6

OmniVU Setup Procedures

Before you can use OmniVU, you need to set up your cable system and transponders. This chapter will show you how to do this. (Before attempting to set up your cable system, we recommend that you read and fully understand this User's Guide.)

Setting up your cable system to work with OmniVU consists of the following major steps:

1. Cable System Setup:

    * Install transponders throughout your Cable System.

    * Use the OmniVU System Manager and Topologer to Describe your Cable System to OmniVU.

      (These two steps can be performed in any order. They are simply listed in this order for convenience.)

2. Identify and set up installed transponders for Communication with OmniVU.

Installing the Transponders

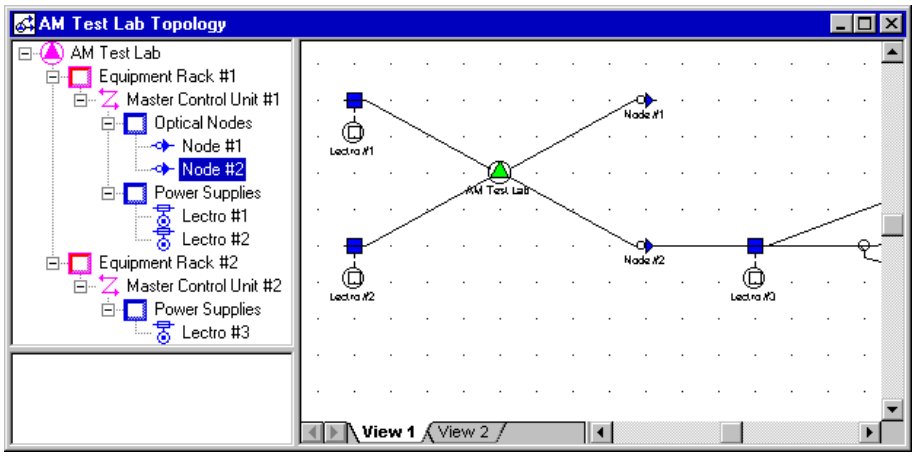
Planning transponder placement should be done in accordance with best commercial practice. When in doubt, contact AM Communications for information on transponder placement.

Transponder installation should be performed in accordance with the applicable transponder installation manual.

Describing Your Cable System to OmniVU™

Once you have installed your transponders, you need to tell OmniVU where they are in your cable system and what they are monitoring. This task is performed using the OmniVU System Manager and/or the OmniVU Topologer.

When you start OmniVU, the System Manager is open. The illustration below shows a sample system made up of several headends, groups, master control units, and transponders:

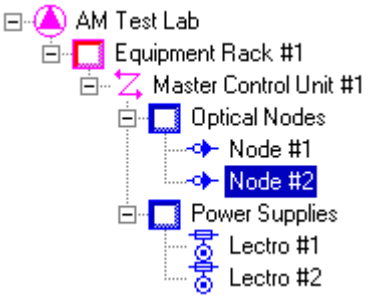


Using the tree at the upper left-hand side of the System Manager, you enter data about the monitoring components installed in the cable system.

Using the Topologer window on the right side of the System Manager, your cable system can be drawn using toolbar symbols to represent the various components of the cable system.

The Topologer icons and System Tree views can be connected to complete OmniVU's customized interface to your cable system.

System Tree Basics



The System Tree groups items together under *headends*. Headends are the highest level item on the System Tree. Other items (MCU's, groups, and transponders) fall beneath headends in the System Tree.

Headends divide your cable system into manageable units.

Beneath Headends in the System Tree are the MCU's and/or groups of MCU's.

Beneath MCU's are transponders and/or groups of transponders, all of which are controlled by the MCU which they reside beneath.

Creation and setup of each item is described later in this section.

System Tree Hierarchy

The hierarchy is as follows:

Headends

Groups

Master Control Units

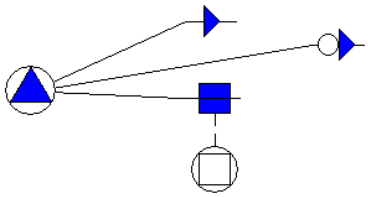
Groups

Transponders

Groups can reside beneath headends and/or Master Control Units. All items, except headends, can reside beneath a group in the hierarchy.

Topologer Basics

As mentioned above, the Topologer allows you to "draw" your cable system to provide a visual representation of the components you wish to monitor.



The Topologer works much like a drawing program. You use tools from the Toolbar to place objects on the Topologer. Connectivity rules are enforced so that you do not leave parts of the system unconnected.

Drag and drop placement of items allows you the flexibility to easily edit your Topologer view.

Drawing tools are provided to allow you to enter all devices which OmniVU can monitor as well as couplers, splitters, and taps.

Once you have "drawn" your cable system, you "connect" the Topologer to the System Tree using popup menus. After connection, the Topologer provides a visual indication of the alarm status of the monitored components.

Creation and setup of each item is described below.

Using the Topologer

When you first launch OmniVU, a System Manager window appears. This window

blank Topologer Window. You can start entering Topologer components at any time. (You do not need to have corresponding components entered in the System

Topologer Toolbar

The Toolbar located on the OmniVU parent window contains a toolbar containing

is broken into several sections. Most of these sections are for use with the Topologer. Let's take a look at the Toolbar before we start entering cable system

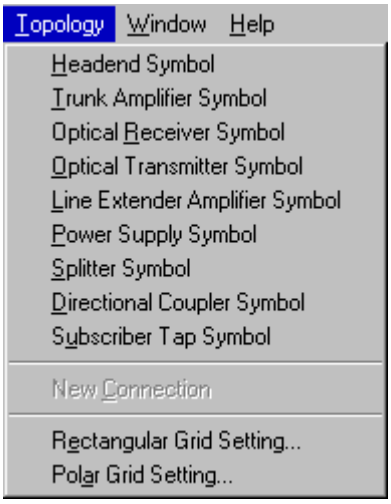
Topologer Components:

This portion of the Toolbar contains the components that you can place on the

The tools are (from left to right):

- Drawing Cursor
- Headend Symbol
- Trunk Amplifier Symbol
- Optical Node Symbol
- Optical Transmitter Symbol
- Line Extender Amplifier Symbol
- Power Supply Symbol
- Splitter Symbol
- Directional Coupler Symbol
- Subscriber Tap Symbol
- New Connection Symbol

Note: These tools can also be selected by using the menu on the OmniVU parent window.



Snap Modes:

This portion of the Toolbar dictates how symbols are placed when added to the Topologer.

The tools are (from left to right):

- Allow placement anywhere
- Snap the inserted symbols to the nearest grid intersection
- Insert a symbol between two connected symbols

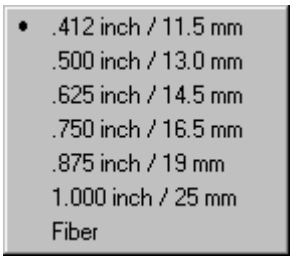
Line Types:

This portion of the toolbar indicates the line types used between connected symbols.

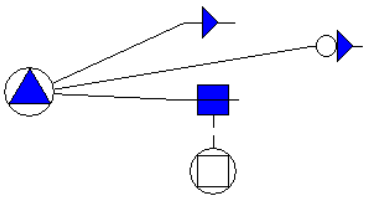
The tools are (from left to right):

- .412 inch/11.5 mm
- .500 inch/13.0 mm
- .625 inch/14.5 mm
- .750 inch/16.5 mm
- .875 inch/19.0 mm
- 1.000 inch/25.0 mm
- Fiber

Note: These line types can also be selected by using the popup-menu on the Topologer when the mouse is pointing to the line you wish to change.



Creating a Topology



As stated previously, when you first launch OmniVU, a System Manager window appears with several sample components in the System Tree, a blank Alarm View window, and a blank Topologer window.

With a few mouse clicks, you can begin creating topologies for your cable system.

Inserting and Working with Topology Symbols

To insert a topology symbol:

1. Select the symbol using either the Toolbar or the **Topology** menu.

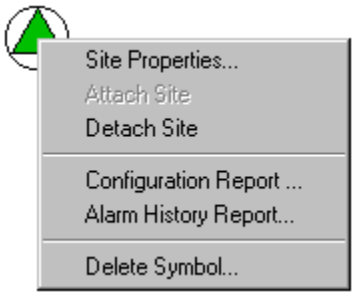
2. If desired, click on the line type (on the Toolbar) that is used to connect the installed component to a higher-level component.

3. Click on the Topologer where you want to insert the symbol.

4. If required, connect the symbol to a higher-level component by clicking on the higher-level component.

Once you've inserted the symbol, you can drag the symbol to any desired location.

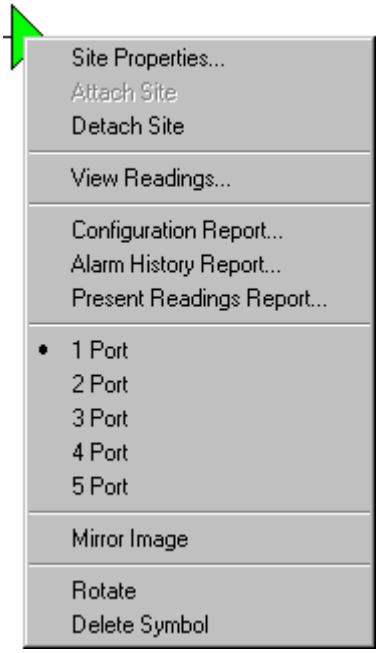
Each topology symbol has an associated popup menu which is accessed by clicking the right mouse button when the mouse cursor is pointing to the associated symbol. For example, click the right mouse button while pointing to a headend symbol. The following menu will appear:



This menu allows you to view and edit site properties for this component, attach the component to a site (using the System Tree), detach the component from a site, generate configuration and alarm history reports for this component, or delete the component from the topology.

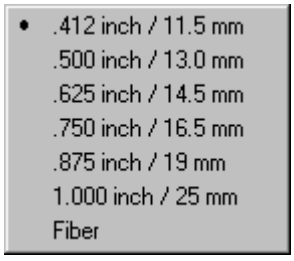
The popup menus vary based on the component selected.

For example, if you select the popup menu from a trunk amplifier symbol, you'll see the following:



This menu allows you to perform the same types of procedures as the headend popup, but you can also perform tasks related to this specific component, such as; changing the number of ports, mirroring the symbol (so that it points in the opposite direction, and rotating the symbol, so that it points in a different direction).

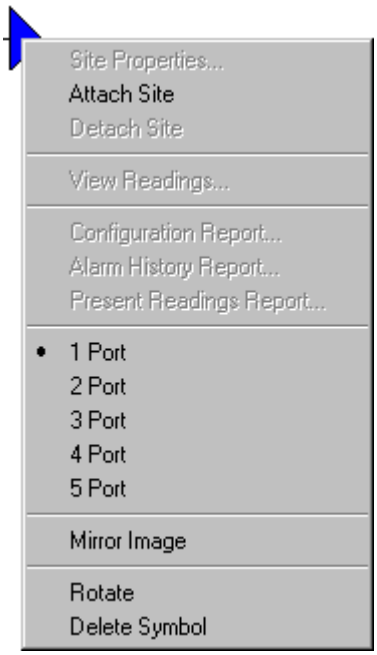
You can also access a popup menu for line types when you are pointing the cursor at a connecting line. Clicking the right mouse button brings up the following menu:



You can then change the line type as desired by clicking on the desired menu item.

Connecting Topology Components to System Tree Components

Once a topology component is inserted, it can be connected to a corresponding, existing item on the System Tree. (Refer to the information on the System Tree found on page 2.)



Clicking the **Site Properties...** menu item brings up the setup dialog for the selected topology component. For example, since the illustration above is a trunk amplifier, the associated component on the System Tree would be an amplifier transponder. (Refer to the Transponder Setup portion of this chapter, page **Error! Bookmark not defined.**, for more information.)

Clicking the **Attach Site** menu item connects this topology component to the highlighted component of the System Tree. The color of the topology component will change from blue (unconnected) to gray (unknown).

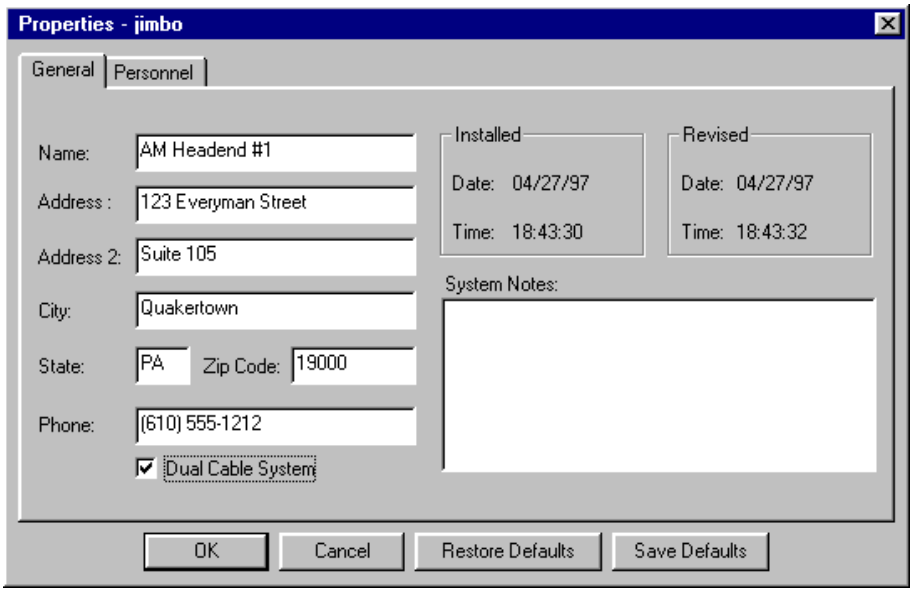
Clicking the **Detach Site** menu item disconnects the selected topology component from its associated System Tree component.

Establishing Headends

OmniVU follows the deployment scenario of systems by dividing the cable system into headends. Each headend is defined individually as follows.

AM Cable System

Select the **New Headend Site...** menu item from the **Sites** menu. The following form will appear.



The Headend Setup form is made up of two tabs.

This form allows you to create and enter information about a new headend.

Each field is described below:

Cable System Tab Field Definitions

The Cable System tab allows you to enter information about the headend such as the headend name, location, phone number, etc.

Name - The name you wish to assign to the headend. (This is the name that will appear on the System Tree.)

Address/Address 2/City/State/Zip Code - The street address for this headend.

Phone - The voice phone number for this headend.

Dual Cable System - An **X** in this check box indicates that your headend is part of a dual cable system.

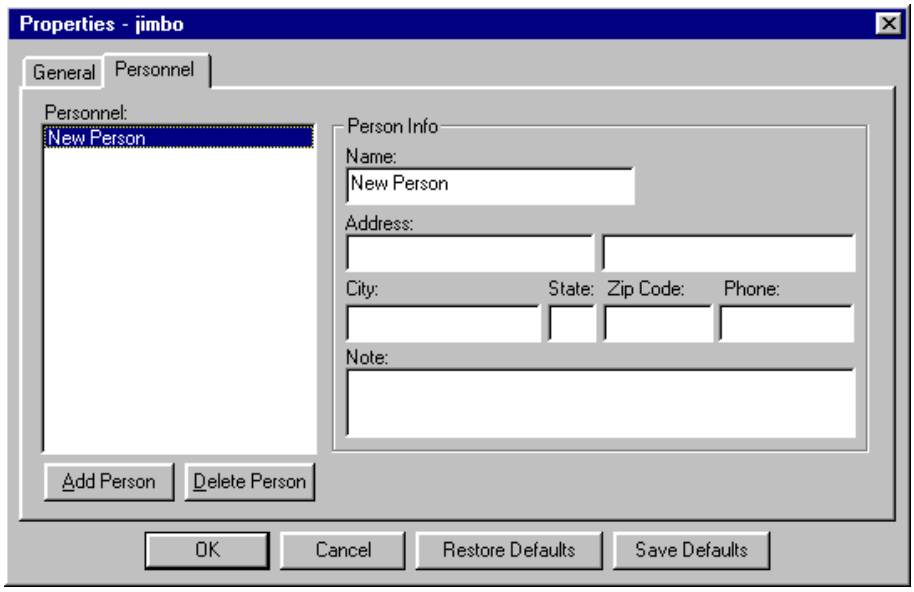
Notes - Freeform note entry field in which notes regarding this headend can be entered.

Installed - The date and time that this headend was created. (This field is maintained by OmniVU for administrative purposes and cannot be modified.)

Revised - The date and time that this headend was last revised. (This field is maintained by OmniVU for administrative purposes and cannot be modified.)

Personnel Tab Field Definitions

The Personnel tab allows you to enter information about engineers and technicians associated with this headend.



Personnel - An engineer or technician available to service this headend. Select the desired individual by clicking on the associated name in the list box below this field. This loads the information associated with the selected individual in the other fields on this tab. To enter a new individual. simply click the **Add Person** button then type the individuals name in the **Personnel** field. To delete an individual, click on their name in the Personnel field and click the **Delete Person** button.

Address/Address 2/City/State/Zip Code - The street address of the selected individual.

Phone - The voice phone number for the currently selected individual.

Note - Freeform note entry field in which notes regarding the selected individual can be entered.