure D-1	Automotive EN-2000 Power Connection with Delayed Power-Off	D-1
Figure D-2	Automotive Ignition Configuration	D-2
Figure D-3	Automotive EN-2000 System Power Status Screen	D-2
Figure D-4	Automotive EN-2000 System Power Status Screen: Countdown to Power Shutdown	D-3
Document E	EN-2000 System Administration	
Figure E-1	Status Overview Screen	E-1
Figure E-2	Screen to Set a New Password	E-2
Figure E-3	Screen to Configure System Services	E-3
Figure E-4	System Screen for General Settings	E-4
Figure E-5	Message about Invalid Entry	E-5
Figure E-6	Screen to Set System Logging	E-6
Figure E-7	System Screen for General Settings	E-7
Figure E-8	System Screen, Time Synchronization Settings	E-7
Figure E-9	Screen to Save or Retrieve Files	E-8
Figure E-10	Screen to Verify Disposition of File	E-9
Figure E-11	Information during Upload	E-10
Figure E-12	Screen to Save or Retrieve Files	E-11
Figure E-13	Status Overview Screen	E-12
Figure E-14	Troubleshooting Screen	E-12

Figure E-15	Screen to Select the *.img File for a Software Upgrade	E-13
Figure E-16	Screen to Save or Retrieve Files	E-13
Figure E-17	Screen to Verify Loading the Software Upgrade	E-14

**Document G Applying a System Software Patch
to the EN-2000 Operating Software**

Figure G-1	Browser Address Field	G-1
Figure G-2	EN-2000 Log-In Screen	G-1
Figure G-3	Status Overview Screen	G-2
Figure G-4	Flash Operations Screen	G-3
Figure G-5	Message during Upload	G-4
Figure G-6	Firmware Version Listed on Status Overview Screen	G-4
Figure G-7	Troubleshooting Screen	G-5

