

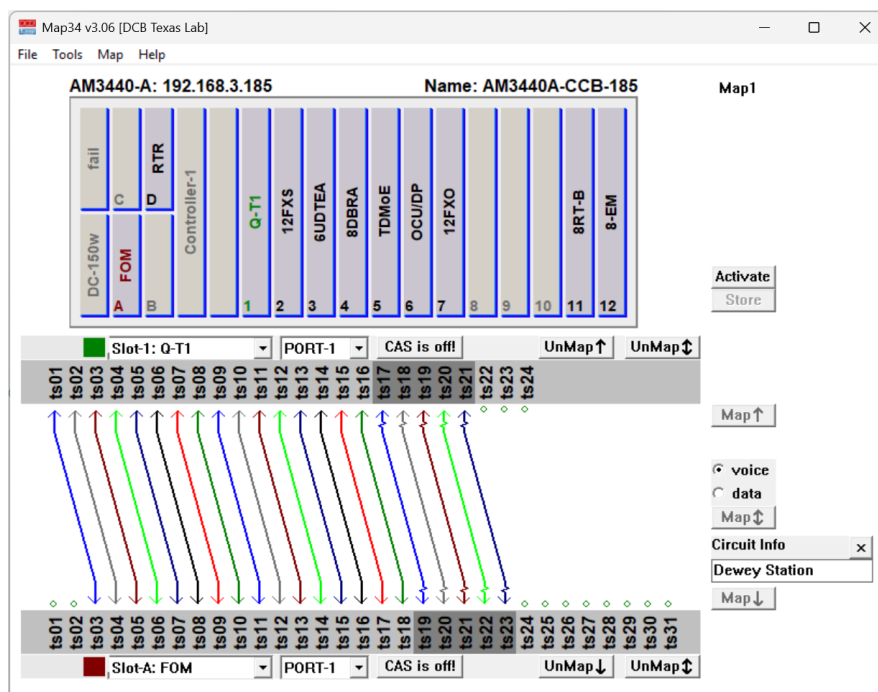


Map34

Mapping Software for Loop

AM3440

User's Guide



Link to check for upgrades to the latest Map34 version: <http://www.dcbnet.com/datasheet/map34ds.html>

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Revised February 2026
Revised for Map34 - Version 3.06

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Chapter 1

Introduction

This chapter provides an overview of the Map34 software features and capabilities.

Congratulations on the purchase of the Map34 graphical mapping software. Map34 is simple, easy to use visual mapping software for the Loop Telecom AM3440 A, B, C and D multi-services cross connect platforms. By default, the AM3440 uses a VT100/telnet user console for card configuration, system configuration, mapping, etc. As more cards are added to the AM3440 platform, cross connecting (mapping) DS0s can become confusing and time consuming using the serial/telnet console. Map34 provides clarity using graphical representation, speeds up cross connect mapping and documentation.

Productivity Software for AM3440 Configuration

Map34 software is productivity software with graphical mapping. Map34 is a craft tool that fills the gap between the serial/telnet console and complex network management and circuit provisioning systems.

Configure AM3440 Tributary Cards

Map34 is used for the TSI (Time-Slot Interchange) cross connect, commonly called “mapping”. System configuration and tributary card configuration are performed using the serial/telnet console port. For example, T1 framing and line build out, router card tributary configuration, voice tributary card dB levels, etc., are configured using the console port.

Map34 Export and Import Functions

Map34 software has cross-connect map export and import functions. TSI (Time-Slot Interchange) cross-connect maps can be exported in a comma delimited (csv, or comma separated values) format for import into spreadsheets or in text form for word processors. Create system documentation quickly and efficiently with the export function. Spreadsheet files may be modified offline and imported back into the AM3440, creating or modifying the time-slot cross connect map. **User added rows beginning with “#” are ignored on import. Additional descriptive columns can be added after the 10 columns that contain the mapping data.**

Windows Compatibility

Map34 is a 32-bit Windows application. It is compatible with both 32-bit and 64-bit versions of Microsoft Windows 10 and 11.

Map34 Licensing

Map34 software is licensed per controller. Each AM3440 requires one or two license keys, one per controller. One license file (.lcf) is created per AM3440. Once Map34 and a license is purchased, it can be distributed to an unlimited number of PCs and used by an unlimited number of technicians on that AM3440. Licenses are available from DCB and can be granted almost immediately using email.

Map34 software accesses the local license (.lcf) file each time a connection is made to an AM3440.

Map34 Enterprise Licensing

Map34 software is also available under an enterprise license agreement. Once an enterprise license is activated, it is not necessary to configure a per controller license. Please contact your DCB sales representative for details.

Map34 and SNMP Version 1 or Version 3

Map34 uses SNMP commands to communicate with the AM3440. Therefore, Map34 requires an Ethernet connection to the AM3440. Map34 supports both SNMP Version 1 and SNMP Version 3. (The AM3440 does not support SNMP Version 2.) SNMP Version 3 uses authentication keys for secure connections.

Demonstration Version

For demonstration purposes, Map34 is available with a 30-day demo license. Please contact either your DCB sales representative, call DCB at 217-897-6600, or send email to: sales@dcbnet.com.

Map34 Applications

Map34 is an ideal tool for telecommunications technicians who work with the Loop AM3440 products. The learning curve for mapping the AM3440 is dramatically reduced. Accuracy is increased.

Once an AM3440 is in service, changes are intermittent. Graphical representation of the mapping and the simplicity of the visual process makes recall of the mapping process much faster.

Other Features

Visual Highlight and Click Mapping

To map a DS0 or multiple DS0s, DS0s to be mapped are highlighted and the “Map” button is clicked. Un-mapping uses the “UnMap” button. Analog DS0s are visually differentiated from digital DS0s.

Saves Time

Every DS0 mapping operation reduces a couple of dozen terminal key presses to a simple highlight and click operation. Visual mapping can save hours of mapping for a loaded AM3440A chassis.

Increases Accuracy

Links between feature cards are visually displayed. The visual display with varied colors is much easier to understand than row and column presentation of DS0 mapping.

Auto-Selection of Voice or Data

The mapping software automatically selects voice or data when low-speed feature cards are mapped. E&M cards are unique. E&M cards can be set to voice or data, whether set to Transmit Only (TO) or Tie Line Types I through V.

Change CAS OFF to ON Without Tedious Re-Mapping

Map34 stores the current mapping, next un-maps everything, changes the CAS setting, then re-maps automatically.

Short Learning Curve

Visual mapping is more intuitive. More of the mapping options are on the single mapping screen.

Small Program Footprint

The mapping software is a small, efficient program. Users can open multiple program copies when configuring multiple AM3440s to better visualize the communications links.

Chapter 2

Installing the Map34 Program

This chapter details the installation process.

Overview

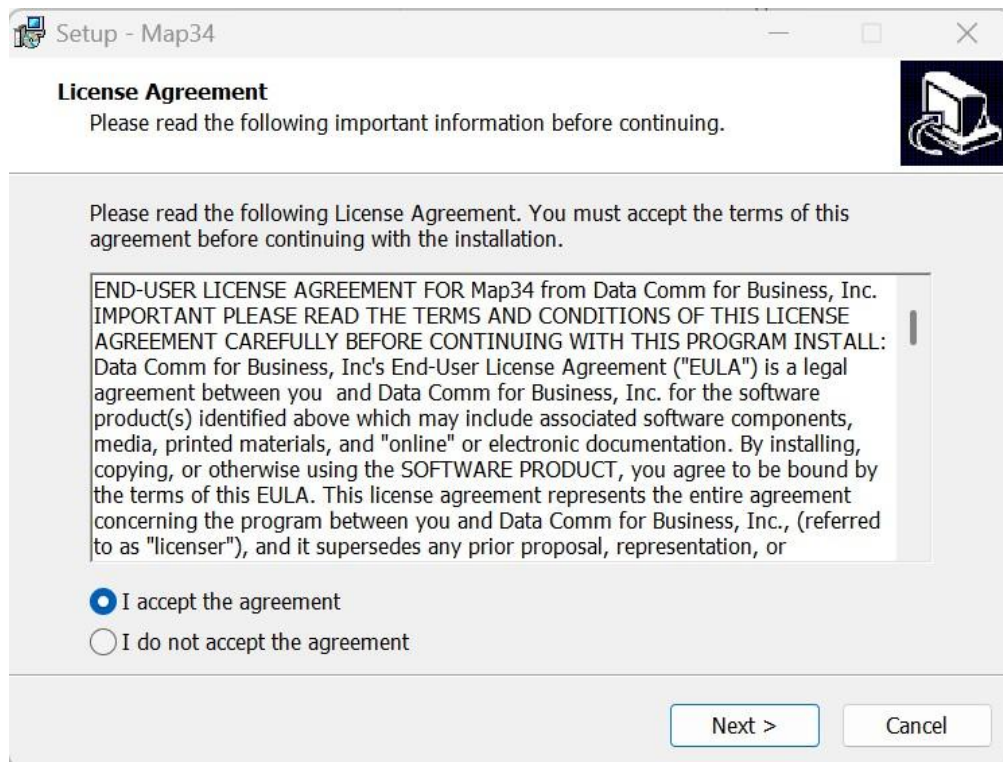
Map34 comes as an installer file for Microsoft Windows 10 and 11. To install the software, execute the file with a name similar to "Map34_v3_06.exe". Please follow the on-screen procedures to complete the installation. The following three questions will be asked during the installation process: acceptance of the End User License Agreement (EULA), the installation location of Map34, and if the creation of a desktop icon for Map34 is desired.

Installation

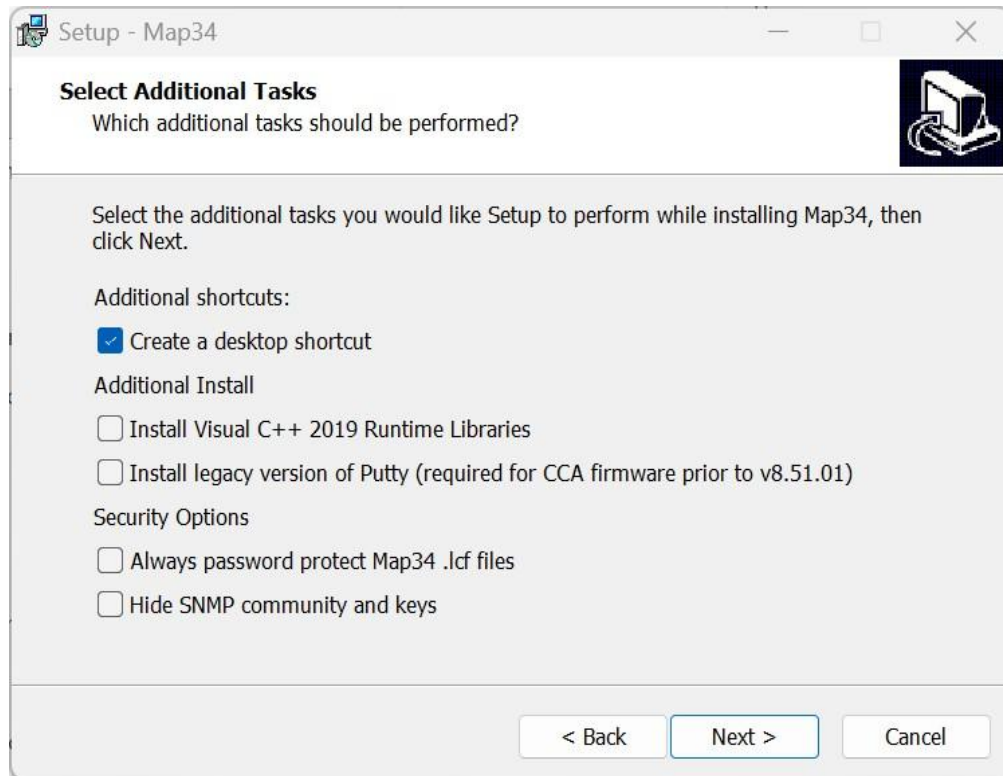
Run Map34 Setup File

Run the file "Map34_v3_06.exe". The screens displayed are listed in sequence below. Follow the on-screen instructions. NOTE: If an older version of Map34 is already installed on your system, it is not necessary to remove it before installing a newer version of Map34.

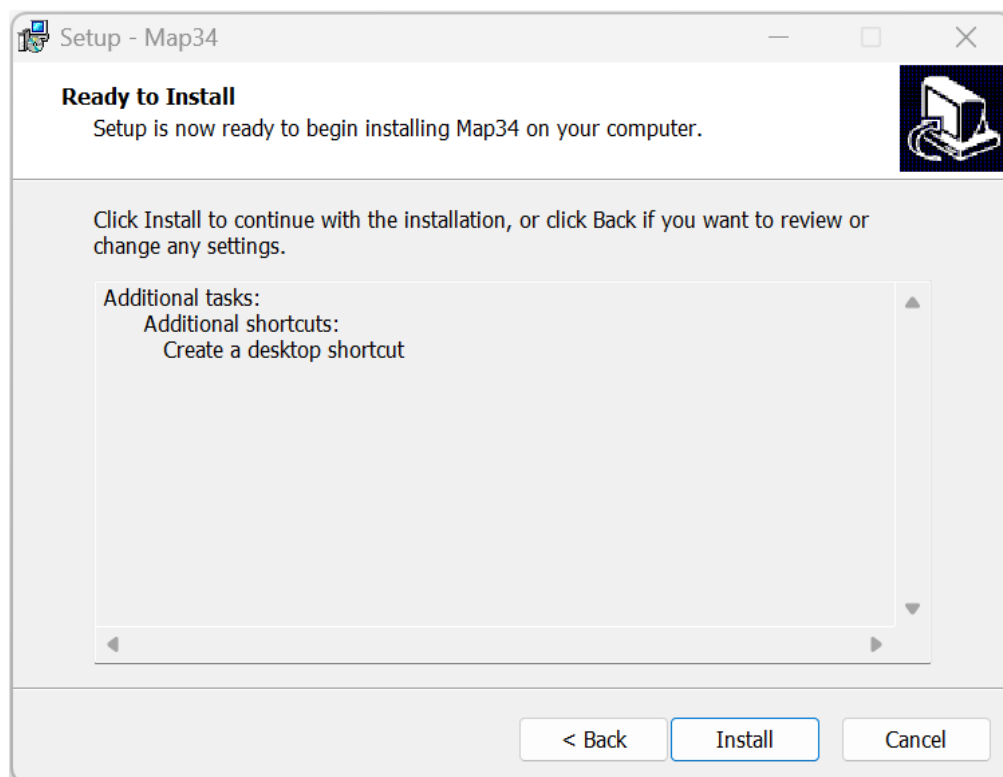
The license agreement must be accepted to continue the software installation.



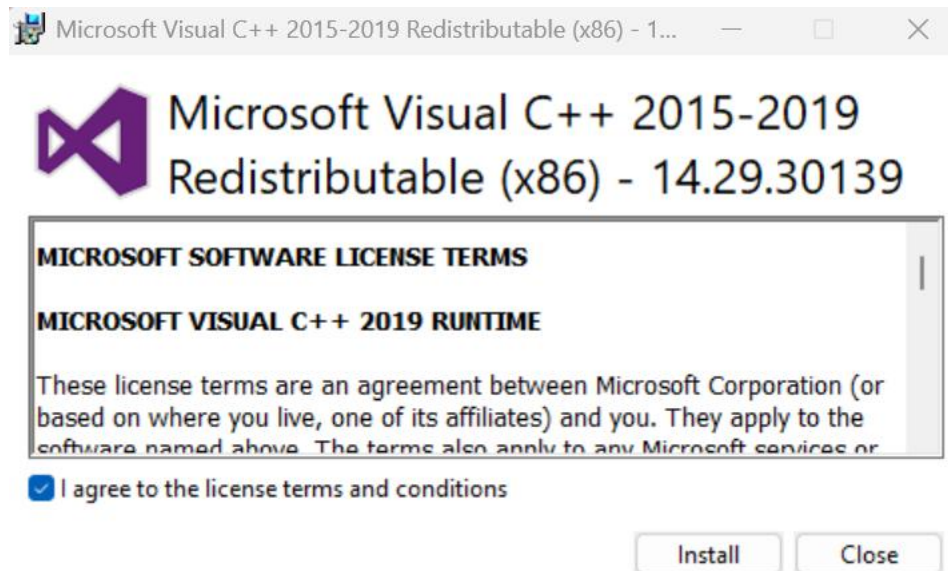
Choose whether to create a desktop icon.



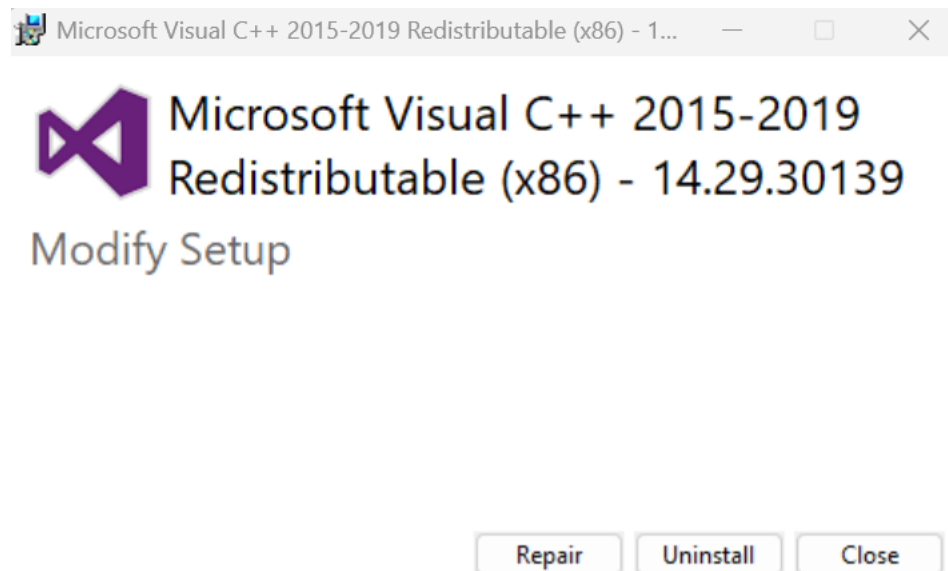
Click on “Install” to proceed with the program installation. The program typically installs in less than a minute.



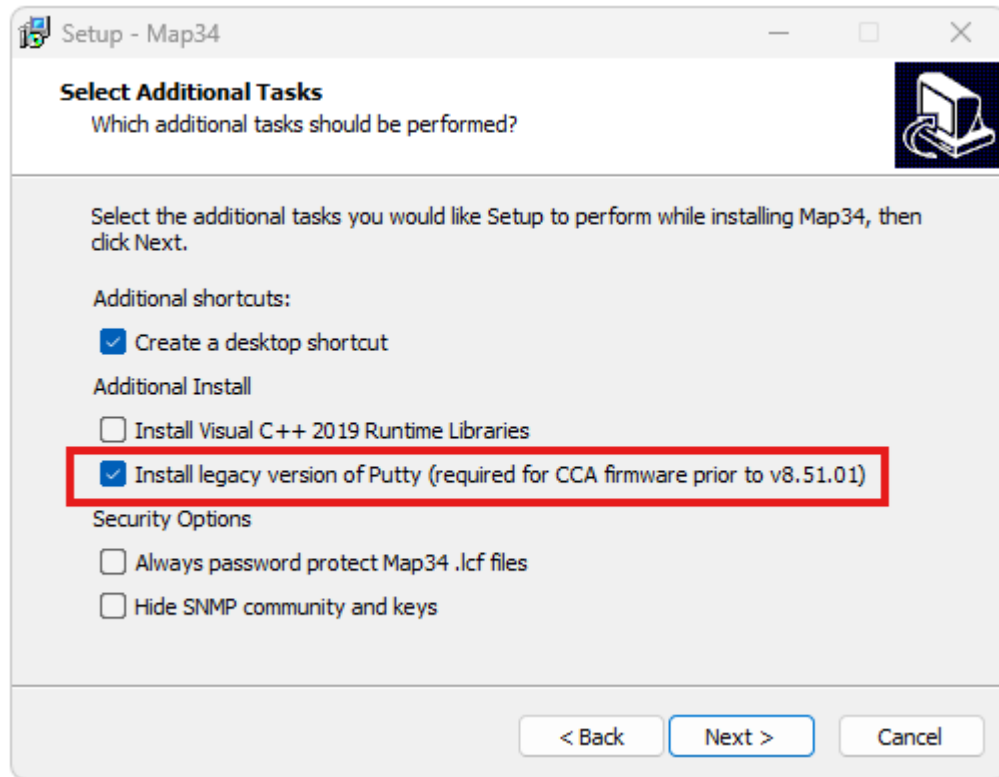
After the Map34 files are installed and if you checked the “Install Microsoft Visual C++ 2019 run-time libraries,” the pop-up window below will appear. Click in the “I agree” box and click on “Install.”



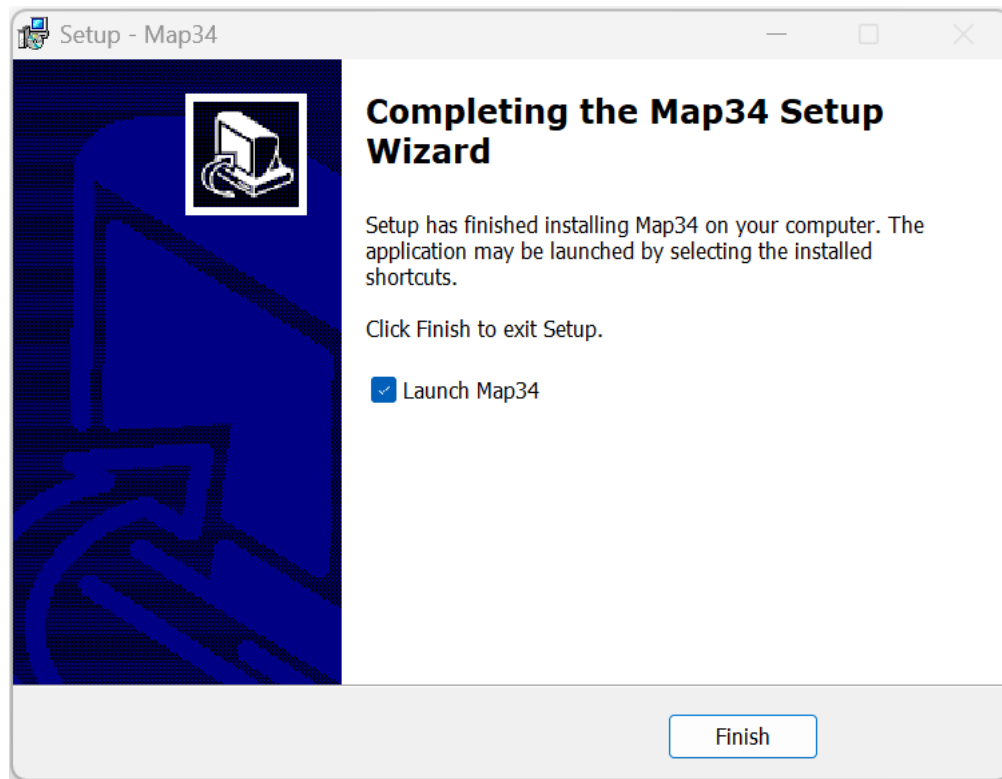
During the Map34 installation, if the Microsoft Visual C++ 2019 run-time libraries are already, the following screen will appear. If this occurs just click the “Close” button and the installation will be complete. Once these Microsoft Visual C++ libraries are installed, the run-time libraries will be automatically updated, as needed, by the Windows Update system.



Install the legacy version of PuTTY if being used with an AM3440 CCA controller that uses controller firmware older than v8.51.01.



The program is now installed. If the box “Launch Map34” is checked, the program will be launched when the “Finish” button is clicked.



Start the Map34 Program

Click on the screen icon or run Map34 from the Program Manager.

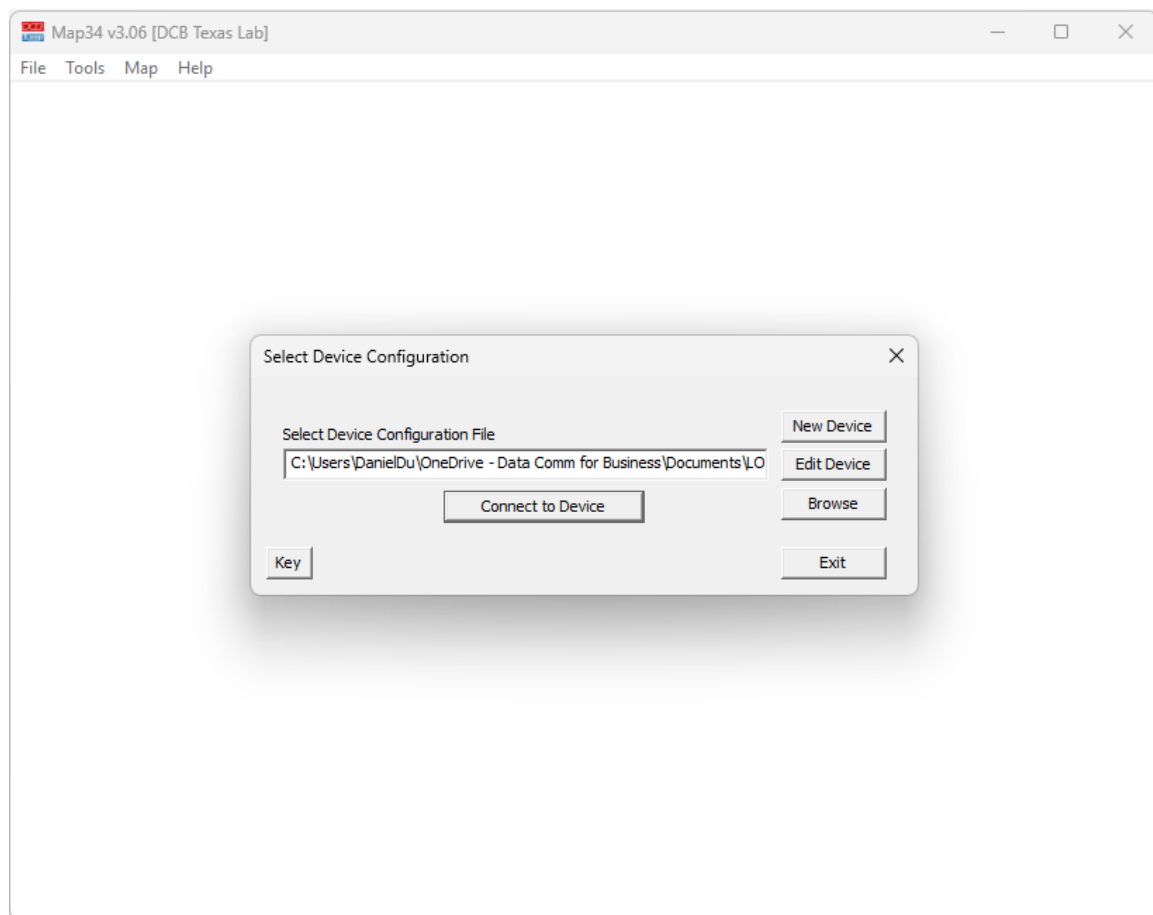
Chapter 3

Creating License Files

This chapter describes the process for creating license files. A license file is required for each AM3440 that is managed.

Overview

License files are created for each AM3440 unit. An AM3440 has one or two controllers. The controller serial numbers are used to create a 16-digit license key. The serial number(s) and the 16-digit license key are used to create the license key file (.lcf). One .lcf file is created for each AM3440.



Edit Device Configuration

Basic information is entered in the "Edit Device Configuration" screen.

Entering Device Configuration Information

1. Enter the **IP address** of AM3440.
2. Select SNMPv1 or SNMPv3. The details entered must match the AM3440. For example, for SNMPv1, the “Get Community” and “Set Community” must match between the .lcf file and the AM3440. For SNMPv3, an SNMPv3 username and the correct encryption protocols are required.
3. The “Endpoint Comment File” is a file/path where an additional optional file can be created/accessed to allow for the storage of additional names for endpoints and cross connects. See the later section for more details.
4. Enter the **controller serial number(s)** and the **controller license key(s)** provided to match that controller card serial number(s).
5. The “Edit Device Configuration” screen has an option to **probe** the AM3440 for the **controller serial numbers**. The serial numbers can also be obtained from the serial/telnet screens of the AM3440.

Completed Device Configuration-screen

The sample *Edit Device Configuration-screen* below has the **controller serial number** and **license key** entered the fields near the bottom of the screen.

Edit Device Configuration

IP Address or Host Name: 192.168.3.238

Device File Name: C:\Users\ddu\Documents\238.lcf

☒ SNMPv1 ☐ SNMPv3 ☐ view community and keys

Get Community: *****

Set Community: *****

Context:

User Name:

Auth Protocol: ☐ MD5 ☐ SHA ☒ None

Auth Key:

Priv Protocol: ☐ DES ☐ AES ☒ None

Priv Key:

Endpoint Comment File:

Controller-1 Serial Number: 114

Controller-1 License Key: E3AD-8E7F-EA0C-06EE

Controller-2 Serial Number: 240

Controller-2 License Key: B428-D400-6753-BAEE

☐ Save As encrypted file

Password:

Verify Password:

Click on the “Save As” button to complete the configuration.

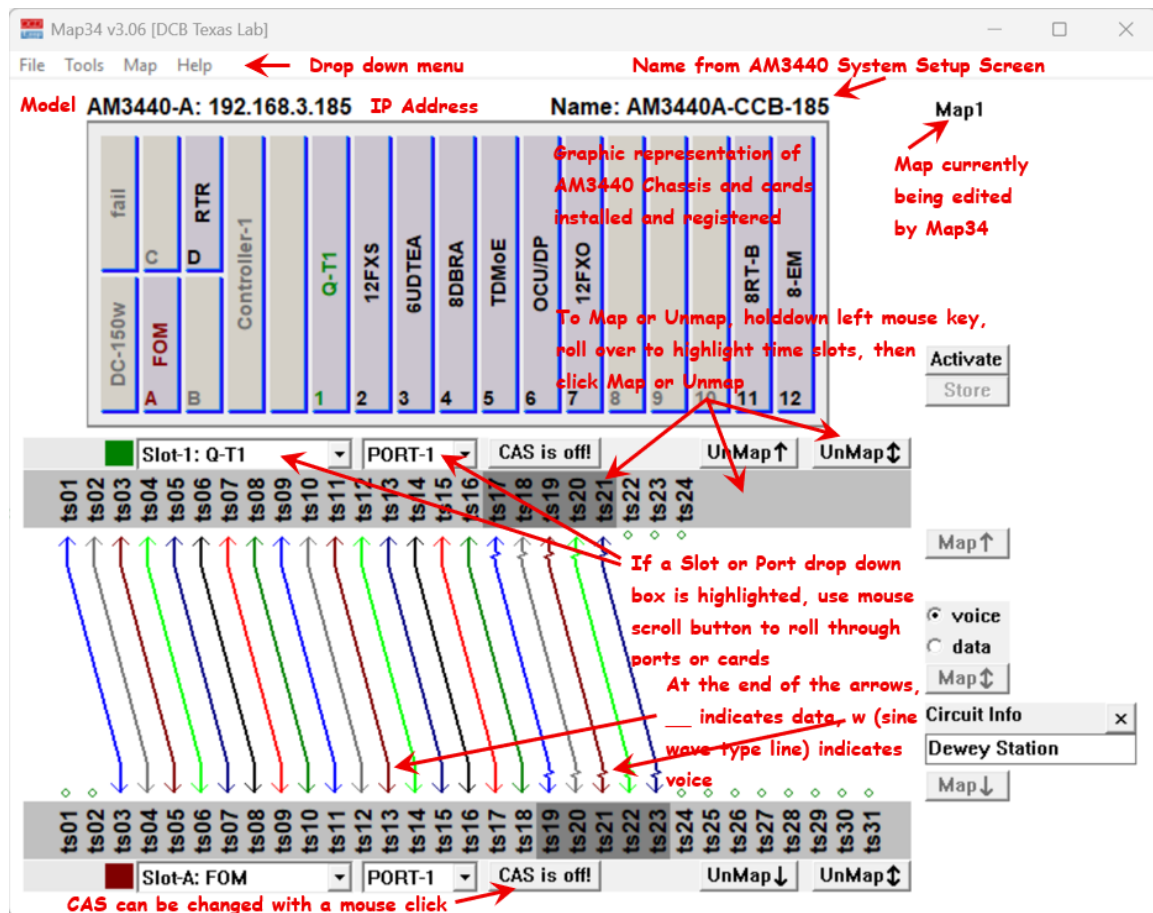
Chapter 4

Using *Map34*

This chapter describes how to use the Map34 program.

Overview

There is a single main screen for mapping operations. See chapter 6 for ULSR (SONET-type ring topology for T1/E1) mapping, which uses a different screen. The Map34 main screen showing a partially populated AM3440 is shown below. The illustration is annotated with explanatory notes and arrows in red.

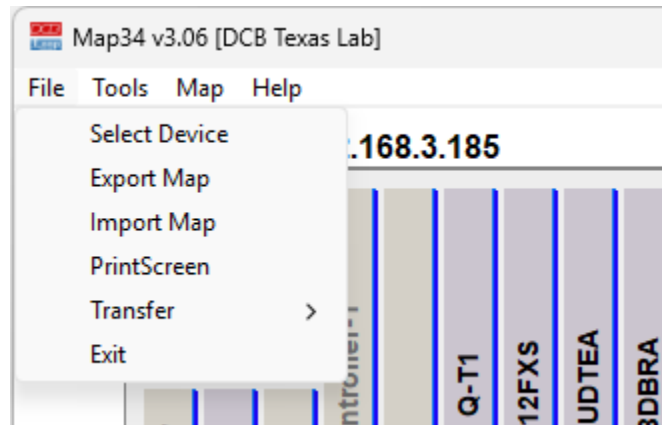


Map34 Main Screen Annotated

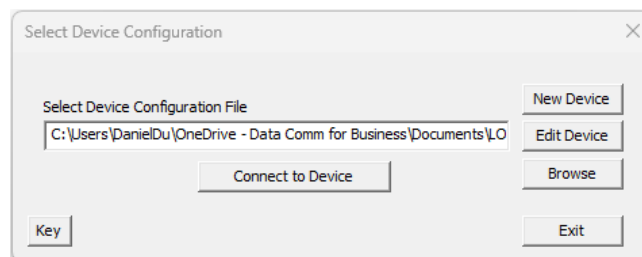
Drop-Down Menus

File Menu

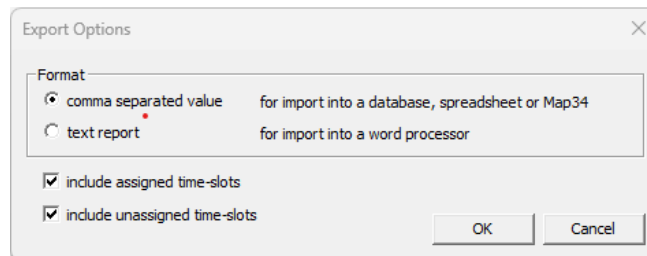
The **File** menu has options to **Select Device**, **Export Map**, **Import Map**, **PrintScreen**, **Transfer**, and **Exit** the program.



1. **Select Device** will open the same window the users see when the Map34 program is initially opened. Options are to **Connect to Device**, connect to a **New Device** (entering a new license key file), **Edit Device** (an existing device license key file), **Browse** for an existing license key file, or **Exit** the program.



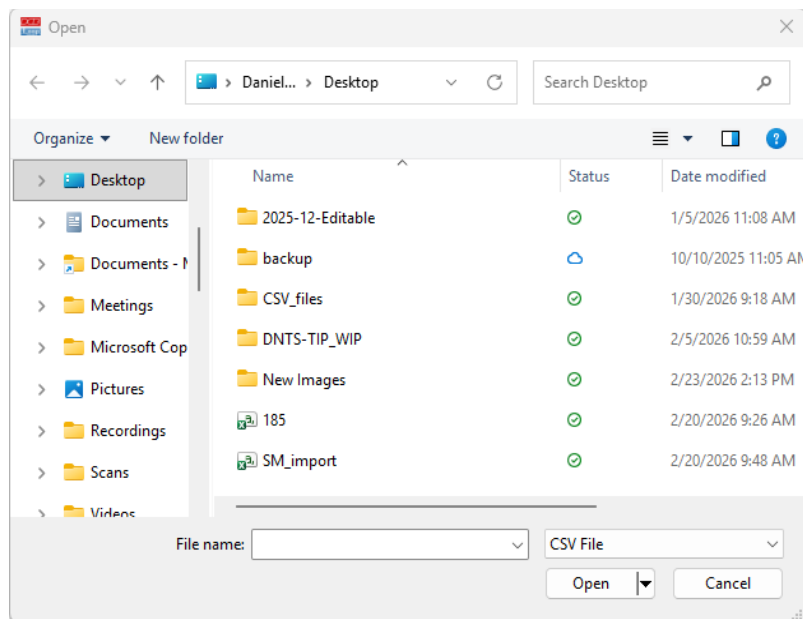
2. **Export Map** exports the cross-connect map in comma separated value (csv) format or text (txt) format and can include assigned time-slots, unassigned time-slots, or both.



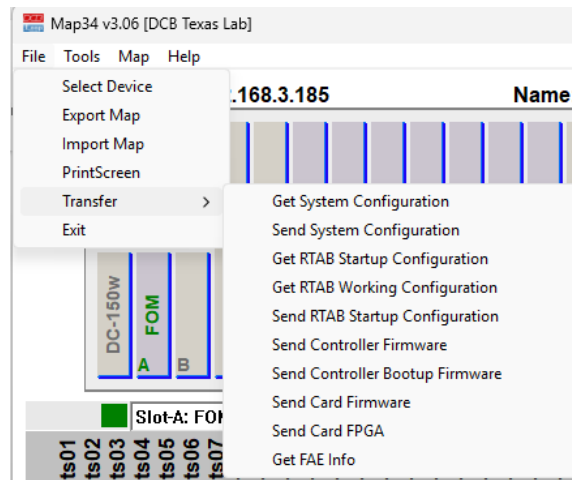
The map, after the .csv file export, formatted in a spreadsheet, looks like the sample below:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Device_No	Target_Card	Target_Slot	Target_Port	Target_TS	Source_Card	Source_Slot	Source_Port	Source_TS	Chan_Type	Target_Circuit_Info	Source_Circuit_Info	
2	AM3440A-	FOM	A	1	1 Q-T1		1	1	1	1 data			
3	AM3440A-	FOM	A	1	2 Q-T1		1	1	1	2 data			
4	AM3440A-	FOM	A	1	3 Q-T1		1	1	1	3 data			
5	AM3440A-	FOM	A	1	4 Q-T1		1	1	1	4 data			
6	AM3440A-	FOM	A	1	5 Q-T1		1	1	1	5 data			
7	AM3440A-	FOM	A	1	6 Q-T1		1	1	1	6 data			
8	AM3440A-	FOM	A	1	7 Q-T1		1	1	1	7 data			
9	AM3440A-	FOM	A	1	8 Q-T1		1	1	1	8 data			
10	AM3440A-	FOM	A	1	9 Q-T1		1	1	1	9 data			
11	AM3440A-	FOM	A	1	10 Q-T1		1	1	1	10 data			
12	AM3440A-	FOM	A	1	11 Q-T1		1	1	1	11 data			
13	AM3440A-	FOM	A	1	12 Q-T1		1	1	1	12 data			
14	AM3440A-	FOM	A	1	13 Q-T1		1	1	1	13 voice			
15	AM3440A-	FOM	A	1	14 Q-T1		1	1	1	14 voice			
16	AM3440A-	FOM	A	1	15 Q-T1		1	1	1	15 voice			
17	AM3440A-	FOM	A	1	16 Q-T1		1	1	1	16 voice			
18	AM3440A-	FOM	A	1	17 Q-T1		1	1	1	17 voice			
19	AM3440A-	FOM	A	1	18 Q-T1		1	1	1	18 voice			
20	AM3440A-	FOM	A	1	19 Q-T1		1	1	1	19 voice			

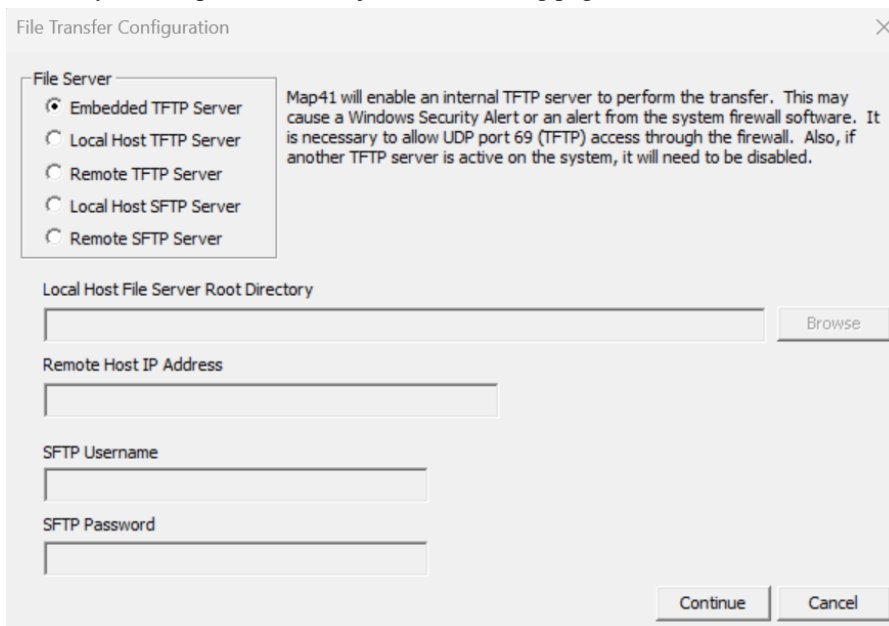
3. **Import Map** imports the map from a csv spreadsheet. The imported map must be in the same format as it was exported. It is recommended that a map be exported and examined to see the format required for a map to be imported. A sample of the exported map, as expressed in a spreadsheet, is illustrated above. Comment rows beginning with “#” can be added. Additional descriptive columns can be added after column “J”. The added “#” rows and descriptions following column J are ignored on import. The **Import Map** feature provides a way for a map to be modified offline, to be restored to an earlier version, to be moved to a different unit, etc. Selecting **Import Map** brings up a standard Windows file selection menu as shown below. This may differ slightly based on view options.



4. **PrintScreen** sends a snapshot of the Map34 window to a printer.
5. **Transfer** contains a sub-menu that facilitates: a) saving and loading configuration files for both the AM3440 itself, as well as RTA and RTB plug-in cards (if installed), and b) installing new firmware for the AM3440 and for certain plug-in cards that might be installed in the system.
NOTE: The AM3440 used in the examples below contains an eight-port Router B (a.k.a. RTB, 8RT-B, RTAB) card.



Click any of the options of **Transfer**, the following page will show.



Embedded TFTP Server – a TFTP server that is bundled with Map34.

Local Host TFTP Server – use a TFTP server that is currently running on the same PC / laptop that is currently running Map34.

Remote TFTP Server – use a TFTP server that is on the network and reachable by the PC / laptop that is currently running Map34.

Local Host SFTP Server – use a SFTP server that is currently running on the same PC / laptop that is currently running Map34.

Remote SFTP Server – use a SFTP server that is on the network and reachable by the PC / laptop that is currently running Map34.

NOTE: SFTP requires the use of a username and password for an account on the SFTP server.

Get System Configuration save (“get” from the AM3440) the working AM3440 configuration as a .cfg file and save to your PC using Map34’s internal TFTP server. This .cfg file contains user accounts, group accounts, and passwords. System configuration files include the current TSI mapping. Router A and B tributary cards, however, are unique and sufficiently complex to require most of their configuration to stay on the card, rather than in the controller. Only the TSI mapping from Router A and B cards to other cards is stored in the controller. There is a separate process for Router A and B configurations. See below.

NOTES: a) If another TFTP server is already running on your PC, shut it down before completing this operation. b) A pop-up window may appear requesting approval to unblock the TFTP port in Windows Firewall.

Send System Configuration load ("send" to the AM3440) a .cfg configuration file into the AM3440.

Get RTAB Startup Configuration save the startup configuration of the RTR-A (a.k.a. Router A, RTA, RTAB) and 8RT-B (a.k.a Router B, RTB, RTAB) plug-in card(s) to a file on your PC.

Get RTAB Working Configuration save the working (currently running) configuration of the RTR-A and 8RT-B (RTAB) plug-in card(s) to a file on your PC. NOTE: If changes to the working configuration file are not saved, it is possible that the working configuration and the startup configuration are different.

Send RTAB Startup Configuration load a configuration file into the RTR-A and 8RT-B (RTAB) plug-in card as the startup configuration.

Send Controller Firmware loads controller firmware into the AM3440.

Send Controller Bootup Firmware loads controller bootup codes into AM3440.

Send Card Firmware loads tributary card firmware into selected plug-in cards.

Send Card FPGA loads PFGA code into selected plug-in cards.

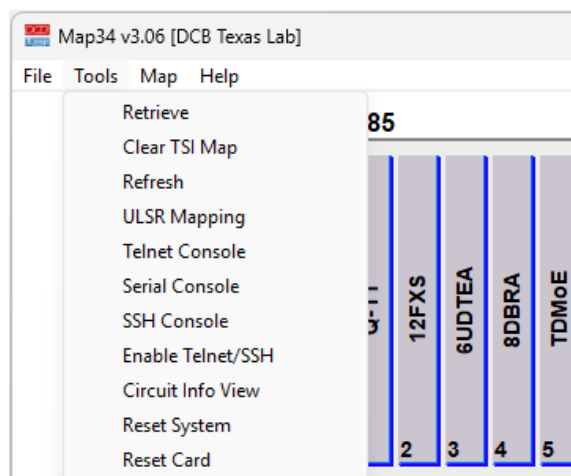
Get FAE Info save FAE (Field Application Engineering) information.

6. The following plug-in cards are supported for firmware upgrades through Map34:

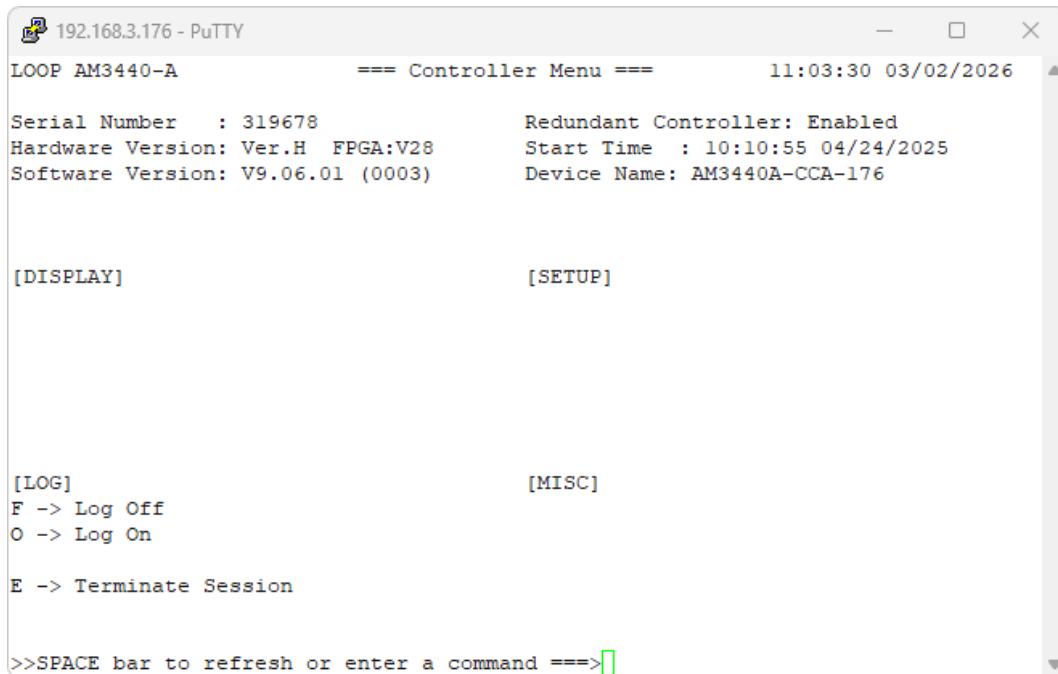
8RS232RJ	8RS232DB	DTU-10	DTU-6	8-EM
12FXS	12FXO	Q-E1	Q-T1	V.35-A
V.36-A	X.21-A	GSHDSL-2	GSHDSL-4	RTR-A
8RT-B	RS232-8	TDMoE	8DBRA	8UDTE

Tools Menu

The **Tools** menu has options to **Retrieve** a TSI map, **Clear TSI Map**, **Refresh** the TSI map, configure **ULSR Mapping**, open a **Telnet Console** connection, and open a **Serial Console** connection, open an **SSH Console** connection, **Enable Telnet/SSH**, load a “circuit info” file stored on a PC with the **Circuit Info View** option, reboot controllers with the **Reset System** option, and reboot tributary cards with the **Reset Card** option.



1. **Retrieve** issues a command to the AM3440 to perform a retrieve operation. This is the same as "retrieve" in the serial/telnet main screen option V – Store/Retrieve Configuration “retrieve” sub-command. The AM3440 re-reads the last stored configuration. After the retrieve operation completes, the Map34 software will automatically do a refresh.
2. **Clear TSI Map** wipes out the current TSI map (Map 1, 2, 3 or 4 as shown on the top-right hand side of the Map34 screen) and returns that map to a completely un-mapped state.
3. **Refresh** causes the Map34 software to re-read the map from the AM3440. This comes in handy if the user goes in with the serial/telnet console and directly modifies the map. It is also useful if there is a communication error between the Map34 software and the AM3440 and Map34 gets out of sync. Some of the Map34 error messages will instruct the user to do a refresh.
4. **ULSR Mapping** is used to map ULSR – PDH rings. This choice opens a special mapping window for ULSR mapping only. **See chapter 6.**
5. **Telnet Console** opens a telnet session with the AM3440.



192.168.3.176 - PuTTY

LOOP AM3440-A === Controller Menu === 11:03:30 03/02/2026

Serial Number : 319678 Redundant Controller: Enabled
Hardware Version: Ver.H FPGA:V28 Start Time : 10:10:55 04/24/2025
Software Version: V9.06.01 (0003) Device Name: AM3440A-CCA-176

[DISPLAY] [SETUP]

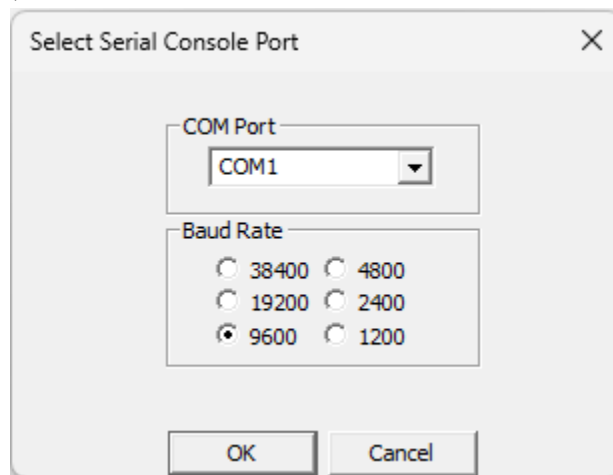
[LOG] [MISC]

F -> Log Off
O -> Log On

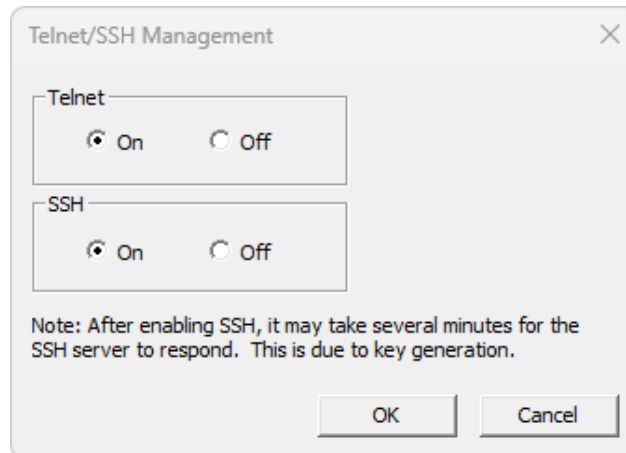
E -> Terminate Session

>>SPACE bar to refresh or enter a command ===>

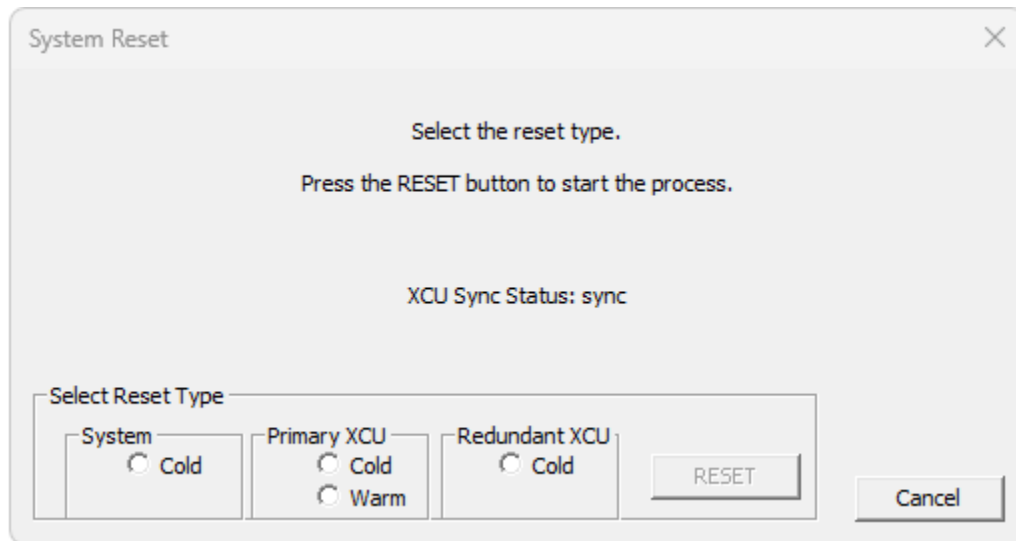
6. **Serial Console** probes the COM ports and virtual COM ports (for example, if a USB to serial adapter is being used) to facilitate a direct serial connection to the AM3440's console port.



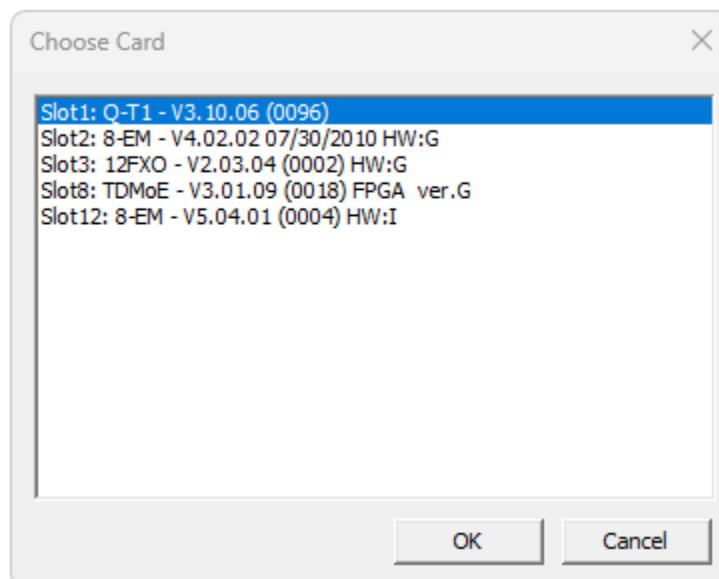
7. **SSH Console** opens a Secure Shell (SSH) session with the AM3440
8. **Enable Telnet/SSH** enable or disable Telnet/SSH



9. **Circuit Info View** to input circuit information. Refer to Chapter 8
10. **Reset System** restart the system (either individual controllers or the whole unit at once)

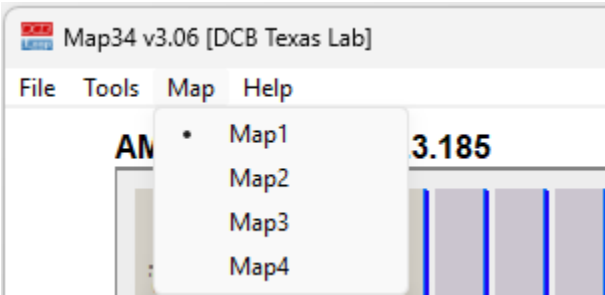


11. **Reset Card** to restart individual tributary cards

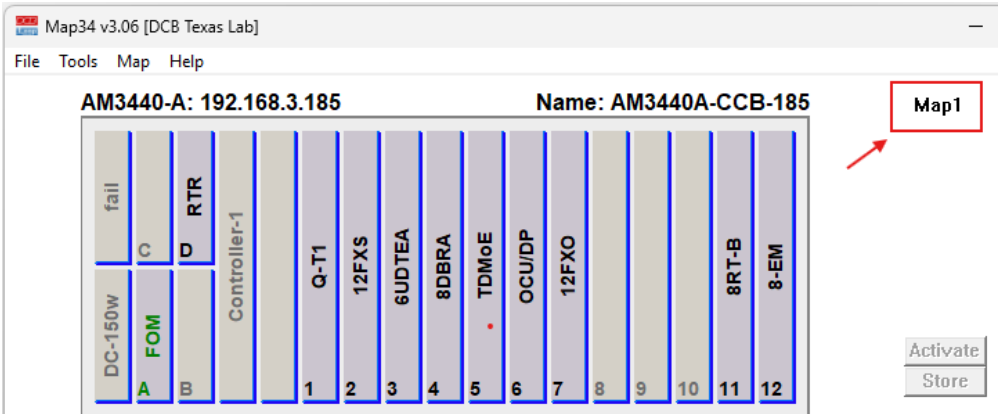


Map Menu

The **Map** menu allows selection of Map1, 2, 3 or 4. The AM3440 has up to four maps. Only one of the maps is working at any time. Most applications use only Map 1. More than one map may be used if there is a need to work on a new map without disturbing a current working map. Maps can also be operational by time-of-day or night. For example, one map may be used during the day to carry primarily voice traffic. At night, a different map may be desired to increase bandwidth for data transfer.

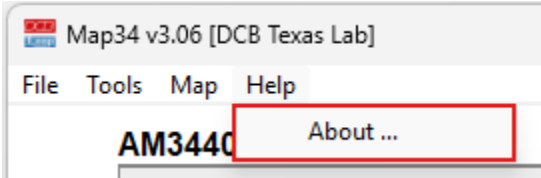


The current map being managed by the Map34 software is shown in the upper-right of the main Map34 screen.



Help

The **Help** drop-down menu has an **About** selection that displays the current software version of Map34.



AM3440 Chassis Image

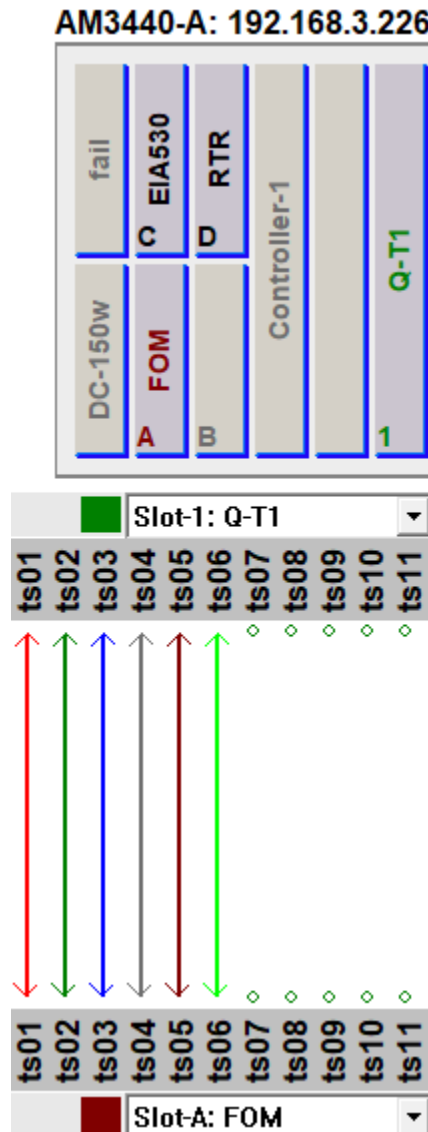
Near the top of the Map34 screen is an image of the AM3440 chassis. Across the top is the chassis type, which can be A, B, C or D, the IP address, and the name assigned to the unit from the SNMP system setup screen. The A, B, C and D chassis will be shown in their approximate dimensions. The A chassis is 5U (five rack units), the B is 2.5U, the C is 3U, and D is 2U.

Name: AM3440A-CCB-185

DC-150w	fail
A FOM	C
B	D RTR
Controller-1	
1	Q-T1
2	12FXS
3	6UDTEA
4	8DBRA
5	TDMoE
6	OCU/DP
7	12FXO
8	
9	
10	
11	8RT-B
12	8-EM

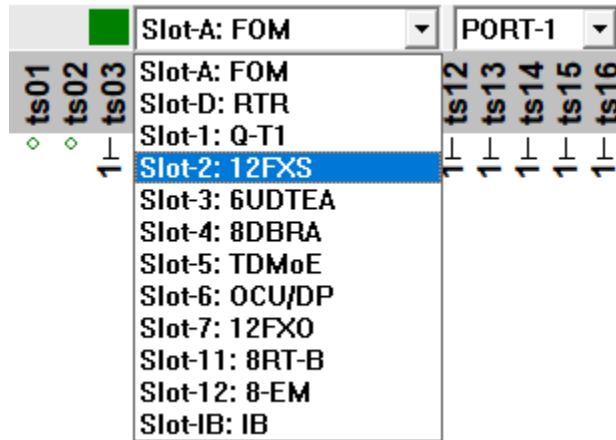
Picking a Card Slot with a Mouse Click

Below is a partial image of the Map34 screen. Note the **red slot A FOM** card and the **green slot 1 Q-T1** card. A left-click will populate the horizontal upper card (below the chassis), a right-click will populate the lower card near the bottom of the screen. The selected card and the horizontal representation of the card slots are **color matched**. **Green** on top matches the Q-T1, **red** on the bottom matches the FOM card.



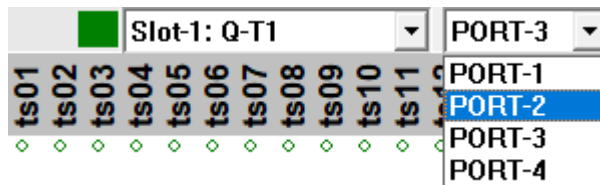
Picking a Card Slot - Time-Slot Drop-Down Boxes

Click on the box with the mouse. Move the mouse over the desired slot and left-click it. If the box is highlighted in blue, scrolling a mouse wheel will scroll through all the registered cards.



Picking a Card Port - Time-Slot Drop-Down Boxes

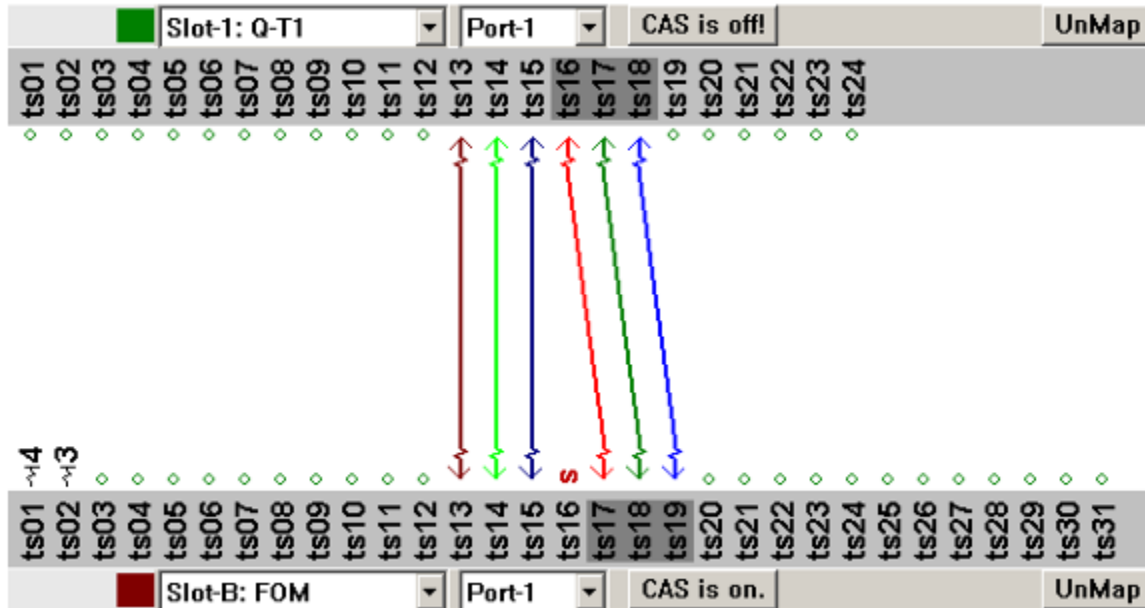
If the card slot has multiple ports, click on the port box. Move the mouse over the desired port and click. If the box is highlighted in blue, scrolling a mouse wheel will scroll through all the available ports. Some of the cards with multiple ports include the Q-T1, Q-E1, FOM, TDMoE, 8DBRA, GDSL, LS Optical, etc.



Turn CAS ON or OFF “On the Fly”

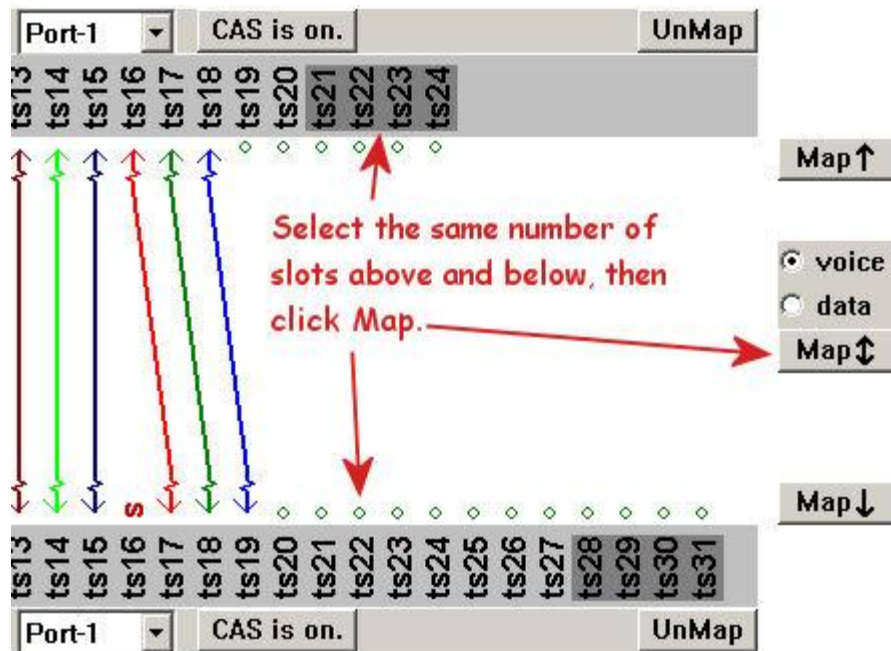
Map34 software allows CAS to be changed from CAS OFF to CAS ON, and CAS ON to CAS OFF “on the fly”. Below, CAS for the Q-T1 card should be ON. A left-click on the “CAS is off!” button will change the CAS from OFF to “CAS is ON”.

This is a significant improvement and huge time saver for users new to the AM3440, or users who may have been in a hurry to map and forgot to turn CAS ON in the serial/telnet card slot configuration-screen. The serial/telnet console requires the map to be manually cleared, then re-entered, if CAS needs to be changed. Map34 can change CAS from OFF to ON automatically with a single click.



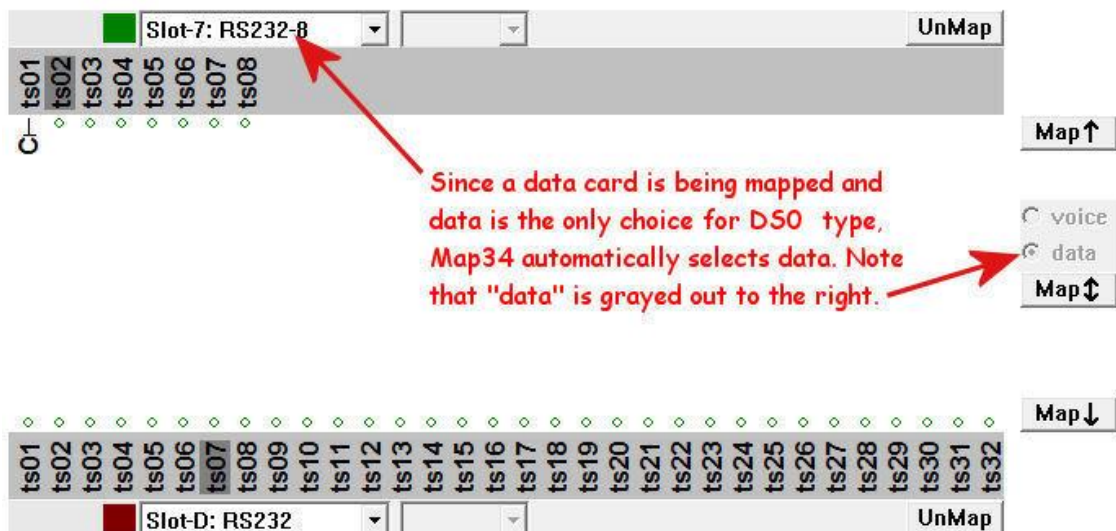
Selecting Time-Slots to Map

Select the time-slots to map by highlighting them. Hold down the left mouse key and slide over the desired time-slots. The time-slots will be highlighted in a darker gray. The same number of slots must be picked on the top and the bottom cards.



Automatic Selection of Voice or Data for Low-speed Cards

Low-speed cards are non-transport cards. Voice low-speed cards are FXS and FXO. Data low-speed cards include the DTE cards, 8DBRA, and 8RS232, Router cards, etc. High speed cards, or trunk circuit cards that can have DS0s manually set for Voice or Data include T1, E1, FOM, GDSL, TDMoE. NOTE: E&M low-speed cards can carry both data and voice. Starting with recent versions of Map34, E&M time-slots can be mapped as either "data" or "voice." "Data" removes robbed bit signaling from the data stream and provides a slight improvement of the signal to noise ratio.



Select Voice or Data for Pass Through Time-Slots

If one transport card is mapped to another (T1 to T1, E1 to E1, T1 over FOM, E1 over FOM, etc.), and not directly to a low-speed voice tributary card, a time-slot may or may not carry voice traffic. If the time-slot does carry voice traffic, the card must be mapped as voice. If the time-slot does not carry voice traffic, the card must be mapped as data. Proper designation of voice or data is required for the voice signaling bits (AB bits or ABCD bits) to pass through the system correctly. **Exception: Types I – V and Transmit Only (TO) E&M cards may be set as data if the E&M leads will not be used, as the ABCD robbed bits are not needed for signaling. Setting an E&M Types I – V or TO circuit to data will improve the signal to noise ratio (SNR) by about 3 dB.** NOTE: If an E&M circuit is set to Types I – V, the relays may chatter. Relay chatter can be ignored or can be suppressed by wiring to the appropriate Type.

Below, the dark gray selected time-slots on the T1 to FOM could be voice or data. To the right of the screen is the voice or data selection. If the time-slots are passing voice, select **voice**. If they are passing data, select **data**.

The screenshot displays the Map34 software interface for configuring time-slot mappings. It features two main sections: Slot-1: Q-T1 (top) and Slot-B: FOM (bottom). Each section has a dropdown menu for Slot, a dropdown for Port, and a checkbox for CAS is on. To the right of each section are buttons for Map, UnMap, and Map selection. The Map selection menu is highlighted with a red box and a red arrow, showing options for voice (selected) and data. The Map selection menu also includes a Map button with a double-headed arrow. The time-slots are listed in two columns: ts01 to ts24 for Slot-1 and ts01 to ts31 for Slot-B. Arrows indicate the mapping between the two slots, with a red arrow pointing to the 'voice' radio button in the Map selection menu.

Bidirectional and 1:N(Multicast)

The AM3440 can be configured for *1:1(Bidirection)* (bidirectional mapping) or *1:N(Multicast)*. This is set in the **System** screen under **System Setup**, using the serial/telnet console. Below is a snippet from the System screen showing the *1:N(Multicast)* selection. If bidirectional mapping is selected, there is only one map choice. If *1:N(Multicast)* is selected, Map34 shows three mapping options: bidirectional with the up and down arrows, or one way with the up arrow or down arrow.

```

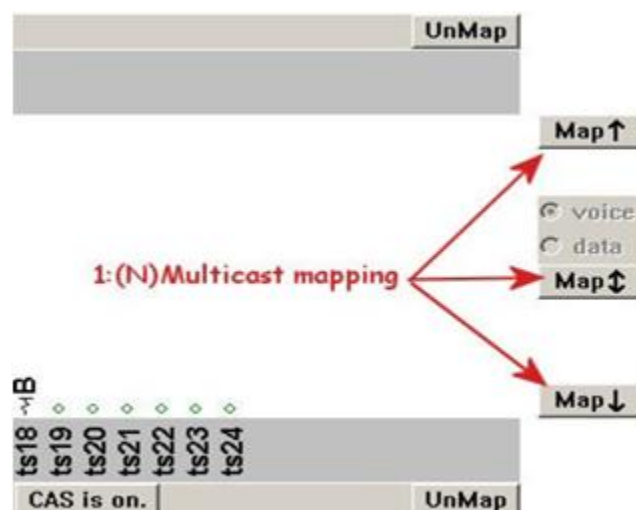
192.168.3.226 - PuTTY
[AM3440A-CCB-226][LOOP AM3440-A CCB](System Setup (SYSTEM)) 09:40:08 02/27/2026
ARROW KEYS: Cursor move; Please Input: hh:mm:ss mm/dd/yyyy, BACKSPACE to edit
[System]
Time/Date      : 09:40:08 02/27/2026
Device Name    : AM3440A-CCB-226
[Network]
Mode: ROUTER
Eth port BPDU: NA
NI  EN  IPAddress      SubnetMask    Frame  LB Timer  Interface
LAN: ON  192.168.003.226 255.255.255.000 Ethernet RJ(electric)
WAN: ON  192.168.100.001 255.255.255.000 HDLC    000000001
Gateway Interface: WAN  Gateway IPAddr: 192.168.100.002
Inband Uses Slot: D
[CONSOLE port]
Baud Rate      : 9600
Data Length    : 8-Bits
Stop Bit       : 1-Bit
Parity         : NONE
XON_XOFF       : XOFF

[TSI map]
TSI Function    : 1:N(Multicast)
Clock Mode     : Normal
Idle Signalling: 1010

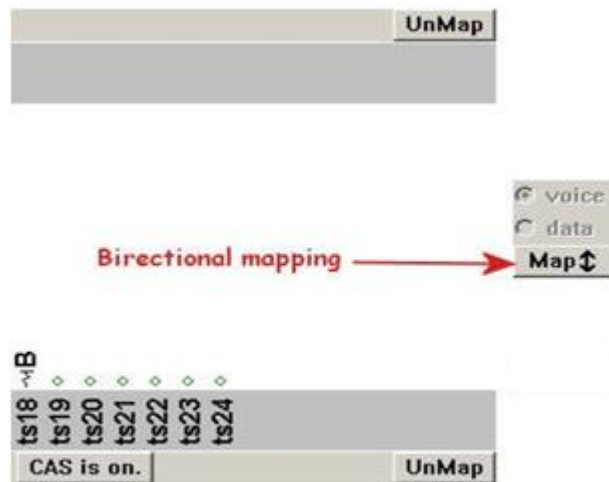
<< Press ESC key to return to previous menu >>

```

1:N(Multicast) mapping can be one direction or bidirectional as shown below. The three choices, up, down or both up and down, are shown only when the System setting is “*1:N(Multicast)*”.



Map one way or bidirectional when the AM3440 system setting is “*1:N(Multicast)*”



When the System setting in the AM3440 is bidirectional, only the two-way mapping button appears. The AM3440 defaults to bidirectional.

Please Note: The CCB, CCPA and later firmware versions of the CCA controller allow unidirectional cross-connects even when the system TSI function is set for **1:1(Bidirection)**. If the controller supports this feature, Map34 will display the unidirectional and bidirectional map and unmap buttons, regardless of the TSI function setting.

Map34 v3.06 [DCB Texas Lab]

File Tools Map Help

AM3440-A: 192.168.3.185 **Name: AM3440A-CCB-185** **Map1**

fail	Q	D	RTR												
DC-150W	FOM	B	Controller-1	Q-T1	12FXS	6UDTEA	8DBRA	TDMoE	OCU/DP	12FXO	8RT-B	8-EM			
A				1	2	3	4	5	6	7	8	9	10	11	12

Slot-1: Q-T1 PORT-2 CAS is off!

ts01 ts02 ts03 ts04 ts05 ts06 ts07 ts08 ts09 ts10 ts11 ts12 ts13 ts14 ts15 ts16 ts17 ts18 ts19 ts20 ts21 ts22 ts23 ts24

UnMap↑ UnMap↕

Map↑

voice
data
Map↕

Circuit Info x

Map↓

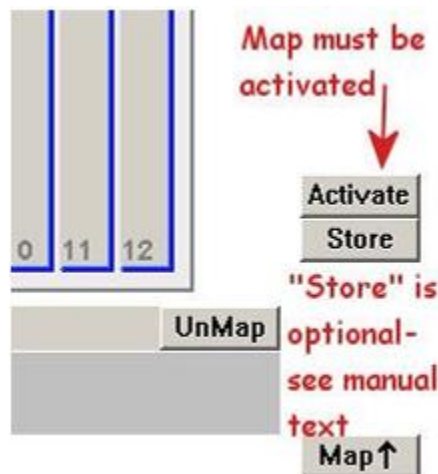
Slot-A: FOM PORT-1 CAS is off!

ts01 ts02 ts03 ts04 ts05 ts06 ts07 ts08 ts09 ts10 ts11 ts12 ts13 ts14 ts15 ts16 ts17 ts18 ts19 ts20 ts21 ts22 ts23 ts24 ts25 ts26 ts27 ts28 ts29 ts30 ts31

UnMap↓ UnMap↕

Activate, Store the Map

The map must be activated with the **Activate** button to become functional. Storing the map can be optional. **Store** takes about 30 seconds to complete. AM3440 units since about 2008 have an automatic save (store) function that defaults to 300 seconds, or five minutes to trigger. Force a store if the AM3440 has older firmware, or if the unit will be powered off before the auto-save timer expires.



The **auto-save** function is accessed through the serial/telnet console. It is under “System Setup”, then “L-Command Line”. A sample screen is below:

```

192.168.3.185 - PuTTY
09:57:50 Feb 25/26  Insert

Press ? get help or QUIT return.
09:57:23 Feb 25/26 >>?
Available Commands:
quit          help          passcode      ssh           ping
fbank         fboot         upgrade       auto_save     inactive
txtcfg       defcfg       force_sync   hwinfo       falicense
ring          hb_check     gateway_check show          card_log
netcap        netperf

09:57:41 Feb 25/26 >>
09:57:42 Feb 25/26 >>auto_save
Command: auto_save [sec], sec: 0=DISABLE, or 30~1000 seconds.
Current Auto Save is 300 seconds.
09:57:52 Feb 25/26 >>

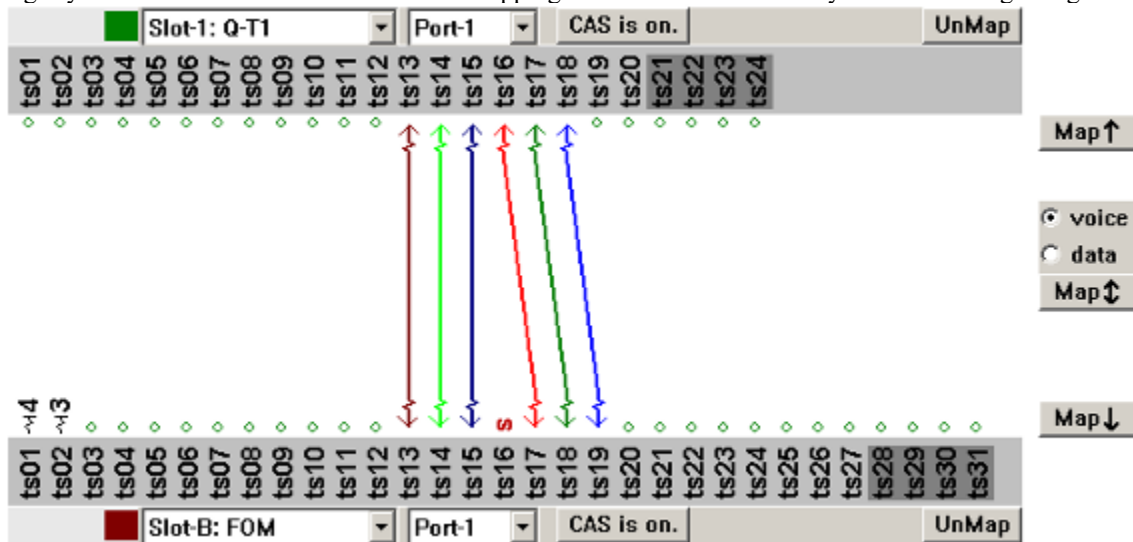
```

FOM (Fiber Optic Module) Cards and Time-Slot 16

The FOM cards have 31 timeslots for each of the four virtual E1 ports. The FOM card also transports timeslots as voice or data. To transport voice, the FOM card timeslot must be set to “FRAME = ON” and “CAS = ON” via the console interface. Note: If CAS is off, it can also be enabled by selecting the **CAS if off!** button.

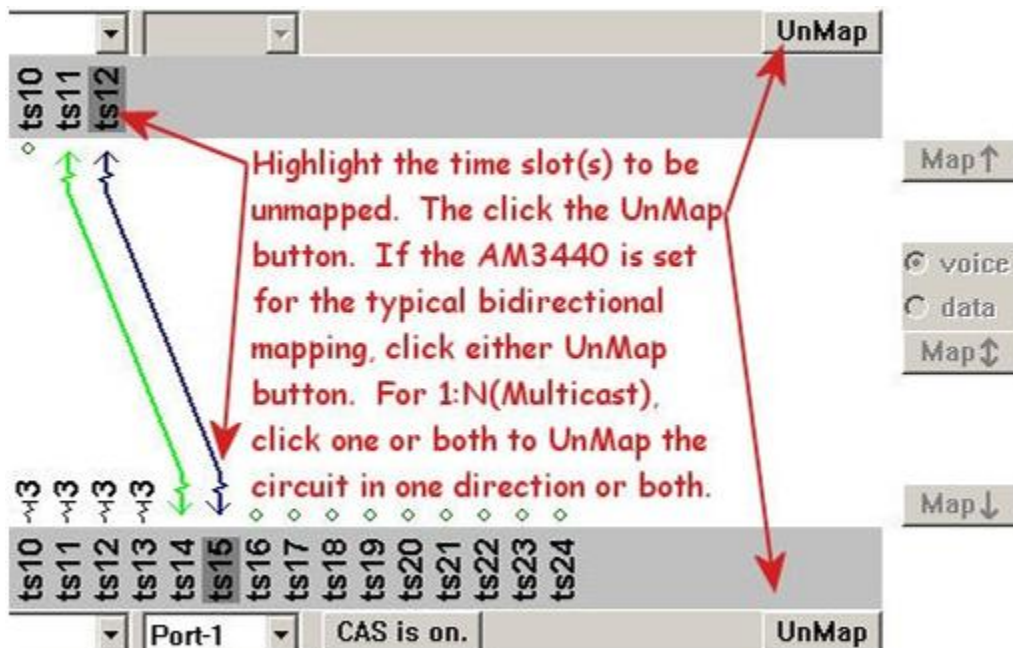
When set to “CAS = ON” to transport voice, timeslot 16 of the virtual E1 is not available for mapping. It is automatically selected for signaling. T1 carries the signaling bits (ABCD bits that signal on-hook, off-hook, ring, etc.) within the DS0 as in-band “robbed bit” signaling.

See the screen shot below. Note that “ts16” at the bottom on the Slot-B FOM card, Port-1 has a red “S” to signify that the channel is not available for mapping. It has been automatically reserved for signaling.



UnMap Time-Slots

Click the card images to select the cards, select the desired port, if it is a multi-port card. The time-slots mapped are shown by the colored lines connecting the time-slots. Highlight the time-slots to be un-mapped. Click the UnMap button on the right-hand side of the screen. Click “Activate” to activate the new map with the time-slots removed.



Chapter 5

Operations Requiring the Serial/Telnet Console

This chapter describes what functions must be done using the serial/telnet console configuration functions that are not part of Map34.

Overview

Map34 makes time-slot mapping the AM3440 faster and more accurate and aids in documentation. The program is a complement to the serial/telnet console, not a substitute. The following lists some examples of configuration that must be completed using the AM3440 console. Some screenshots are included.

System Configuration

```

192.168.3.185 - PuTTY
[AM3440A-CCB-185][LOOP AM3440-A CCB] (System Setup (SYSTEM)) 10:24:59 02/25/2026
ARROW KEYS: Cursor move; Please Input: hh:mm:ss mm/dd/yyyy, BACKSPACE to edit
[System]
Time/Date      : 10:24:59 02/25/2026
Device Name    : AM3440A-CCB-185
[Network]
Mode: BRIDGE
NI  EN  IPAddress      SubnetMask      Frame      LB Timer      Interface
LAN: ON 192.168.003.185 255.255.255.000 Ethernet      RJ(electric)
WAN: OFF
Gateway Interface:      Gateway IPAddr: 000.000.000.000
Inband Uses Slot: D
[CONSOLE port]
Baud Rate      : 9600
Data Length    : 8-Bits
Stop Bit       : 1-Bit
Parity         : NONE
XON_XOFF       : XOFF

[TSI map]
TSI Function    : 1:1(Bidirection)
Idle Signalling: 1010

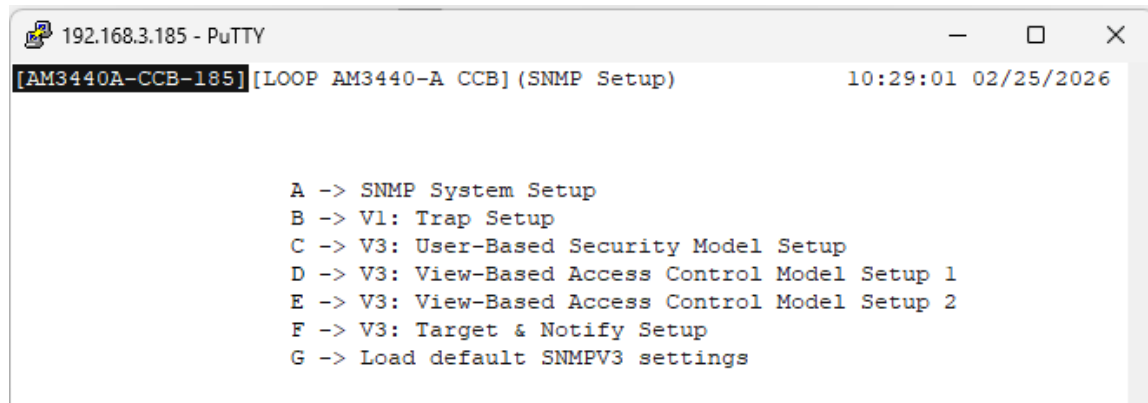
[Clock]
Clock Mode     : Normal

<< Press ESC key to return to previous menu >>

```

SNMP Configuration

SNMP configuration is via the console.



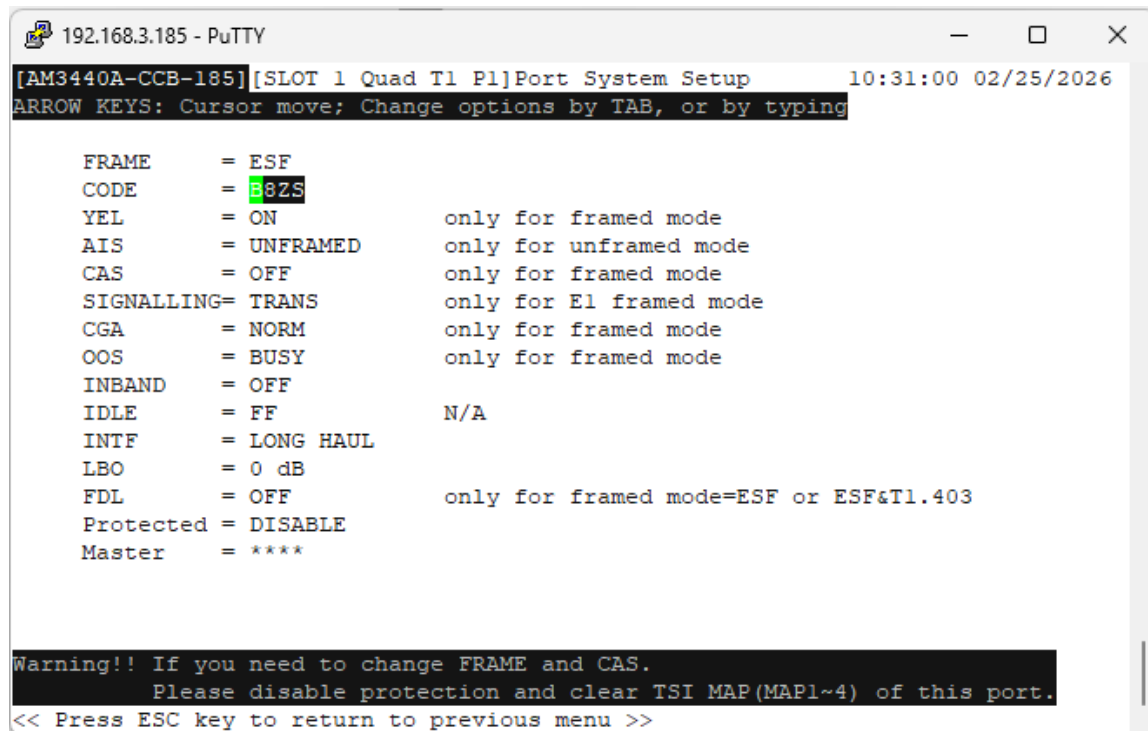
```

192.168.3.185 - PuTTY
[AM3440A-CCB-185][LOOP AM3440-A CCB] (SNMP Setup) 10:29:01 02/25/2026

A -> SNMP System Setup
B -> V1: Trap Setup
C -> V3: User-Based Security Model Setup
D -> V3: View-Based Access Control Model Setup 1
E -> V3: View-Based Access Control Model Setup 2
F -> V3: Target & Notify Setup
G -> Load default SNMPV3 settings
  
```

High-Speed Trunk Card Configuration

T1, E1, FOM, TDMoE and DSL cards are configured using the console.



```

192.168.3.185 - PuTTY
[AM3440A-CCB-185][SLOT 1 Quad T1 P1]Port System Setup 10:31:00 02/25/2026
ARROW KEYS: Cursor move; Change options by TAB, or by typing

FRAME      = ESF
CODE       = 882S
YEL        = ON           only for framed mode
AIS        = UNFRAMED     only for unframed mode
CAS        = OFF          only for framed mode
SIGNALLING= TRANS         only for E1 framed mode
CGA        = NORM         only for framed mode
OOS        = BUSY         only for framed mode
INBAND     = OFF
IDLE       = FF           N/A
INTF       = LONG HAUL
LBO        = 0 dB
FDL        = OFF          only for framed mode=ESF or ESF&T1.403
Protected  = DISABLE
Master     = *****

Warning!! If you need to change FRAME and CAS.
Please disable protection and clear TSI MAP(MAP1~4) of this port.
<< Press ESC key to return to previous menu >>
  
```

Voice Card Configuration

Voice cards, including FSX, FXO, and E&M are configured with the console.

```

192.168.3.185 - PuTTY
[AM3440A-CCB-185][SLOT 2 FXS]System Setup 10:32:06 02/25/2026
ARROW KEYS: Cursor move; Change options by TAB, or by typing
A/u-Law : A Impedance : 600ohm
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12
TxGain: -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0
RxGain: -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0
ALL Tx/Rx Gain = L1 : NO ( -21 ~ +3 in dB )
Tx Signaling Bit A B C D Rx Signaling Bit A B C D
ON HOOK : 0 1 0 1 RING ON : 0 0 * *
OFF HOOK : 1 1 0 1 BATT-REV & PLS ON : 0 1 0 0
RING-GND : 0 0 0 1 OOS-ALARM : * * * *
PLAR ON HOOK : 0 0 0 0 TIP-OPEN : 1 1 1 1
PLAR OFF HOOK : (fixed) PLAR RING ON : 1 1 1 1 (fixed)
PLAR Ring Cadence : 2"ON,4"OFF ( * for don't care )
Ring Frequency : 20 Hz
Metering Pulse : OFF
Metering Freq. : 16 KHz
Metering Level : 2.4Vrms
PLAR L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12
OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF
ALL PLAR = L1 : NO
<< Press ESC key to return to previous menu >>

```

Router Card Configuration

The RT, RTA (a.k.a. RTR-A, Router A) and RTB (a.k.a. 8RT-B, Router B) router cards are configured using the serial/telnet console. Router A and Router B cards also store the router configurations on the router cards themselves, not in the controller configuration. Use the **Transfer** function under the **File** drop-down menu to get Router A and B configurations from the cards or to send stored configurations back into the cards.

Serial Data Card Configuration

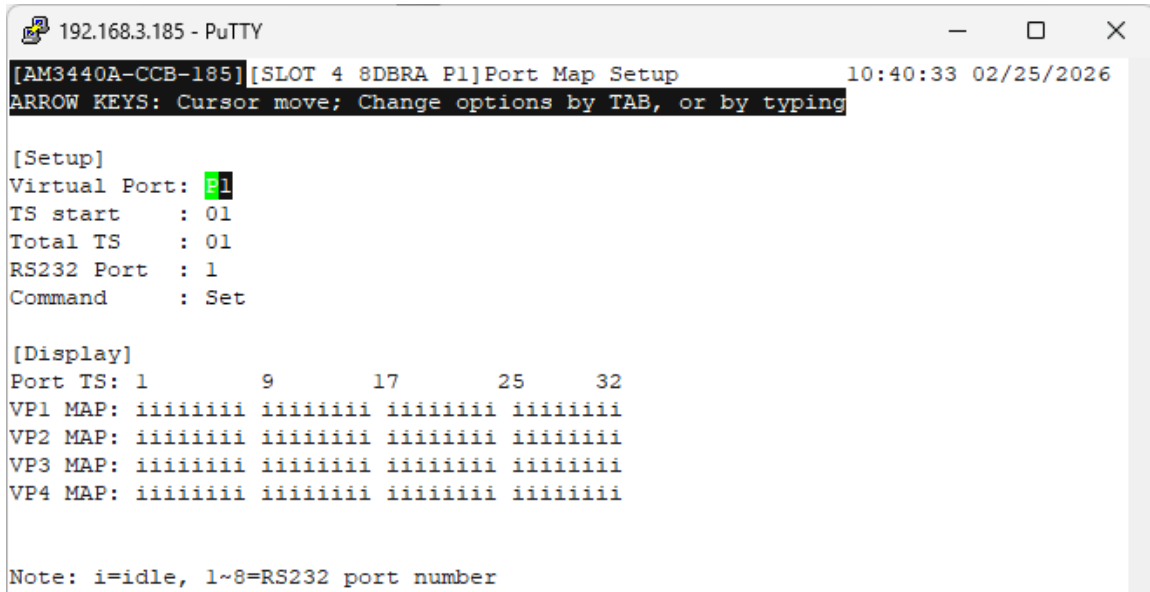
Serial data cards require the serial/telnet console for system setup.

```

192.168.3.226 - PuTTY
[AM3440A-CCB-226][SLOT C SDTE]Port System Setup 09:57:36 02/26/2026
ARROW KEYS: Cursor move; Change options by TAB, or by typing
RATE = 64K (BANDWIDTH: OK)
CLOCK = NORMAL
DATA = NORMAL
RTS = ACTIVE
TTM = OFF
V.54 = ON
INTERF= EIA530

```

DTE Card serial/telnet configuration-screen



```
192.168.3.185 - PuTTY
[AM3440A-CCB-185][SLOT 4 8DBRA P1]Port Map Setup 10:40:33 02/25/2026
ARROW KEYS: Cursor move; Change options by TAB, or by typing

[Setup]
Virtual Port: 91
TS start    : 01
Total TS    : 01
RS232 Port  : 1
Command     : Set

[Display]
Port TS: 1      9      17      25      32
VP1 MAP: iiii iiii iiii iiii iiii
VP2 MAP: iiii iiii iiii iiii iiii
VP3 MAP: iiii iiii iiii iiii iiii
VP4 MAP: iiii iiii iiii iiii iiii

Note: i=idle, 1~8=RS232 port number
```

8DBRA (serial asynchronous data bridge) serial/telnet configuration-screen

Chapter 6

ULSR PDH Ring

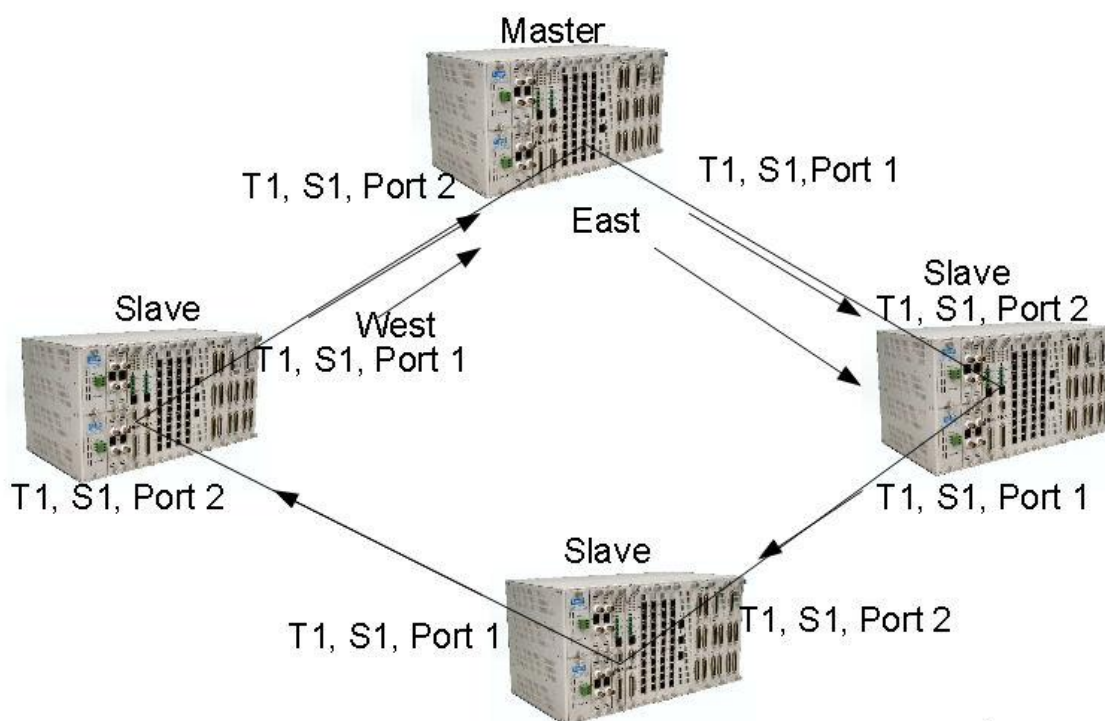
This chapter describes the ULSR PDH ring, how to configure the AM3440 to support the ULSR function, and how to map the ULSR ring with the Map34 software.

Overview

ULSR is a Unidirectional Line Self-healing Ring. The Loop AM3440 supports ULSR PDH ring architecture for T1, E1 and FOM cards. A ULSR ring is similar to a self-healing SONET or STM ring, but over T1 or E1. In short, ULSR is a low-speed DS1 ring architecture.

It is recommended that the ring be visualized as working clockwise. In the Map34 software, clockwise is considered to be easterly, or the out of the East link, while counterclockwise is considered to be westerly, or the out of the West link.

ULSR Ring with T1. Low speed card flow out T1, Port 1, into the next unit On T1 Port 2. Out the low numbered port (1), in the high port (2). East to West clockwise primary flow



System Configuration

The AM3440 must be configured to support the ULSR. Key items to configure are:

1. The System Configuration must be changed from the default bidirectional setting to **1:N(Multicast)**.

2. ULSR software must be installed in the AM3440. ULSR software is optional add-in software. When purchased, a software key is supplied that activates the ULSR function in the AM3440. ULSR software is per controller. Dual controllers require a ULSR software license per controller.
3. When the software is installed, the System Setup – Controller Setup page has an additional option “R – PDH Ring Protection. The “R” option is where the protection is enabled for the AM3440 and for selected ports. The main unit is set to Master, the other units in the ring are set to Slave. See the screen below:

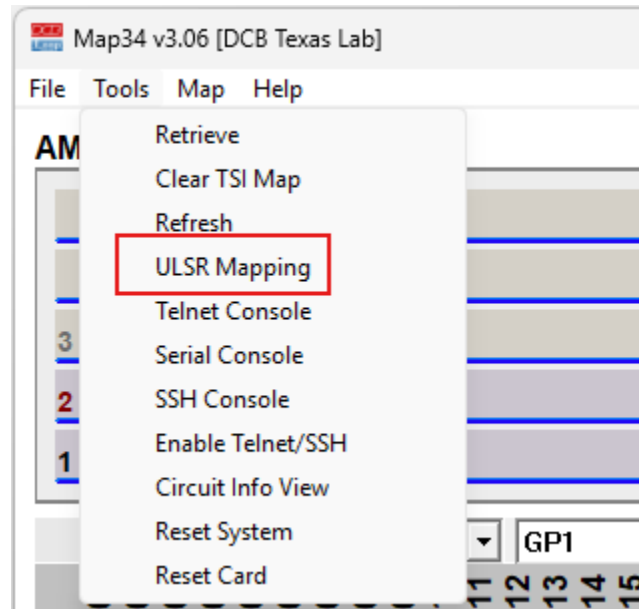
```

192.168.3.226 - PuTTY
[AM3440A-CCB-226][LOOP AM3440-A CCB](PDH Ring Protection) 10:21:11 02/26/2026
ARROW KEYS: Cursor move; Change options by TAB, or by typing
PDH Ring Protection: ENABLE Ring Station : MASTER
Switching Interval : 005 Alarm Filtering: 000
Slot (Model) Port 1 Port 2 Port 3 Port 4
=====
A (FOM ) DISABLE DISABLE DISABLE DISABLE
B ( ) -----
C (SDTE ) -----
D (RTR LAN/WAN) -----
1 (Quad T1 ) ENABLE ENABLE DISABLE DISABLE
2 (FXS ) -----
3 (6UDTEA ) -----
4 (8DBRA ) -----
5 (TDMoE ) -----
6 (OCU/DP ) -----
7 (FXO ) -----
8 ( ) -----
9 ( ) -----
10 ( ) -----
11 (OCT-RT-B ) -----
12 (E&M ) -----
<< Press ESC key to return to previous menu >>

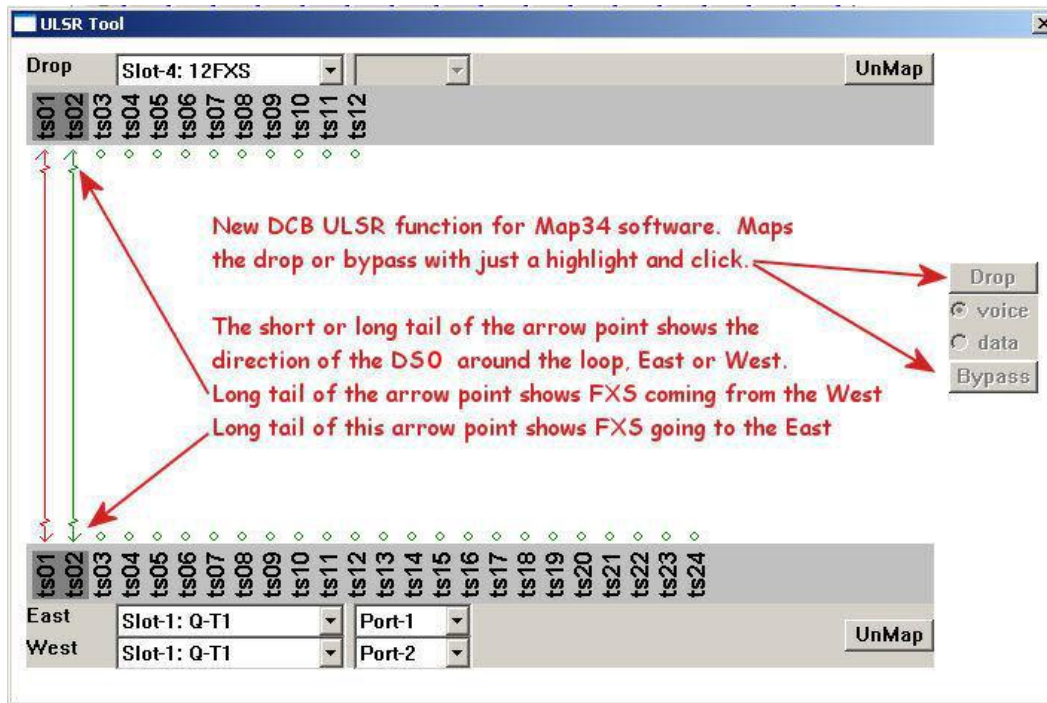
```


ULSR Mapping Tool

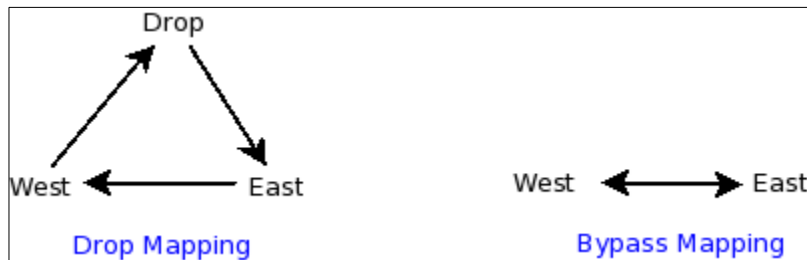
The main screen of Map34 software has a drop-down option under **Tools** for **ULSR Mapping**.



The **ULSR Mapping** option brings up the screen shown below. Select cards first. The low-speed drop cards, such as FXS, FXO, E&M, Router, serial card, etc. are selected at the top of the screen. The trunk T1, E1 or FOM cards are selected at the bottom of the screen. Highlight the desired time-slots, then click **Drop** if the low-speed circuit terminates at this location, or **Bypass** if the circuit terminates at another AM3440 unit. Usually, voice or data does not need to be selected (except for E&M circuits, which can be voice or data), unless it is a bypass DS0 at this location and a **Drop** card is not selected.



The following diagrams illustrate the cross-connects generated when using the ULSR mapping tool. The **Drop** button creates three unidirectional cross-connects between east, west, and the drop. The **Bypass** button creates a bidirectional cross-connect between east and west.



Chapter 7

Activating an Enterprise License

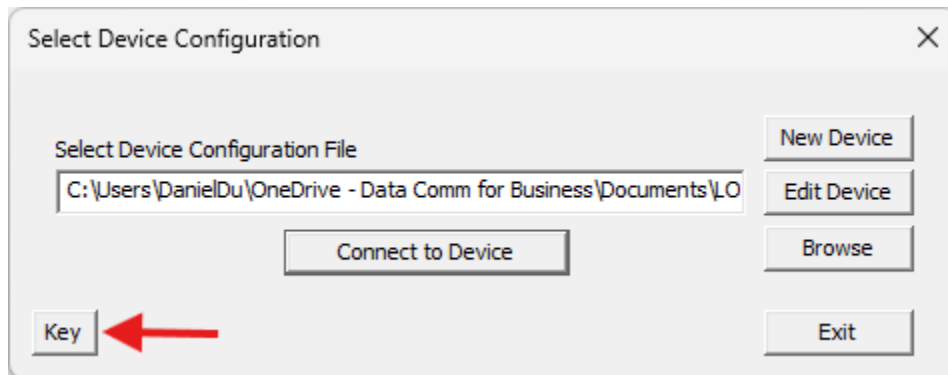
This chapter describes the process for activating an enterprise license.

Overview

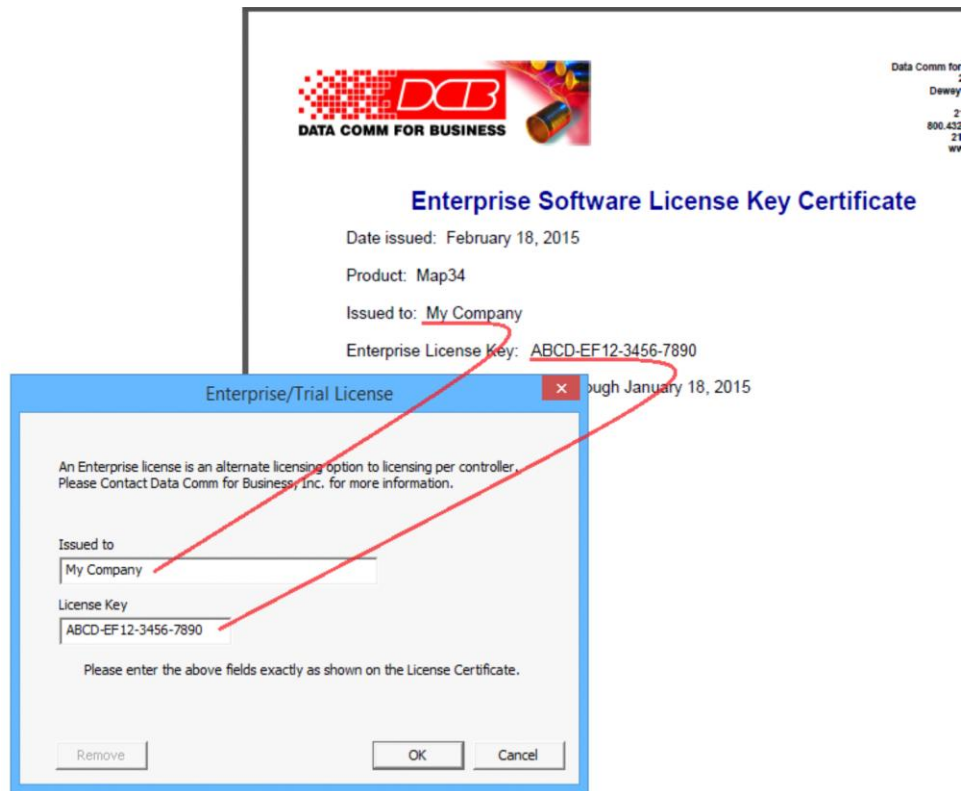
An enterprise license is an alternate Map34 licensing method. It eliminates the need to manage per-controller licenses. Instead, a single license key is entered into Map34. Once activated, it is not necessary to populate the controller license key fields in the device configuration. This licensing method is used for both enterprise and trial licensing.

Activation

- Start Map34. The following window will appear. Press the "Key" button.



- The Enterprise/Trial License Window will open. Enter the "Issued to" and "Enterprise License Key" fields exactly as shown on your Enterprise Software License Key Certificate.



- Press **OK**. Your copy of Map34 will now operate in enterprise mode.

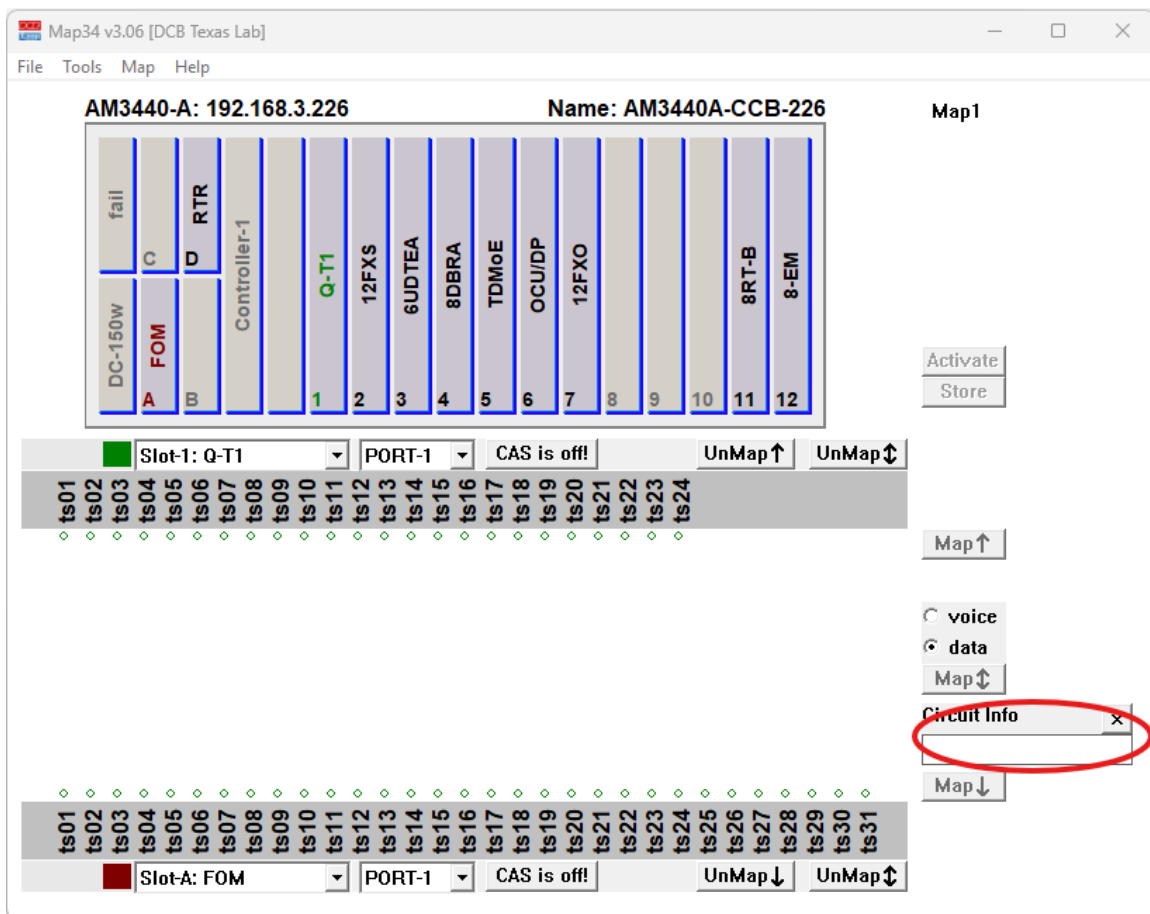
Chapter 8

Circuit Info Feature

This chapter describes Circuit Info feature available in the AM3440 CCB and CCPA controllers and how to set this information from Map34.

The CCB and CCPA controllers have the capability to attach Circuit Information to a cross-connect. From the CLI, this information is attached during TSI Map Setup and may be viewed from the TSI Map. To modify the Circuit Information, the user must re-map the cross-connect with the new information.

Map34 supports adding Circuit Information during map operation. Circuit Information is entered into a text box before pressing one of the Map buttons.



Map34 v3.06 [DCB Texas Lab]

File Tools Map Help

AM3440-A: 192.168.3.226 Name: AM3440A-CCB-226 Map1

DC-150w fall C D RTR Controller-1 Q-T1 12FXS 6UDTEA 8DBRA TDMoE OCU/DP 12FXO 8RT-B 8-EM

Activate Store

Slot-1: Q-T1 PORT-1 CAS is off! UnMap↑ UnMap↓

ts01 ts02 ts03 ts04 ts05 ts06 ts07 ts08 ts09 ts10 ts11 ts12 ts13 ts14 ts15 ts16 ts17 ts18 ts19 ts20 ts21 ts22 ts23 ts24

Map↑

voice data Map↓

Circuit Info x

Dewey Station

Map↓

Slot-A: FOM PORT-1 CAS is off! UnMap↓ UnMap↑

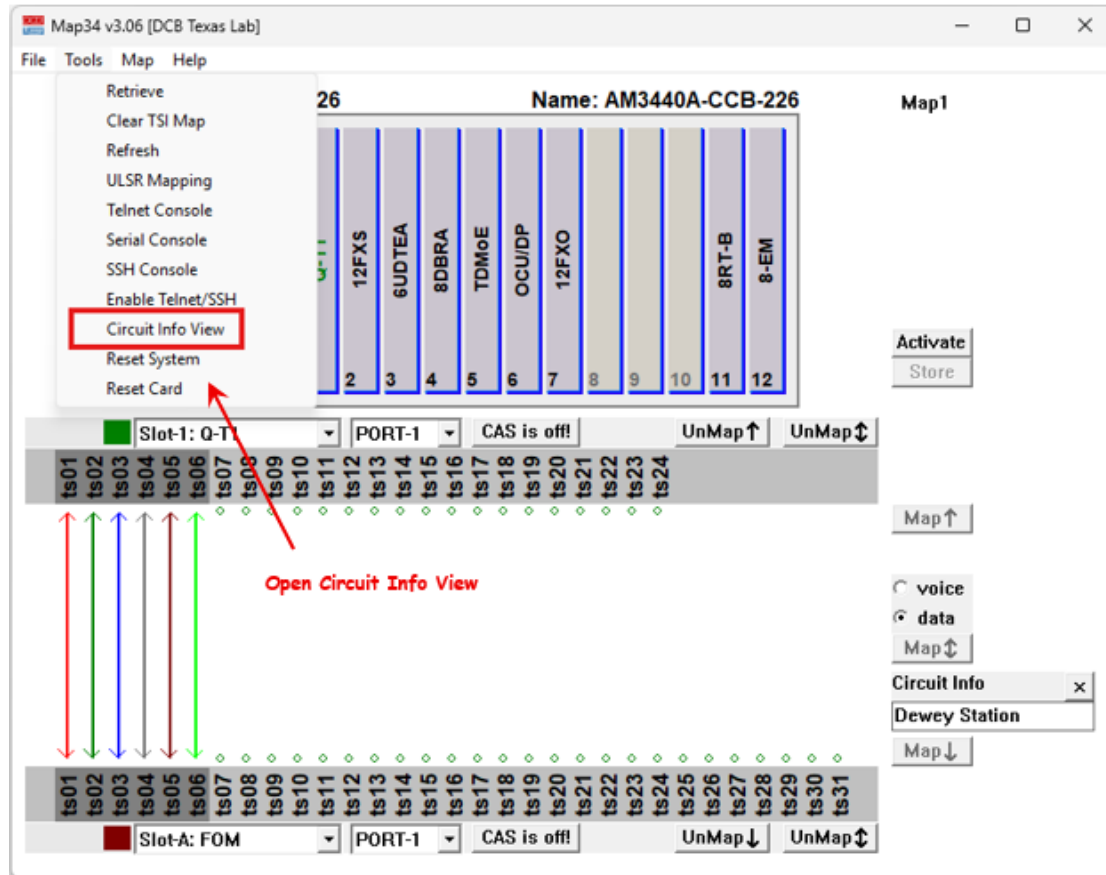
ts01 ts02 ts03 ts04 ts05 ts06 ts07 ts08 ts09 ts10 ts11 ts12 ts13 ts14 ts15 ts16 ts17 ts18 ts19 ts20 ts21 ts22 ts23 ts24 ts25 ts26 ts27 ts28 ts29 ts30 ts31

1) Select Time-Slot

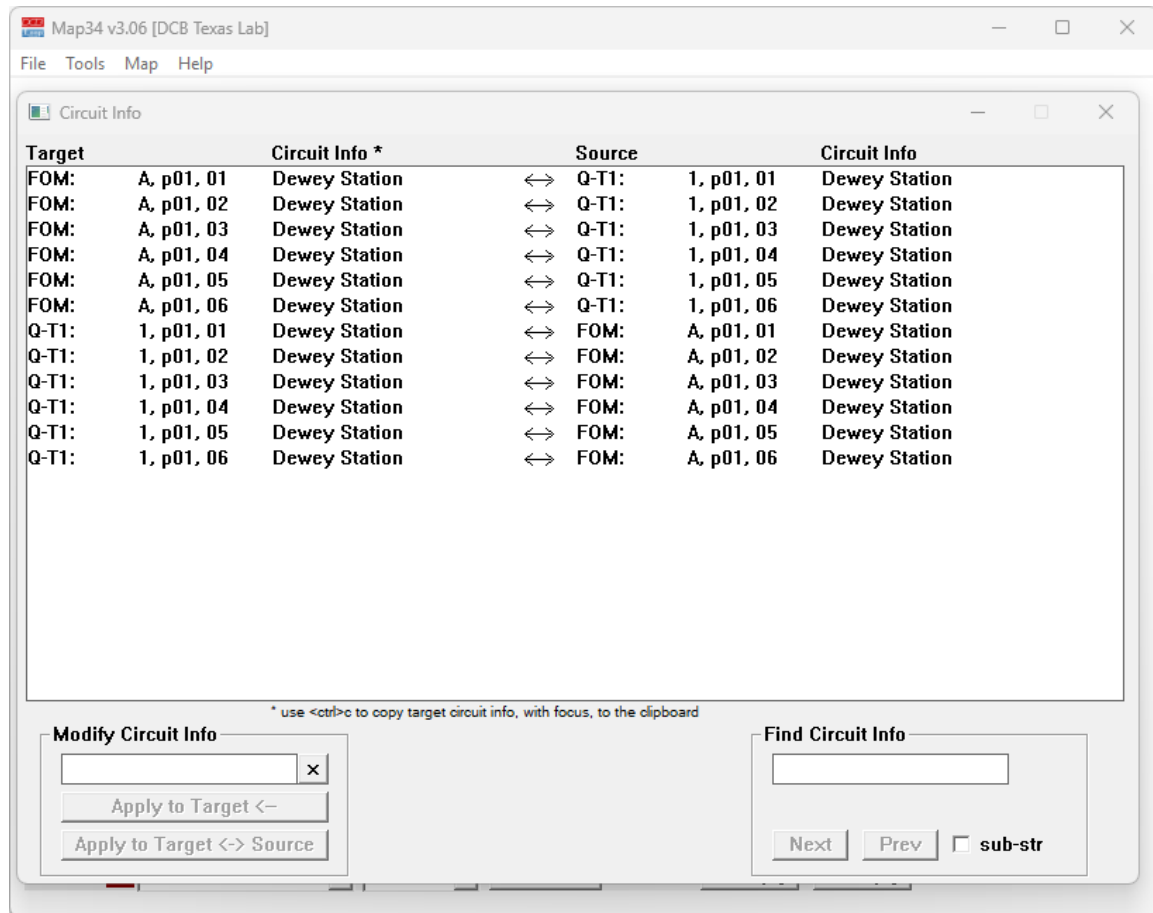
2) Enter Info

3) Map

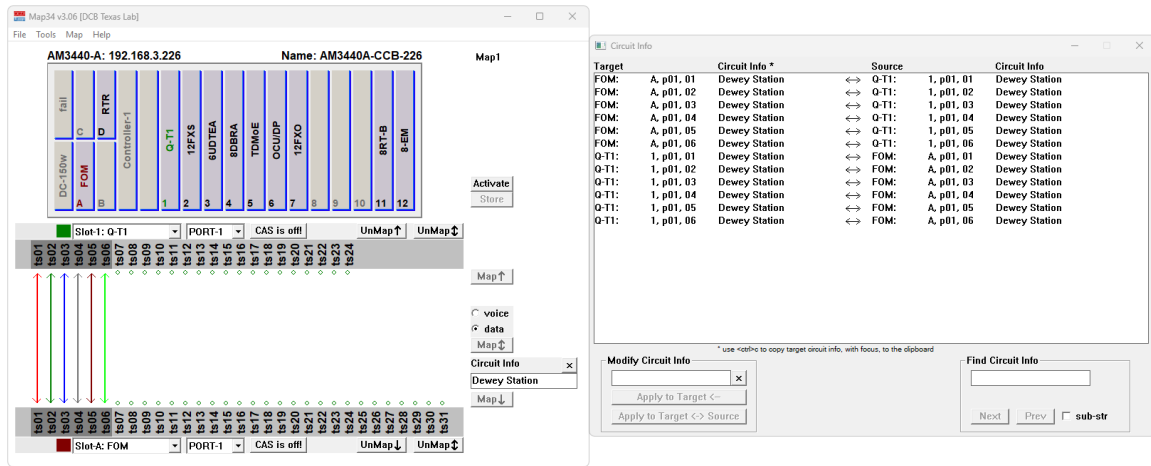
To view and modify Circuit Information, Map34 provides a **Circuit Info View**. This view will open a second window showing all cross-connects and the attached Circuit Information.



The Circuit Information window will initially overlay the main Map34 window.



The Circuit Information Window does not preempt the main Map34 Window. The user may move the Circuit Information Window to the side of the main Map34 Window and freely move focus back and forth between the two windows.



To modify the Circuit Information, select one or more cross-connects, enter the new Circuit Information, and press one of the **Apply** buttons. The new Circuit Information can be applied to the Target side by pressing *Apply to Target* ←.

Circuit Info

Target	Circuit Info *	Source	Circuit Info
FOM: A, p01, 01	Dewey Station	↔ Q-T1: 1, p01, 01	Dewey Station
FOM: A, p01, 02	Dewey Station	↔ Q-T1: 1, p01, 02	Dewey Station
FOM: A, p01, 03	Dewey Station	↔ Q-T1: 1, p01, 03	Dewey Station
FOM: A, p01, 04	Dewey Station	↔ Q-T1: 1, p01, 04	Dewey Station
FOM: A, p01, 05	Dewey Station	↔ Q-T1: 1, p01, 05	Dewey Station
FOM: A, p01, 06	Dewey Station	↔ Q-T1: 1, p01, 06	Dewey Station
Q-T1: 1, p01, 01	Dewey Station	↔ FOM: A, p01, 01	Dewey Station
Q-T1: 1, p01, 02	Dewey Station	↔ FOM: A, p01, 02	Dewey Station
Q-T1: 1, p01, 03	Dewey Station	↔ FOM: A, p01, 03	Dewey Station
Q-T1: 1, p01, 04	Dewey Station	↔ FOM: A, p01, 04	Dewey Station
Q-T1: 1, p01, 05	Dewey Station	↔ FOM: A, p01, 05	Dewey Station
Q-T1: 1, p01, 06	Dewey Station	↔ FOM: A, p01, 06	Dewey Station

* use <ctrl>c to copy target circuit info, with focus, to the clipboard

Modify Circuit Info

Dewey Station B1 x

Apply to Target ←

Apply to Target ↔ Source

Find Circuit Info

Next Prev ☐ sub-str

Circuit Info

Target	Circuit Info *	Source	Circuit Info
FOM: A, p01, 01	Dewey Station B1	↔ Q-T1: 1, p01, 01	Dewey Station
FOM: A, p01, 02	Dewey Station B1	↔ Q-T1: 1, p01, 02	Dewey Station
FOM: A, p01, 03	Dewey Station B1	↔ Q-T1: 1, p01, 03	Dewey Station
FOM: A, p01, 04	Dewey Station	↔ Q-T1: 1, p01, 04	Dewey Station
FOM: A, p01, 05	Dewey Station	↔ Q-T1: 1, p01, 05	Dewey Station
FOM: A, p01, 06	Dewey Station	↔ Q-T1: 1, p01, 06	Dewey Station
Q-T1: 1, p01, 01	Dewey Station	↔ FOM: A, p01, 01	Dewey Station B1
Q-T1: 1, p01, 02	Dewey Station	↔ FOM: A, p01, 02	Dewey Station B1
Q-T1: 1, p01, 03	Dewey Station	↔ FOM: A, p01, 03	Dewey Station B1
Q-T1: 1, p01, 04	Dewey Station	↔ FOM: A, p01, 04	Dewey Station
Q-T1: 1, p01, 05	Dewey Station	↔ FOM: A, p01, 05	Dewey Station
Q-T1: 1, p01, 06	Dewey Station	↔ FOM: A, p01, 06	Dewey Station

* use <ctrl>c to copy target circuit info, with focus, to the clipboard

Modify Circuit Info

Dewey Station B1 x

Apply to Target ←

Apply to Target ↔ Source

Find Circuit Info

Next Prev ☐ sub-str

If the cross-connect is bidirectional, the modified Circuit Information can be applied to both the target and source by pressing the **Apply to Target ↔ Source** button. Please note, if the cross-connect is not bidirectional, only the Target will be modified.

Circuit Info

Target	Circuit Info *	Source	Circuit Info
FOM: A, p01, 01	Dewey Station B1	↔ Q-T1: 1, p01, 01	Dewey Station
FOM: A, p01, 02	Dewey Station B1	↔ Q-T1: 1, p01, 02	Dewey Station
FOM: A, p01, 03	Dewey Station B1	↔ Q-T1: 1, p01, 03	Dewey Station
FOM: A, p01, 04	Dewey Station	↔ Q-T1: 1, p01, 04	Dewey Station
FOM: A, p01, 05	Dewey Station	↔ Q-T1: 1, p01, 05	Dewey Station
FOM: A, p01, 06	Dewey Station	↔ Q-T1: 1, p01, 06	Dewey Station
Q-T1: 1, p01, 01	Dewey Station	↔ FOM: A, p01, 01	Dewey Station B1
Q-T1: 1, p01, 02	Dewey Station	↔ FOM: A, p01, 02	Dewey Station B1
Q-T1: 1, p01, 03	Dewey Station	↔ FOM: A, p01, 03	Dewey Station B1
Q-T1: 1, p01, 04	Dewey Station	↔ FOM: A, p01, 04	Dewey Station
Q-T1: 1, p01, 05	Dewey Station	↔ FOM: A, p01, 05	Dewey Station
Q-T1: 1, p01, 06	Dewey Station	↔ FOM: A, p01, 06	Dewey Station

* use <ctrl>c to copy target circuit info, with focus, to the clipboard

Modify Circuit Info

Dewey Station B2 x

Apply to Target <-

Apply to Target <-> Source

Find Circuit Info

Next Prev ☐ sub-str

Circuit Info

Target	Circuit Info *	Source	Circuit Info
FOM: A, p01, 01	Dewey Station B1	↔ Q-T1: 1, p01, 01	Dewey Station
FOM: A, p01, 02	Dewey Station B1	↔ Q-T1: 1, p01, 02	Dewey Station
FOM: A, p01, 03	Dewey Station B1	↔ Q-T1: 1, p01, 03	Dewey Station
FOM: A, p01, 04	Dewey Station B2	↔ Q-T1: 1, p01, 04	Dewey Station B2
FOM: A, p01, 05	Dewey Station B2	↔ Q-T1: 1, p01, 05	Dewey Station B2
FOM: A, p01, 06	Dewey Station B2	↔ Q-T1: 1, p01, 06	Dewey Station B2
Q-T1: 1, p01, 01	Dewey Station	↔ FOM: A, p01, 01	Dewey Station B1
Q-T1: 1, p01, 02	Dewey Station	↔ FOM: A, p01, 02	Dewey Station B1
Q-T1: 1, p01, 03	Dewey Station	↔ FOM: A, p01, 03	Dewey Station B1
Q-T1: 1, p01, 04	Dewey Station B2	↔ FOM: A, p01, 04	Dewey Station B2
Q-T1: 1, p01, 05	Dewey Station B2	↔ FOM: A, p01, 05	Dewey Station B2
Q-T1: 1, p01, 06	Dewey Station B2	↔ FOM: A, p01, 06	Dewey Station B2

* use <ctrl>c to copy target circuit info, with focus, to the clipboard

Modify Circuit Info

Dewey Station B2 x

Apply to Target <-

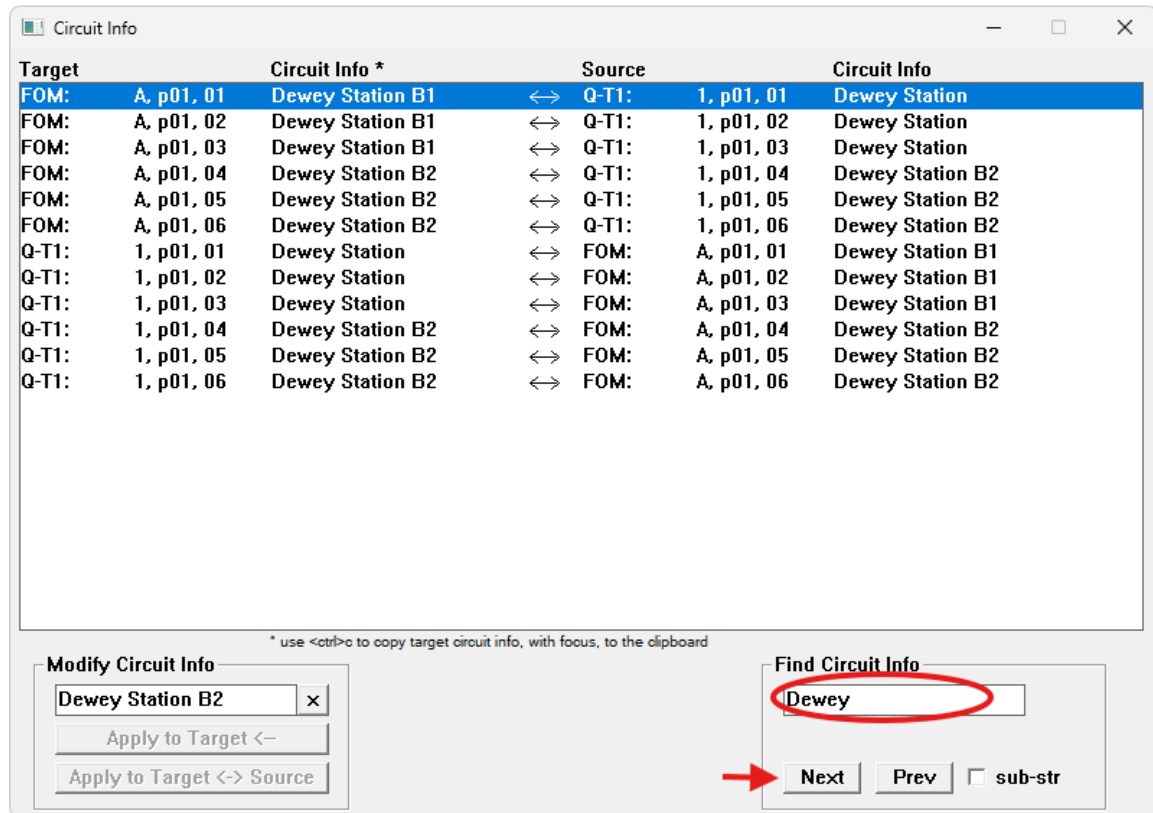
Apply to Target <-> Source

Find Circuit Info

Next Prev ☐ sub-str

The Circuit Information Window also has a search facility to locate a cross-connect based on the Circuit Information. Only the “Target” side is searched, and the search is not case sensitive.

There are two search modes supported. In normal mode, the search string is always compared with the Circuit Info, starting with the first character. For example, a search string of “Dewey” will match Circuit Info “Dewey B1” but would not match “Site Dewey”.



The other search mode will match on sub-strings. This means the search string will match any part of the Circuit Information. For example, searching for “B2” will match “Dewey Station B2”.

The screenshot shows a window titled "Circuit Info" with a table of circuit information. The table has four columns: Target, Circuit Info *, Source, and Circuit Info. The data is as follows:

Target	Circuit Info *	Source	Circuit Info
FOM: A, p01, 01	Dewey Station B1	↔ Q-T1: 1, p01, 01	Dewey Station
FOM: A, p01, 02	Dewey Station B1	↔ Q-T1: 1, p01, 02	Dewey Station
FOM: A, p01, 03	Dewey Station B1	↔ Q-T1: 1, p01, 03	Dewey Station
FOM: A, p01, 04	Dewey Station B2	↔ Q-T1: 1, p01, 04	Dewey Station B2
FOM: A, p01, 05	Dewey Station B2	↔ Q-T1: 1, p01, 05	Dewey Station B2
FOM: A, p01, 06	Dewey Station B2	↔ Q-T1: 1, p01, 06	Dewey Station B2
Q-T1: 1, p01, 01	Dewey Station	↔ FOM: A, p01, 01	Dewey Station B1
Q-T1: 1, p01, 02	Dewey Station	↔ FOM: A, p01, 02	Dewey Station B1
Q-T1: 1, p01, 03	Dewey Station	↔ FOM: A, p01, 03	Dewey Station B1
Q-T1: 1, p01, 04	Dewey Station B2	↔ FOM: A, p01, 04	Dewey Station B2
Q-T1: 1, p01, 05	Dewey Station B2	↔ FOM: A, p01, 05	Dewey Station B2
Q-T1: 1, p01, 06	Dewey Station B2	↔ FOM: A, p01, 06	Dewey Station B2

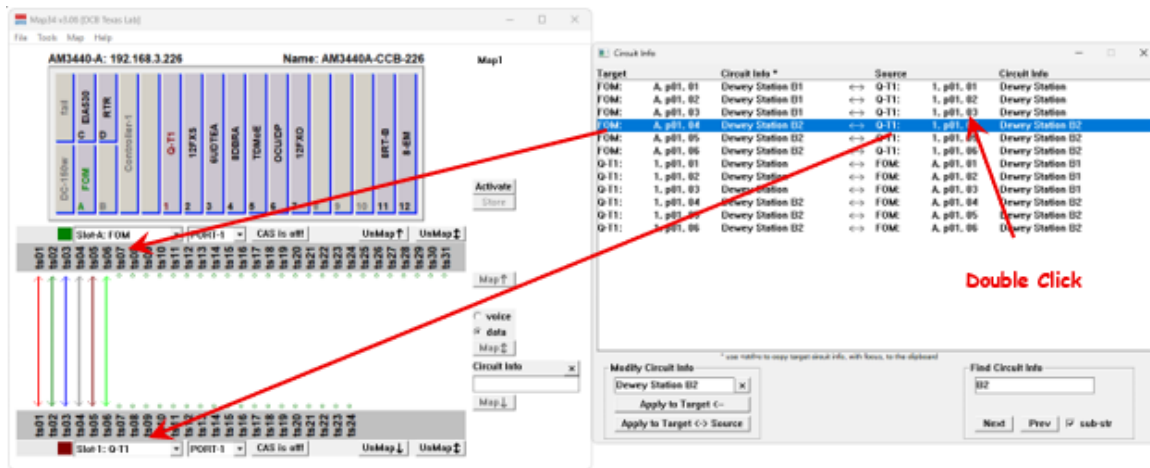
Below the table, there is a note: * use <ctrl>c to copy target circuit info, with focus, to the clipboard.

At the bottom, there are two panels:

- Modify Circuit Info:** Contains a text input field with "Dewey Station B2", a close button (x), and two buttons: "Apply to Target <-" and "Apply to Target <-> Source".
- Find Circuit Info:** Contains a text input field with "B2", a "Next" button, a "Prev" button, and a checked radio button labeled "sub-str".

A red arrow points to the "Next" button, and red circles highlight the "B2" input field and the "sub-str" radio button.

The Circuit Info window can be used to quickly navigate within the main Map34 Window. By double-clicking on a row in the Circuit Info window, the main Map34 window change context to show the requested cross-connect.



Circuit Info in CSV export file

The Circuit Information fields have been appended to each row in the CSV export file. The format of each row is shown below:

Device_Name,
 Target_Card,
 Target_Slot,
 Target_Port,
 Target_TS,
 Source_Card,
 Source_Slot,
 Source_Port,
 Source_TS,
 Chan_Type,
 Target_Circuit_Info,
 Source_Circuit_Info

Appendix A

Specifications

Map34 Specifications

- Map34 works with all versions of the Loop Telecommunications International AM3440 (A, B, C, D and E chassis) and selected OEM/ODM versions.
- Map34 works with AM3440 CCA, CCB, and CCPA controllers. For CCA controllers, the firmware version must be v8.41.01 or later.
- Map34 runs on Windows 10 (both 32-bit and 64-bit) and 11.
- Map34 requires a license for each AM3440 controller it supports.
- Map34 may be used by an unlimited number of technicians on an unlimited number of workstations.
- Map34 is also available under an Enterprise license agreement.
- Map34 is licensed software owned by Data Comm for Business, Inc., 2949 CR 1000E, Dewey, Illinois, 61840, Tel 217-897-6600.
- <http://www.dcbnet.com>
- Link to check for upgrades to newer versions: <http://www.dcbnet.com/datasheet/map34ds.html>
- Map34 v1.16 supports AM3440 CCA controller firmware released after January 2012 but prior to controller firmware v8.41.01, released in 2015. Please contact DCB support if you need this specific version of Map34.