

ADTRAN Gateway Compatibility!

Toshiba is pleased to announce technical compatibility with the ADTRAN line of Total Access 908 and 908e T1 gateways.

ADTRAN, Inc. is a leading global provider of networking and communications equipment with an innovative portfolio of more than 1,700 solutions for use in the last mile of today's telecommunications networks. Widely deployed by carriers, distributed enterprises and Small- and Medium-sized Businesses (SMBs), ADTRAN networking equipment solutions enable voice, data, video, and internet communications across copper, fiber, and wireless network infrastructures. ADTRAN solutions are currently in use by every major U.S. service provider and many global ones, as well as by thousands of public, private and governmental organizations worldwide.



ADTRAN offers a full line of IP business gateways for converged IP networks. The Total Access 900/900e series is ideal for networks transitioning to VoIP and offers a number of fixed-port configurations.

ADTRAN Total Access 908 Series

The Total Access 908 IP Business Gateway provides SIP-gateway functionality, a robust IP router, firewall and VPN functionality, and support for a number of analog and digital interfaces for existing phone equipment, or for the combination of an IP PBX and an analog fax, phones, or modem.

- Single T1/single Ethernet platform, 8 analog FXS interfaces, integrated DSX-1
- Ideal for networks transitioning to VoIP and an all IP voice and data WAN

Features and Benefits

- Carrier-class, cost-effective IP Business Gateway for integrated services such as VoIP
- Supports up to 8 analog FXS interfaces for legacy equipment
- Single Ethernet interface for data connectivity
- Integral DSX-1 PRI/CAS for PBX connectivity
- Transparent proxy with survivability for network outages
- Voice Quality Monitoring (VQM) for enhanced Quality of Service (QoS)
- Compatible with industry leading soft switches and call agents
- Integral full-featured IP router for data support and Internet access

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- Stateful inspection firewall for network security
- Quality of Service (QoS) for delay sensitive traffic like VoIP
- Command Line Interface (CLI) mimics industry de facto standard
- Feature-rich ADTRAN Operating System (AOS)
- Industry-leading 10-year North American warranty
- Single T1 WAN interface

ADTRAN Total Access 908e Series

The Total Access 908e IP Business Gateway provides SIP-gateway functionality, a robust IP router, firewall and VPN functionality, and support for a number of analog and digital interfaces for existing phone equipment, or for the combination of an IP PBX and an analog fax, phones, or modem.

- Four T1/dual Ethernet platform, 8 analog FXS interfaces, integrated DSX-1
- Ideal for networks transitioning to VoIP and an all IP voice and data WAN

Features and Benefits

- Carrier-class, cost-effective multi-T1/dual Ethernet IP Business Gateway for integrated services such as VoIP
- Supports up to 8 analog FXS interfaces for legacy equipment
- Integral DSX-1 PRI/CAS for PBX connectivity
- Transparent proxy with survivability for network outages
- Voice Quality Monitoring (VQM) for enhanced Quality of Service (QoS)
- Compatible with industry leading soft switches and call agents
- Integral full-featured IP router for data support and Internet access
- Stateful inspection firewall for network security
- Quality of Service (QoS) for delay sensitive traffic like VoIP
- Command Line Interface (CLI) mimics industry de facto standard
- Feature-rich ADTRAN Operating System (AOS)
- Industry-leading 10-year North American warranty
- Four T1 WAN interfaces/two Ethernet interfaces/ 8 FXS interfaces

Order Information

Gateways

4212908L1	Total Access 908 - T1 network interface, 8 FXS ports, DSX-1 port, 10/100 BaseT and IP Router. Includes G.168 Echo Cancellation and support for G.711 and G.729a CODECs. Supports VoIP applications using SIP. Router features include OSPF, BGP, RIP V1 and V2, Static routes, 802.1d Bridging (all protocols), CLI, Frame Relay and PPP WAN Protocols, SNMP, Telnet, Craft/Console port, TFTP support and stateful inspection firewall.
4212924L2	Total Access 908e - Four T1 network interfaces (two of the T1's can be configured for DSX-1 applications), 8 FXS ports, two 10/100 BaseT interfaces, single FXO interface and IP Router. Includes G.168 Echo Cancellation and support for G.711 and G.729a CODECs and supports up to 60 simultaneous TDM to VoIP call conversions. Supports VoIP applications using SIP. Router features include OSPF BGP, RIP V1 and V2, Static routes, 802.1d Bridging (all protocols), CLI; FR, MLFR, PPP and MLPPP WAN Protocols; SNMP, Telnet, Craft/Console port, TFTP support and stateful inspection firewall.

Extended 1-Year Maintenance Plan

1100AM580122N	30 minute phone response; next business day delivery of replacement parts, available Monday - Friday 8 a.m. - 5 p.m. (local time) covers TA 904, 908, 912, 916, NetVanta 6310, NetVanta 6630 8FXS, NetVanta 6330 16FXS
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System Compatibility

Hardware Platform	Software Version
IPedge EM & EC Servers	
Strata CIX40	R520 MT055
Strata CIX100	R520 MT055
Strata CIX670	R520 MT055
Strata CIX1200	R520 MT055
MIPU	MIPU02_06
Total Access 908/908e	A5.00.15 or higher

Important! T.38 Faxing is not supported between the Adtran gateways and the IPedge system.

Documentation

Log into Toshiba FYI > TSD 3rd Party Partners for Installation and Configuration documentation.

Adtran Quick Start Guide

1. Use the Toshiba accepted Firmware version:

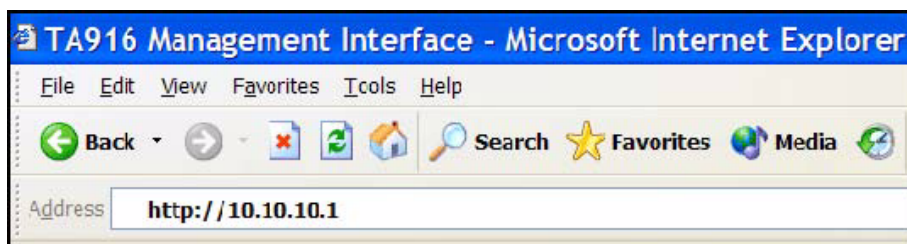
- T900E2A-A5-25-E.biz



2. Login to the Adtran unit using the Web-Based GUI

The Web-based GUI enables you to easily configure and view the main settings and the status of your system.

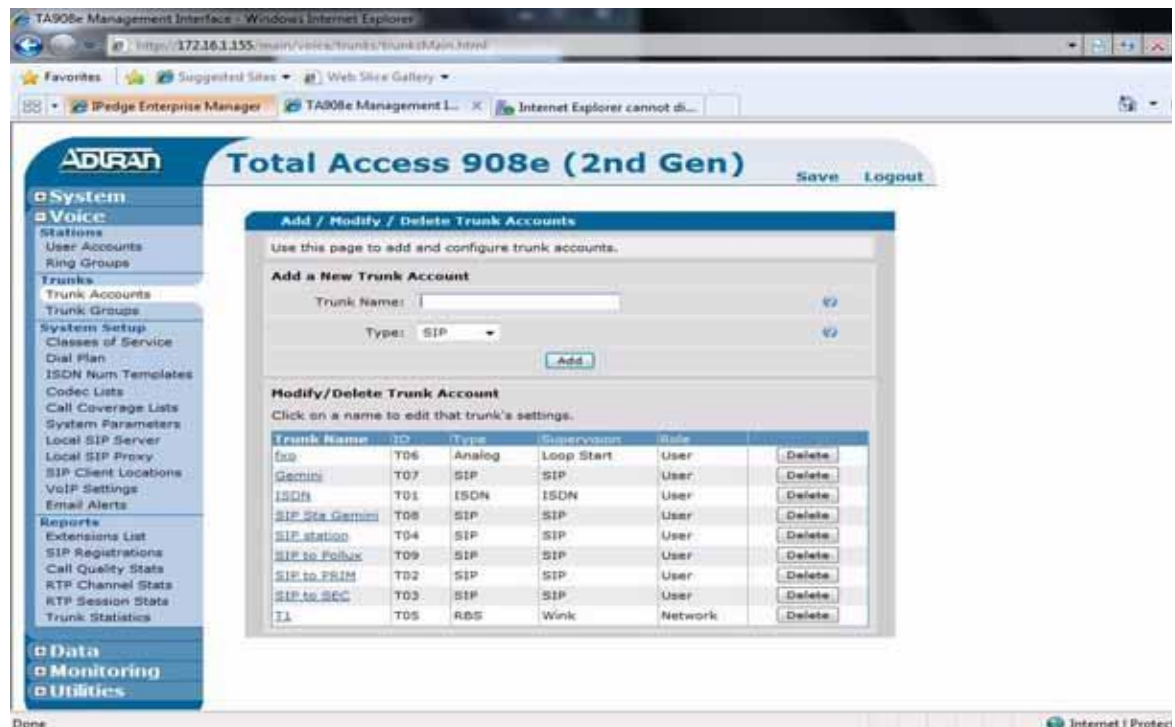
- Connect the Total Access 900 Series unit to your network using the ETH 0/1 port on the rear panel of the unit. The Total Access 900 Series units support auto MDI-MDIX crossover; therefore, a straight-through cable can be used for this connection.
- Configure your PC to obtain an IP address automatically (DCHP), or change the IP address of your PC to 10.10.10.2. The default address for the Total Access 900 Series unit is 10.10.10.1.
- Enter the IP address 10.10.10.1 (default) in your Internet browser Address field (see example, below).



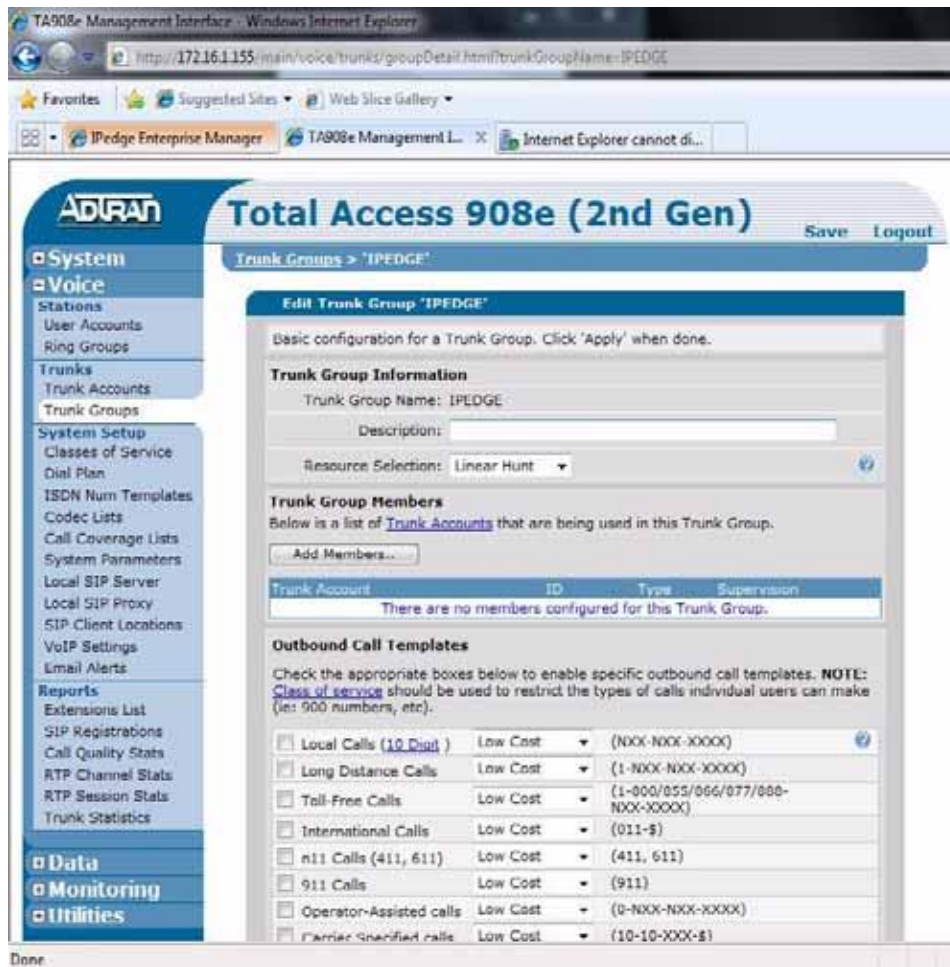
- Once you are connected, you will be prompted to enter the user name and password.
- Enter your User name (default is admin) and Password (default is password) and click OK.



3. Go to Voice > Trunk accounts
4. Add a SIP TRUNK ACCT.



5. Then go to Trunk Groups
6. Create a new Trunk Group
7. Click on Add Members



8. In the Add Members to Trunk Group dialogue box, select the Trunk Account created earlier.

The screenshot shows the TA908e Management Interface in a Windows Internet Explorer browser. The address bar displays the URL: `http://172.16.1.155/main/voice/trunks/sipTrunkDetail.html?successMessage=StrunkName=T10`. The left sidebar contains a navigation menu with categories: **Configuration** (Dial Plan, ISDN Num Templates, Codec Lists, Call Coverage Lists, System Parameters, Local SIP Server, Local SIP Proxy, SIP Client Locations, VoIP Settings, Email Alerts), **Reports** (Extensions List, SIP Registrations, Call Quality Stats, RTP Channel Stats, RTP Session Stats, Trunk Statistics), **Data**, **Monitoring**, and **Utilities**. The main content area is titled "Edit SIP Trunk" and includes a sub-header: "Use this screen to modify the SIP Trunk configuration." Below this is the "Trunk Account Information" section with the following fields: Trunk ID: T10, Type: SIP, Trunk Name: IP edge acct, Reged External: ☐, Nex Number Calls: 84, Emergency Caller ID Override: (with a "Use Match-Substitution" checkbox), Inbound Caller ID Override: , and Inbound Caller ID Override Method: Always. Below the Trunk Account Information are four tabs: SIP Settings, ANI Substitution, DNIS Substitution, and DNIS:ANI Replacement. The SIP Settings tab is active, showing fields for SIP Server Address (with radio buttons for Not Set, IP, and Host; the IP radio button is selected and the address is 172.16.1.64), SIP Server Port, SIP Proxy Address (with radio buttons for Not Set, IP, and Host; the Not Set radio button is selected), and SIP Proxy Name.

9. Enter IPedge IP address. Port 5060.

Basic ISDN Programming

1. Go to System > Physical Interfaces
2. Select the t1 O/X interface desired

The screenshot shows the Adtran TA908e Management Interface in a Windows Internet Explorer browser. The address bar shows the URL <http://172.16.1.155/main/system/interfaces/interfaces.html>. The page title is "Total Access 908e (2nd Gen)". The left sidebar contains a navigation menu with the following items: System (selected), Physical Interfaces, Passwords, IP Services, DHCP Server, Hostname / DNS, LLDP, and SNMP. The main content area is titled "Physical Interfaces" and contains a table listing all physical interfaces. The table has four columns: Name, Logical Interface, Line Status, and Type. The table lists 16 interfaces, including WAN-T1, Ethernet, FXO, and FXS. The status of each interface is indicated in the Line Status column. Below the table, there is a "Statistics Rate Interval" section with a dropdown menu set to 300 and an "Apply" button.

Name	Logical Interface	Line Status	Type
11_0/1	none	TxYellow, Red, LOS	WAN-T1
11_0/2	none	TxYellow, Red, LOS	WAN-T1
11_0/3	pri_1	Up	WAN-T1
11_0/4	none	Up	WAN-T1
eth_0/1	none	100Mbps/half	Ethernet
eth_0/2	none	Interface Disabled	Ethernet
fxo_0/0	none	OnHook	FXO
fxo_0/1	none	OnHook	FXS
fxo_0/2	none	OnHook	FXS
fxo_0/3	none	OnHook	FXS
fxo_0/4	none	OnHook	FXS
fxo_0/5	none	OnHook	FXS
fxo_0/6	none	OnHook	FXS
fxo_0/7	none	OnHook	FXS
fxo_0/8	none	OnHook	FXS

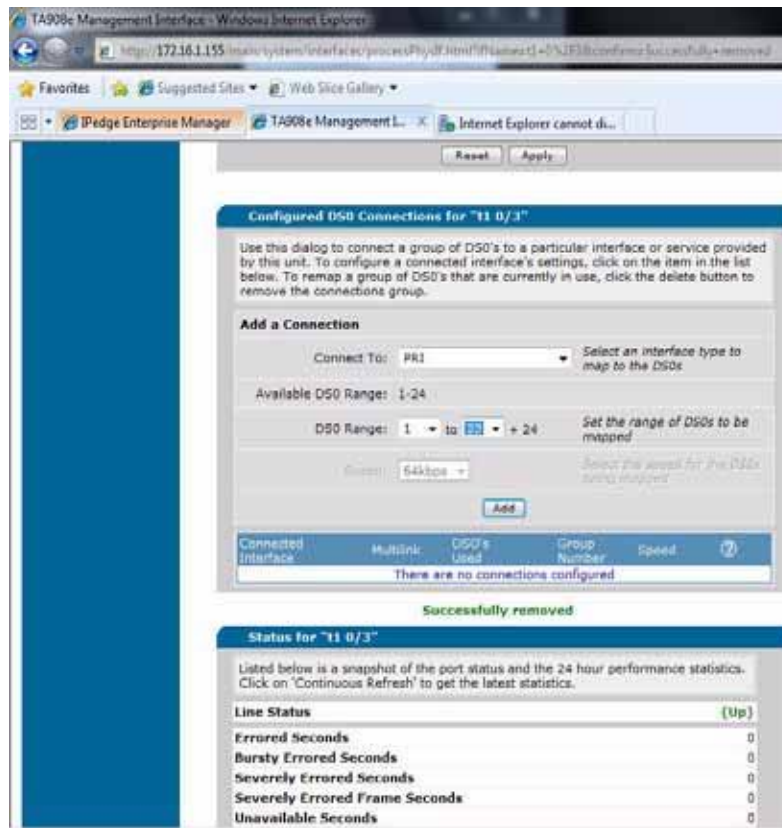
Statistics Rate Interval: 300 Statistics Rate Interval (in seconds)

Apply

3. Set Enable and PRI parameters



4. Add DSO's (the channels)



5. Configure the channels

Adtran Total Access 908e (2nd Gen)

Physical Interfaces > TE 8/3 > PRI Config

PRI Configuration

Basic configuration for PRI interface.

Description:	pri 1	
SNMP Alias:		
Enabled:	☐	
Switch Type:	National ISDN 2	
Protocol Emulation:	Network	
B-Channel Restart:	☐ Enabled	
Resource Selection:	Auto	
Name Delivery:	none	
Digits Transferred:	All	
Digit Prefix:		

Cancel Apply

6. Create the DSO parameters.

Adtran Total Access 908e (2nd Gen)

Physical Interfaces > TE 8/3 > PRI Config

PRI Configuration

Basic configuration for PRI interface.

Description:	ISDN PRI	
SNMP Alias:		
Enabled:	☐	
Switch Type:	National ISDN 2	
Protocol Emulation:	Network	
B-Channel Restart:	☐ Enabled	
Resource Selection:	Auto	
Name Delivery:	none	
Digits Transferred:	All	
Digit Prefix:		

Cancel Apply

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