

# spatialNET 5.6.1 features

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# About this Guide

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This guide provides step-by-step processes for configuring and using spatialNET.

## Audience

This guide is intended for administrators and users of spatialNET.

## Version

spatialNETversion 2010 R1 5.6.1

## Prerequisites

N/A

## Related Documentation

- spatialNET Release Notes
- System Requirements on [www.spatialinfo.com](http://www.spatialinfo.com)

## System Requirements

### License Server Requirements

The spatialNET license server (SAM) is required to be installed on a Windows-based machine, and centrally manages the license pool for all spatialNET users.

Any Windows-based machine can be used to host the SAM server, including existing Oracle, spatialWEB or spatialOFFLINE servers.

### Client Machines

SpatialNET operates on stand-alone PCs that have a network connection to the Oracle database. Each spatialNET client must have the following software installed:

- Windows XP SP2/SP3, Windows Vista.
- AutoCAD MAP 3D 2007 or later
- Oracle Full Client 10.2.0.3 patch 1 or later
- MS Office for integration with Excel

SpatialNET operates over a TCP/IP connection from the AutoCAD client machine to the Oracle server and the license server using a direct LAN connection or a VPN connection. Many customers connect to their Oracle database over VPN software such as the Cisco VPN client. SpatialNET also operates as a desktop client without AutoCAD, using Google or as a standalone application.

A typical spatialNET client machine should meet these minimum requirements:

	Minimum	Highly Recommended
<b>Processor</b>	2.0 GHz dual Core	3.3 GHz dual-core
<b>RAM</b>	2 GB (Windows XP) 4 GB (Windows Vista)	4 GB (Windows XP) 4 GB (Windows Vista)
<b>Graphics</b>	1280 x 900 @ 24-bit standard graphics card	1920x1200 @ 24-bit, with dual monitors
<b>Network</b>	100M connection to the Oracle server	GigE connection to the Oracle server

## Conventions Used in this Manual

Convention	Description
<b><u>Heading</u></b>	New chapter or section
<i><u>Note</u></i>	Extra information about the task or heading.
<b><u>WARNING</u></b>	Causes functionality issues or software malfunction
<b>Bold</b>	Emphasis within the instruction
<a href="#"><u>hyperlink</u></a>	Links within or outside of the document
<i>italics</i>	Extra information with a task

## Support

<http://support.spatialinfo.com>

## Feedback

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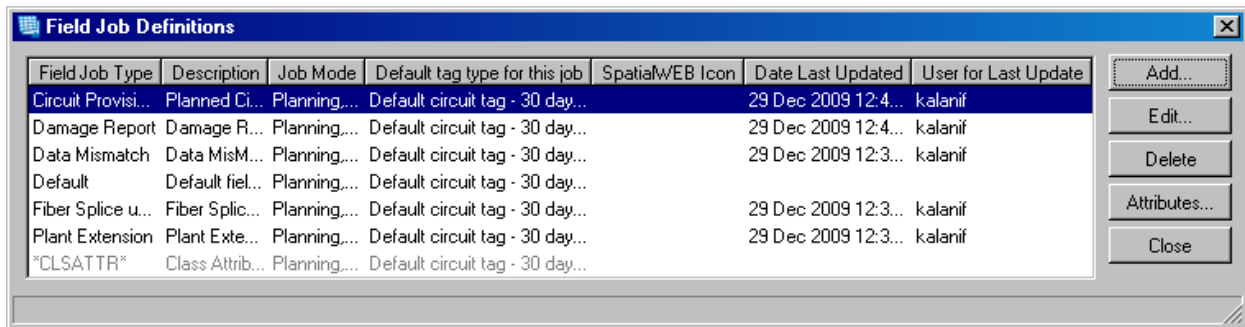
## SECTION 1 DICTIONARY CONFIGURATIONS IN 5.6.1

SpatialNET uses dictionaries, a reference source containing definitions of site and equipment types. The dictionaries save specifications for equipment types. Create, edit and delete specifications for equipment types in the dictionary. Before a site or equipment type can be used in spatialNET, a new entry in the dictionary must be created and defined.

### Defining Field Job Types in the Dictionary

To define a Field job in the dictionary:

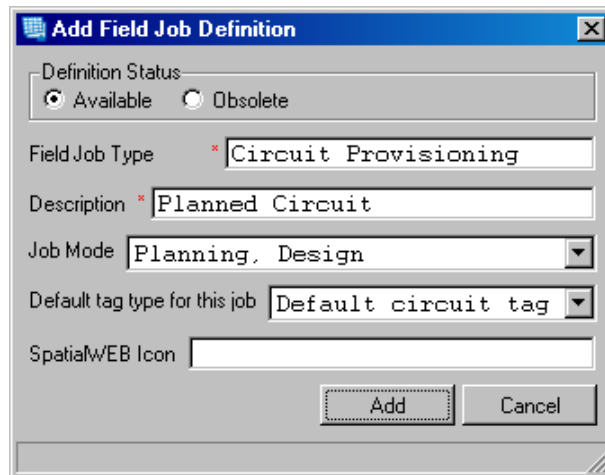
1. Go to **SPATIALnet > Dictionaries > Other Definitions > Field Job Definitions**



Field Job Type	Description	Job Mode	Default tag type for this job	SpatialWEB Icon	Date Last Updated	User for Last Update	
Circuit Provisi...	Planned Ci...	Planning...	Default circuit tag - 30 day...		29 Dec 2009 12:4...	kalanif	Add...
Damage Report	Damage R...	Planning...	Default circuit tag - 30 day...		29 Dec 2009 12:4...	kalanif	Edit...
Data Mismatch	Data MisM...	Planning...	Default circuit tag - 30 day...		29 Dec 2009 12:3...	kalanif	Delete
Default	Default fiel...	Planning...	Default circuit tag - 30 day...				Attributes...
Fiber Splice u...	Fiber Splic...	Planning...	Default circuit tag - 30 day...		29 Dec 2009 12:3...	kalanif	Close
Plant Extension	Plant Ext...	Planning...	Default circuit tag - 30 day...		29 Dec 2009 12:3...	kalanif	
*CLSATTR*	Class Attrib...	Planning...	Default circuit tag - 30 day...				

Figure 1 Field Job Definitions

2. Select **Add**. The Add Field Job Definition dialog box opens. Enter the following information:



**Add Field Job Definition**

Definition Status  
 Available  Obsolete

Field Job Type \*

Description \*

Job Mode

Default tag type for this job

SpatialWEB Icon

Figure 2 Add Field Job Definition

Name	Definition
<b>Definition status</b>	Select Available to use as a definition
<b>Field Job Type</b>	Enter a name for a type of field job markups. Ex: Circuit Provisioning
<b>Description</b>	Describe the type of field job
<b>Job Mode</b>	Audit mode- Use for markups for an entire splice case, not fiber specific Planning, Design Mode- Use for markups to splice cases lock specific fibers and reserve circuit tags
<b>Default tag type for this job</b>	Select a circuit tag type for circuit tag markups  Note: Circuit tag types are populated by the circuit tag dictionary. See Defining Circuit tags for more information.
<b>spatialWEB icon</b>	Enter a name of a spatialWEB icon in a png format.

3. Select **Add**.

### Add attributes associated with a field job.

Attributes or descriptions can be associated with a field job. A list of default attributes is included, with the ability to also add specific attributes.

1. Select the **Attribute** button. The **Attribute Mapping** dialogue box opens. Select **Add**.

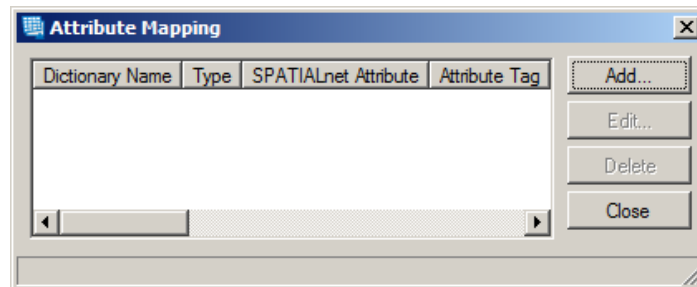


Figure 3 Attribute Mapping

2. The **Add Attribute Mapping** dialog box opens.

Figure 4 Field Jobs Attribute Mapping

3. Enter the following:

Name	Description
<b>Dictionary Name</b>	States the name of dictionary for added attribute
<b>Type</b>	States the type of field job, Audit or Planning and Design. See <a href="#">Defining Field Jobs in the Dictionary</a> for more information
<b>spatialNET Attribute</b>	Select type of attribute from drop-down menu.
<b>Attribute tag</b>	Name of the actual tag that is defined in the block drawing.
<b>Content</b>	Allow an empty field or define if it must have a value.
<b>Attribute rotation</b>	Select an Attribute rotation type from the drop-down menu. See <a href="#">Attribute rotation</a> below.
<b>Default value</b>	Set this for attribute mapping- Examples of attribute mapping maybe numbers, or a state, depending on use of the attribute mapping.

4. Select **Add** when complete.

## Attribute Mapping Dictionary

The Attribute mapping dictionary can rotate attributions for any spatial attribute annotations.

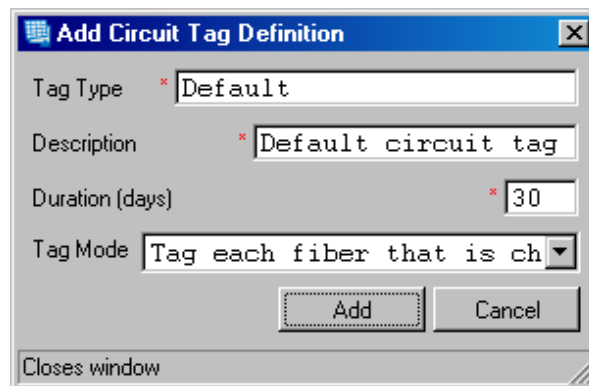
Name	Description
<b>Rotate with Block</b>	Rotate with the owning block
<b>Ignore Block Rotation</b>	Attributes display upright. If owning block is rotated, the location of attribute varies.
<b>Ignore Block rotation, lock position</b>	Attributes display upright. Location is locked.

## Circuit tag Definitions

Circuit tag definitions in 5.6.1 remain the same, however, ensure that the circuit tag definition does not conflict with a field job definition. Do not set up a tag mode that conflicts with Audit or Planning modes for Field Jobs. See [Field Jobs](#) for more information.

To create a circuit tag definition:

1. Go to **SPATIALnet->Dictionaries->Others Definitions>Circuit tags Definitions**.
2. The Circuit Tag Definitions dialog box opens. Select **Add**.
3. The **Add Circuit tag definition** dialog box opens



The screenshot shows a dialog box titled "Add Circuit Tag Definition". It has a standard Windows-style title bar with a close button (X). The dialog contains the following fields and controls:

- Tag Type**: A text box containing "Default".
- Description**: A text box containing "Default circuit tag".
- Duration (days)**: A text box containing "30".
- Tag Mode**: A dropdown menu with the selected option "Tag each fiber that is ch".
- Buttons**: "Add" and "Cancel" buttons are located at the bottom center.
- Status Bar**: A small text box at the bottom left corner contains the text "Closes window".

Figure 5 Add Circuit Tag Definition

Name	Definition
<b>Tag Type</b>	Name of the tag
<b>Description</b>	Describe the tag type
<b>Duration</b>	Time before expiration
<b>Tag mode</b>	Select either <ul style="list-style-type: none"> <li>• Tag each fiber that is changed</li> <li>• Tag the whole splice case</li> </ul> Circuit tag types must match to Audit or Planning and design modes for field jobs to work correctly. See <a href="#">Field jobs</a> for more information.

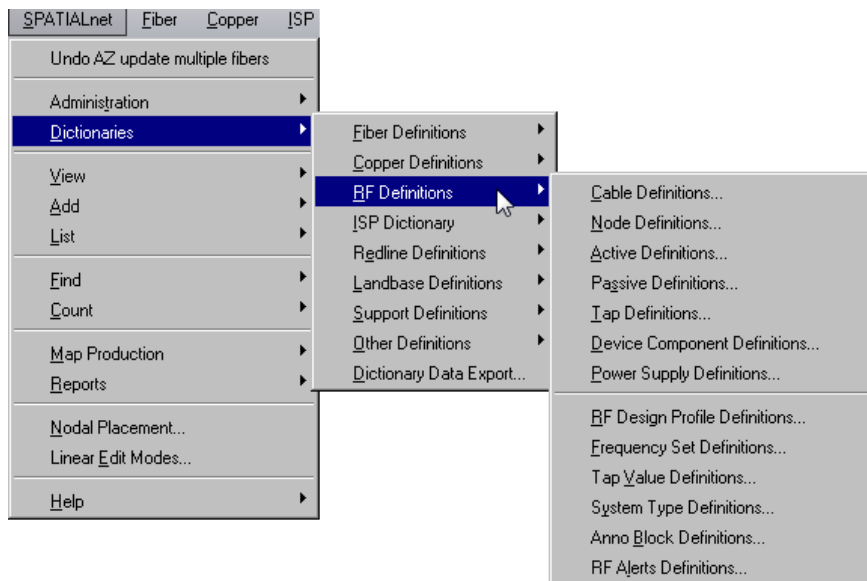
## RF Dictionary

### Changing the Definition status of RF equipment types

The definition status of RF equipment displays in all RF equipment dictionaries, nodes, actives, passives, taps, power supplies and cables. The definition status defines if the definition is available for use.

To change between Available or Obsolete settings in equipment dictionaries:

1. Go to **SPATIALnet->Dictionaries->RF Definitions**. Select the equipment type to define:



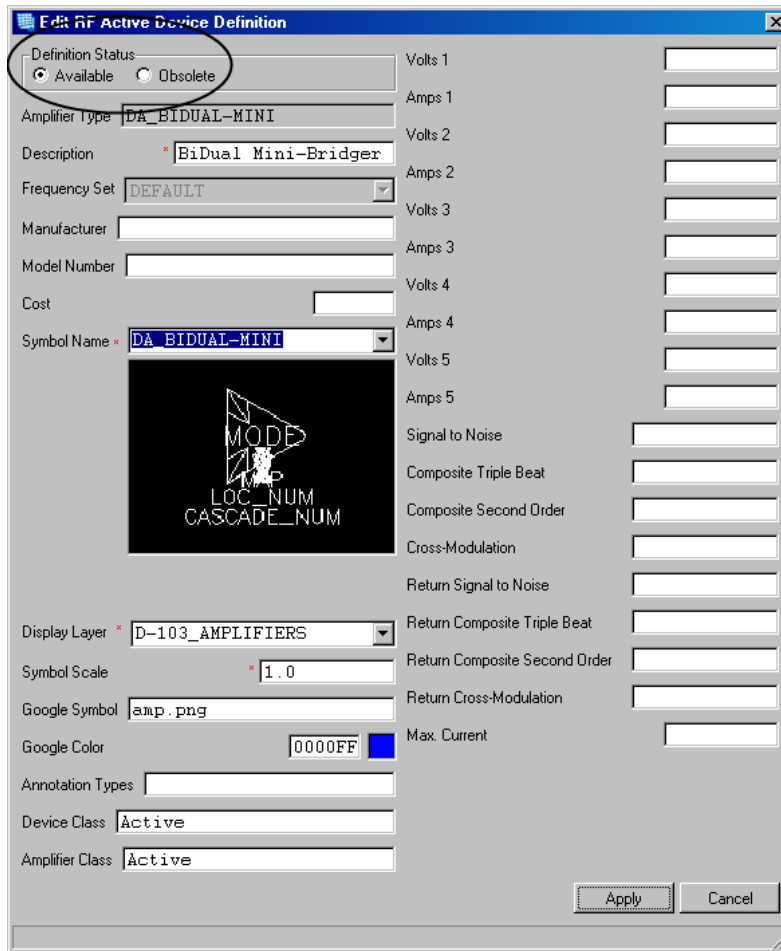


Figure 6 RF Equipment Definition Status example

2. Select Available or Obsolete.

- Obsolete: Design profile lists the equipment type as Not in Use; not available to select when placing RF equipment, but remains stored in the dictionary.
- Available: Available to select equipment when placing RF equipment.

When changing between Available and Obsolete, Design profiles are automatically updated, showing the new status.

## Fiber dictionary

### Cable Annotations Dictionary

A new RF Cable Type annotation is available. This annotation displays on the map view, listing RF cable information.

To add an RF Cable Type definitions:

1. Go to **spatialNET->Dictionaries->Other Definitions->Cable Annotations Definitions** The **Cable Annotation Definitions** dialog box opens.

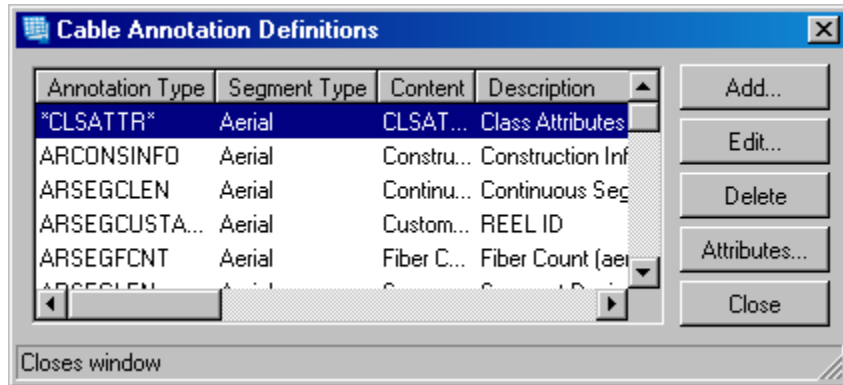


Figure 7 Cable Annotation Definitions

2. Select. **Add**. The **Add Cable Annotation Definition** dialog box opens.

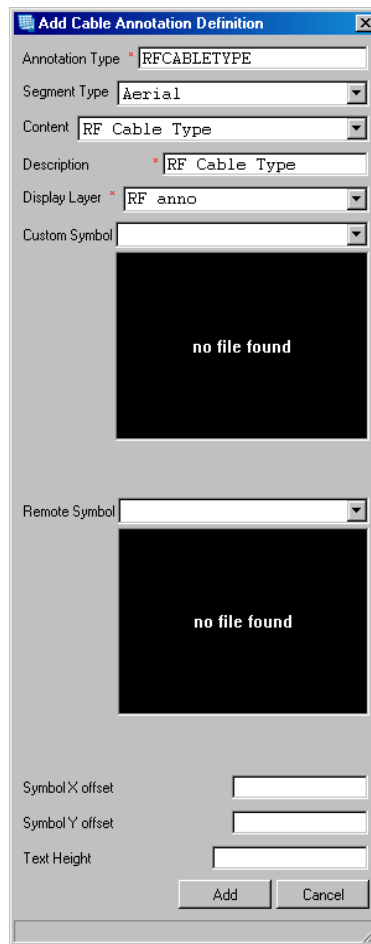


Figure 8 Add Cable Annotation Definition

Name	Description
<b>Annotation Type</b>	Name for the new type of annotation
<b>Segment Type</b>	Type of segment to apply annotation
<b>Content</b>	Information that should be included in the annotation
<b>Description</b>	User's description of the annotation type
<b>Display Layer</b>	Layer from the drawing the annotation displays
<b>Custom Symbol</b>	Select a custom symbol from the drop-down list.
<b>Remote Symbol</b>	The remote symbol is used as a marker; the annotation is placed nearby.
<b>Symbol X offset</b>	Annotation symbol offset in the x axis
<b>Symbol Y offset</b>	Annotation symbol offset in the y axis
<b>Text Height</b>	Text size of the annotation

3. Enter the following:
  - a. Annotation Type: RFCABLETYPE
  - b. Content: Select RF Cable Type
  - c. If available, select a custom and remote symbol.
4. Select **Add**.

## Defining Master Circuits

To configure:

1. Under **spatialNET**, select **Dictionaries-> Fiber Definitions-> Master Circuit Definitions**.

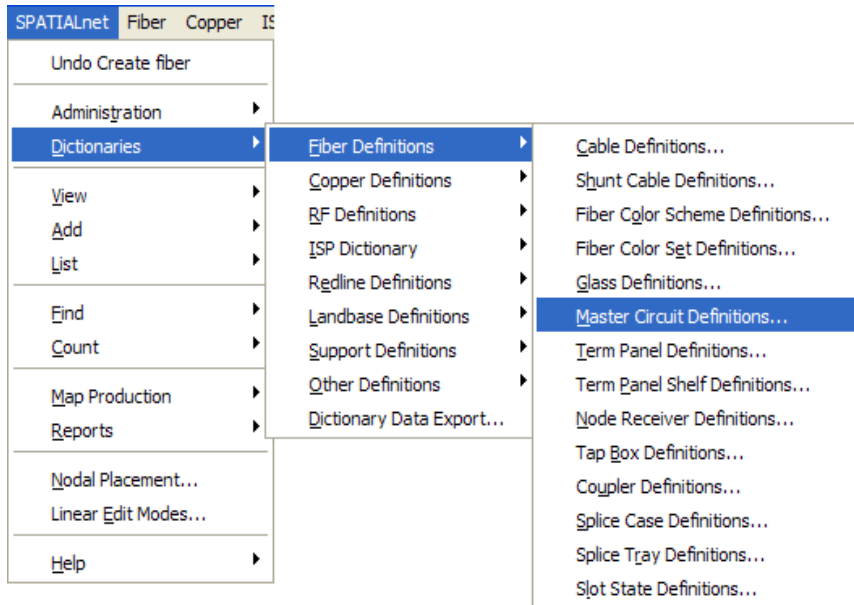


Figure 9 Master Circuit Definitions

2. The **Master Circuit Definitions** dialogue box opens. Select Add.

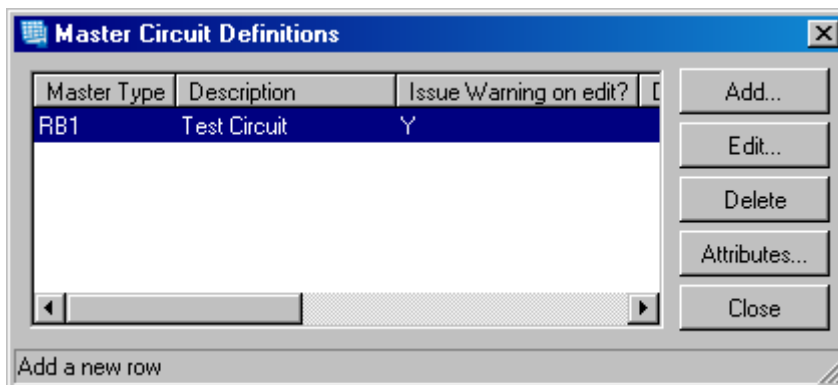


Figure 10 Master Circuit Definitions

3. The **Add Master Circuit Definition** dialogue box opens. Enter the following fields:

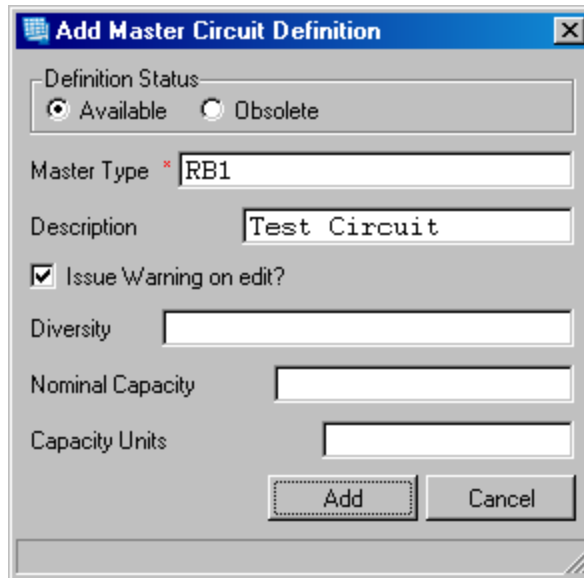


Figure 11 Add Master Circuit Definition

Name	Description
<b>Definition Status</b>	Select Available for current use
<b>Master Type</b>	Name the type of master circuit to be used
<b>Description</b>	Describe the Master Circuit. The description can also be used in the Master Circuits Definition box to sort.
<b>Issue Warning on edit?</b>	If selected, a warning dialogue box opens, notifying the user of changes made to the Master Circuit.
<b>Diversity</b>	Shows that this circuit is part of a diverse system.
<b>Nominal Capacity</b>	Enter amount of nominal capacity.
<b>Capacity Units</b>	Enter type of capacity units

4. Select **Add**.

## ISP Dictionary

### Setting the Power rating for a rack

The power rating for a rack can now be set in the ISP Equipment dictionary.

To set the power rating for a rack for a new ISP rack entry:

1. Go to **SPATIALnet->Dictionaries->ISP->Add entry**

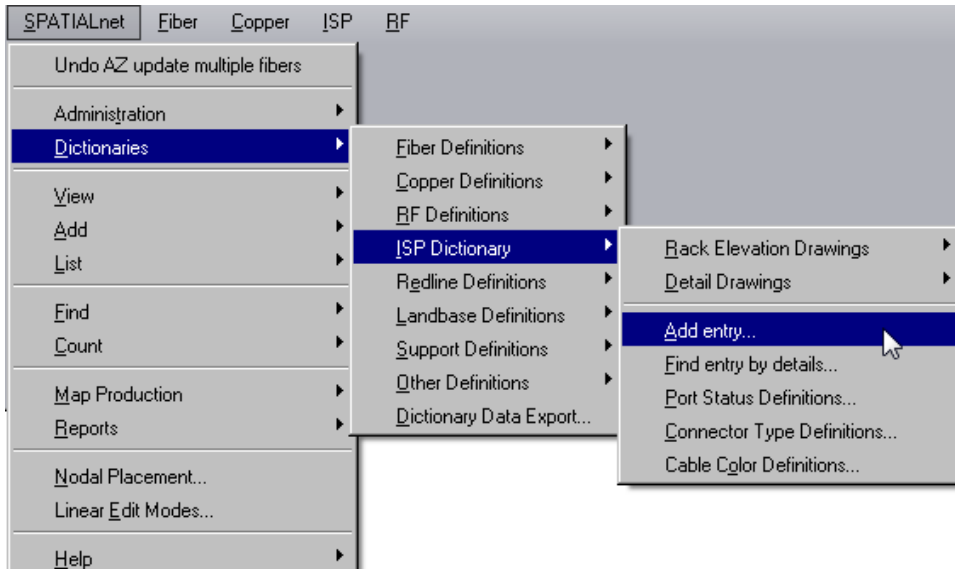
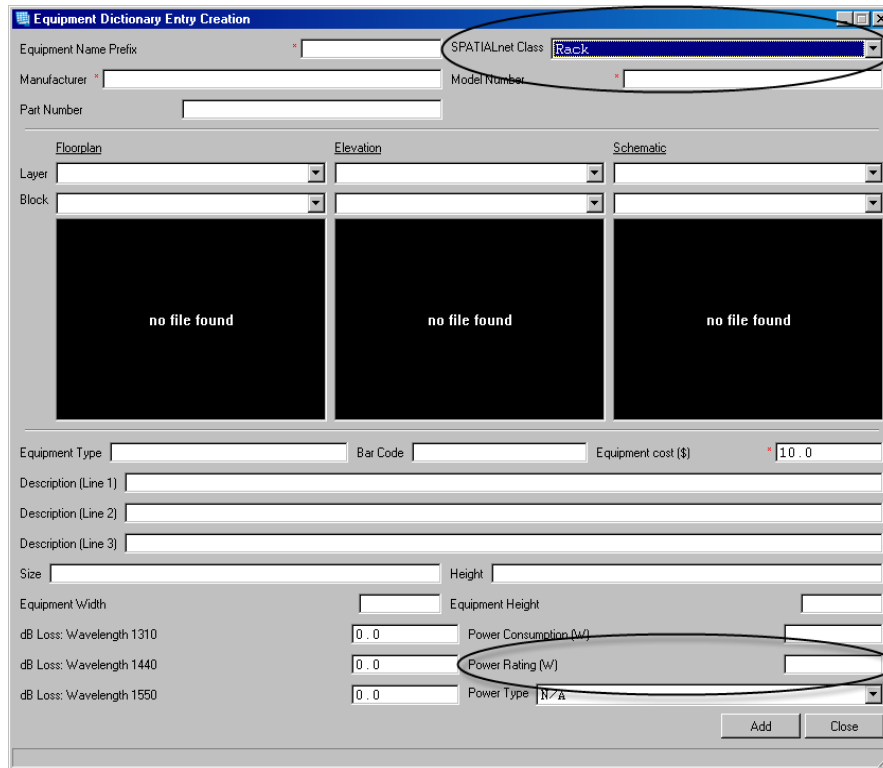


Figure 12 Adding ISP Entry

2. The **Equipment Dictionary Entry Creation** dialog box opens.
3. For the spatialNET class, select **Rack**.
4. Enter the power rating.



### To change an existing rack power rating:

1. Go to **spatialNET->Dictionaries->ISP Dictionary->Find Entry by Details.**

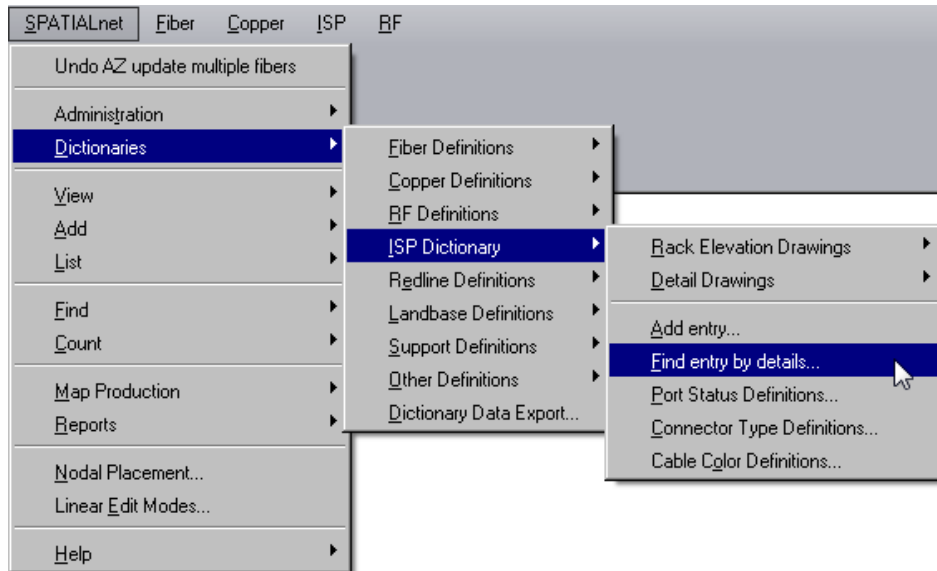


Figure 13 Find Entry by Details

2. The Equipment dictionary opens. Select Rack in the spatialNET class.
3. Select the rack to add the power rating from the list.

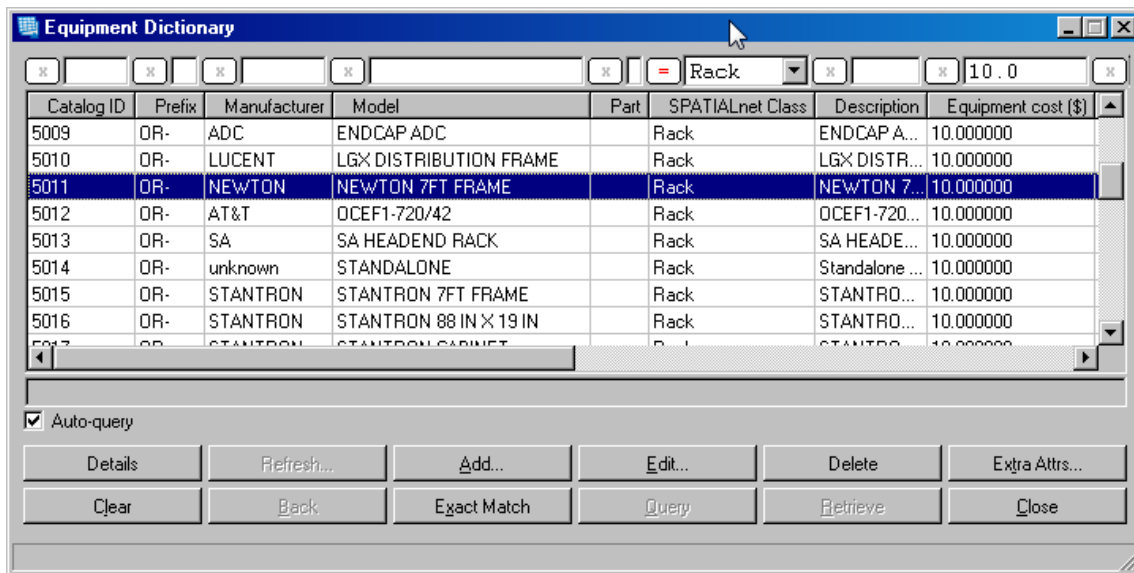


Figure 14 Equipment Dictionary

4. Select **Edit**.
5. The Equipment Dictionary Entry opens. See steps 2-4 above to edit the power rating.

## Setting the AC/DC Power Type

1. Open the Equipment Entry Dictionary Creation dialog box. See [Setting the Power rating for a rack](#) for information.

2. Select the Power Type from the drop-down menu.

The screenshot shows the 'Equipment Dictionary Entry Creation' dialog box. The 'Power Type' dropdown menu is open, displaying the following options: N/A, AC, DC, AC + DC, 3PH, and 3PH + DC. The dropdown is circled in red. Other fields in the dialog include 'Equipment Name Prefix', 'SPATIALnet Class' (no class selected), 'Manufacturer', 'Model Number', 'Part Number', 'Layer', 'Block', 'Equipment Type', 'Bar Code', 'Equipment cost (\$)' (10.0), 'Description (Line 1-3)', 'Size', 'Height', 'Equipment Width', 'Equipment Height', 'dB Loss: Wavelength 1310', 'Power Consumption (W)', 'dB Loss: Wavelength 1440', 'Power Rating (W)', and 'dB Loss: Wavelength 1550'. There are also three preview windows for 'Floorplan', 'Elevation', and 'Schematic', all showing 'no file found'.

## Changing the name of ISP Chassis linked to an OSP term panel

1. Open the spatialNET Equipment dictionary. Select Chassis in the SPATIALnet Class drop-down menu to find the specific chassis.
2. Select the Chassis to edit in the list. Select **Edit**.
3. In the Equipment Dictionary Entry Creation dialog box, change the Equipment Name Prefix. The OSP term panel that is linked to the chassis displays the new name.

The screenshot shows the 'Equipment Dictionary Entry Modification' dialog box. The 'Equipment Name Prefix' field is circled in red and contains the value 'CH'. The 'SPATIALnet Class' dropdown is set to 'Chassis'. Other fields include 'Catalog ID' (100010), 'Manufacturer' (Generic), 'Model Number' (PP72), and 'Part Number'.

Figure 15 Equipment name prefix

## SECTION 2 NEW USER FEATURES

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New features have been added to the following sections:

- Fiber and Field Jobs
- ISP
- MDUs
- RF
- Support Structures
- Boundaries

## Fiber

---

### Fiber Report

A report is now available that lists all fibers going into or out of an ISP or OSP site, displaying end equipment, nodes and sequences.


1. With a site selected, go to **Fiber->Reports->Fibers from Site**. The Cables report opens in a new window.

### Splice Details

Splice tray details now display in the Details panel.

1. Select a splice with a tray. For more information on how to select a splice, see the spatialNET User's Guide.



2. Select the **Details** Button  on the **General** Toolbar. The Details panel opens.
3. Under the **Tray Details**, splice information is listed.

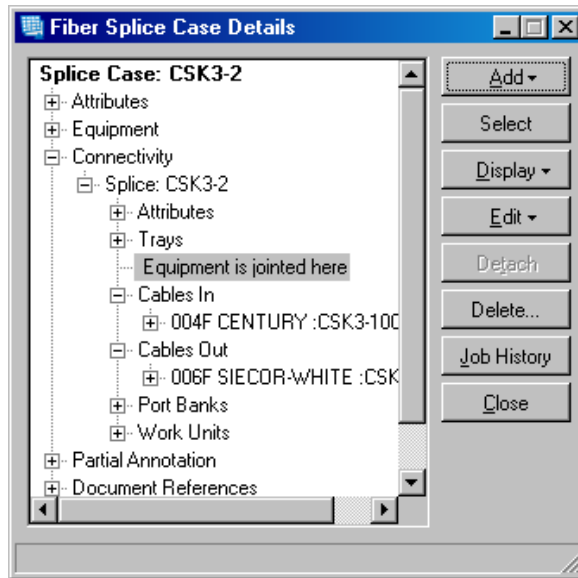


Figure 16 Fiber Splice Details

## Tracing






### Trace Fibers, Circuit Tags and Master Circuits in the Fiber List

SpatialNET provides a powerful, flexible tracing utility that can locate, display and report on connective paths throughout the network. We can trace physical cables and circuits, and logical circuits. We can also trace Master Circuits that we create within spatialNET. All of these can be traced:

- Upstream
- Downstream
- In both directions
- Flood

Trace results are shown on the map by highlighting cable sheaths and equipment, and several textual report formats are produced. Traces can also be saved in the database for later reporting, or export to third-party tools.

## The Tracing toolbar

Button	Name	Function
	Trace Control	Performs a trace.
	Rerun Saved Trace	Reruns a saved trace.
	Trace Cable	Traces a cable.
	Dark Fiber Trace	Performs Dark Fiber trace.
	Clear Highlight	Clears the trace highlight in map view.

To trace a fiber:

1. Select the line representing the fiber sheath by clicking on it in the map view.
2. Click on the **Fibers/Ports** list detail button on the SpatialNET Network Tools toolbar:



3. Select a fiber in the **Fiber List** dialogue box, and click the Trace button, as shown below.

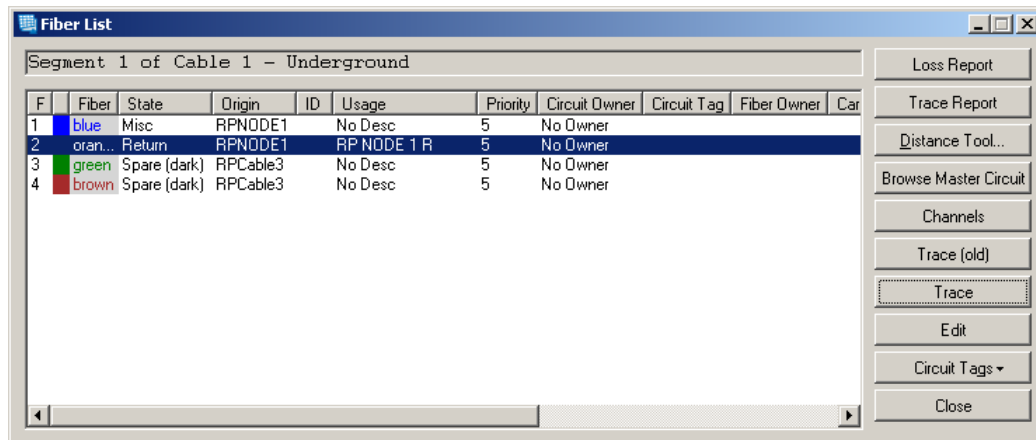


Figure 17 –Fiber List dialogue box

4. This opens the **Trace Control** dialogue box. The Trace Control tab selects a Trace Direction and lists the traced cable. The Trace Control Conditions tab selects types of networks to trace through, where to terminate the trace, and also to change the color that highlights the trace.
5. Select a trace direction from the drop-down menu.

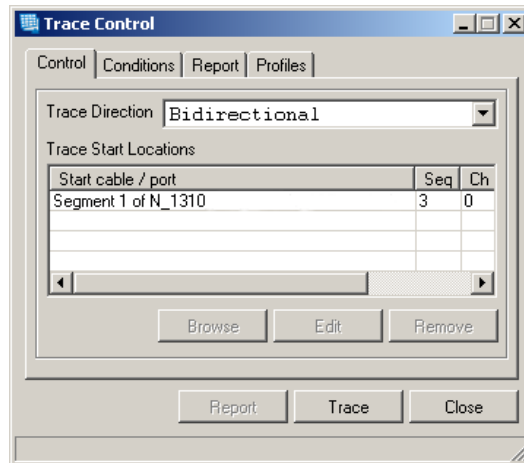


Figure 18 –Trace Control

6. Next, select the **Conditions** tab.

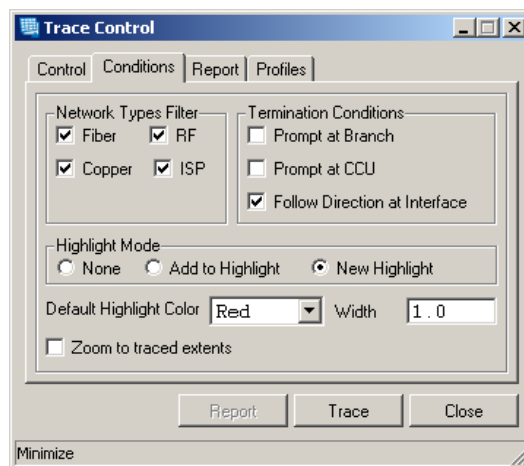


Figure 19 –Trace Control Conditions

Select the following:

- a. Network Types Filter: Fiber, RF, Copper, ISP
- b. Select Termination conditions.
- c. Select the default highlight color.

The Trace Control Report tab lets the user choose what type of output for the report. The results of tracing can be output to several formats. These include:

- One or more highlighted paths on the map view, or fiber splicing views.
- Microsoft Excel-based reports
- HTML-based reports
- Custom reports that can be defined in Python

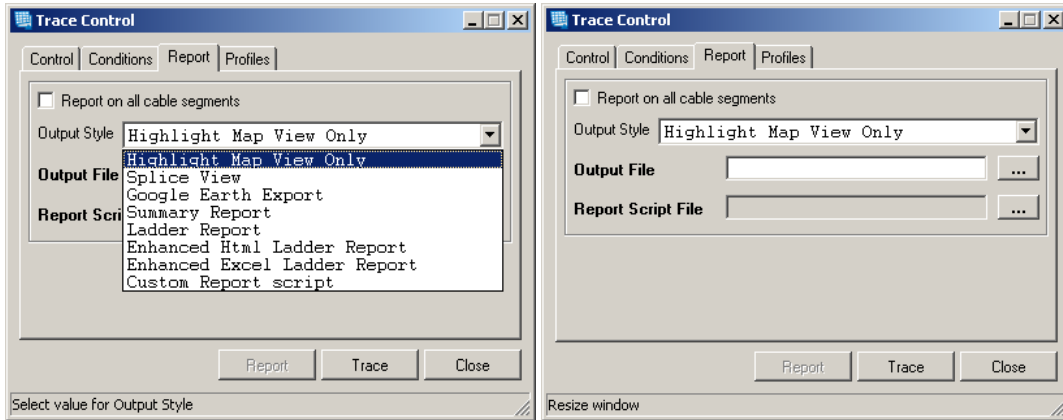


Figure 20 Trace Control Report

4. Select the **Profiles** tab. Save the Trace profile. Select Public or Private. Public allows others to see the trace profile. Private allows only the user to see the trace profile.

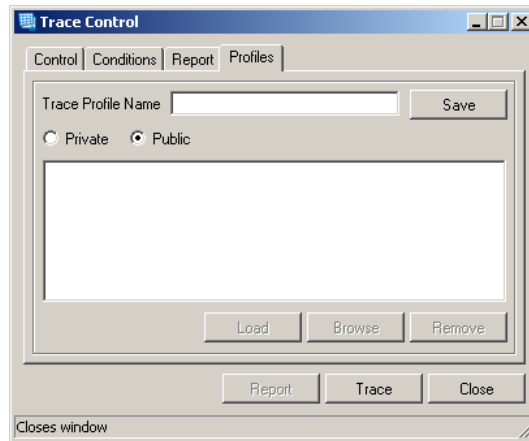


Figure 21 –Trace Control Report

5. Click on the **Trace** button.
6. The fiber selected is highlighted in red and shows the trace on the map view. A trace ends at the equipment where the cable terminates.

## Trace Reports

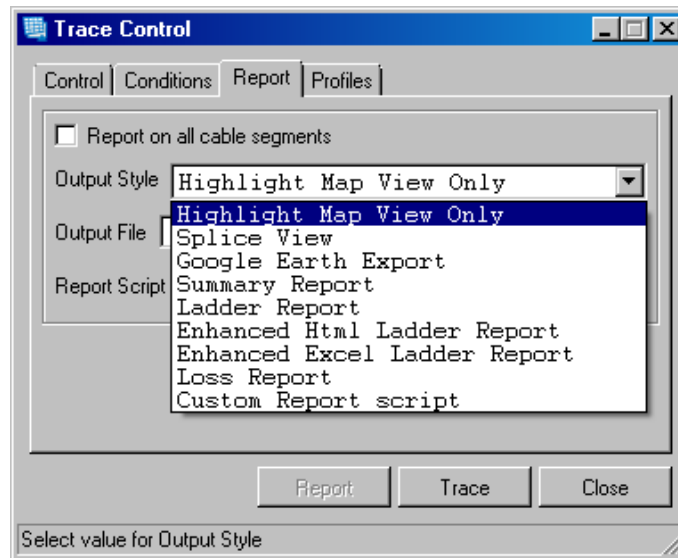


Figure 22 Trace Control Reports

### Ladder Report

Master Circuits for fiber now show, and summary of the total length of number of splices passed in the extended trace ladder reports.

### Extended Trace Reports


Support Network attachments are now shown.

### Enhanced HTML Ladder Report

In the summarized report, the Move ISP equipment details display in section F. A summary section also displays as-built length and design length. Total cable lengths and number of splice cases is also listed.

## Dark Fiber Trace

Dark Fiber is used to find a second or redundant path through a network. If one segment of the network goes down, the dark fiber trace can find another path to be used.

1. To open the **Dark Fiber Trace** dialogue box, select the  Dark Fiber Trace button on the Trace Toolbar or go to **Fiber->Network Tracing -> Dark Fiber Trace**



2. The **Dark Fiber Trace** dialogue box opens. Select **-nothing selected-** next to the **Start Point**. A drop-down menu displays.

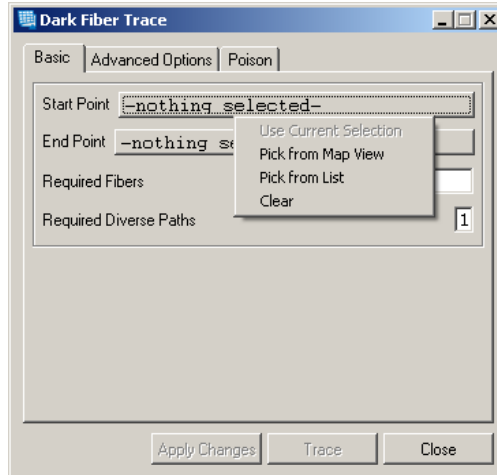


Figure 23 –Trace Control Report

3. Select a **Start Point** from the Map View. The **Choose site or building** dialogue box opens. Select a site from the map using the crosshairs. Select **Done** when the site displays in the dialogue box.

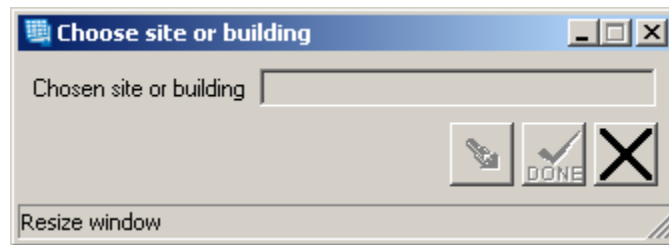


Figure 24 Choose Site or Building

4. For the **End Point**, also select a site. The same dialogue box opens. Select the site using the crosshairs, and select **Done**.
5. Add a number for required fibers and Required Diverse paths. Click on the **Advanced Options** tab.
6. Select the **New Spliced Required**. This states how many splices are needed for this path.
7. Select **Restrict search by number of entities passed**, limiting the trace area.
8. The trace can be restricted by the screen or using a rectangle to select items.

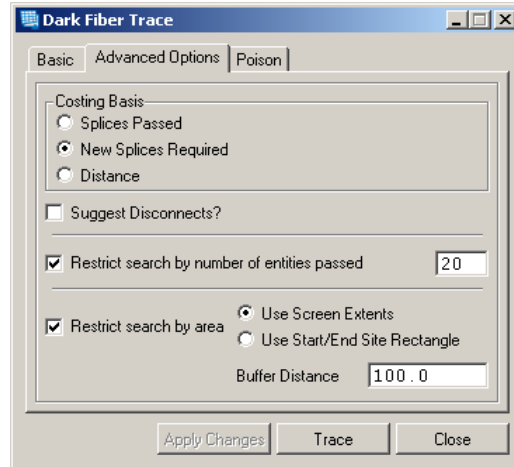


Figure 25 –Trace Control Report

9. Select **Trace**. The Dark Fiber Trace results appear in a dialogue box when finished.

## Apply Changes

After performing a trace, changes can be made in any of the Dark Fiber trace tabs. Select **Apply Changes** after making changes. Select **Trace**.

## Master Circuits

Master Circuits creates a group of network elements, such as fiber, ports or channels. Point to point fiber routes, channels and ports on Inside Plant equipment can all be grouped together into a master circuit. These master circuits are the networks typically purchased by the end customer from a telecommunications company.

### Using the Fiber menu to add a Master Circuit

1. Select **Fiber->Add-> Master Circuit**

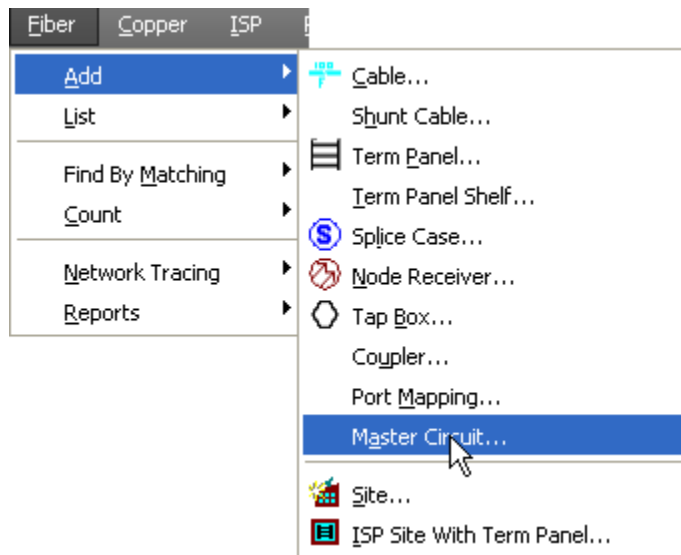


Figure 26 Fiber Menu

2. The **Master Circuit Creation** dialogue box opens. Enter the following fields:

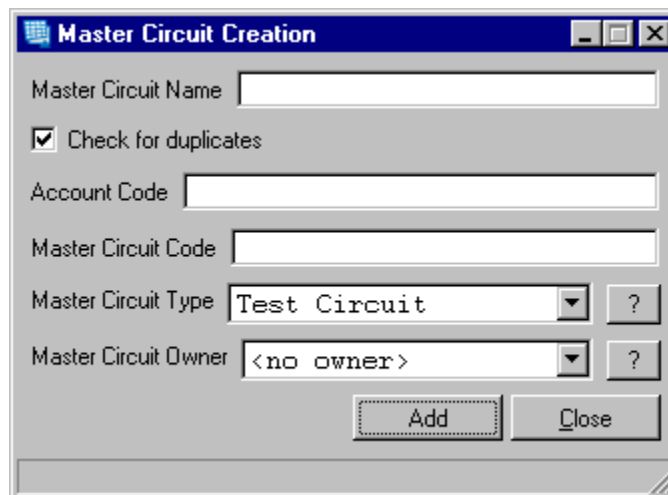



Figure 27 Master Circuit Creation

Name	Task
<b>Master Circuit Name</b>	Enter the Master Circuit name.
<b>Check for duplicates</b>	New Master Circuit will not be added if this box is checked and a duplicate is found.
<b>Account Code</b>	Enter any account codes associated with the master circuit
<b>Master Circuit code</b>	Enter a Master Circuit code.
<b>Master Circuit Type</b>	Automatically populates from the dictionary list.
<b>Master Circuit Owner</b>	Select from the drop-down list. Populated from the Plant Owner dictionary definition.

3. Select **Add**, then **Close**.

## Associating/Creating a Master Circuit with a Fiber/Port

### Adding/Creating a Master Circuit to a fiber

1. Select a cable from the current view.
2. Select the fibers/ports icon  located on the **Network Tools** toolbar.
3. The **Fiber List** dialogue box for the selected fiber opens. Select the fiber to add to the master circuit.

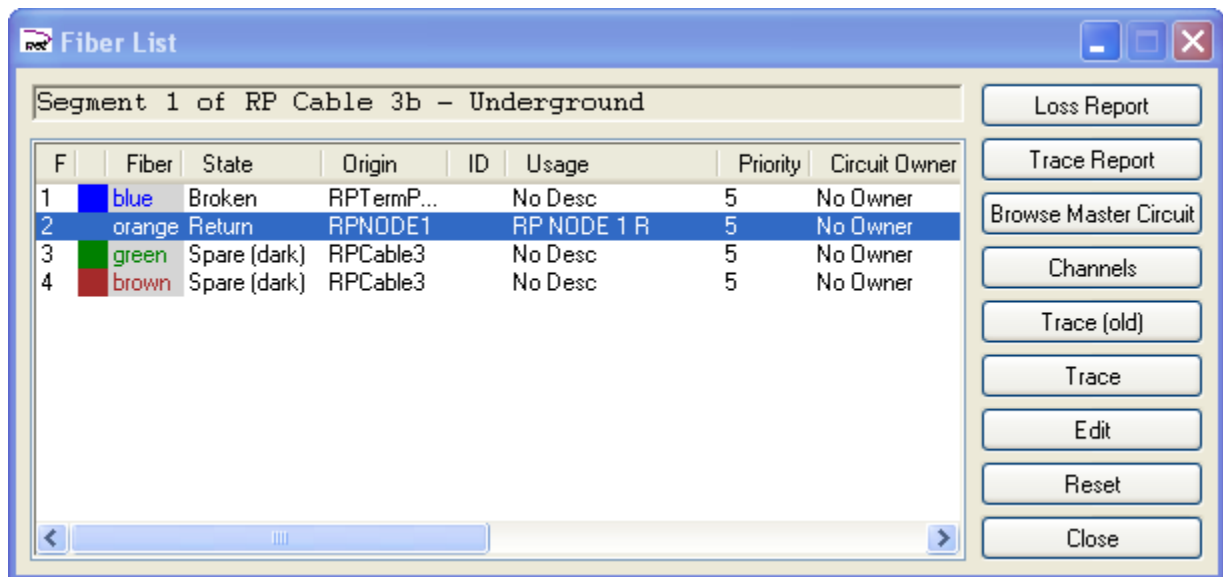


Figure 28 Fiber List

4. Select **Edit**. The **Fiber Modification** dialogue box opens. Select the **Master Circuit button** (callout 1). A drop down menu opens.

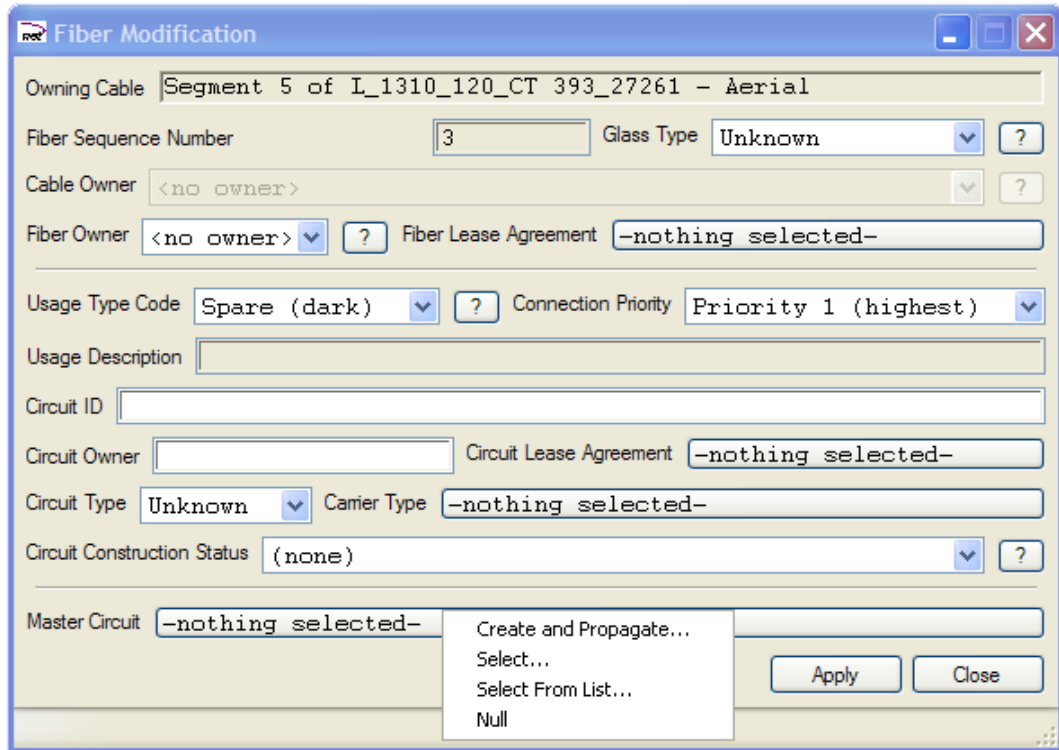
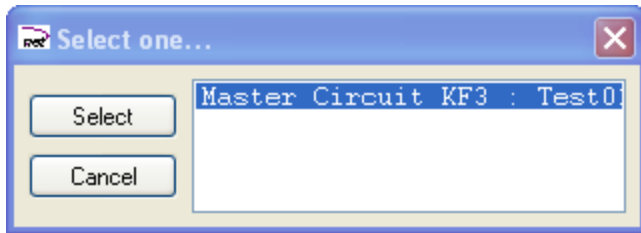


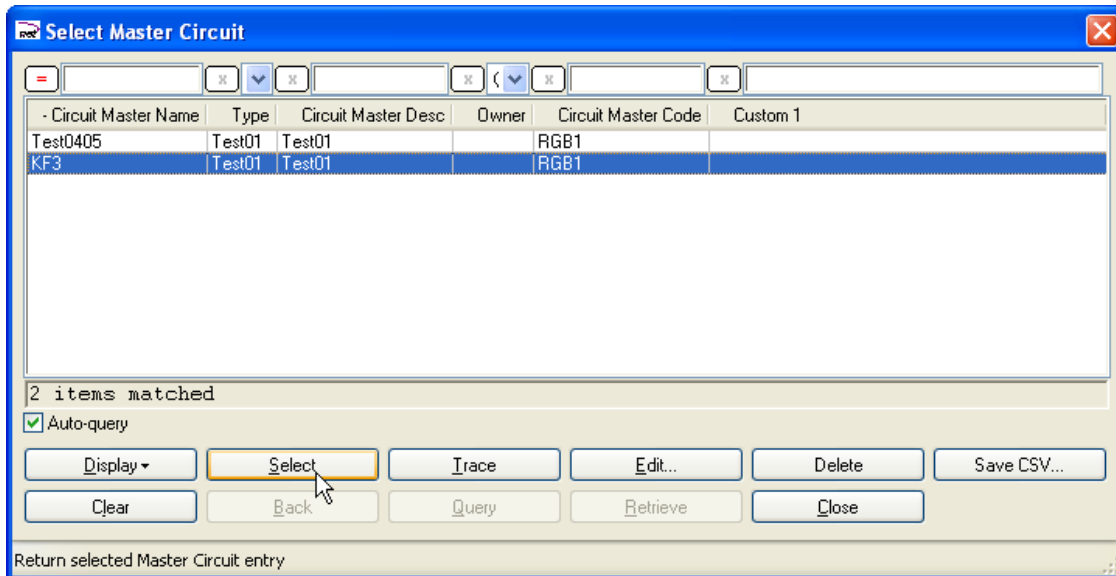
Figure 7 Fiber Modification dialogue box

Name	Task
<b>Create and Propagate</b>	Creates a new master circuit, associated with the selected fiber or port Select to create a new Master Circuit. The Master Circuit Creation dialogue box opens. See Step 2 of Creating a Master Circuit for more information
<b>Select...</b>	Opens the Select Master Circuit Screen. Select a master circuit from this screen. Can search, query and delete for Master Circuits.
<b>Select from List</b>	Displays a list of the master circuits created. Select a master circuit for this screen
<b>Null</b>	Deletes the currently selected entity

- a. Since a previous Master Circuit was created, choose the Master Circuit either from **Select** or **Select from List**. From **Select from List**:



b. From **Select**



5. After the Master Circuit is selected, it is associated with the fiber in the Fiber List.

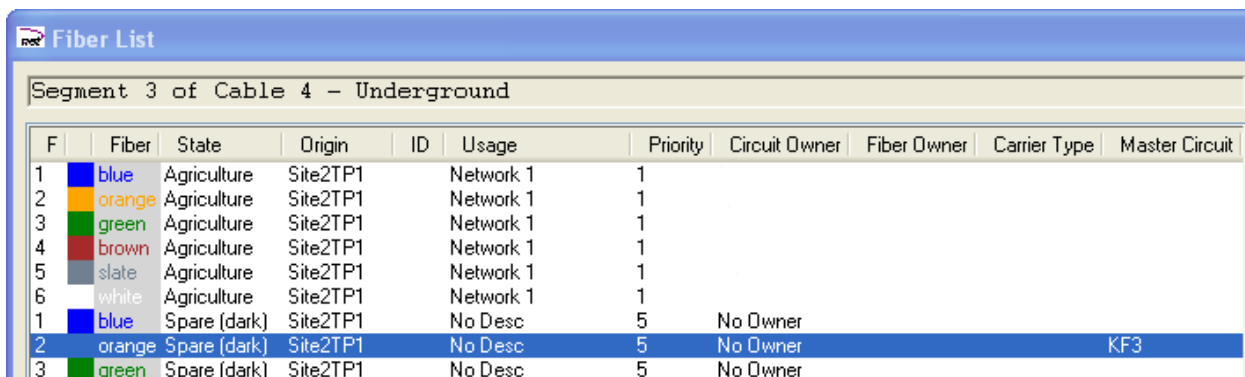



Figure 29 Fiber List with Master Circuit

## Adding a Master Circuit to a port

1. Select a port from the current view.
2. Select the fibers/ports icon  located on the **Network Tools** toolbar.

3. The **Port List** dialogue box for the selected port opens. Select the port to add to the master circuit.

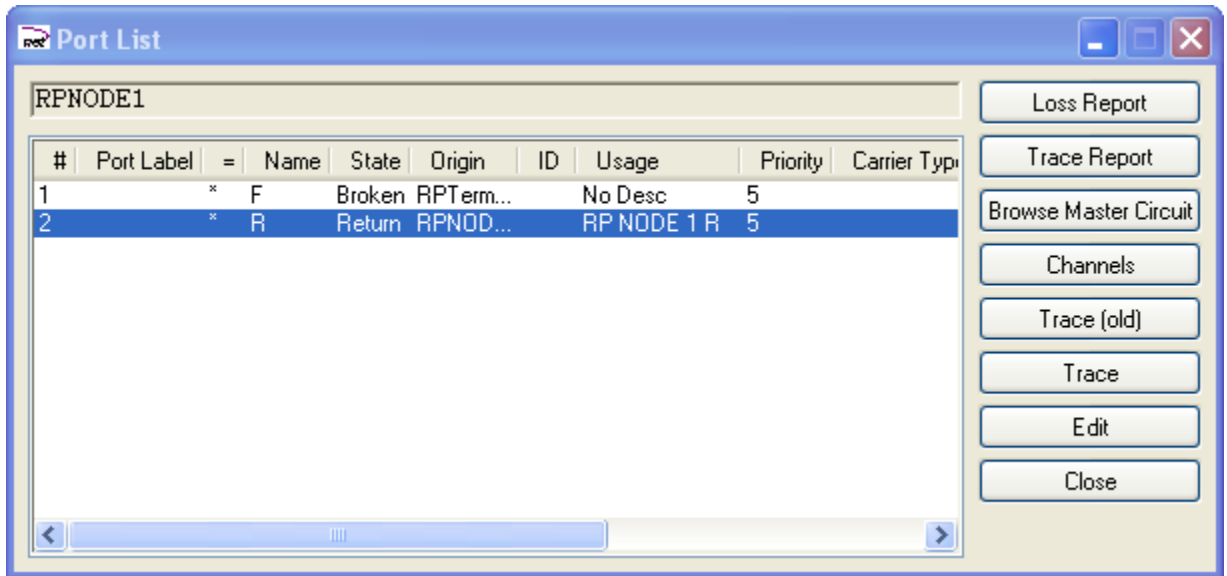


Figure 30 Port List

4. Select **Edit**. The **Port Modification** dialogue box opens. Select the Master Circuit button. See Step 4 on page 7 to complete the steps to add a Master Circuit.

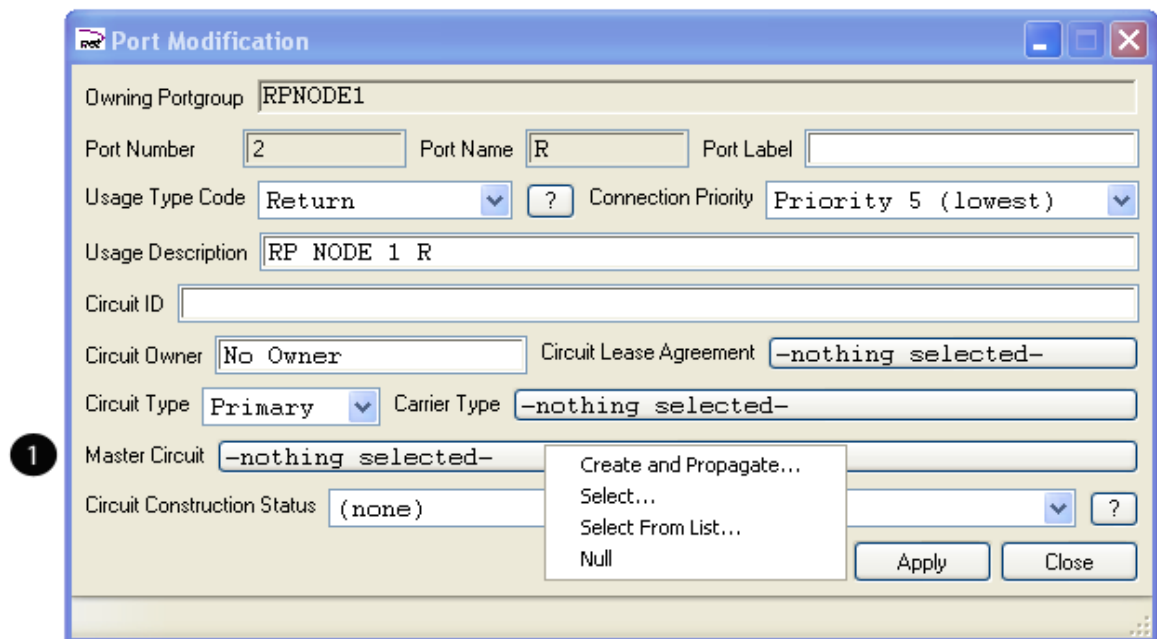


Figure 31 Port Modification dialogue box

## Multi-edit master circuits in AZ List

1. Select the cable. Select the **A to Z fiber list** button.
2. A list of the fibers displays.
3. Select two or more fibers that have the same start/end point.
4. Select **Edit**. The AZ Update Fiber dialog box opens.
5. Enter the new Master Circuit information. Select **Edit** and **Close**.

AZ Update Fiber

Owning Cable Segment 3 of CSK3-100 - Underground

Start Details: A Equipment CSK3-100: Seg1, A Site CSK3-1

End Details: Z Equipment CSK3-100: Seg1, Z Site CSK3-2

Usage Type Code Spare (dark)

Circuit ID

Circuit Construction Status (none)

Master Circuit Name Telco 1

Account Code 4452

Master Circuit Code

Master Circuit Type forward feed for node

Master Circuit Owner <no owner>

Add Edit Close

Figure 32 AZ Update Fiber

## Adding multiple master circuits

Follow the same steps as above, selecting two fibers that do not currently have master circuits associated with them. Select **Add** and **Close** when complete.

## Master Circuits Reports

Master circuits that have changed, added, modified or deleted can be displayed in a report.

1. Go to **Fiber->Reports-> Master Circuits Touched in a Job**. The Master Circuit report opens.

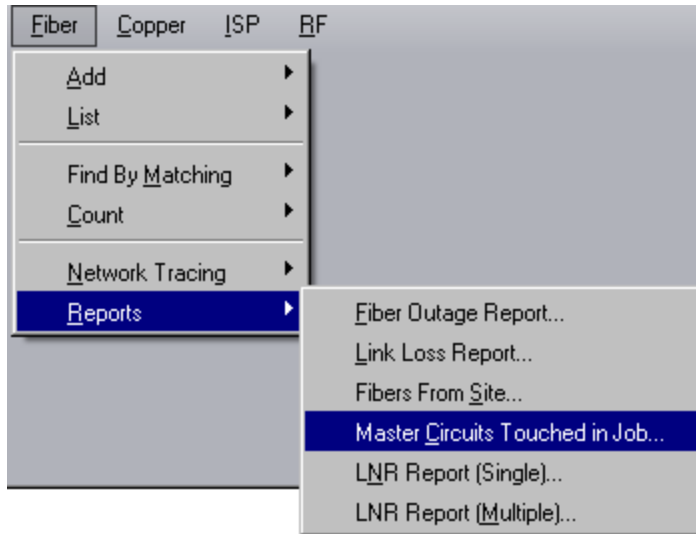


Figure 33 Master Circuits Touched in Job

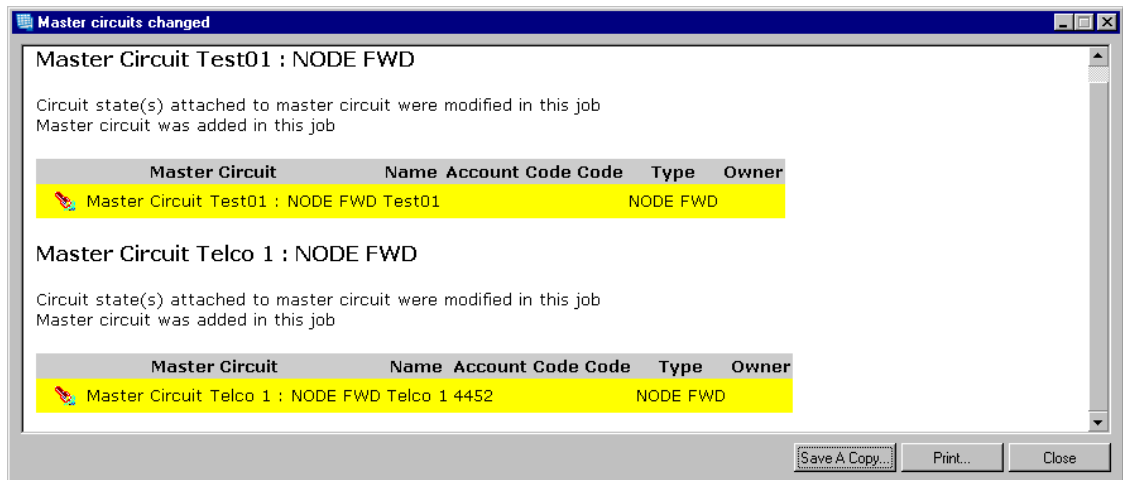


Figure 34 Master Circuit Report

- Users can Save a Copy, Print or view the results in the display window.

# Field Jobs

Field jobs are a way to manage workflow for redlining and markups in spatialNET and spatialWEB. Markups can be made in both programs and reviewed in each program for engineers and technicians to share information about network maps.

## Creating a Field Job in spatialNET

Field jobs can be created in both spatialNET and spatialWEB. To create a field job in spatialWEB, see the spatialWEB User’s Guide.

To create a field job:

1. Go to **SPATIALnet > Add > Other > Field Job**. The **Field Job Creation** dialogue box opens.

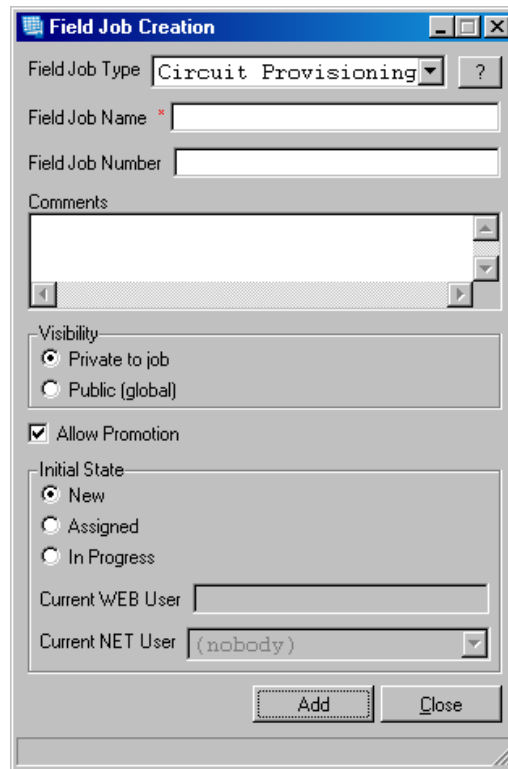


Figure 35 Field Job Creation

Name	Description
<b>Field Job Type</b>	Select from the drop-down menu. Populated from the field job dictionary.
<b>Field Job Name</b>	Name of the field job, related to the type of markup in the field job.
<b>Field Job Number</b>	Number of the field job, if required.
<b>Comments</b>	Enter any information about the field job.

<b>Visibility</b>	Implemented in future releases.
<b>Allow promotion</b>	Currently not in use; check for completion of field job.
<b>Initial State</b>	Select one of the following : New- Not assigned to anyone, not opened Assigned-Gives the field job to a current spatialNET or spatialWEB User. In Progress-Opens the current field job for the current user
<b>Current Web User*</b>	If Assigned is selected, type in the name.
<b>Current NET User *</b>	If Assigned is selected, select the user from the drop-down menu.

**\*Note:** Select either a spatialWEB user or spatialNET user

---

## Reviewing Field jobs created in spatialWEB or spatialNET

---

After creating a field job in spatialNET, the field job must be opened to add markups such as redlines and circuit tags. Field jobs that are submitted from spatialWEB also need to be opened for edits and review.

To open a field job after it has been created in spatialNET or spatialWEB:

1. Go to **SPATIALnet->Find-> Other> Field Jobs**. The **Find Field Job** dialogue box opens. The columns are populated based on the attributes added in the dictionary. See

*Note: The Find Field Jobs panel replaces the Find Redline panel. Redline entities and circuit tags are now required to belong to a field job, the database upgrade provided with the release will automatically create a field job named "SPAm13557" as the collection point for all pre-existing redline entities and circuit tags.*

---

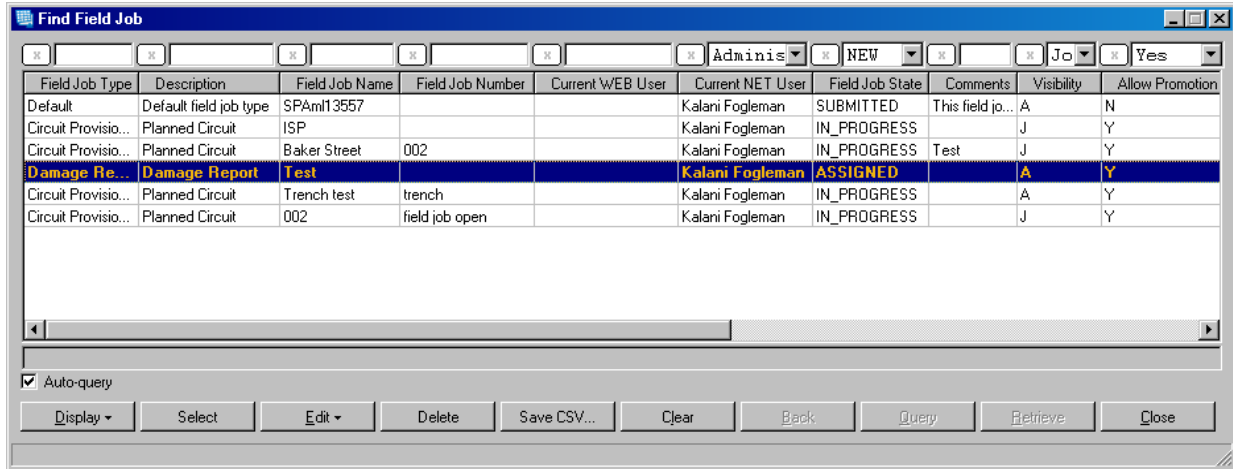


Figure 36 Find Field Job

Name	Description
<b>Display</b>	Opens field job details and reports. See Viewing Field Jobs and Field Job Reports.  <i>Note: Map view only displays if markups have been applied.</i>
<b>Select</b>	Highlights the selected Field Job
<b>Edit</b>	Opens, assign and edit options. See Editing Field Jobs.
<b>Delete</b>	Deletes the selected Field Job
<b>Save CSV</b>	Saves report of field job in Excel format
<b>Clear</b>	Clears the field job selection
<b>Query</b>	Searches for Field Jobs

*Note: When a field job is modified, the change appears immediately, and cannot be undone using the spatialNET menu undo option.*

## Viewing Field Jobs Details

All markups in spatialWEB can be viewed in spatialNET.

### Viewing Field Job Details

To view the field jobs details panel:

- c. Double-click on a selected Field job.

Or

- d. Select **Display->Details**.
2. The Field Jobs Details panel opens.

## Viewing Field jobs in the Map View

To view a created Field Job in the Map View:

1. In the **Find Fields** dialogue box, select **Display**.
2. Select **Map View**. The markups appear in the spatialNET view.

## Assigning Field Jobs

---

Two ways are available to assign a field job and change its status:

- Edit button->Change State
- Edit button->Edit which opens the Field Job Modification dialog box

The following lists the states for field jobs:

Name	Description
Assign	Allows technicians to identify filed jobs assigned to them. The assign state is optional; newly created field jobs can move directly to the In Progress state by selecting the Open button.
Open	Select to make the field job current
Submit	Notes all work is completed and is ready for review.
Review	Moves the field job into a review state
Accept	Reviewer has accepted the suggested changes.
Reject	This state allows technicians to view field jobs re-assigned to them for changes.
Complete	Closes the field job. All markups have been reviewed and accepted.
Cancel	Cancel the field job

### Opening a field job

1. Select **Open**. The **Open Field Job** dialog box opens.

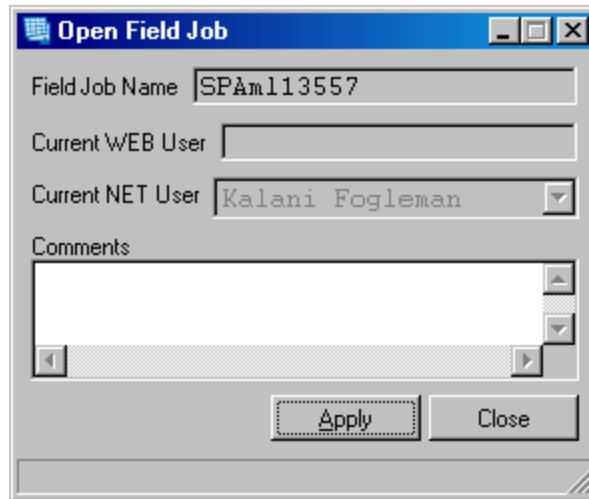


Figure 37 Open Field Job

2. Add Comments, if needed. Select **Apply**.
3. The Field Job status is now **In Progress** in the Find Field Jobs panel.

### ***Current Selection Panel***

After opening a field job, the opened field job displays on the **Current Selection** panel.



1. Select the Question button on the **General toolbar**.
2. The Current Selection Panel opens, stating the current field job.

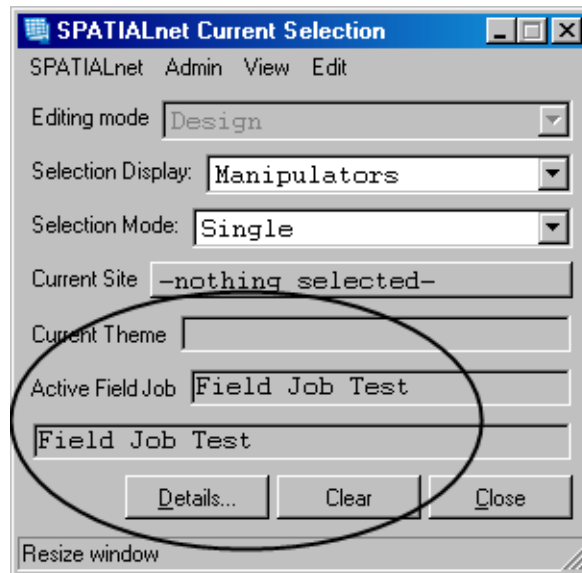


Figure 38 Active Field Job

# Assigning a User

---

1. Select the Field job in the Find Field Job panel.
2. Select **Edit->Edit**.
3. Select the user from the drop-down menu for spatialNET or enter the user for spatialWEB.

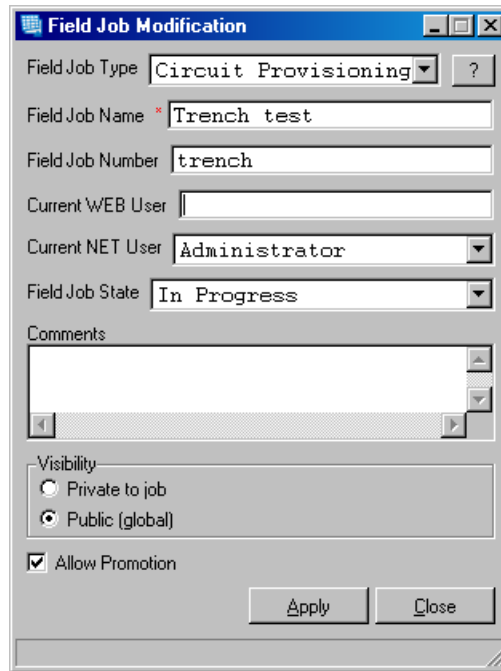


Figure 39 Field Job Modification

4. Select **Apply**.

## Editing a Field Job status

To make edits a field job type name, or add additional comments:

1. Select the field job in the Find Field Job panel
2. Select **Edit->Edit**. The Field Job Modification dialog box opens.

Figure 40 Field Job Modification

3. Make the needed changes. For definitions of the Field Job Modification dialog box, see [Creating a Field Job in spatialNET](#).

## Creating Redlines

The following are instructions for redlines in mapviews. For information on how to add redline markups to ISP, see [ISP Redlines](#). Go to **SPATIALnet->View->Settings->Show Redlines** to ensure redlines display in the map view.

To create redlines in a field job in spatialNET:

1. Select the field job in the Find Field Job panel.
2. Select **Edit->Activate**. The Field Job status is now In-Progress and redlines and markups can be added.
3. Go to **spatialNET->Add->Redline**. Select the redline style:
  - Line
  - Polygon
  - Symbol
  - Text
4. A dialog box opens stating the field Job and the option to select the redline style type from the drop-down menu:



Figure 41 Redline Line Creation Example

5. Select **Add**. Depending on the type of redline, different dialog boxes open to complete the redline.
6. After completing, the redlines are viewable in spatialNET. The date and time when the redlines were made display on the Detail and Browser panel.

## Viewing Redlining, markups and circuit tags

To view redlines added in spatialWEB or spatialNET:

1. Select the field job in the **Find Field Job** panel.
2. Select **Display->Details**.
3. Select **Redline** in the left-hand pane. Redline details display. Viewing Splice Markups

Splice markups can be added in spatialWEB. See Field Job reports

### Viewing circuit tags

To view circuit tags added in spatialWEB:

1. select the field job In the Find Field Job panel,
2. Select **Display->Details**.
3. Select **Circuit tags** in the left-hand pane. A list of all circuit tags in the field job displays, including the date and time the circuit tag was made.

## Submitting a field job

After all edits are completed, the field job needs to be submitted for review.

1. Select the Field Job. Select **Edit->Edit**. The **Field Job Modification** dialog box opens.
2. Select **Submit**. The **Submit** dialog box opens.
3. Add comments if necessary. Select **Apply**.

## Review states

Placing a field job in review allows an administrator to accept or reject the submitted changes.

Accepting a field job allows it to move to completion:

1. Select the field job in the **Find Field Job** panel.
2. Go to **Edit->Edit**.
3. In Field Job States, select **Accept** from the drop-down menu.

## Rejecting a field Job

Moving the field job to this state allows technicians to see the field jobs that are assigned to them that were not approved.

To move a job to a rejected state:

1. Select the Field Job. Ensure the field job has been submitted. If not, submit the field job.
2. Select **Edit->Edit**.
3. The **Field Job Modification** dialog box opens.
4. Select **Reject** from the drop-down menu.

## Cancelling a Field Job

To cancel or delete a field job:

1. Select the field job in the Find Field Job panel.
2. Select **Edit->Change State->Cancel**.

## Linking JMS jobs with a Field Job

In the Find Field Job panel, select the field job.

1. Select **Edit->Link the Current Net job**.
2. Select **Display->Details**.
3. Select Associated NET Jobs, and a list of the associated JMS jobs displays.

## Field Job Reports

---

The Field Job report lists all redline activity in a field job.

To open a Field Job report:

1. Select the field job in the **Find Field Job** panel.
2. Select **Display->Field Job Report**. A dialog box opens with the name of the report. Changing the extension changes the type. For example, name the report with ht m changes the report to html report.
3. Select **OK**.



Figure 42 Field Job Details report dialog box

The **Field Job Report** opens, listing all splice markups in the field job.

## ISP

### Find by Matching Panels ISP Chassis and Cards

A comment field is now available in the **Find by Matching** panels, populated from the ISP dictionaries

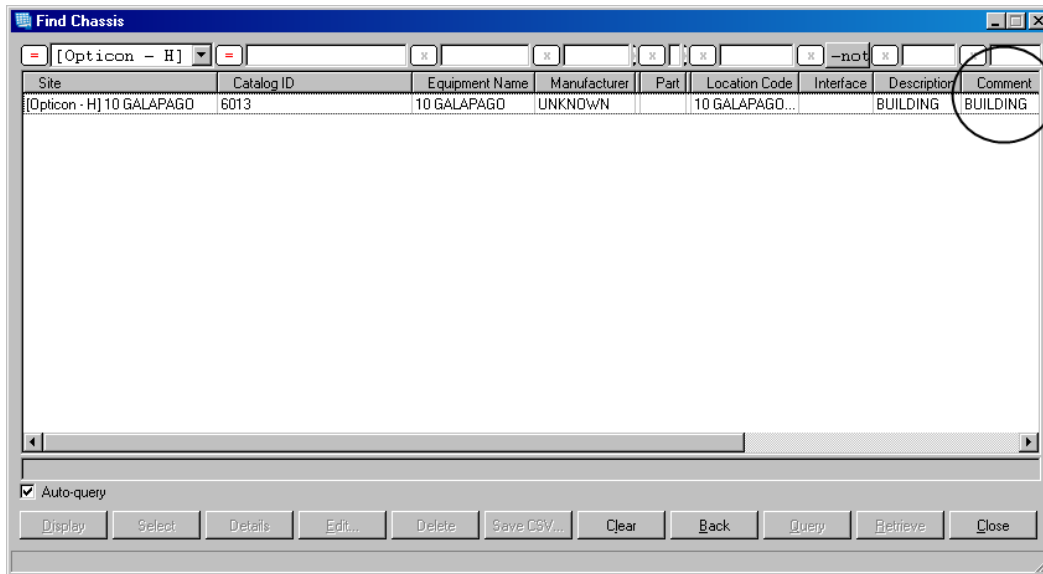


Figure 43 Find Chassis Comment field example

### Adding new backdrop files to floorplans and schematics

SpatialNET can now add different backdrop files for each floorplan and schematics.


To add a new backdrop floorplan:

1. Select an ISP site. For information on how to select ISP equipment, see the spatialNET User's manual.
2. Select the **Details** button in the General Toolbar. The **Details** panel opens.
3. Select the Floorplan in the Site. Select Edit->Edit. **The Site ISP Modification** dialog box opens.

The screenshot shows a dialog box titled "Site Floorplan Modification". It contains the following fields and controls:

- Current Site:** A dropdown menu showing "[Secondary Hub] NUS01".
- Site Floorplan Drawing Name:** A text field containing "Equipment Room".
- Description:** A text field containing "Equipment Room".
- Drawing Type:** A dropdown menu showing "ISP".
- Project No.:** An empty text field.
- Project Title:** An empty text field.
- Title 1, Title 2, Title 3, Title 4:** Four empty text fields.
- Scale:** An empty text field.
- General Notes:** A large text area for notes.
- Backdrop File Name:** An empty text field with a browse button "..." to its right.
- Checked By:** An empty text field.
- Approved By:** An empty text field.
- Revision Details:** A text field with an "Edit" button to its right.
- Buttons:** "Apply" and "Close" buttons at the bottom.

Figure 44 Site ISP Modification dialog box

4. Next to the Backdrop file Name field, select the browse button . This navigates to the file location of the stored backdrop files. If backdrop files are stored on a server, the backdrop path can be set an environment variable and only the name needs to specified in the Backdrop file name panel.

## Editing Multiple ISP Ports

Multiple ports can be edited for the following ISP equipment:

- Chassis
- Cards
- Stand-alone equipment

To edit multiple ports:

1. Select the ISP equipment for port editing. For more information about selecting ISP equipment, see the spatialNET User's Guide.

2. Select the **Details** Button  on the General Toolbar. The Details panel opens.

3. Select **Edit->Edit Multiple Ports**.

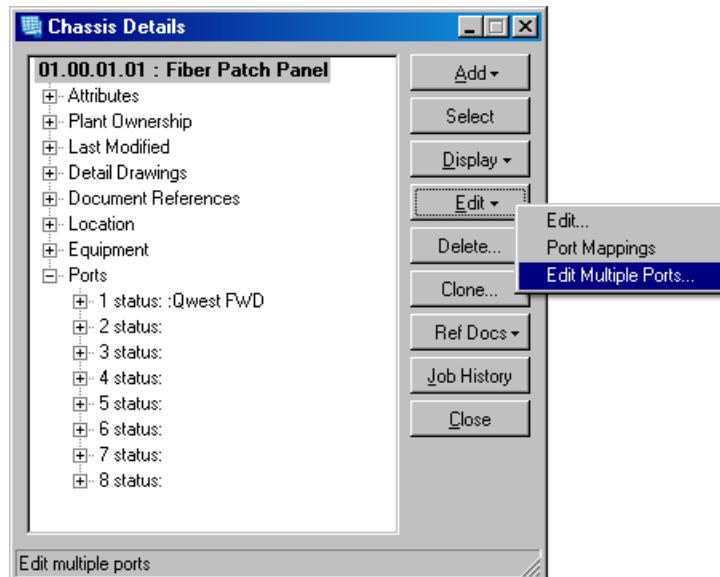


Figure 45 Edit Multiple Ports example

4. The **Select one or more ports** dialog box opens.

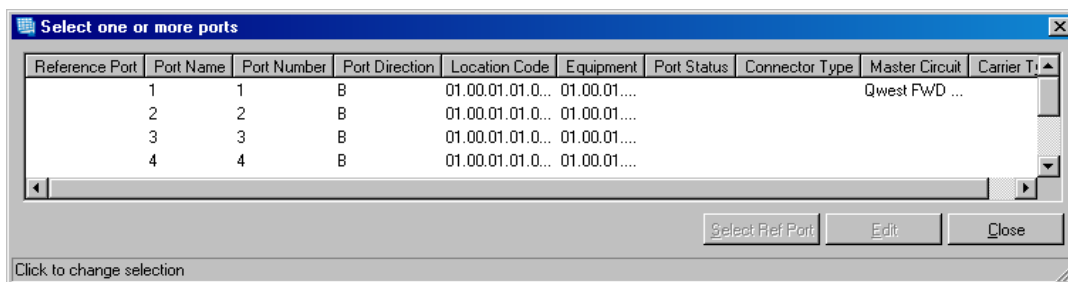


Figure 46 Select one or more ports

5. Multiple-select the ports by holding down the Ctrl key and selecting the ports. Select **Edit**.

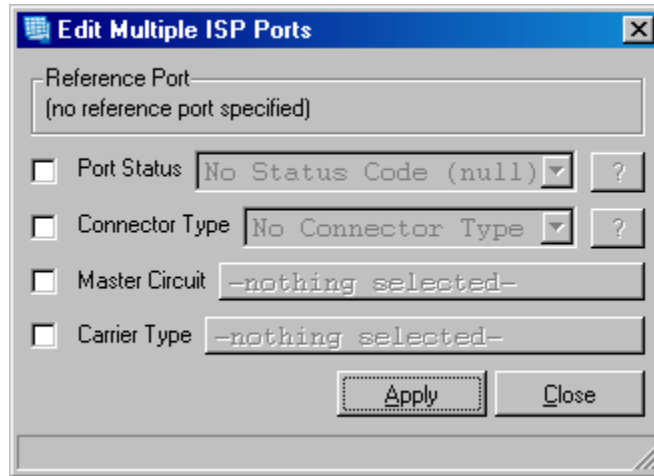


Figure 47 Edit Multiple ISP Ports

6. Select any of the following:
  - **Port Status**- Drop-down menu from the spatialNET dictionaries
  - **Connector Type**- Populated from spatialNET dictionaries.
  - **Master Circuit**-Select to associate the ports with a master circuit
  - **Carrier type**- Drop-down menu from the spatialNET dictionaries
7. Select **Apply** and **Close**.

See [Select Reference Port](#) to add a reference port.

## Select Reference Port

A reference port can be selected that copies the settings or attributes of the port for all other ports selected.

1. Select a port to copy the settings. An asterisk appears under the Reference Port column.
2. Multi-select other ports.
3. Select **Edit**.
4. The settings for the Reference port are copied to the Edit Multiple ISP Ports dialog box. The settings display grayed out.
5. Select **Apply** and **Close**.

## Redlines

### Adding Redline Chassis.

Create or open a field. For information, see [Field Jobs](#) for more information.

1. Select an ISP Rack from the map view or from the Find function.
2. Select the **Details** button. Select **Add>Add** a redline chassis to the highlighted rack.

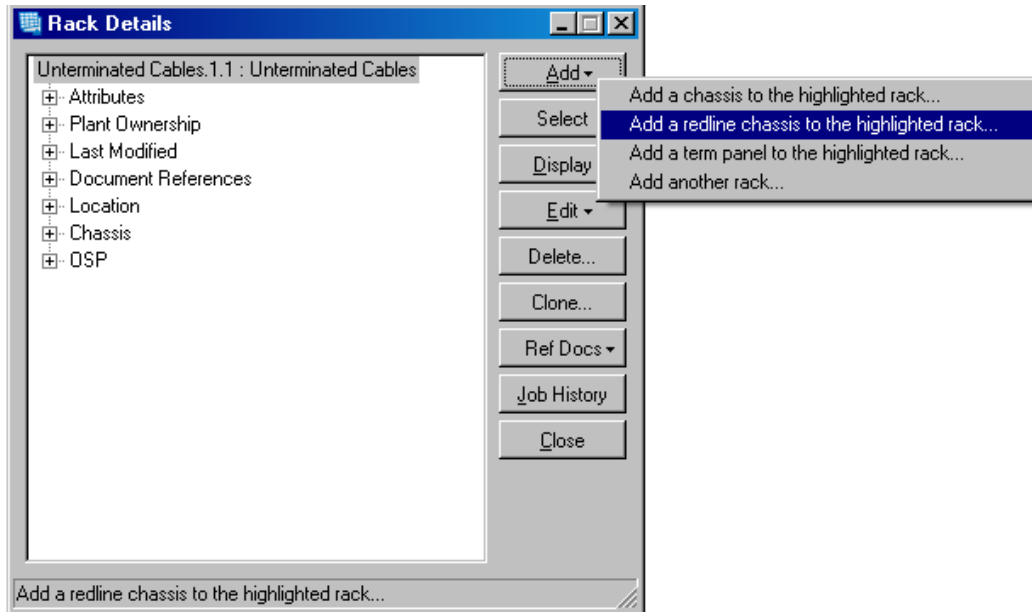


Figure 48 Rack Redlining Details Panel

3. The redline chassis is now listed under the rack in the Details panel.

## Adding Redline Cards

1. Select a chassis from a map view or from the Find function.



2. Select the **Details** Button on the General Toolbar. The Details panel opens.

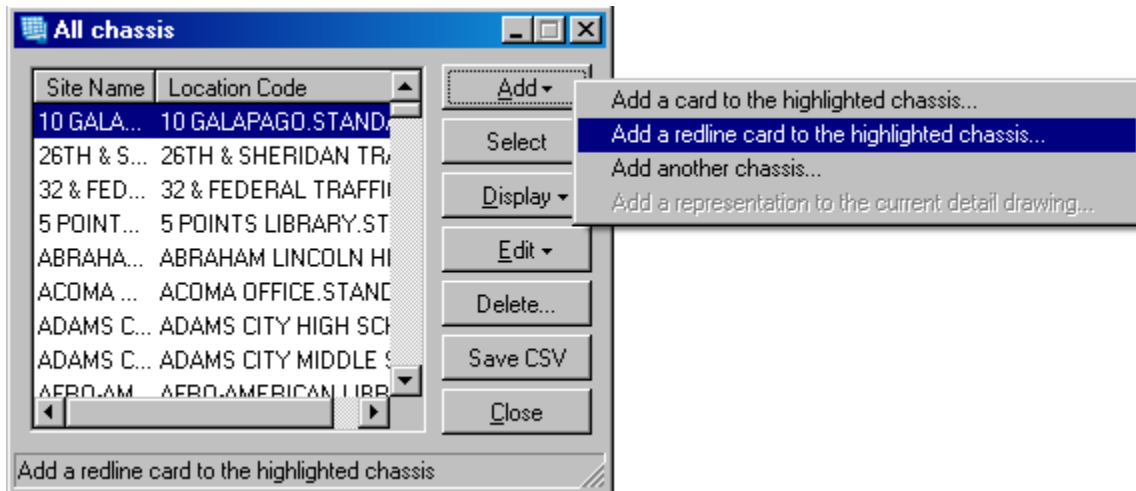


Figure 49 Chassis Redlining from the Find panel

3. The redline card lists under the chassis in the Detail panel.

## MDUs

---

Moving MDU drawings from one building to another:

1. Open the Details panel for the building with an MDU drawing to copy to another building.

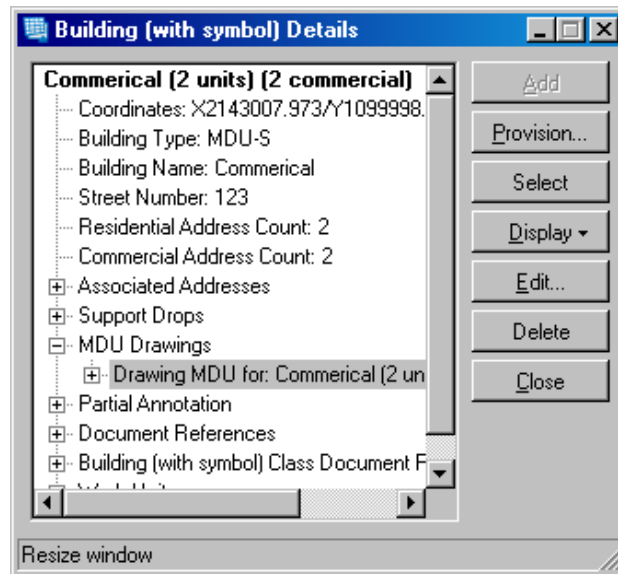


Figure 50 Building with MDU drawing

2. Select the MDU drawing in the Details panel.
3. Select the building to copy the MDU drawing. Open the details panel of the building so that both Building detail panels are open.

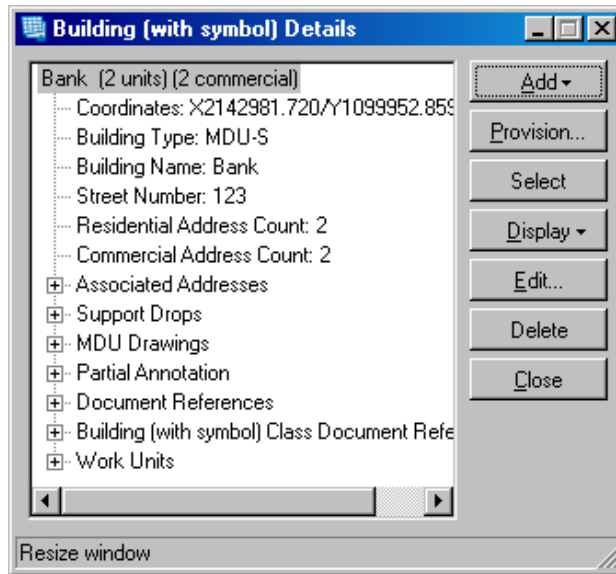
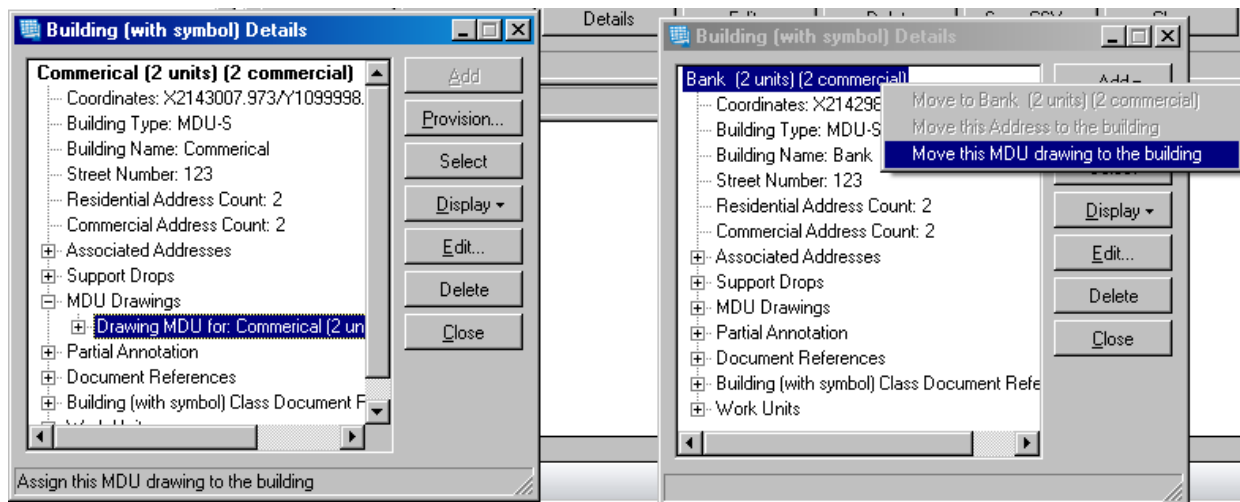


Figure 51 Building with Symbol

4. Drag the highlighted MDU drawing over to the name of the second building. A drop-down menu displays. Select Move this MDU drawing to the building.



5. The MDU drawing lists under MDU drawings in the Details panel of the second building.

## Trace Fiber into MDUs

To trace a fiber circuit through a dmark that has been created in 5.6.1 version of spatialNET:

1. Select the fiber in the Fiber List. Select Trace. The Trace Control dialog box opens. For more information on tracing, see Trace.

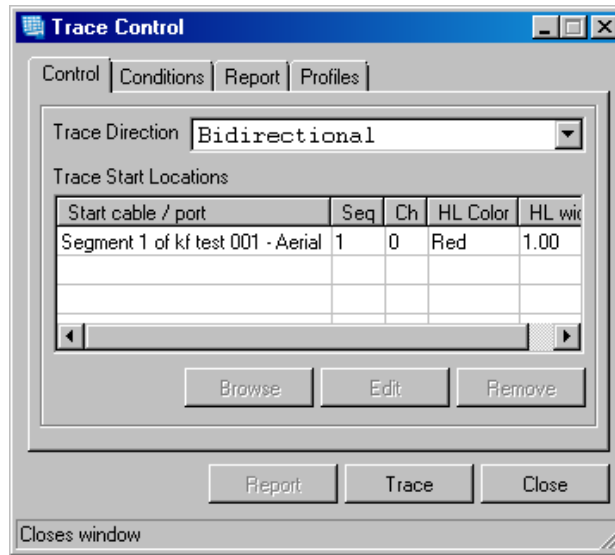


Figure 52 Trace Control

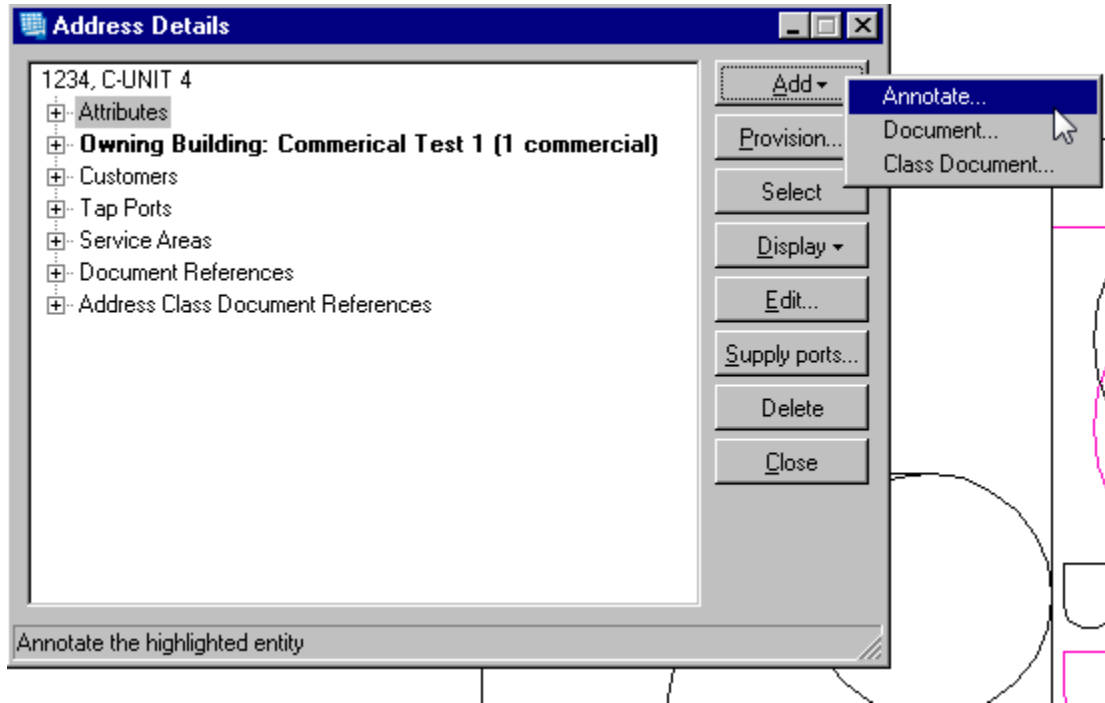
2. Select the Trace Type and any conditions.
3. If the trace encounters a dmark, the trace opens the dmark drawing and traces through the dmark.

## Adding Address Annotations in OSP views

---

To add an Address Annotation in an OSP view:

1. Select the building. For more information on how to select buildings, see the spatialNET User's Guide.
2. Open the Details panel. Select an Address.



3. Figure Address Details Select **Add->Annotate**. This opens the **Annotation** dialog box.
4. Add the annotation. Select **Done**.


## RF

### Annotating an RF Cable Type

Annotations can now be added for RF cables. Cable Type annotations can be used to note RF Cables. See [Adding RF Cable Types](#)

To add a Cable Type annotation for RF cables:

From the General Toolbar:

1. Select the RF Cable in the design view.
2. Select the annotations button  on the General Toolbar.

From the Details panel:

4. Select the RF Cable in the design view.
5. Select the **Details** button  on the General Toolbar.

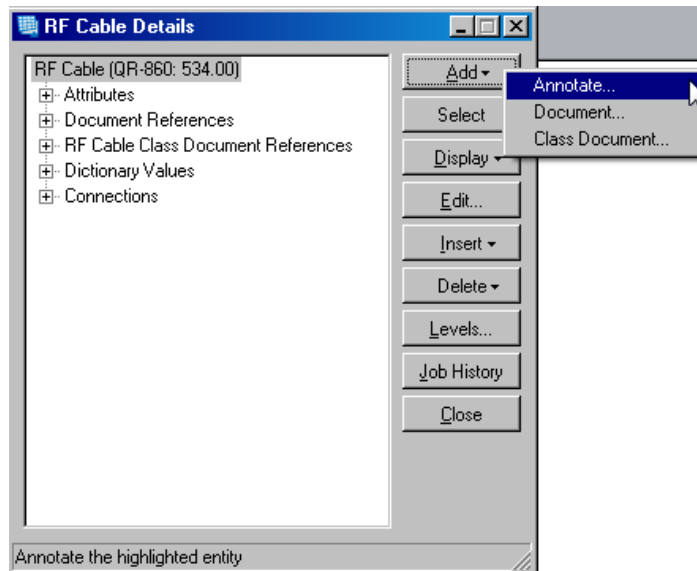


Figure 53 RF Cable Details

6. The **Annotation** dialog box opens.
7. Select **RF Cable Type** from the **Manual Annotations** drop-down menu.
8. Click on the map view. The annotation is placed in location selected on the map. Select **Done**.

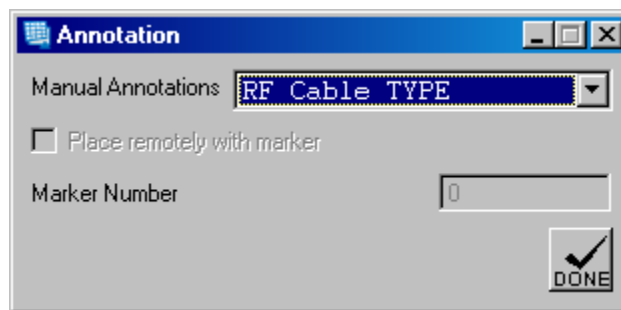


Figure 54 Annotation

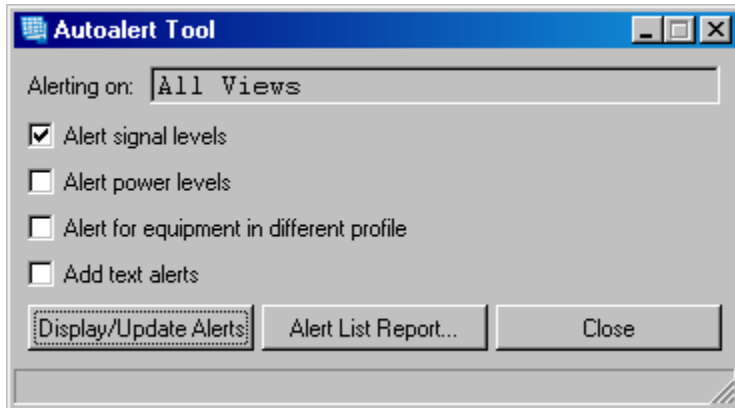
## Using RF Auto-Alerts

RF Auto Alerts display signal and power levels in RF amps, taps, power supplies and passive equipment on the mapview in spatialNET.

To display RF Alerts:

1. Select the RF equipment.

2. Select **RF->Tools->RF Auto Alerts**. The **Autoalert Tool** opens.



3. Select any of the following:
  - Alert signal levels
  - Alert power levels
  - Alert for equipment in different profile
  - Add text alerts
4. Select **Display/Update Alerts**. The alerts display in the map view.

## Alert List Report

1. Select the **Alert List Report** on the Autoalert Tool. A new window opens, listing all signal and power levels.

## RF Details panel

The Job History button is now available on the **Details** panel for RF equipment. The job history allows you to retrieve the following kinds of information for later reporting:

- All of the entities affected by a given job
- All of the jobs which have updated a given entity

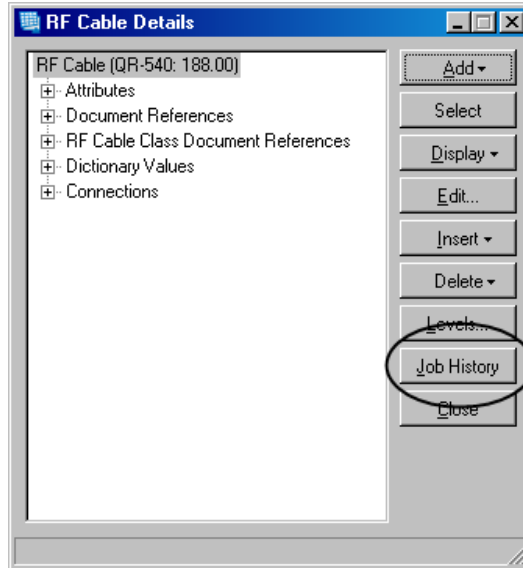


Figure 55 RF Cable Details

## RF Find by Matching Panels

Find RF Node Panel now lists:

- Type Descriptions
- RF Design Profile
- Power ID

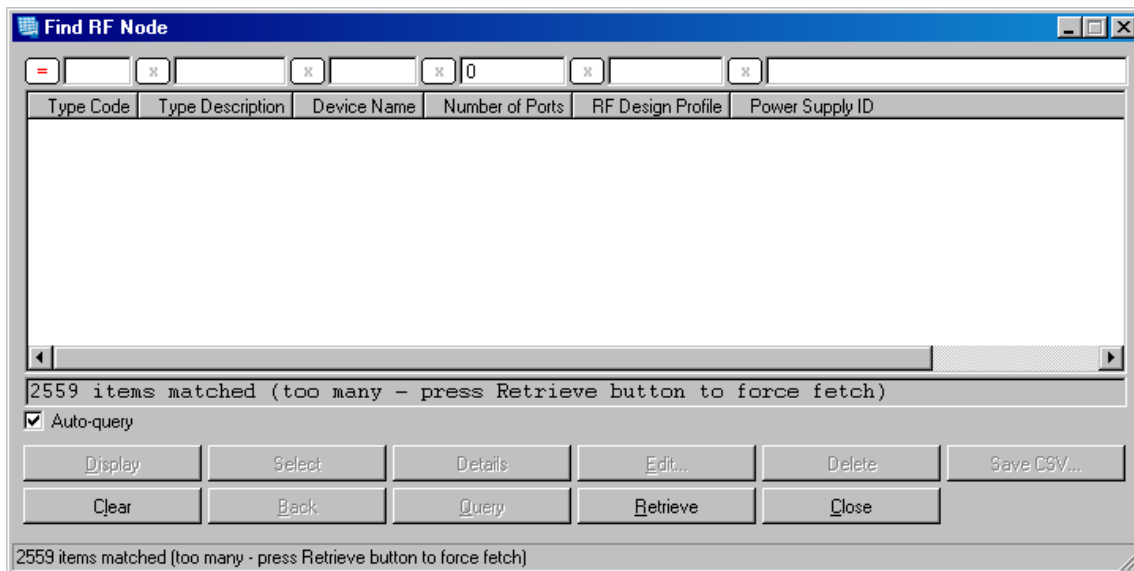


Figure 56 Find RF Node

Find RF Active Device panel now lists:

- Type Description
- RF Design Profile
- Power Supply ID

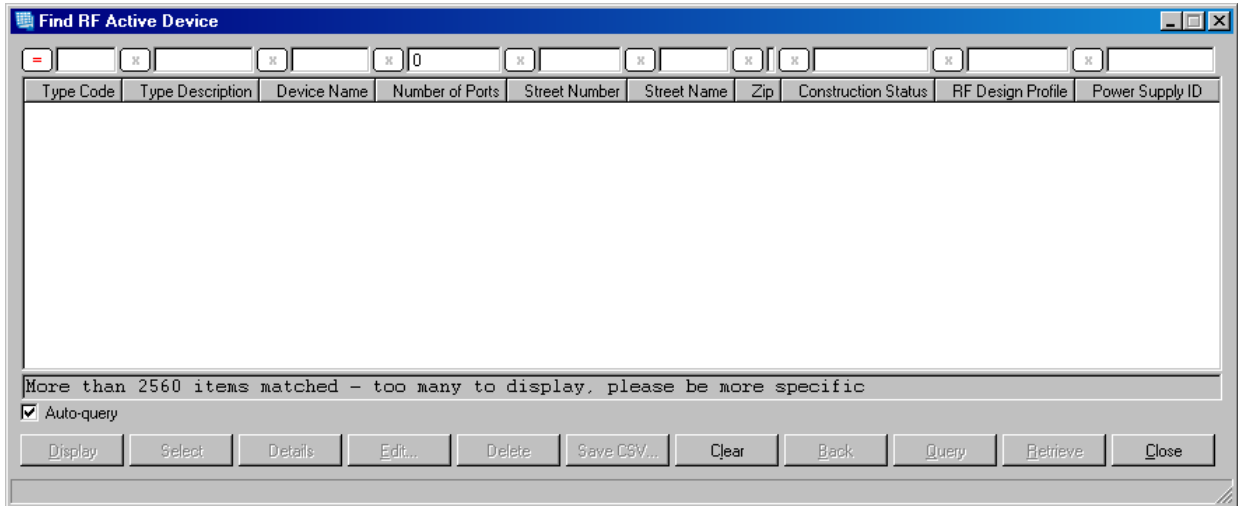


Figure 57 Find Active Device

Find RF Passive Device now panel lists:

- Type Description
- RF Design Profile

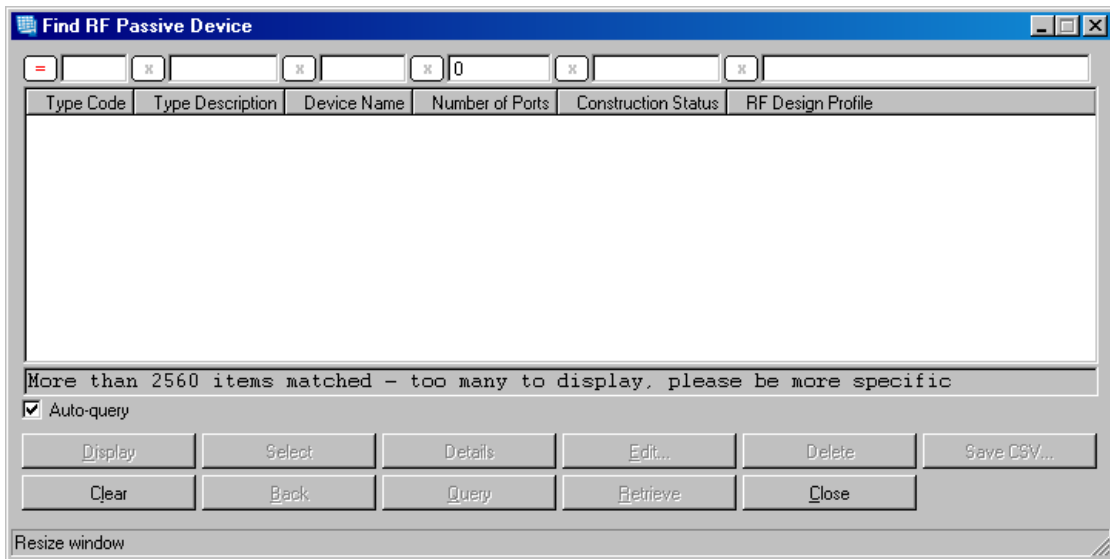


Figure 58 Find RF Passive Device

Find RF Power Supply panel now lists:

- Type Description
- RF Design Profile

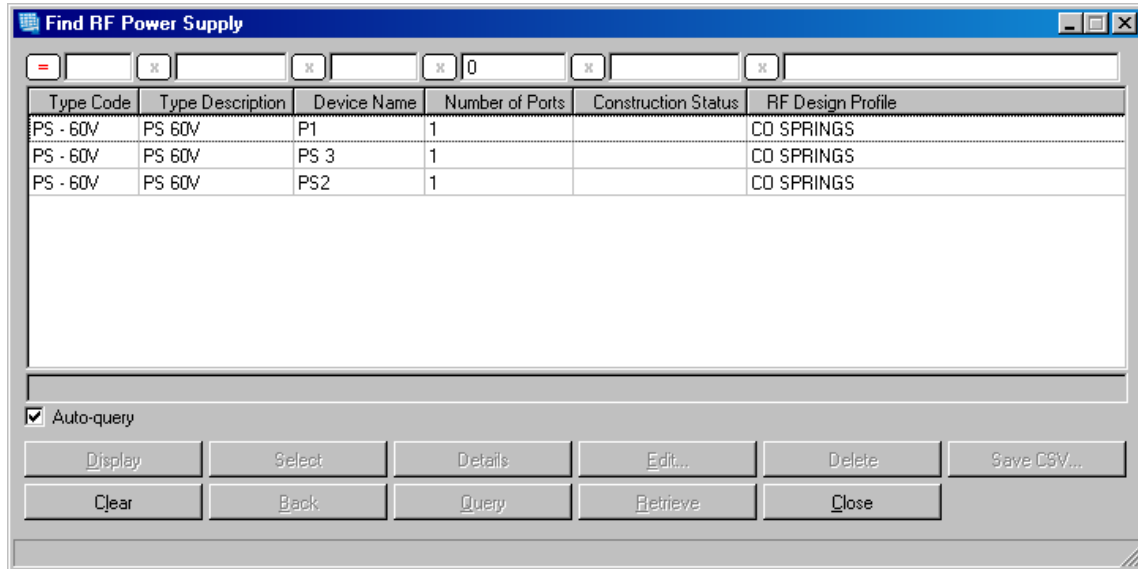


Figure 59 Find RF Power Supply

## Support structures

Creation panels now load the height value from the dictionary by default for aerial structures.

1. In the **Pole Creation** panel, select the **Edit** button next to the General Field. The **General Attributes** dialog box opens, stating the height from the support structures dictionaries,

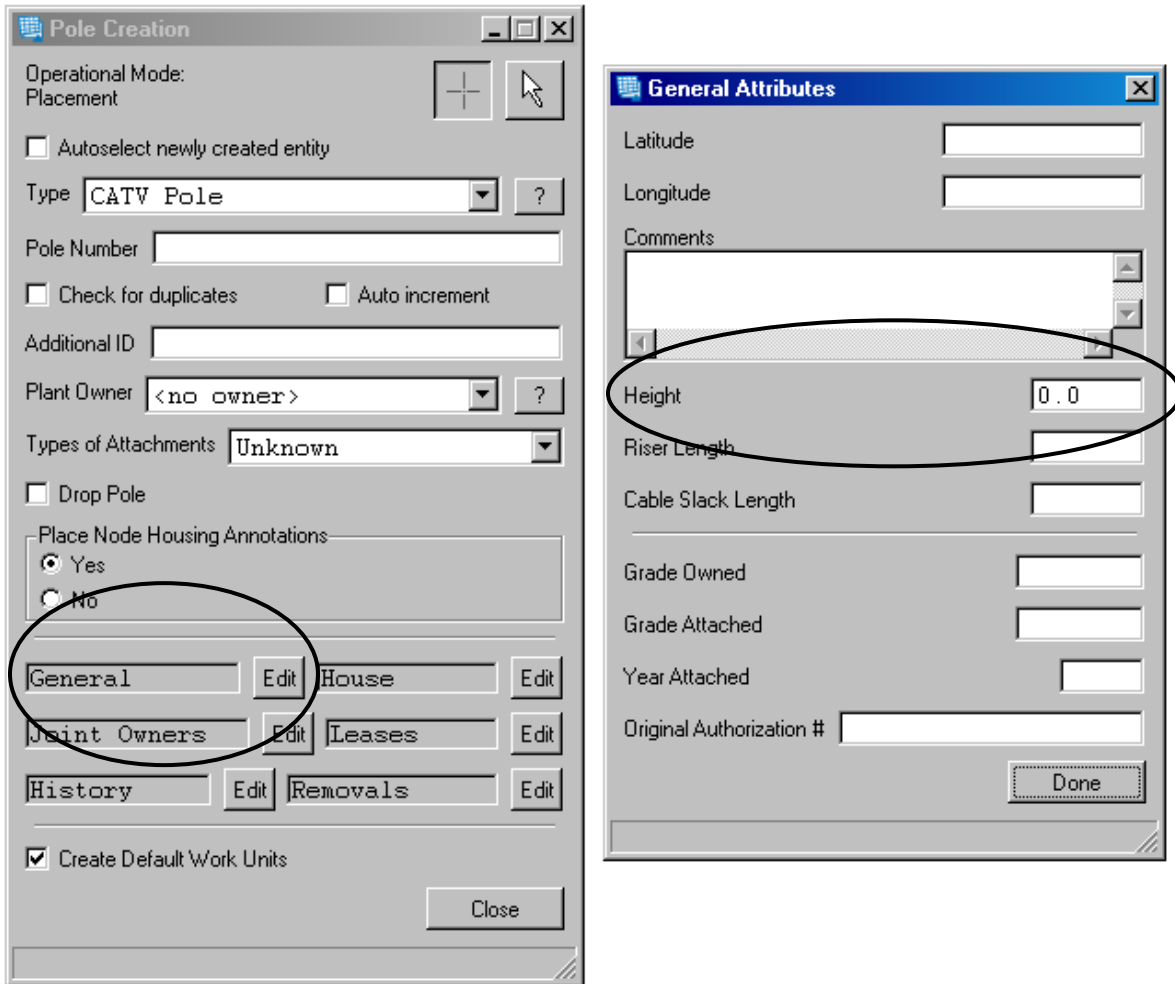


Figure 60 Pole Creation

For underground structures length, width and depth fields are available:

1. Open the **UG Structure Creation** dialog box. Enter the Length, Wiedth and Depth of the equipment.

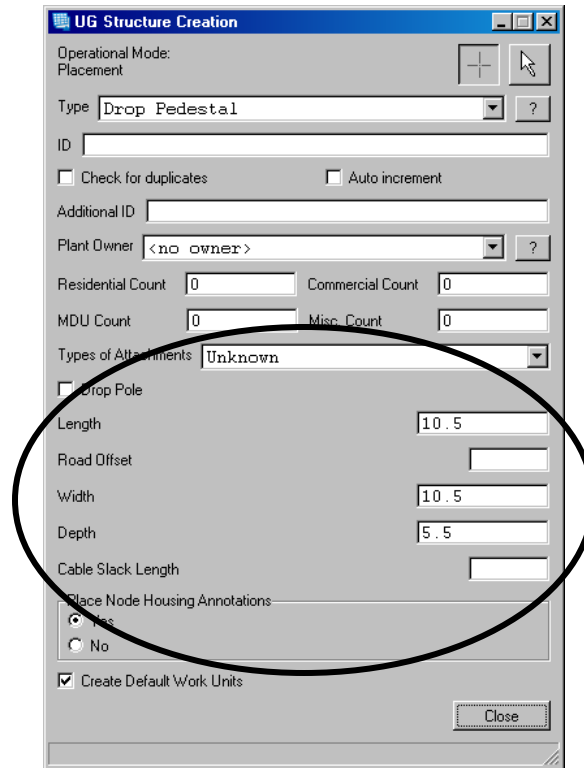


Figure 61 UG Structure Creation

## Boundaries

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Documents can attach to boundaries.

To add a document to a boundary:

1. Select the boundary. For information how to select a boundary, see the spatialNET User's Manual.
2. Select either:

1. The **Details button**  in the General Toolbar

**Or**

2. The **Browser button**  in the General toolbar

3. Select **Add->Document** from the drop-down menu.

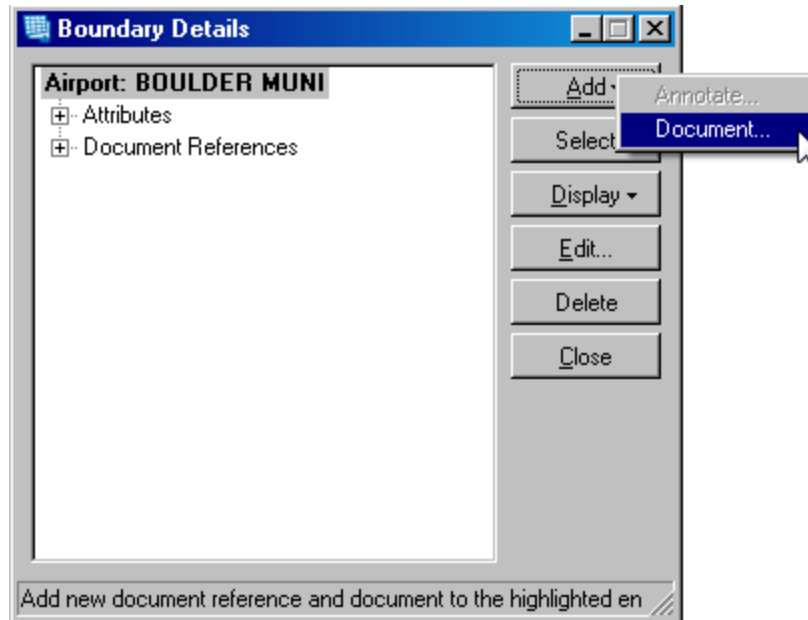


Figure 62 Boundary Details Add Document Example

4. The **Document Reference** dialog box opens.

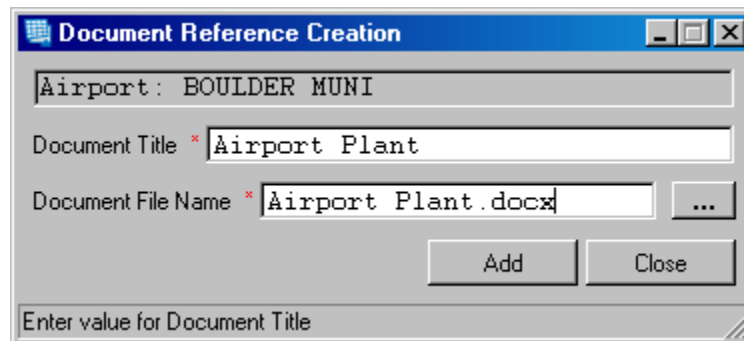



Figure 63 Document Reference Creation

5. Enter the **Document Title**.
6. Select the Browse button  to the right of the Document File Name. Select the Document file to attach.
7. Select **Add**, then **Close**.

## Desktop Client

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Adding a Lease Agreement is now available on the Desktop client.

To add a lease agreement in the desktop client:

1. Select **SpatialNET->Add->Lease Agreement**. The **Lease Agreement Creation** dialog box opens.

The screenshot shows a dialog box titled "Lease Agreement Creation". It contains the following fields and controls:

- Agreement ID: \* 4555
- Agreement Type: Dark Fiber
- Equipment Owner: Cable Co ?
- Equipment Leased To: Telco ?
- Cable Length: \* 0.0
- Cost: \* 0.0
- Agreement Start Date: \* 03Jun10
- Agreement End Date: \* 03Jun10

Buttons: Add, Close

Figure 64 Lease Agreement Creation

2. Enter the Lease Agreement information. Select **Add**.