



O m n i B u s S y s t e m s

Tie-Line Manager

**Introduction
and
Reference Guide**

OmniBus Systems - *Tie-Line Manager*

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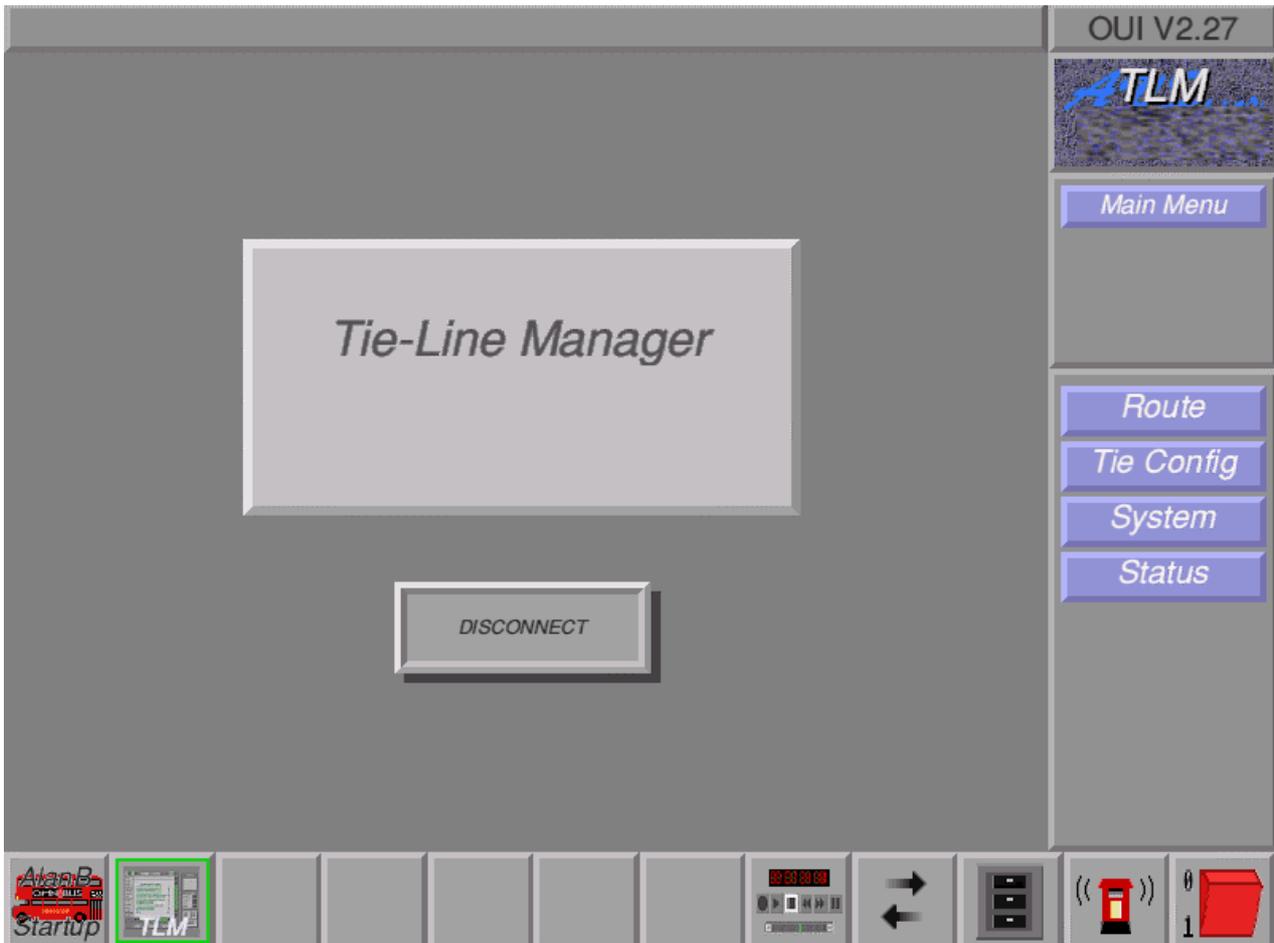
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Introduction

Tie-Line Manager allows you to control all connecting tie-lines between all routers on an Omnibus system. Different sources on separate Omnibus Routers and also inter Router tie-lines, i.e. those that connect sources on different physical matrices on the same router, can be configured. ***Tie-Line Manager*** finds and manages named tie-lines and allows you to view all the systems configured tie-line paths.

Each connected tie-line on the system is first pre configured from the ***Router*** application.

Main Menu



From the ***Tie-Line Manager*** Main Menu you can move to other menus from the Main Menu Bar on the right hand side of the screen.

The following steps must be taken before you can effectively use ***Tie-Line Manager*** :

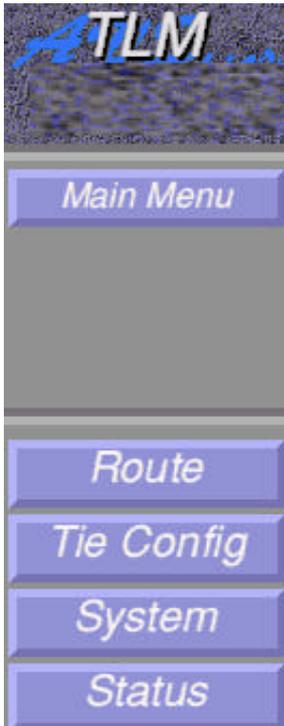
1. Ensure that the tie-lines have been configured in the Router application Configuration Menu. If they have not been then configure sources and destinations with the same identification name at the tie-line endpoints.
2. Set the type of source and destination to be System tie-line (See Router application documentation for further details).

When new tie-lines are added to the system, select the *Browse* option from the Status Menu Bar to start the ***Tie-Line Manager*** search of all router databases for tie-lines.

Note Allow a few seconds for the full database list to be displayed in the Status Menu.

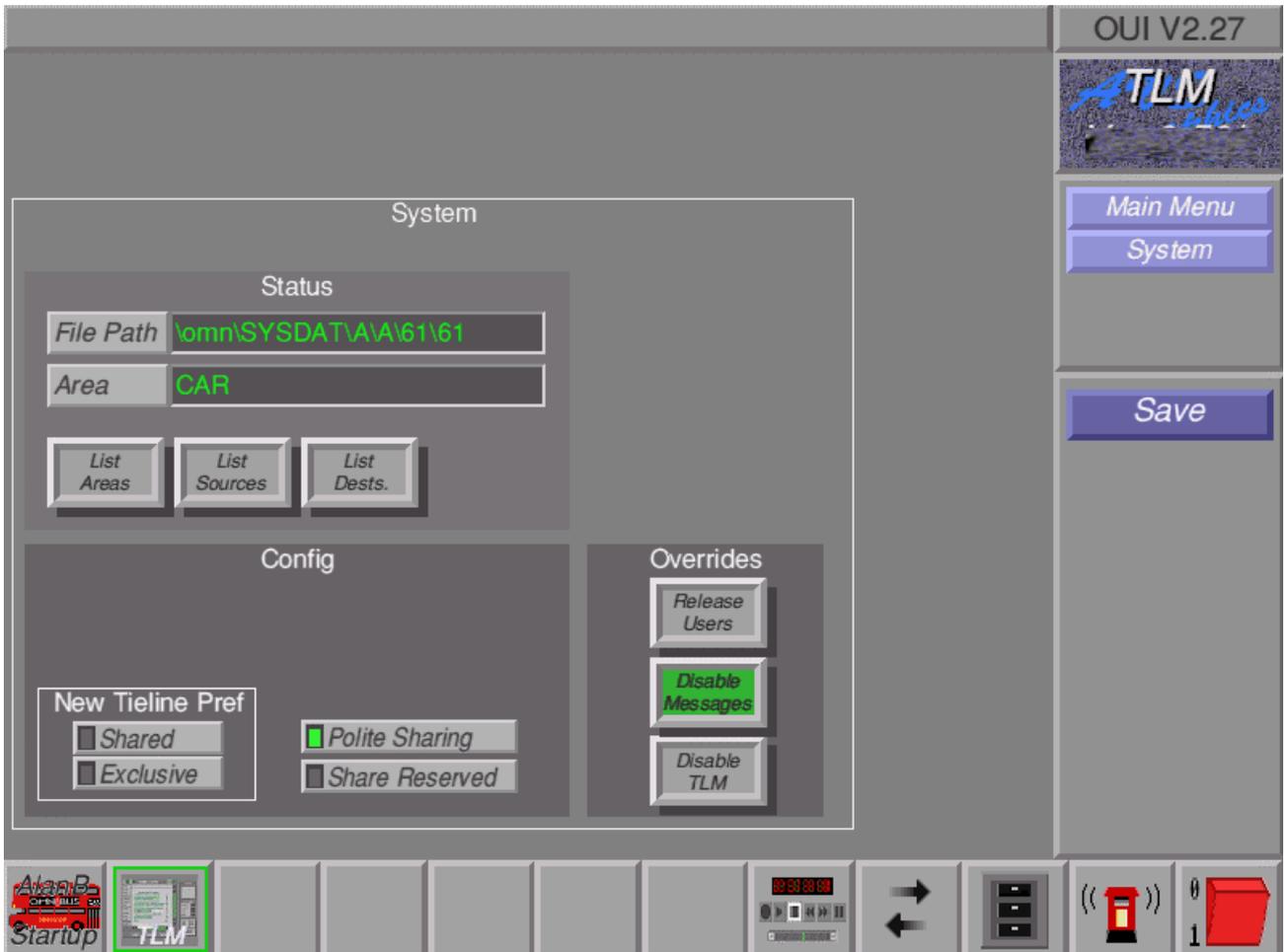
Click on *DISCONNECT* to leave the ***Tie-Line Manager*** application.

Main Menu Bar



- ⇒ Click on *Route* to display the Route Menu where you can search for system tie-lines.
- ⇒ Click on *Tie Config* to display the Tie Config Menu where you can configure a tie-line.
- ⇒ Click on *System* to display the System Menu where you can determine system settings for the tie-line.
- ⇒ Click on *Status* to display the Status Menu where you can view the sources and destinations for all tie-lines on the OmniBus system.

System Menu



From the System Menu you can decide which tie-line mode you wish to use from the Config area, set system settings from the Overrides area and set up the status of the tie-line from the Status area.

File Path

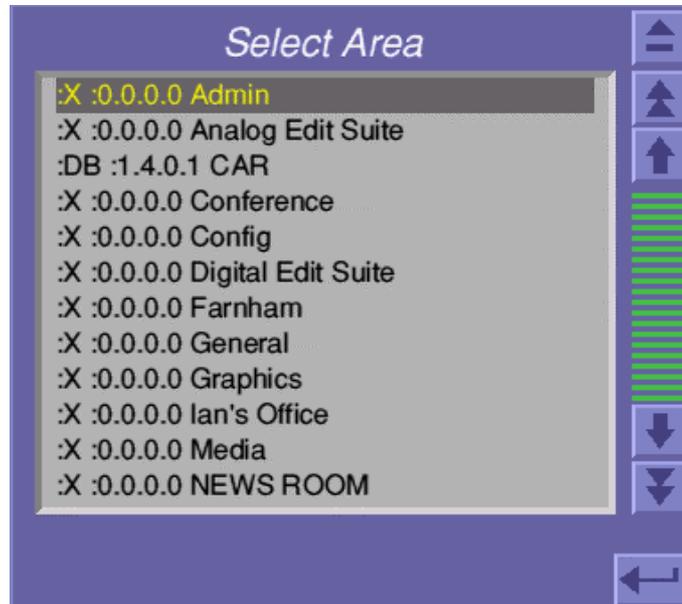
Where tie-lines are configured, files are stored in System Manager. This diagnostic information is displayed here.

Area

The **Tie-Line Manager** has been set up and is running from the displayed area.

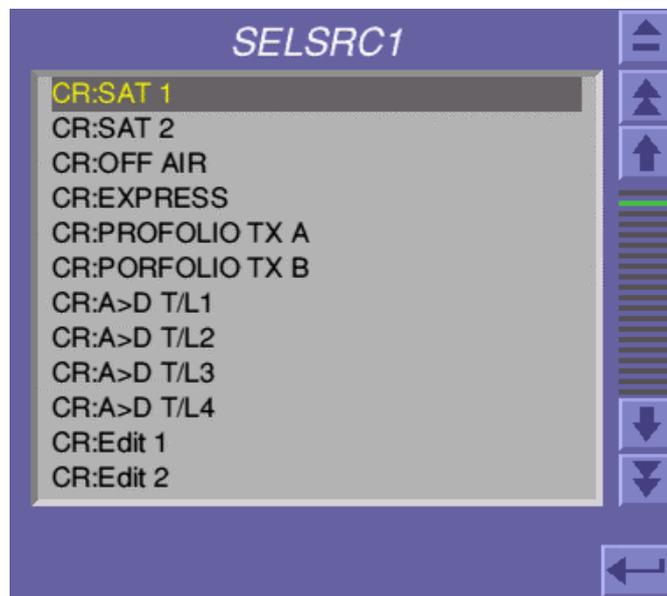
List Areas

Click on *List Areas* to display the *Select Area* window where all areas and known Router database addresses are displayed. Click on an area to re-request it's router database.



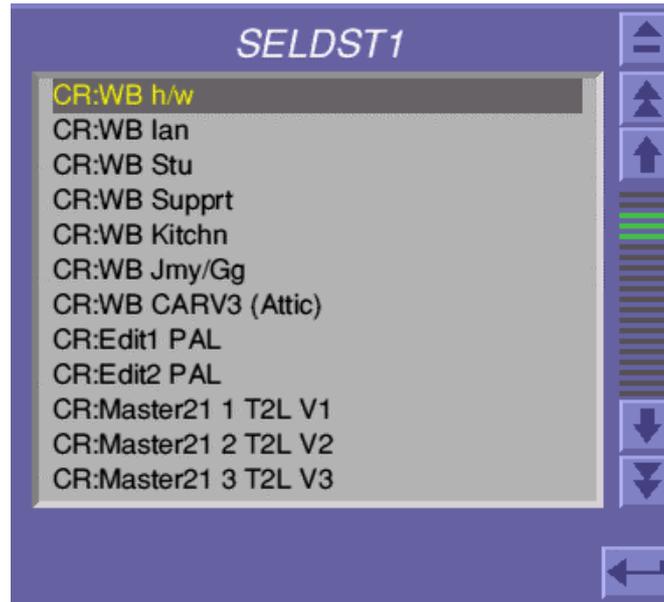
List Sources

Click on *List Sources* to display a list of all router sources.



List Dests.

Click on *List Dests.* to display a list of all router destinations.



Shared

When a new tie-line is required, the system searches for an existing tie-line(s) that have the required source and shares them.

Exclusive

When a tie-line is required the system will use an unused tie-line.

Polite Sharing

This is the default mode (highlighted) i.e. if the first user (owner) of an existing tie-line requests a new source and there are no other tie-lines available, the first user cannot access a new source. If there is a tie-line available, the 1st user will be moved to the other tie-line. If *Polite Sharing* is not selected, the first user to access the tie-line becomes the owner. If the owner changes its source, all the other users connected to the tie-line are changed to the same source.

Note The 'top user' cannot break a tie-line currently shared by others users.

Share Reserved

Both *Polite Sharing* and *Share Reserved* can be 'on'. When *Share Reserved* is highlighted a reserved tie-line has the correct source.

Release Users

The *Tie-Line Manager* stores the users of each tie-line. Select this option to clear this information and free up all tie-lines.

Warning If this option is 'on' there will be no current users, therefore anyone can route. All sources will be changed when selecting this option.

Disable Messages

Network requests for tie lines can be made from different applications on the system. If they cannot be routed, 'No Path' warning messages are displayed during the time you are using *Tie-Line Manager*. Click on and highlight *Disable Messages* to stop these messages being shown.

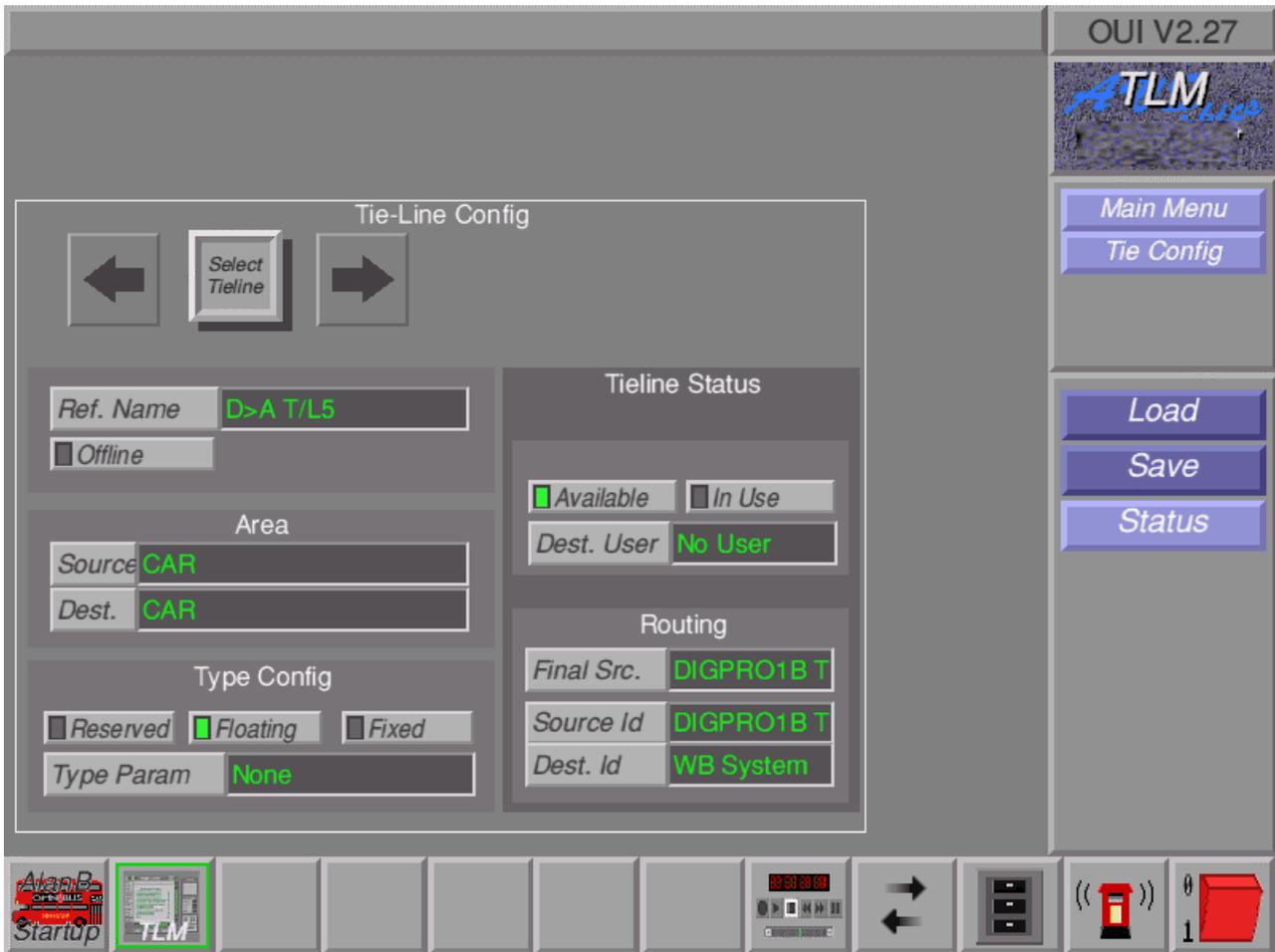
Disable TLM

The first time you use *Tie-Line Manager* the *Disable TLM* is highlighted. Click on *Disable TLM* to completely remove *Tie-Line Manager* from the network.

Save

After you have configured settings on this Menu, click on *Save* from the System Menu Bar to save the settings to the system.

Tie Config Menu



From the Tie Config Menu you can select a pre named tie-line and set up various configurations for each one. After selecting a tie-line you determine whether it is off or online, select the type and set up the status and availability on the system. You can then save each tie-lines configuration to the system.

Select Tieline

Click on *Select Tieline* to display the *Select Tieline* window where you can select from a list of available tie-lines. You can also click on the left or right arrows to scroll through the available tie-lines configured on the system.



Ref. Name

Click on *Ref. Name* and enter your preferred reference name for the tie-line. The default is the router source and destination identification as setup in the Router database.

Offline

When highlighted the current tie-line cannot be used. You can select this option if the tie-line has been configured on the system but the hardware is not available. To be able to use the tie-line you must change its default state from offline (highlighted) to online (not highlighted).

Source

The source area of the tie-line is displayed here.

Dest.

The destination area is displayed here.

Reserved

When highlighted the tie-line can be reserved to the destination displayed in the *Type Param* option.

Floating

When highlighted the displayed tie-line can be used by anyone on the system.

Fixed

When highlighted the tie-line is set to always be available to the source displayed in the *Type Param* option.

Type Param

This is a destination for the current reserved tie-line, i.e. you could make the current tie-line only available to a particular users monitor.

If *Fixed* has been selected, *Type Param* is the source for the current fixed tie-line.

Available

This option is highlighted automatically when the tie-line is available at the router.

In Use

When highlighted the 'top user' is displayed in the *Dest. User* text box.

Dest. User

The name of the main user of the tie-line is displayed when the *In Use* option is highlighted. Click on *Dest. User* to display the *Users* window. This will display the router destination and from what time they have been using the tie-line.

Final Src.

Displays the ultimate source of the tie-line.

Source Id

This option displays the local source of the tie-line.

Dest. Id

Displays all users of the tie-line, both official and unofficial.

Load

If you have made some setting changes to a tie-line configuration and have not yet saved it, you can click on *Load* to re load the previously saved configuration.

Save

Click on *Save* after configuring the options on this Menu to save the settings for the current tie-line to the system.

Status Menu

Tie Line Destination Area OUI V2.27

CAR Status
 % Usage **47**
 Usage **8/17** --- All Areas ---

Tie Lines

	Name	In Use By	Ultimate Src	Local Src
01	OX>CR TL1		(CR)	(CR)
02	OX>CR TL2		(CR)	(CR)
03	A>D T/L1	1200 V6 (1)	BARS PAL (CR)	BARS PAL (CR)
04	A>D T/L2	East (1)	PALPRO 2A (CR)	PALPRO 2A (CR)
05	A>D T/L3	West (1)	PALPRO 1A (CR)	PALPRO 1A (CR)
06	A>D T/L4	1200 V5 (1)	4000 ME2 (CR)	D>A T/L2 (CR)
07	D>A T/L1		(CR)	(CR)
08	D>A T/L2	1200 V5 (1)	4000 ME2 (CR)	4000 ME2 (CR)
09	D>A T/L3		(CR)	(CR)
10	D>A T/L4	PPRO REC (1)	DIGPRO 2B (CR)	DIGPRO 2B (CR)
11	D>A T/L5	Off Line	DIGPRO 1A (CR)	DIGPRO 1A (CR)
12	D>A T/L6		(CR)	(CR)
13	D>A T/L7		(CR)	(CR)

Requests **3** Successes **3** Failures **0**

Navigation: Main Menu, Status, Browse, Export Log

The Status Menu displays information about tie-lines between areas. In the 2nd column, an F or V may be displayed against a tie-line to show if it is fixed or reserved. If a router matrix is unavailable or offline, this is displayed in the In Use By column. The top user and the number of users of a tie-line are also shown in this column. You can scroll through the list using the up and down arrows and click on a column to get information about a tie-line.

Browse

Click on *Browse* for a search of each routers database. Each router on the system is searched one by one until a tie-line matrix source name is found. All the other databases are then searched for a corresponding name. The results of the search are displayed in the Menu.

Areas

The 2 large buttons at the top left and right of the Status Menu show the destination and source areas. By default a tie-line route is displayed from *All Areas* to *All Areas*.

Click on the large destination or source buttons to display the *Select Destination/Source Area* window where you can choose an area from the available list. You can therefore control which tie-lines you wish to view on the Status Menu. Scroll up and down the list using the vertical scroll bar at the right hand side to view all the sources/destinations in the available list windows.

Columns

Click on a tie-line in the Name, Ultimate Src or Local Src column to display the Tieline Status window.

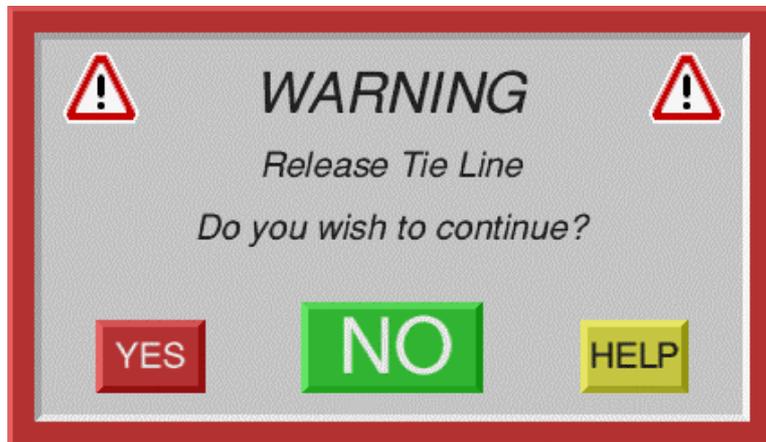


The status of the selected tie-line is displayed. You can see if the tie-line source and destination has been recognised and is therefore available or is in use and you can click on *Dest. User* to display the 'owner' (the destination (monitor etc.)). This list also displays the date and time each user commenced using the tie-line.

The Routing area displays the ultimate source and its identification. If you click on *Dest. Id* a list of all the users not currently controlled by **Tie-Line Manager** are shown.

If all the tie-lines are being used, you can force users off by clicking on a tie-line in the In Use By column.

A warning message is displayed asking you to confirm that you wish to release the tie-line.



% Usage

This displays the percentage of tie-lines currently in use between the selected areas.

Usage

This displays the number of tie-lines on the system and the number currently being used between the selected areas.

Requests

This displays the number of requests for tie-lines in this particular day between the selected areas. The day commences from midnight.

Successes

This displays the number of requests that have been successful between the selected areas.

Failures

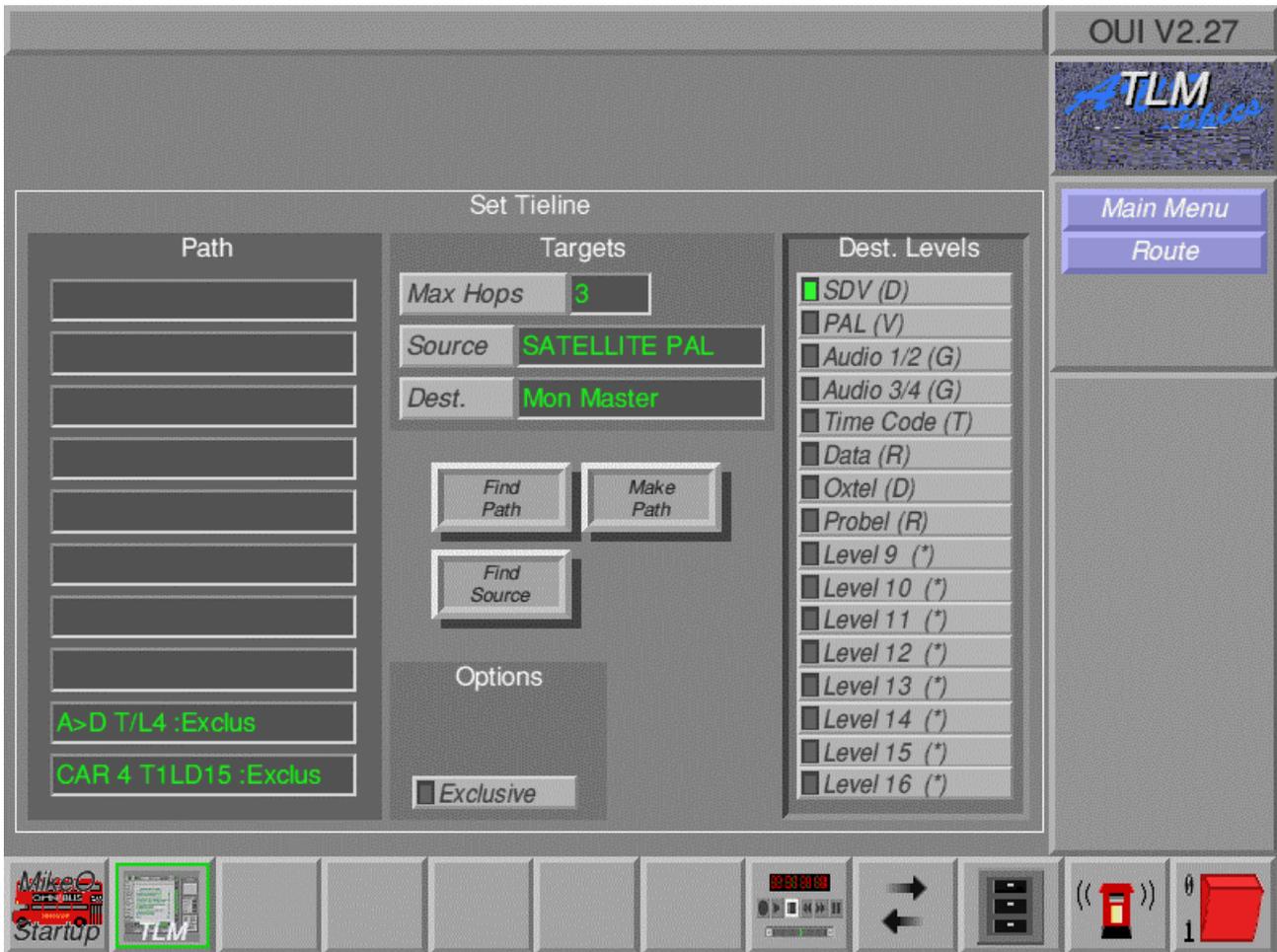
Click on *Failures* to display a list of the last 100 failed route requests for tie-lines and the day/date of failure between the selected areas. The last failed route appears at the top of the list.

The tie-line can fail for various reasons, for example, there are no tie-lines, tie-lines exist but they are all in use, etc.

Export Log

Click on *Export Log* from the Status Menu Bar to display the *Day to Export* box. You can then enter the required day of the month number and write that days tie-line action log in C.S.V. (Common Separated File) format to a floppy disk. You can export a log numerous times during a day if required.

Route Menu



The Route Menu allows you to find and test routes between sources and destinations. You can find tie-line paths which will be displayed in the Path area and initialise them. You can also set various target options and make the tie-line exclusive.

Depending on the mode selected from the System Menu, you will have exclusive, shared or ownership of this tie-line segment. If *Share Reserved* has been selected you will share a reserved tie-line.

Max Hops

Click on *Max Hops* to display the *Number of Hops* box where you can enter the maximum number of jumps between the original source and a destination.

Warning Selecting a high number for each tie-line may slow other users access.



Source

Click on *Route Source* to display the *Select Source* window and select the source from the available list.

Dest.

Click on *Route Dest.* to display the *Select Destination* window and select the destination from the available list.

Find Path

Click on *Find Path* to display the route of the tie-line in the Path list. The bottom of the Path area is towards the destination. The Path area text boxes show the tie-line segment to be used and its status should you use it.

If you are only finding the path this may not tally until you select *Make Path*.

Find Source

When you have chosen a *Route Dest.* click on *Find Source* to display the current source for a destination.

Make Path

Click on *Make Path* to initiate route commands as shown in the Status Menu to all Router controllers and route the specified source to a destination. The path is displayed in the Path list and the tie-lines source and destination are also displayed.

If you click on a Path area text box at a valid location, extra status information can be obtained from the displayed *Tieline Status* window.

Dest Levels

Click on and highlight a destination level. When you select *Make Path* the selected level will be used in the route from the source to the destination.

Exclusive

Click on *Exclusive* if you want to find a tie-line path that is currently not being used.