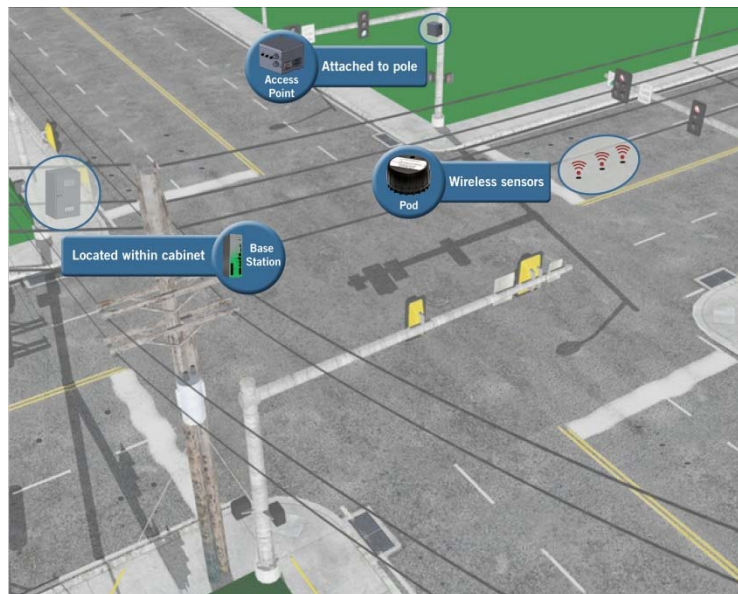




POD Connect™
GUI Setup Manual
Release 4.2.x



February 2017

522 Gillingham
Sugar Land, Texas 77478
Phone: (281) 240-7233
Fax: (281) 240-7238

Engineered by  **Naztec**

POD Connect™
GUI Setup Manual

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Trafficware, LLC.
522 Gillingham Rd
Sugarland, TX 77478

Phone: 510-526-5891 • Fax: 281-240-0452 • Email: sales@trafficware.com

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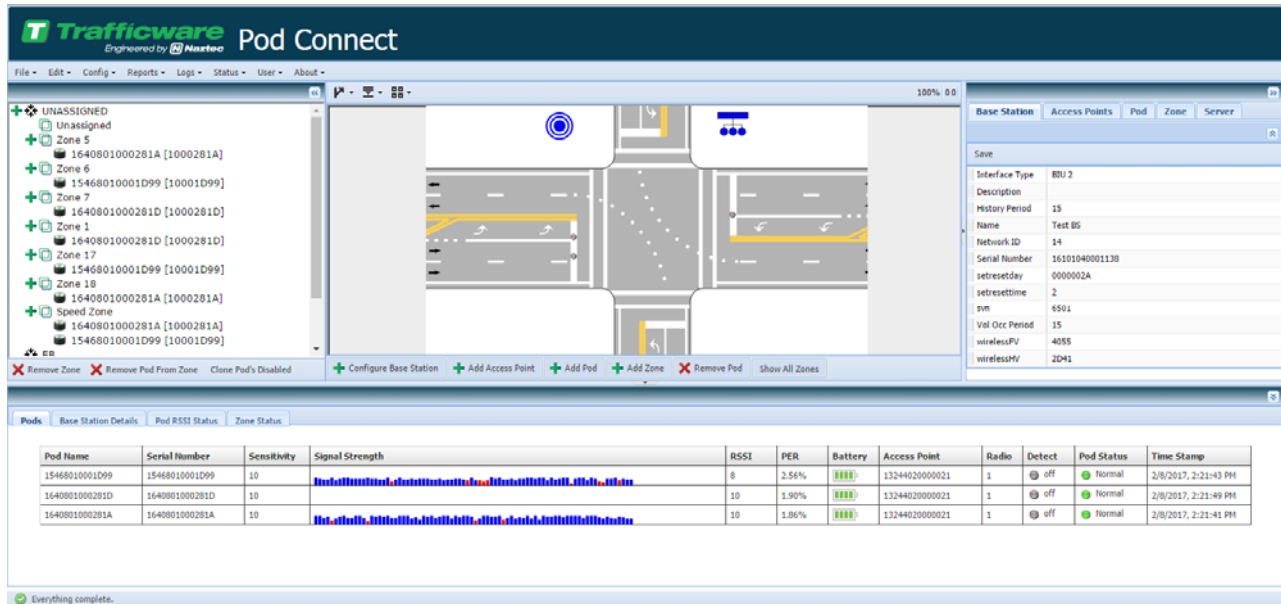
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1. Introduction

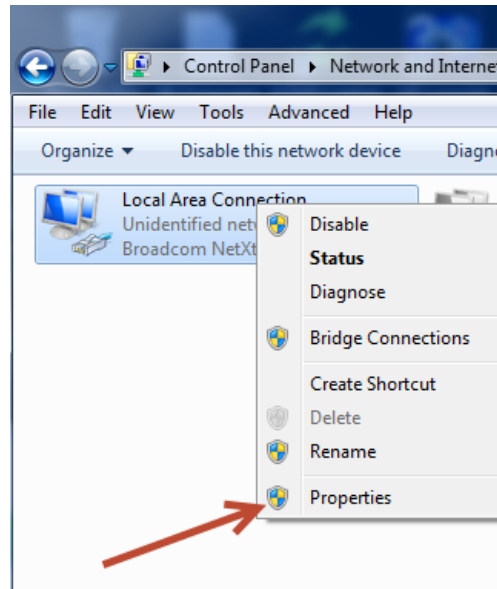
The Graphical User Interface (GUI) for the POD system is displayed in a window which is broken up into 4 panes as shown below.



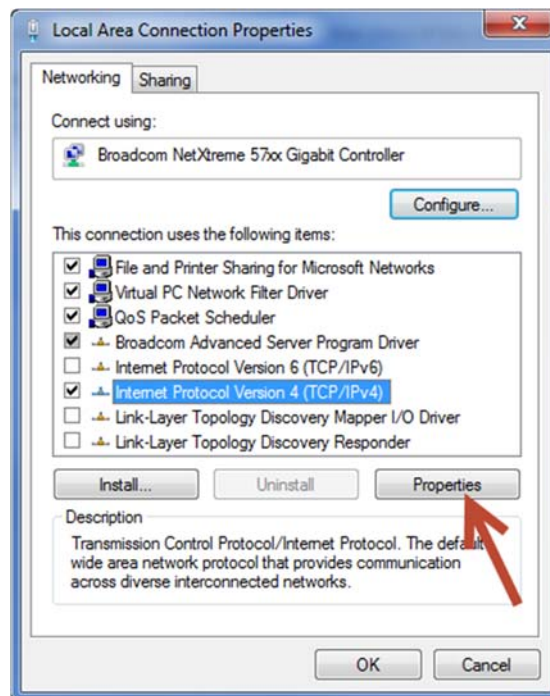
- **GUI Menu:** This is the main menu for the Pod Connect GUI (Graphical User Interface).
- **Map Pane:** The center pane is the Map pane which contains the intersection layout and icons of the PODS as well as the Base station and Access points.
- **Tree Pane:** The left pane, displays the Map approaches, PODs and zone information in a simple tree view.
- **Property Grid Pane:** The right pane shows specific properties and data for each Base Station, Access Point, POD, Zones, and server that the Pod system uses.
- **Spreadsheet Pane:** The bottom pane displays properties of each POD, Base station details, Pod RSSI information or zone volume occupancy information.

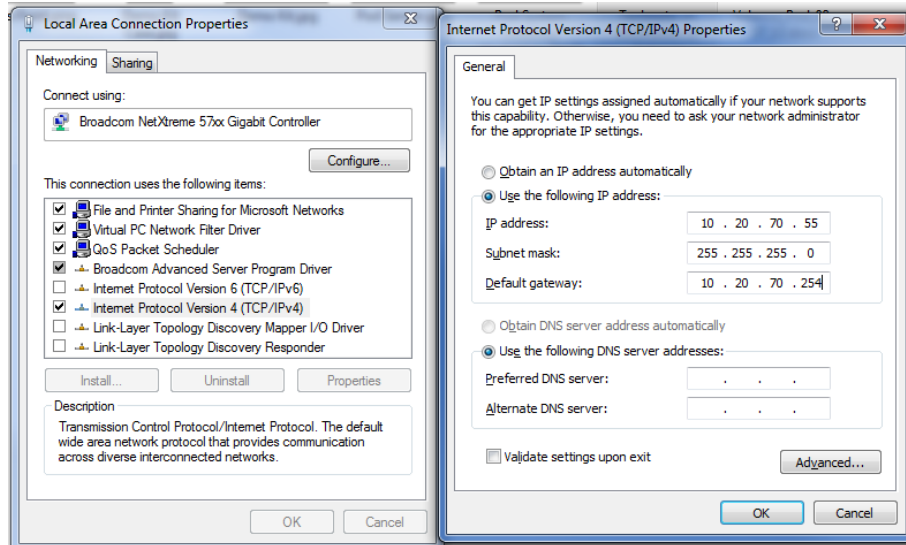
2. Configuring POD system on your PC or server

- 1) Install Internet cable on Base station into “LAPTOP ENET” connector
- 2) Change Default Fixed IP address on Laptop to the following
 - a. Go to Network connections
 - b. Choose Properties

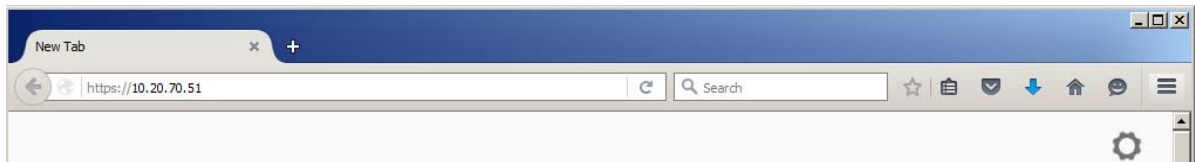


- c. Choose (Highlight) Internet Protocol Version 4 (TCP/IPv4) Properties



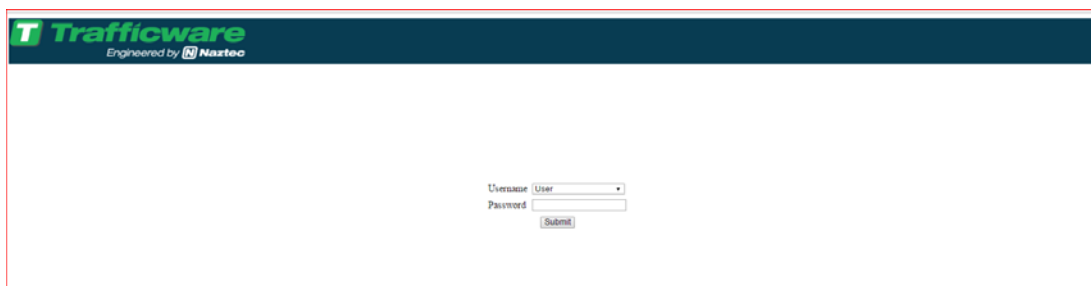


- 3) In order to begin using the Pod web interface first load the interactive site by using the HTTPS protocol and the IP address of the base station, <https://10.20.70.51/>. When using the GUI for the first time it will be necessary to confirm security exceptions as they arise in the browser. In Chrome, select “Show Advanced” and then “Proceed”. In Firefox click “Advanced”, “Add Exception”, and “Confirm Exception”. In Internet Explorer select “Continue to this Website.”



- 4) After confirming any necessary security exceptions, the login screen appears. Select the username “Admin” and enter the password for this account. The default password is “password” and should be changed after login by following the instructions in section entitled “Resetting the Pod Connect GUI Passwords.”

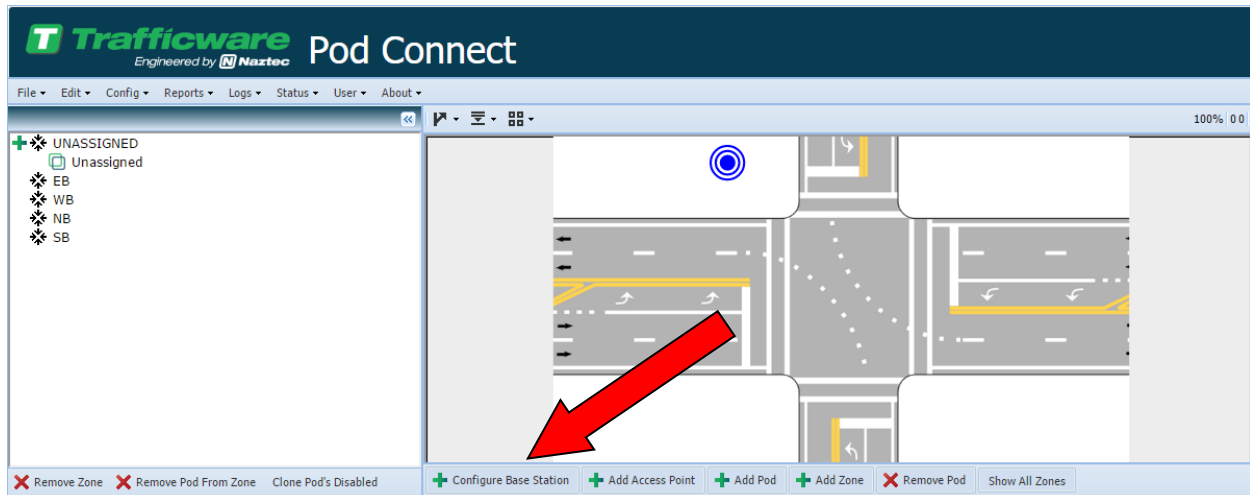
The browser should automatically load the Pod Connect Interface, which is located at this address.



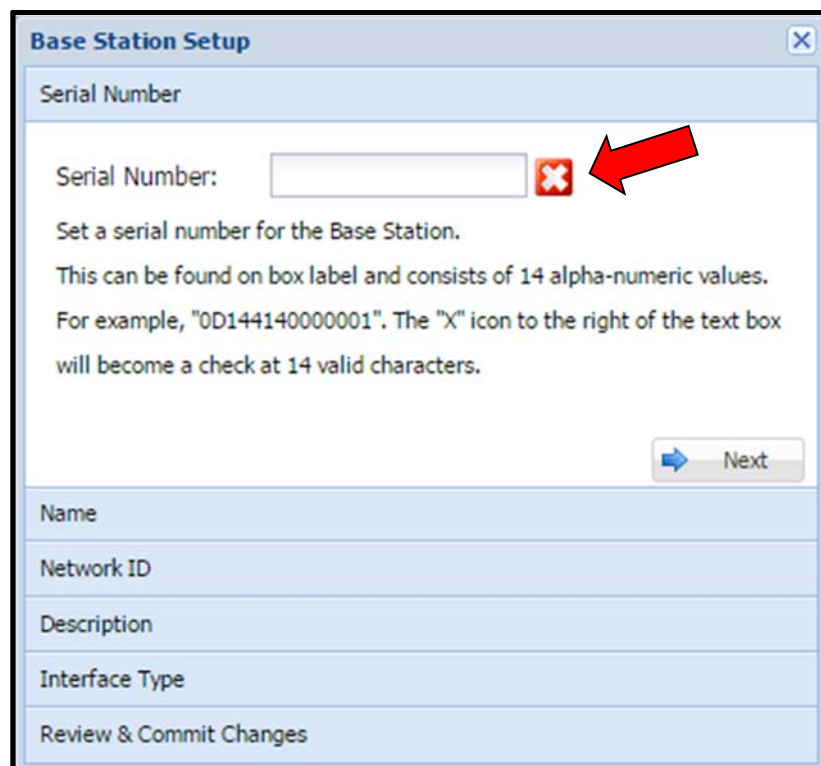
- 5) Then you should see the main Pod Connect interface.
- 6) The Base station is not ready to be setup.

3. Adding and Configuring the Base station

Select the **Configure Base Station** Button from the Map pane.



The Base station setup screen will come up. Notice that the serial number is invalid because a RED X is displayed. **NOTE: for all screens discussed in this manual, a RED X will indicate invalid data.**



Enter the valid 14 digit serial number as found on the Label on the side of the base station. A green check mark will appear. **NOTE: for all screens discussed in this manual, a GREEN Check Mark will indicate valid data.**

Base Station Setup

Serial Number

Serial Number: ✓

Set a serial number for the Base Station.
 This can be found on box label and consists of 14 alpha-numeric values.
 For example, "0D144140000001". The "X" icon to the right of the text box will become a check at 14 valid characters.

Next

Name

Network ID

Description

Interface Type

Review & Commit Changes

Select the **Next** button and a screen will come up to enter the Alpha Numeric Name (25 characters Max) of the Base station. Enter a Name for the base station, or click Next to use the serial# as the Base Station Name.

Base Station Setup

Serial Number

Name

Name: ✓

Set a name for the Base Station. For example, "Main and Center Streets."
 Leaving this field blank will use the Base Station's serial number as its name.

Back Next

Network ID

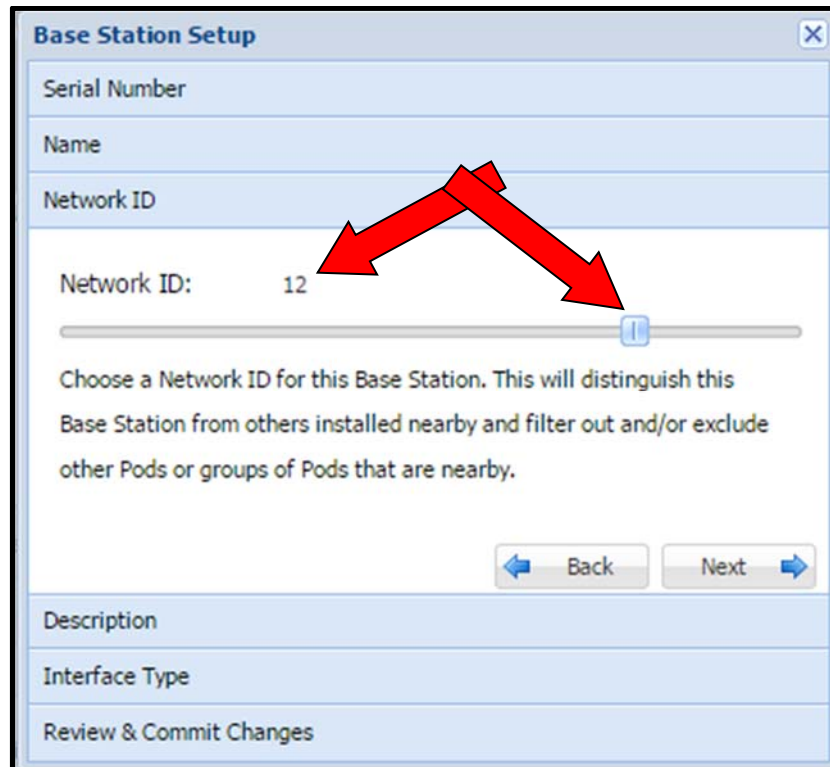
Description

Interface Type

Review & Commit Changes

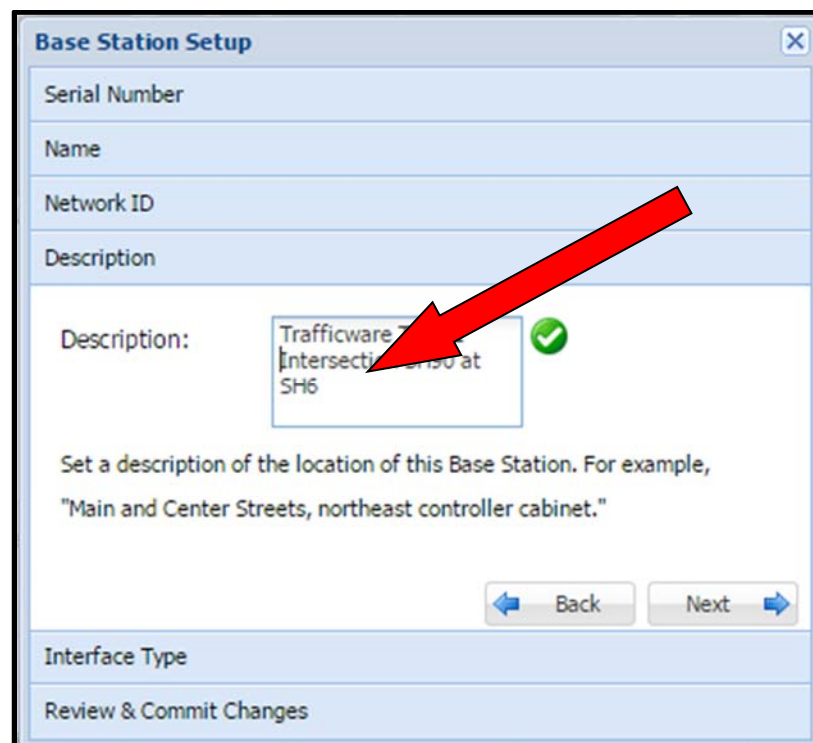
Click the **Next** button.

Enter a Unique Network ID for the Base station (valid ID's are 1-15) via the Slider Bar.

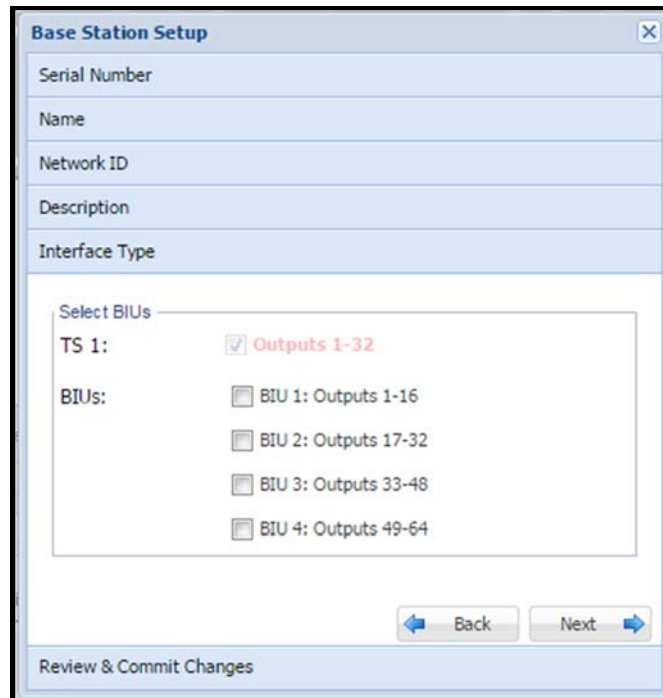


The screenshot shows the 'Base Station Setup' dialog box. The 'Network ID' field is set to 12. A slider bar below the field is positioned at 12. Two red arrows point from the slider to the '12' in the 'Network ID' field. Below the slider, there is a text box with the following text: 'Choose a Network ID for this Base Station. This will distinguish this Base Station from others installed nearby and filter out and/or exclude other Pods or groups of Pods that are nearby.' At the bottom right, there are 'Back' and 'Next' buttons.

Click the **Next** button. Enter the a description which will indicate the Location of the Base station

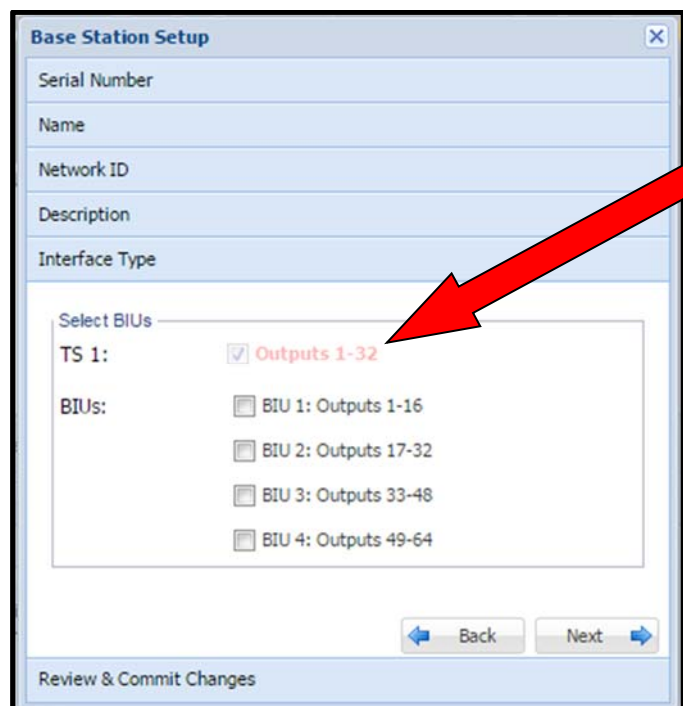
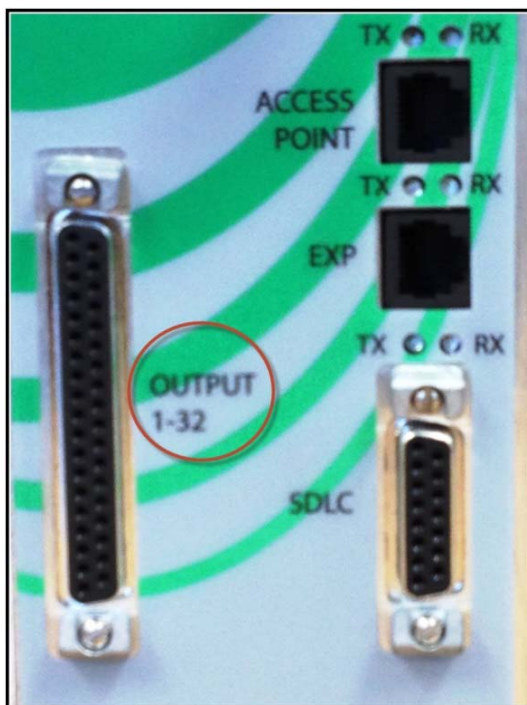


The screenshot shows the 'Base Station Setup' dialog box. The 'Description' field is filled with the text 'Trafficware Intersection at SH6'. A red arrow points from the 'Next' button in the previous screenshot to this text. A green checkmark is visible to the right of the text. Below the text box, there is a text box with the following text: 'Set a description of the location of this Base Station. For example, "Main and Center Streets, northeast controller cabinet."' At the bottom right, there are 'Back' and 'Next' buttons.

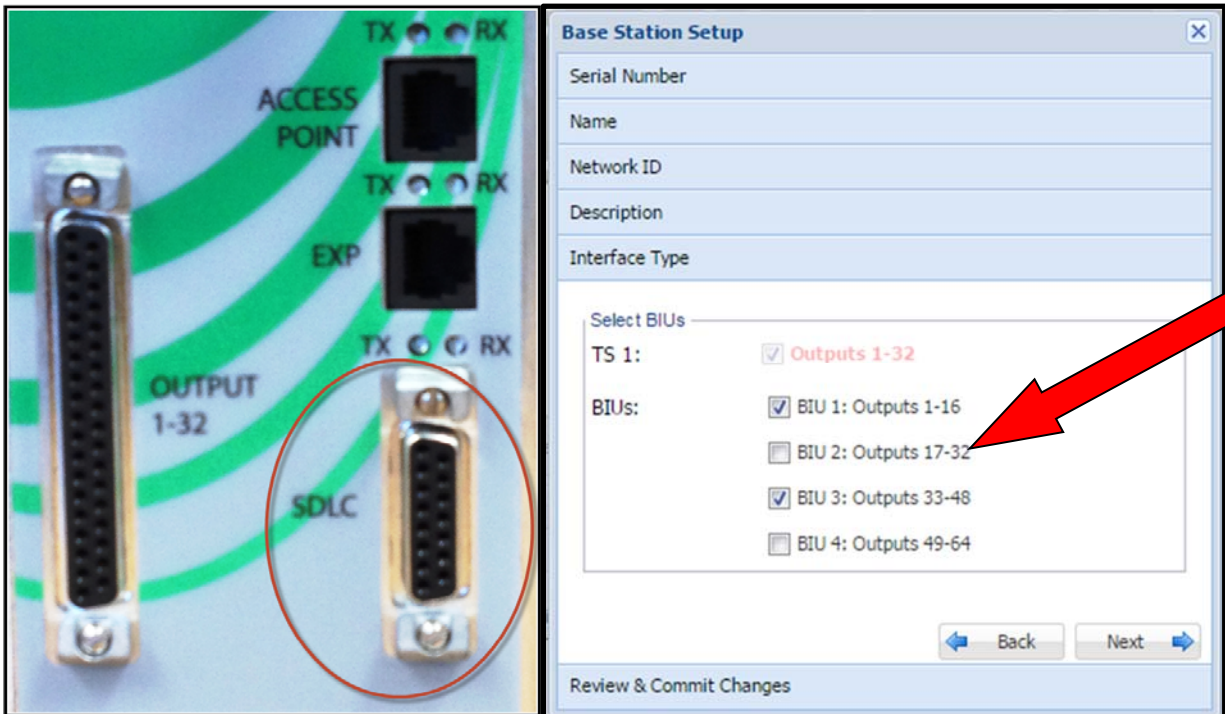


Select the type of interface that the Base Station will use. Valid interface types are either a TS1 controller (no BIU's) or a TS2 controller with BIU's.

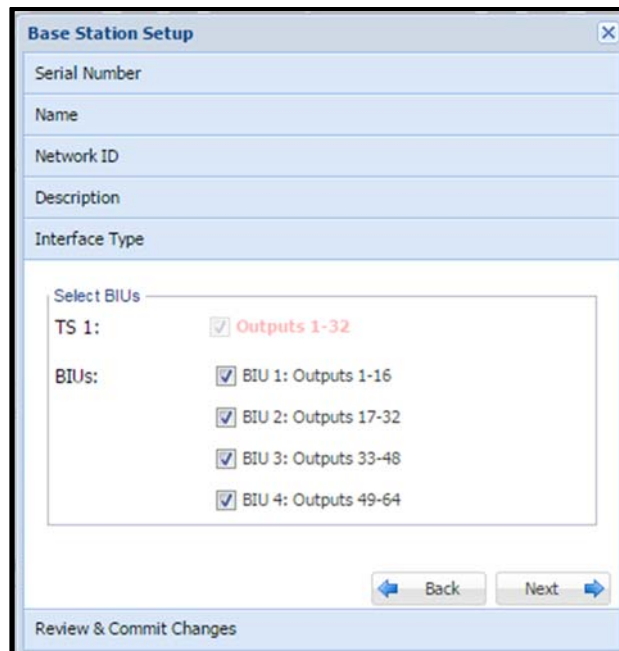
Not selecting any of the BIU checkboxes, enables the TS-1 interface, the Base Station will use the Output 1-32 connector on the Shelf Mount Base station Front Panel or will use EX cards connected in the Rack Mount base station. This connector will be wired to your cabinet's detector inputs.



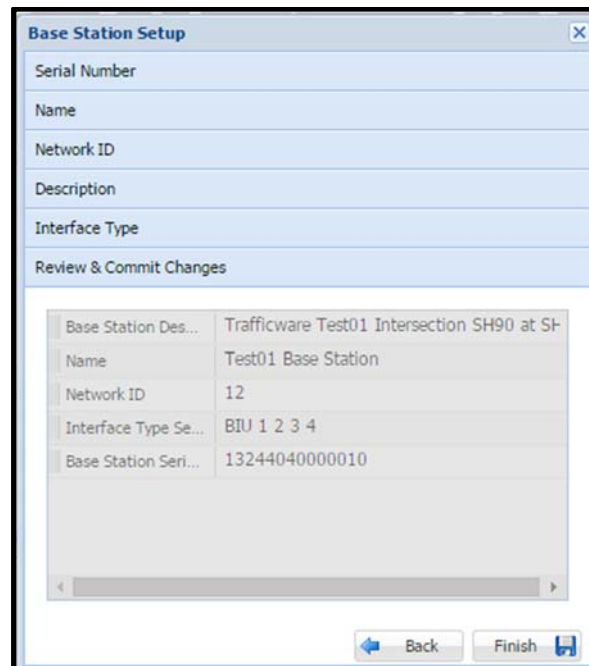
Selecting BIU checkboxes enables the TS-2 interface and the Base Station will use the SDLC connector on the Base station Front Panel. This connector will communicate to the controller using BIU's built into the Base Station. There are up to 4 Detector Facility BIU's that the user can connect to. As shown below.



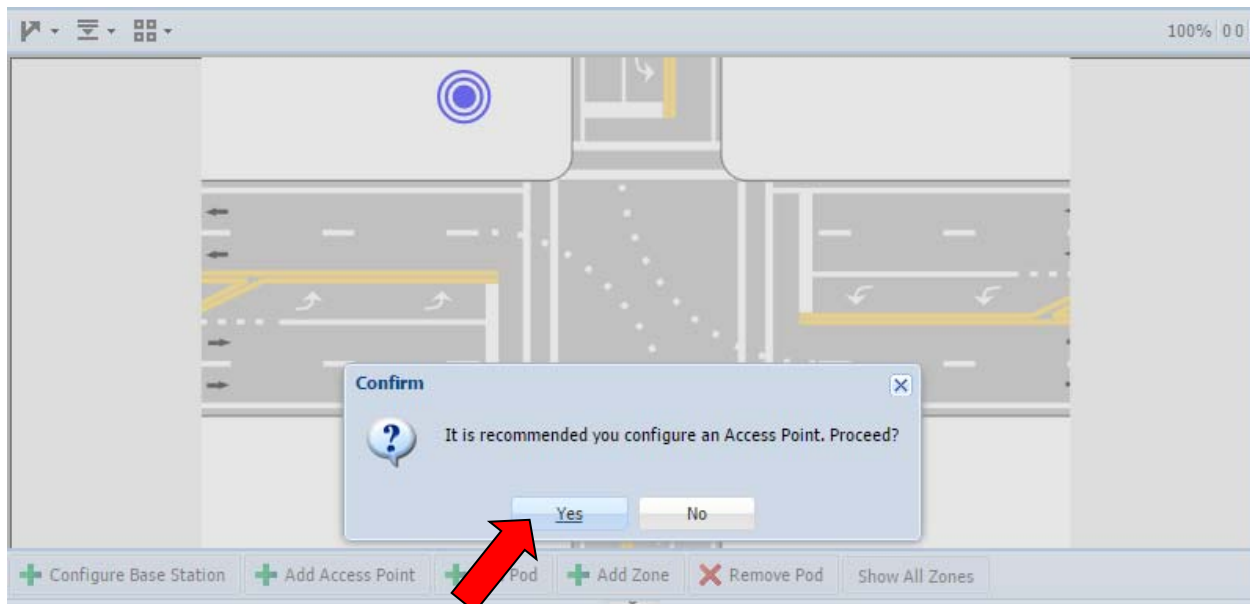
Choose the Interface Type and the BIU's that the POD detectors will communicate with.



Click the **Next** button, to get to the commit screen and then enter Finish to save these settings to the Base Station.

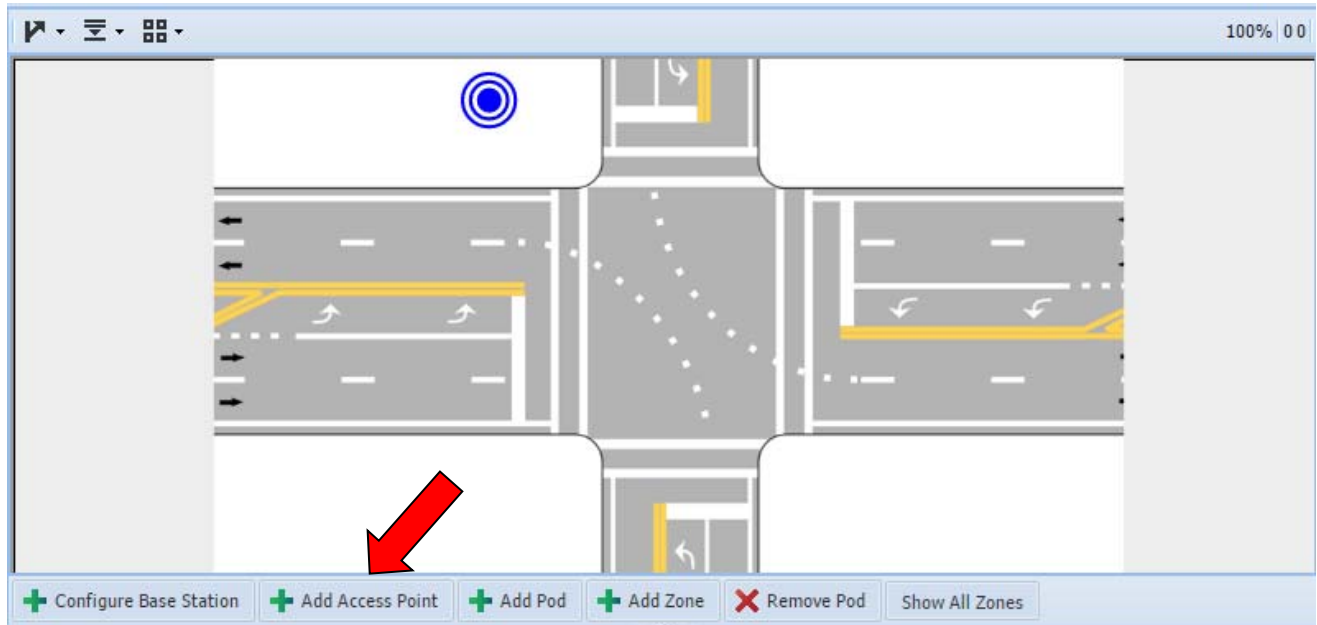


Once saved, Select YES to Proceed to adding the Access Point



4. Adding and Configuring the Access Point

Select the **Add Access Point** Button on the Map Pane.



The screenshot shows the 'Access Point Setup' dialog box. The 'Serial Number' field is highlighted with a red arrow pointing to a red 'X' icon, indicating an invalid entry. The text below the field reads: 'Set a serial number for the Access Point. This can be found on box label and consists of 14 alphanumeric values. For example, "0D144120000001". The "X" icon to the right of the text box will become a check at 14 characters.' Below the field is a 'Next' button with a right-pointing arrow. The dialog box also shows other fields: Name, Communication ID, Access Point Radio Modules, Communication Type, Description, and Review & Commit Changes.

Notice that the serial number is invalid because a RED X is displayed. Enter the 14 digit Access Point serial number which can be found on the unit. Once valid, a green check mark will appear.

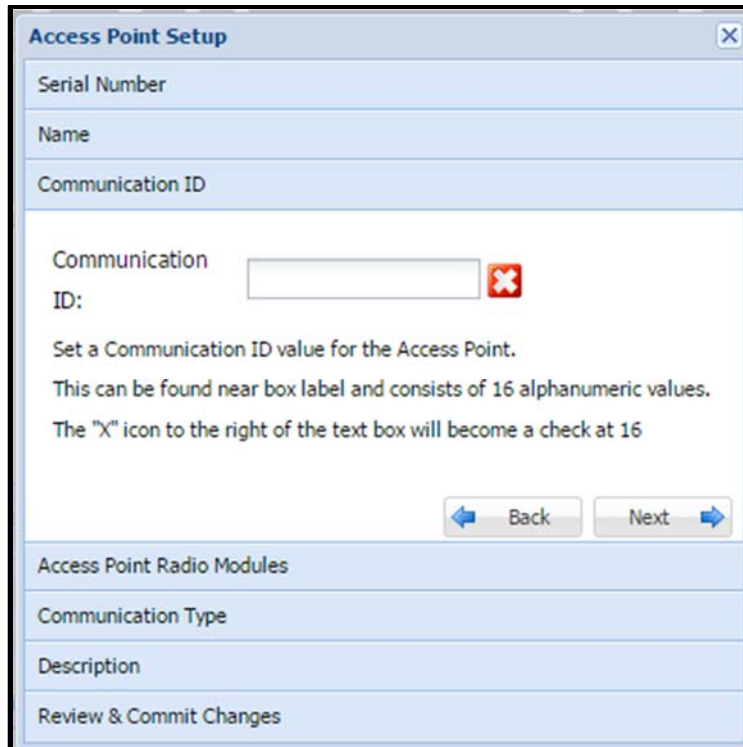
The screenshot shows the 'Access Point Setup' dialog box with the 'Serial Number' section active. The 'Serial Number' text box contains '1324402000003F' and has a green checkmark icon to its right. Below the text box, there is instructional text: 'Set a serial number for the Access Point. This can be found on box label and consists of 14 alphanumeric values. For example, "0D144120000001". The "X" icon to the right of the text box will become a check at 14 characters.' A 'Next' button with a right-pointing arrow is located at the bottom right of the section. Below the 'Serial Number' section, a list of other sections is visible: 'Name', 'Communication ID', 'Access Point Radio Modules', 'Communication Type', 'Description', and 'Review & Commit Changes'.

Click the **Next** button.

Enter a name for the Access Point device that you are installing, or Next to use the device serial number as the name.

The screenshot shows the 'Access Point Setup' dialog box with the 'Name' section active. The 'Name' text box contains 'Trafficware AP01' and has a green checkmark icon to its right. A red arrow points to the text box. Below the text box, there is instructional text: 'Set a name for the Access Point. Leaving this field blank will use the Access Point's serial number as its name.' Below the text box, there are 'Back' and 'Next' buttons with left and right-pointing arrows respectively. Below the 'Name' section, a list of other sections is visible: 'Communication ID', 'Access Point Radio Modules', 'Communication Type', 'Description', and 'Review & Commit Changes'.

Enter Next



The Communication ID is the 16 digit alpha-numeric number of the Zigbee module inside the access point and can be found on the Access Point near the box label.



Access Point Setup

Serial Number

Name

Communication ID

Communication ID: 0013A20040A677EA

Set a Communication ID value for the Access Point.
This can be found near box label and consists of 16 alphanumeric values.
The "X" icon to the right of the text box will become a check at 16

Back Next

Access Point Radio Modules

Communication Type

Description

Review & Commit Changes

Enter Next

Access Point Setup

Serial Number

Name

Communication ID

Access Point Radio Modules

Number of Radios: 3

On this system 3 is the default setting for radios. Please accept this default selection by clicking "Next".

Back Next

Communication Type

Description

Review & Commit Changes

Keep the default Value. Now enter Next to program the Communications Type.

Access Point Setup

Serial Number

Name

Communication ID

Access Point Radio Modules

Communication Type

Choose Type:: Wireless
 Wired

Select whether this Access Point will connect via Wireless or Wired.

Back Next

Description

Review & Commit Changes

This screen allows you to choose the type of communications back to the Base station. The selections are listed. Choose Wireless if you are wirelessly communicating back to the base station or choose wired if you are directly connecting back to the Base Station using a RS-485 cable. We will choose Wireless and connect wirelessly to the Base Station.

Access Point Setup

Serial Number

Name

Communication ID

Access Point Radio Modules

Communication Type

Choose Type:: Wireless
 Wired

Select whether this Access Point will connect via Wireless or Wired.

Back Next

Description

Review & Commit Changes

Access Point Setup

Serial Number

Name

Communication ID

Access Point Radio Modules

Communication Type

Description

Description: ✓

Set a description of the location of this Access Point. For example, "Main and Center Streets, northeast signal pole."

Back Next

Review & Commit Changes

Enter the a description which will indicate the Location of the Access Point

Access Point Setup

Serial Number

Name

Communication ID

Access Point Radio Modules

Communication Type

Description

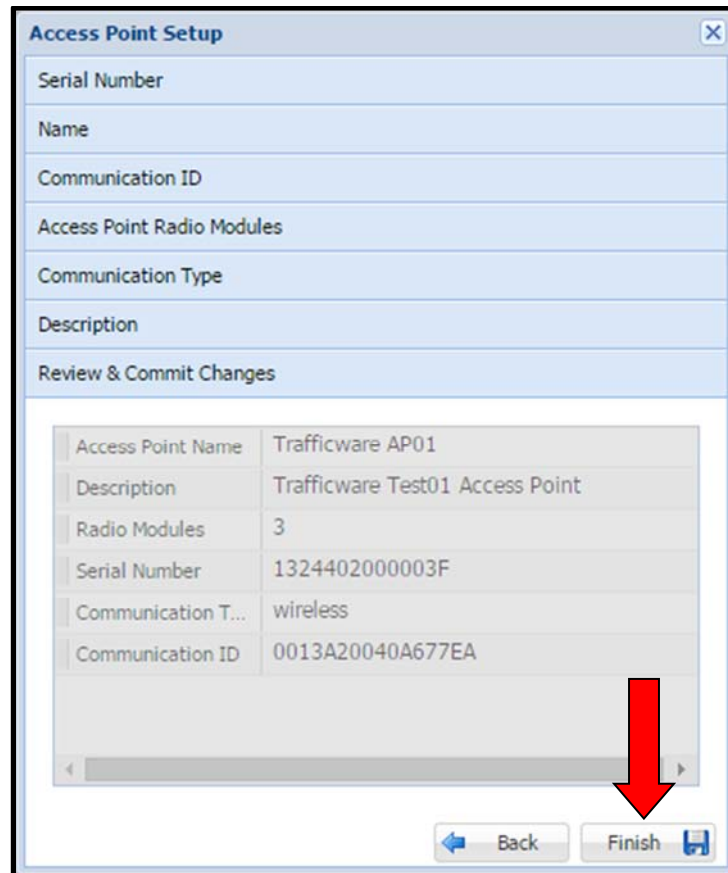
Description: ✓

Set a description of the location of this Access Point. For example, "Main and Center Streets, northeast signal pole."

Back Next

Review & Commit Changes

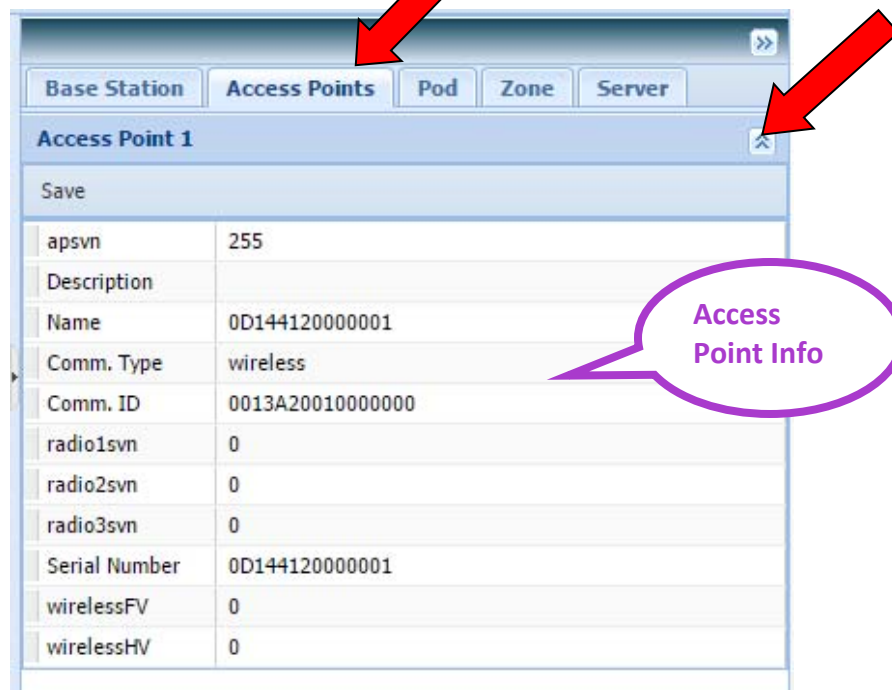
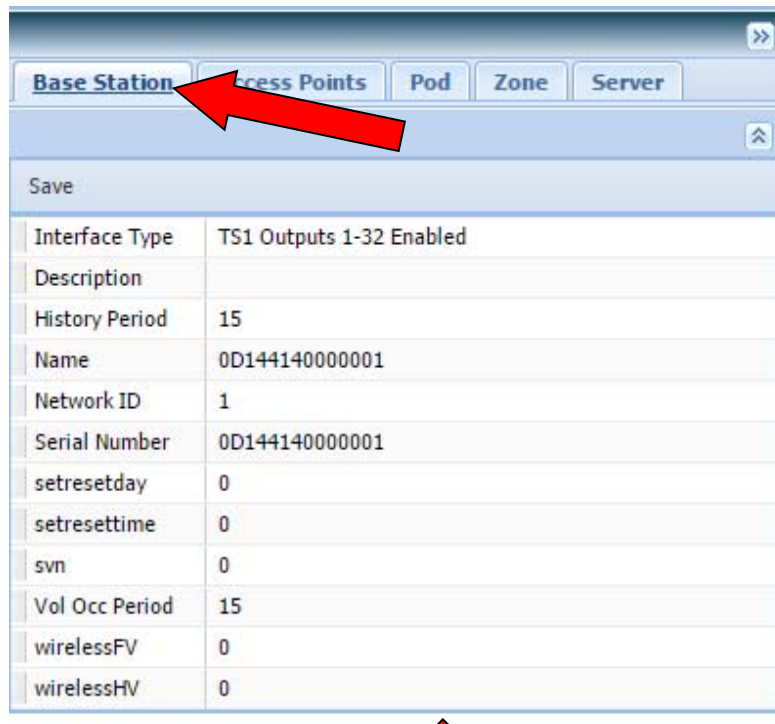
Enter **Next** to get to the commit screen and then enter Finish to save these setting to the Base Station.



Click Finish to confirm the update and you should go back to the Home Screen.

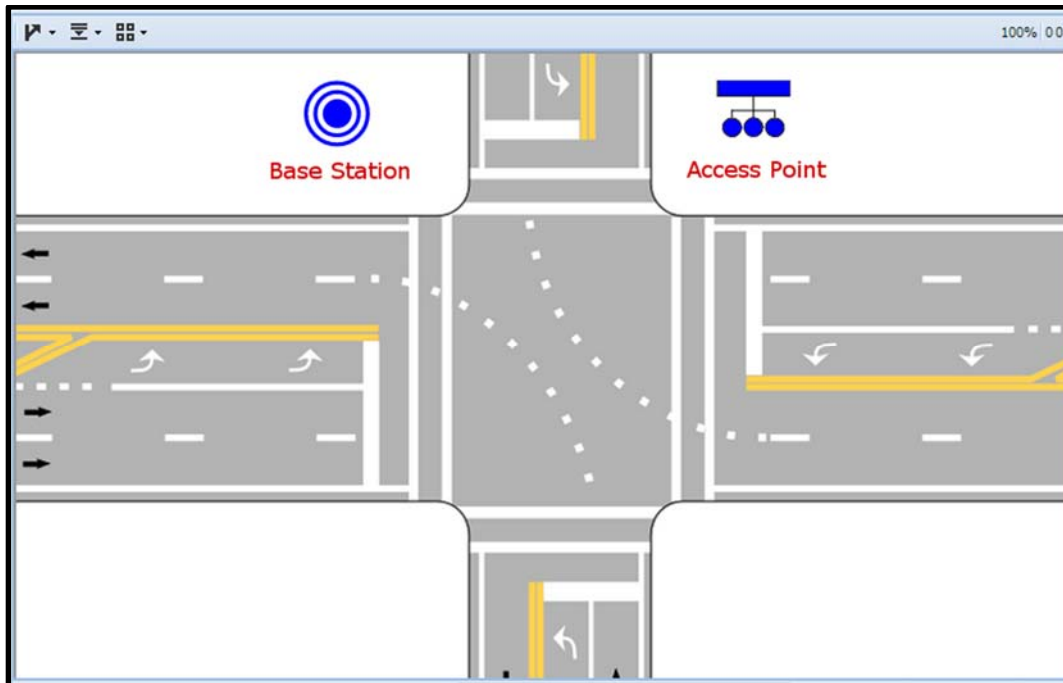


Notice that the Access Point Graphic has been added to the Map Pane as circled in RED. In addition, on the home screen, there are Tabs on the Property Grid pane that give particular information about the Base station and the Access Point devices that you have set up.

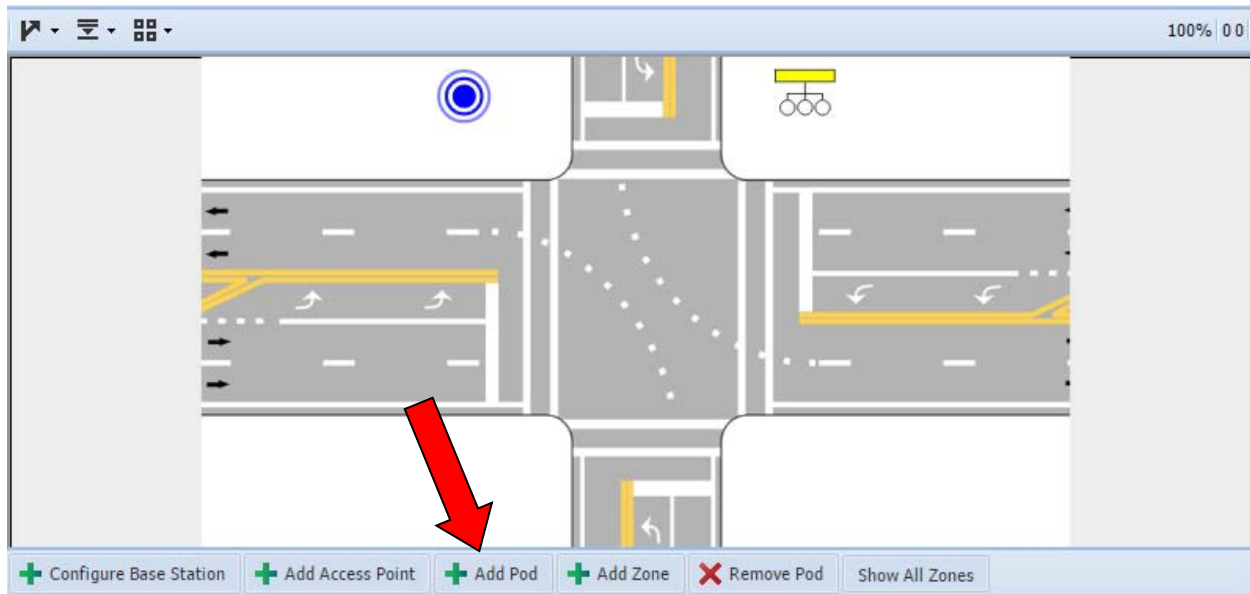


There is a drop-down selector for each Access Point. By selecting this, you can view and edit the specific information for each Access point.

When the Access Point and the Base station are successfully communicating, they will display as “blue”.



5. Adding and Configuring the PODS



Click Add POD and the following screen is displayed:

The 'Pod Setup' dialog box is shown with the following fields and options:

- Serial Number:** A text input field with a red 'X' icon to its right. Below it, instructions state: "Set a serial number for the Pod. This can be found on the Pod label and consists of 14 alphanumeric values. For example, '13256010000162'. The 'X' icon to the right of the text box will become a check at 14 characters."
- Next:** A button with a right-pointing arrow.
- Name:** A text input field.
- Failure State:** A text input field.
- Access Point & Radio Module:** A text input field.
- Review & Commit Changes:** A text input field.

Enter the 14 digit (Alphanumeric) serial number found on the POD and the Red X should turn into a Check Mark.



Pod Setup [X]

Serial Number

Serial Number: ✓

Set a serial number for the Pod. This can be found on the Pod label and consists of 14 alphanumeric values. For example, "13256010000162". The "X" icon to the right of the text box will become a check at 14 characters.

Next →

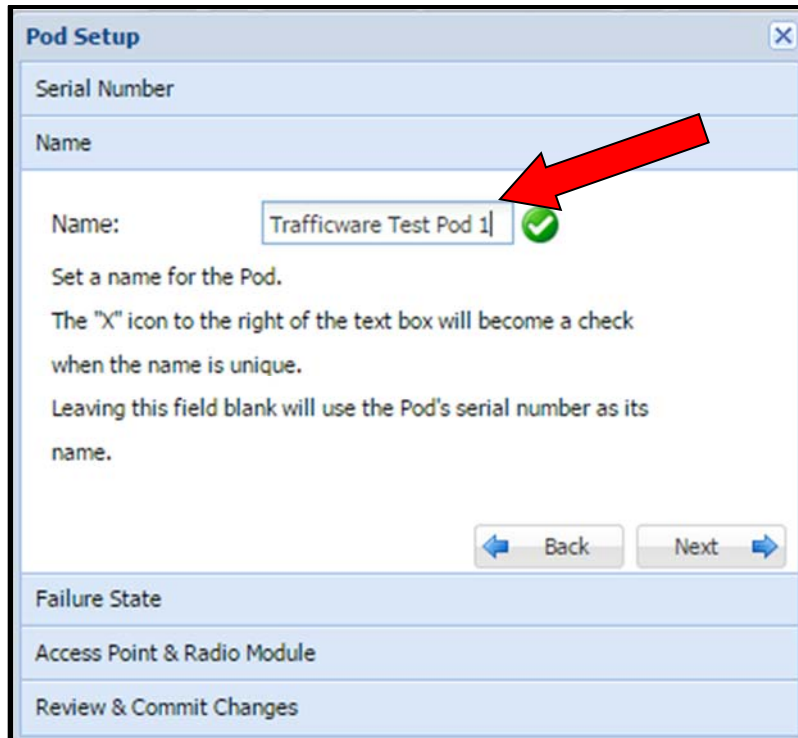
Name

Failure State

Access Point & Radio Module

Review & Commit Changes


Enter the Name/description of the POD



Pod Setup [X]

Serial Number

Name

Name: 

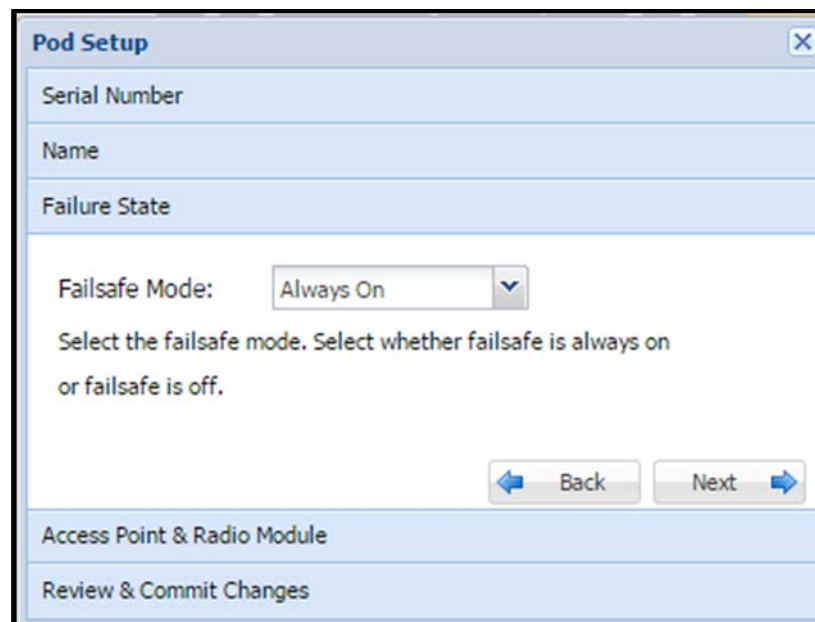
Set a name for the Pod.
 The "X" icon to the right of the text box will become a check when the name is unique.
 Leaving this field blank will use the Pod's serial number as its name.

← Back Next →

Failure State

Access Point & Radio Module

Review & Commit Changes



Pod Setup [X]

Serial Number

Name

Failure State

Failsafe Mode: ▼

Select the failsafe mode. Select whether failsafe is always on or failsafe is off.

← Back Next →

Access Point & Radio Module

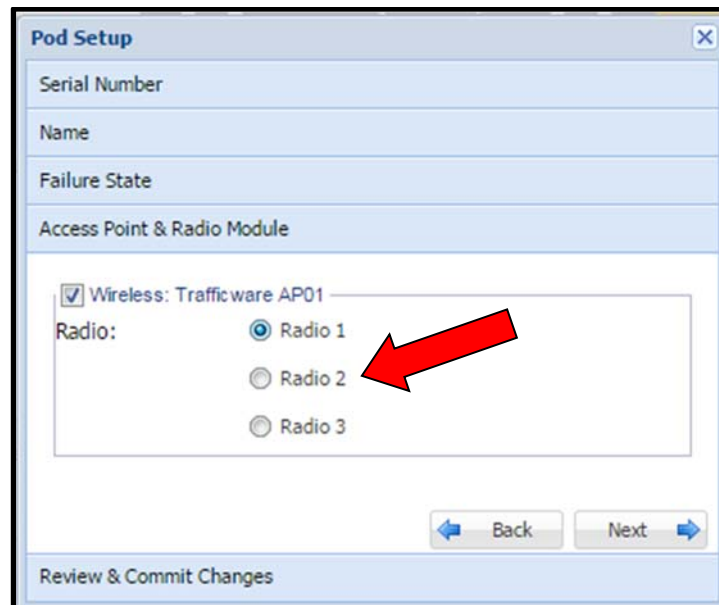
Review & Commit Changes

The Failsafe Mode for each POD is used when combining 2 or more PODS in a zone.

Failsafe Mode = **Always On** will insure the Output of this POD is always turned on for logical operations of that zone.

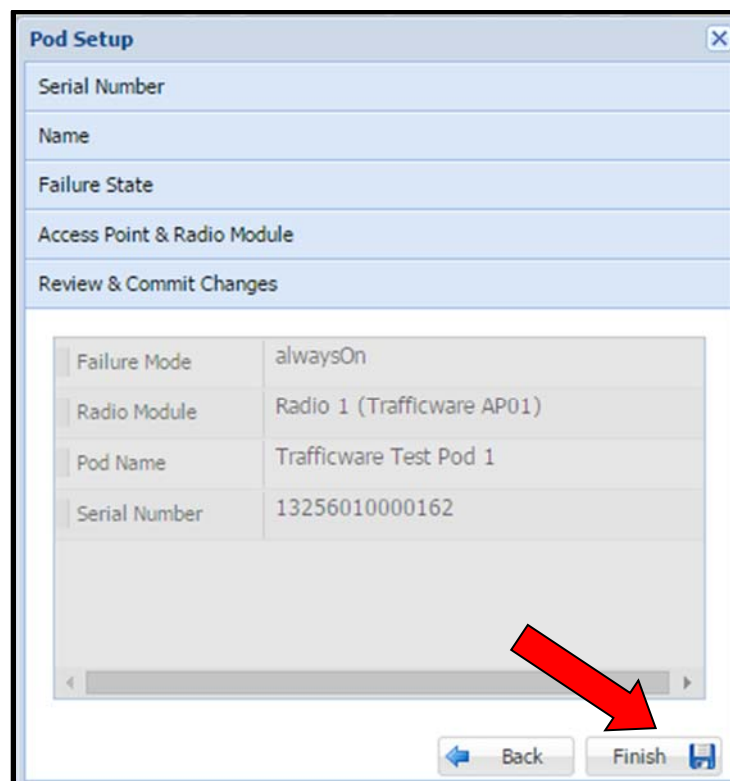
Failsafe Mode = **Ignore State** will insure the Output of this POD is always turned off for logical operations of that zone. Leave the default setting Failsafe Mode On.

Each POD has to communicate to a Radio in the Access Point device. There are three radios in the access point that can be used. Select the desired radio.



The 'Pod Setup' dialog box is shown with the 'Access Point & Radio Module' section expanded. It contains a checked checkbox for 'Wireless: Trafficware AP01' and a 'Radio:' label. Below the label are three radio button options: 'Radio 1', 'Radio 2', and 'Radio 3'. 'Radio 1' is selected. A red arrow points to the 'Radio 1' option. At the bottom of the dialog are 'Back' and 'Next' buttons, and a 'Review & Commit Changes' label at the very bottom.

Enter **Next** to get to the commit screen and then enter Finish to save these setting to the Base Station

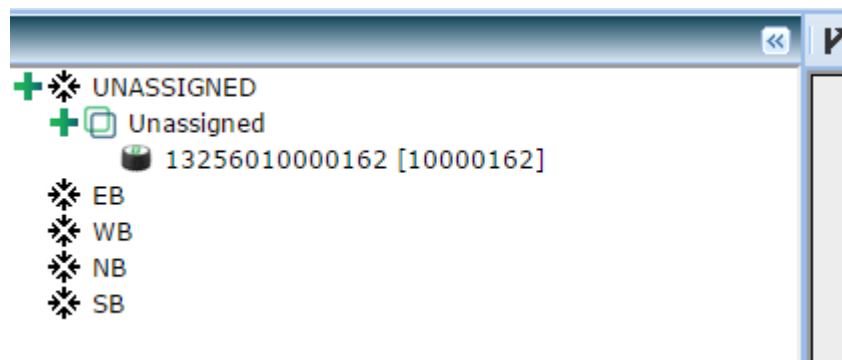


The 'Pod Setup' dialog box is shown with the 'Review & Commit Changes' section expanded. It displays a summary table of settings:

Failure Mode	alwaysOn
Radio Module	Radio 1 (Trafficware AP01)
Pod Name	Trafficware Test Pod 1
Serial Number	13256010000162

Below the table is a horizontal scrollbar. At the bottom of the dialog are 'Back' and 'Finish' buttons. A red arrow points to the 'Finish' button.

Once Finished the Pod will be added to the Map Pane, Tree Pane and Spreadsheet pane as shown below.



Pod Name	Serial Number	Sensitivity	Signal Strength	RSSI	PER	Battery	Access Point	Radio	Detect	Pod Status	Time Stamp
13256010000162	13256010000162	10		0	0.00%		00144120000001	1		NoComm	-

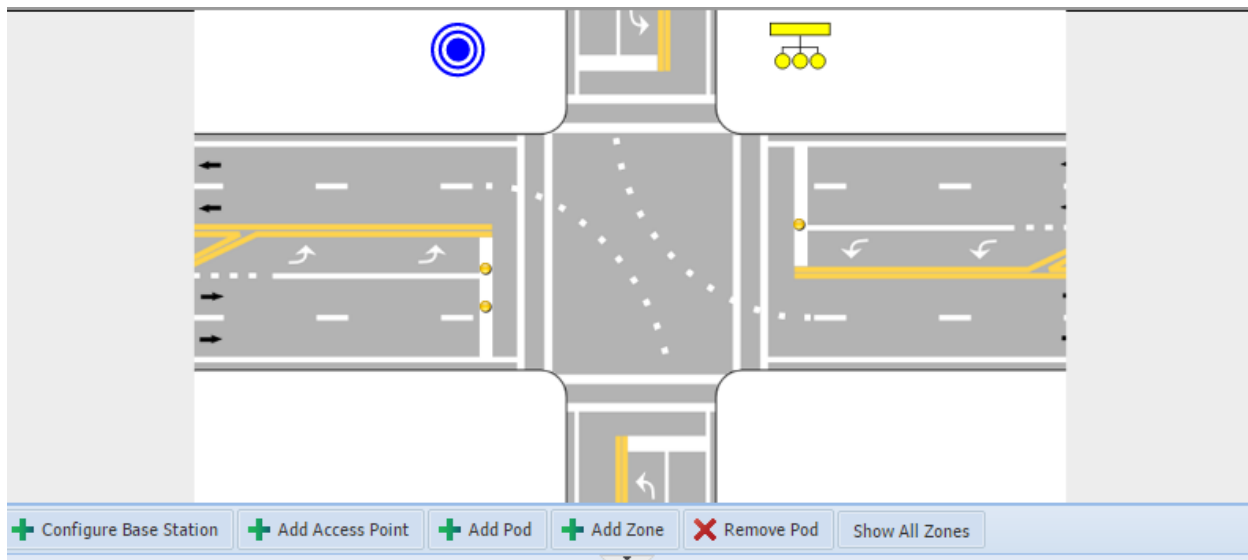
Notice that on the Map pane the pod is golden in color. That indicates that the pod is setup but it is not yet committed to the system or communicating to the Access Point or Base Station. You can now go to the Property Grid Pane and View the Pod detailed information

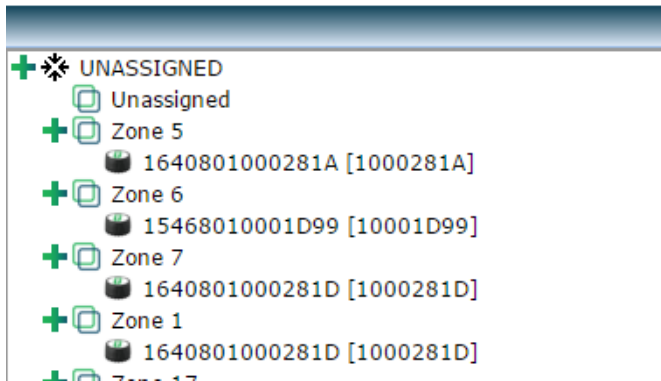
The screenshot shows the configuration page for a Pod. The top navigation bar has tabs for 'Base Station', 'Access Points', 'Pod', 'Zone', and 'Server'. The 'Pod' tab is selected and highlighted with a red arrow. Below the tabs, the ID '13256010000162' is displayed. There are 'Save' and 'Learn' buttons. A table lists the following configuration parameters:

Extension (0.1s)	0
mcu1svn	0
mcu2svn	0
Sensitivity	10
Radio	{"AP":"wireless","radio":1}
Name	13256010000162
Sensor Fail Sta...	alwaysOn
Serial Number	13256010000162

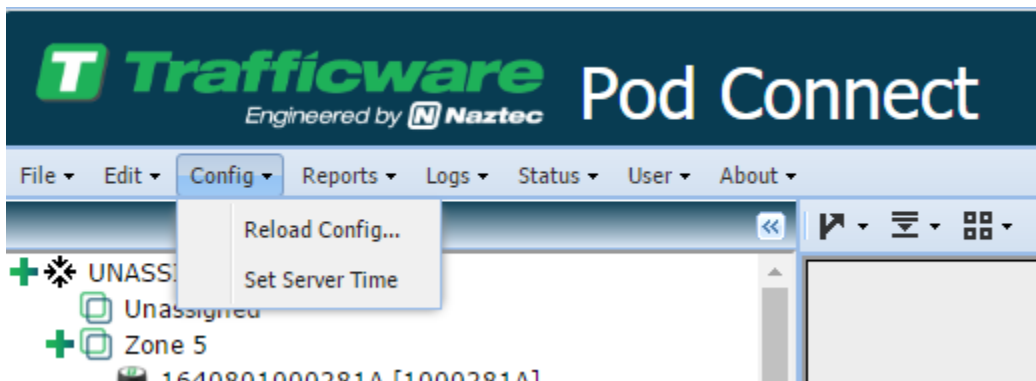
Repeat all the steps in this section to add other PODs to the system.

In this example, we have a 3 POD system as shown below.

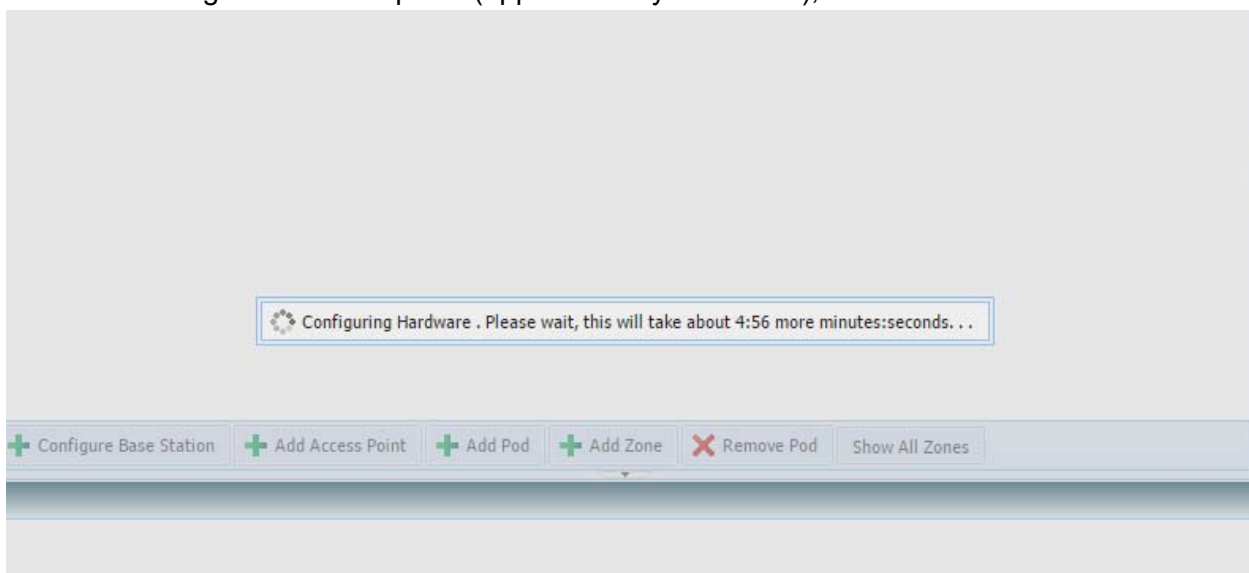




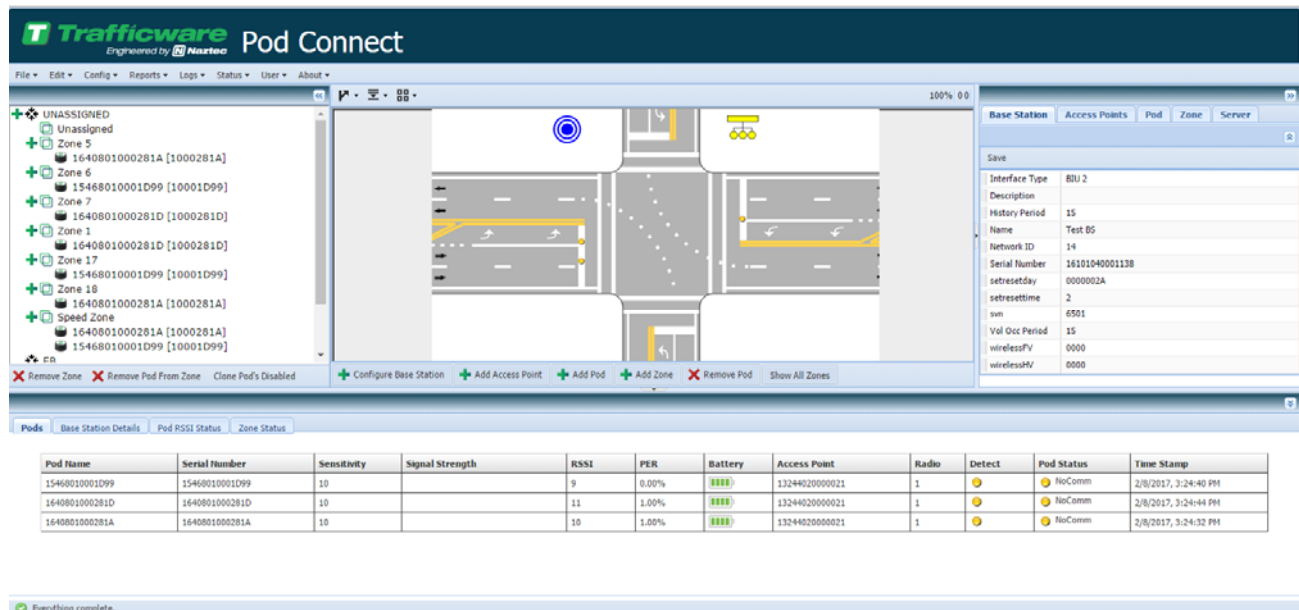
Notice that both PODS are not communicating. The Gold color on the Map Pane will indicate this. The Access Point must reload the Communications and Hardware configuration so that it can begin communicating to the field units. Select the **CONFIG** drop down menu and select **Reload Config** to begin communications.



The screen will gray out and show the following message while the Communications and Hardware configuration takes place (approximately 5 minutes), as shown below:



When complete the PODs are added to the Map as well to the Tree on the Left Pane as shown below:



Pod Colors and descriptions are as follows:

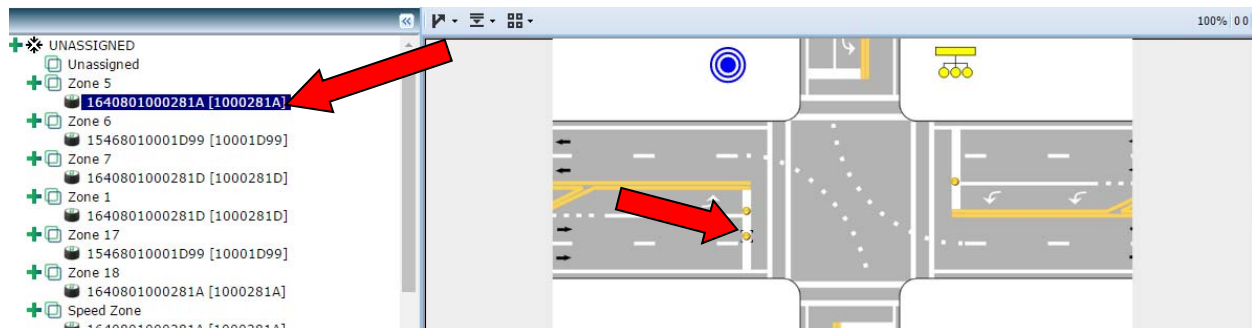
Color		Description
Gold		Not Communicating
Gray		Communicating but not detecting a vehicle
Blue		Communicating and detecting a vehicle

6. Adding and Creating POD Zones

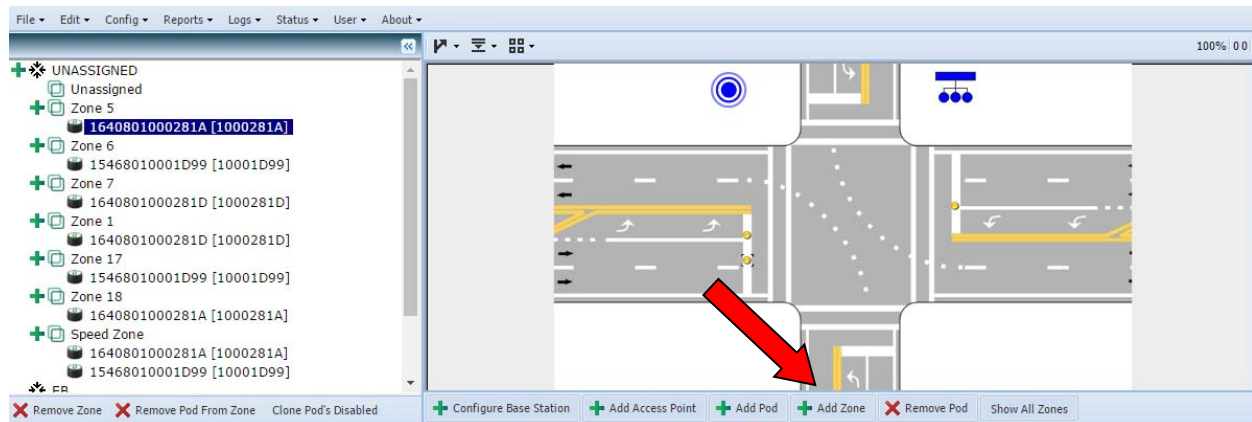
A zone can be created to physically (and/or logically) combine PODs for a detection channel. Click on Add Zone to create a Zone.

First, select the PODs that you want to combine into a zone

You can select them by clicking on the POD on the Map view or by clicking on the POD in the Tree View pane.



Now Select Add Zone to combine the PODS into a detection zone



The following screen is displayed

Zone Setup [X]

Name

Name: [X]

Set a name for the Zone. For example, "WB-RT" (west-bound, right turn).
The "X" icon to the right of the text box will become a check
when the name is unique.

Next [➔]

Operation Mode

Output Number

Review & Commit Changes

Enter the Zone Name to get a Check Mark

Zone Setup [X]

Name

Name: [✓]

Set a name for the Zone. For example, "WB-RT" (west-bound, right turn).
The "X" icon to the right of the text box will become a check
when the name is unique.

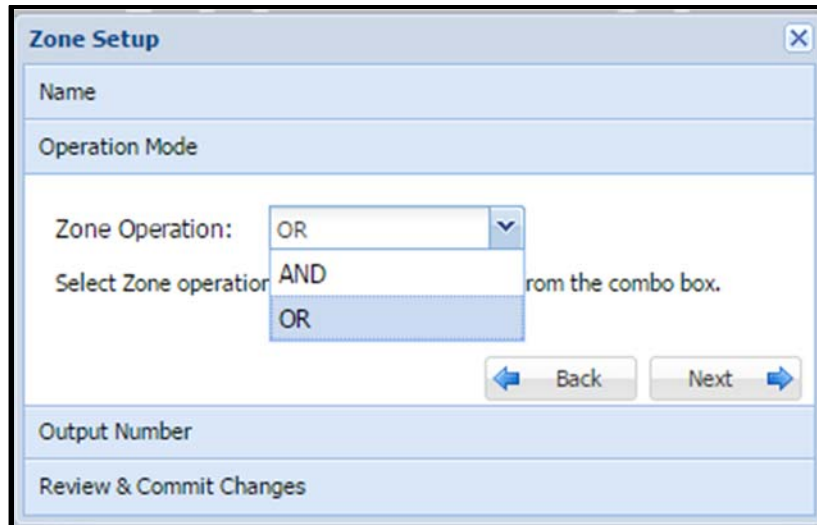
Next [➔]

Operation Mode

Output Number

Review & Commit Changes

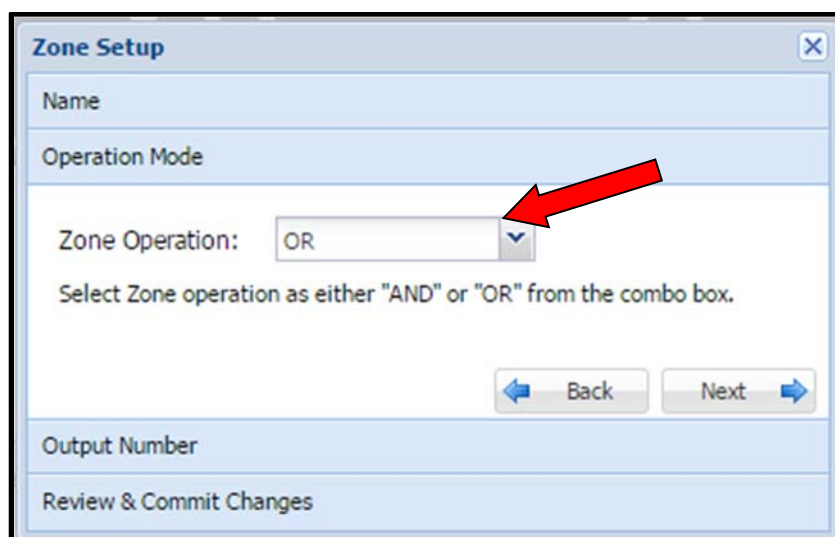
Enter Next

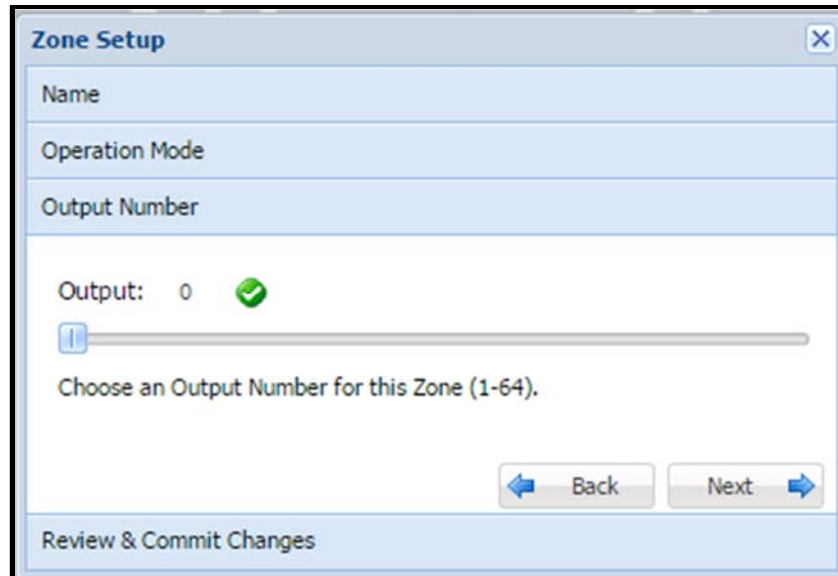


This screen shows you the logical operation of the PODS in each zone. Below is a Boolean Logic chart to reference:

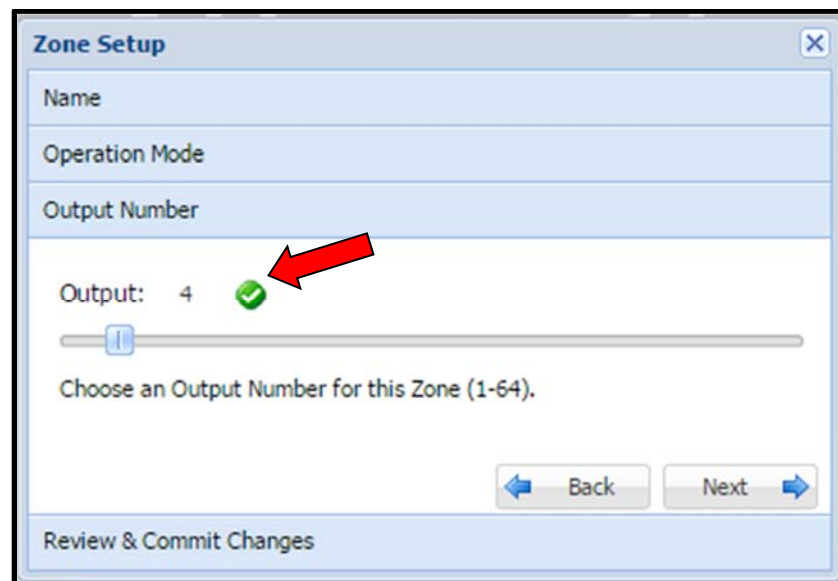
POD 1	POD 2	Zone Logic Result- AND	Zone Logic Result- OR
ON	ON	ON	ON
ON	OFF	OFF	ON
OFF	ON	OFF	ON
OFF	OFF	OFF	OFF

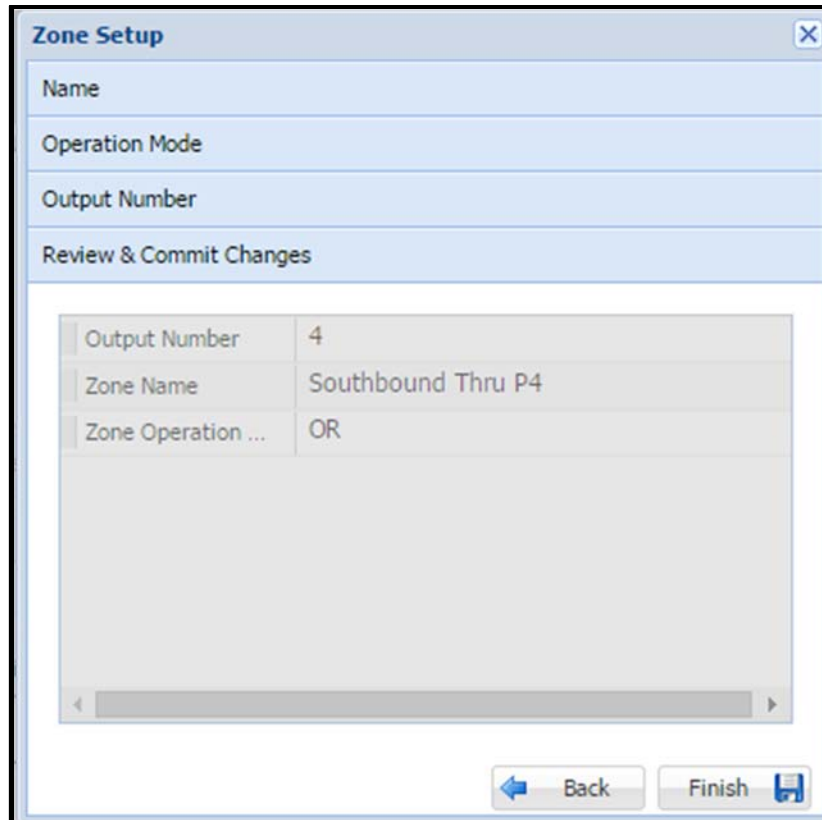
The user can select either operation depending on what the result that they desire from the detection zone. We will default to 'OR' so that if either detector is sensing a vehicle the detection zone will detect a vehicle.



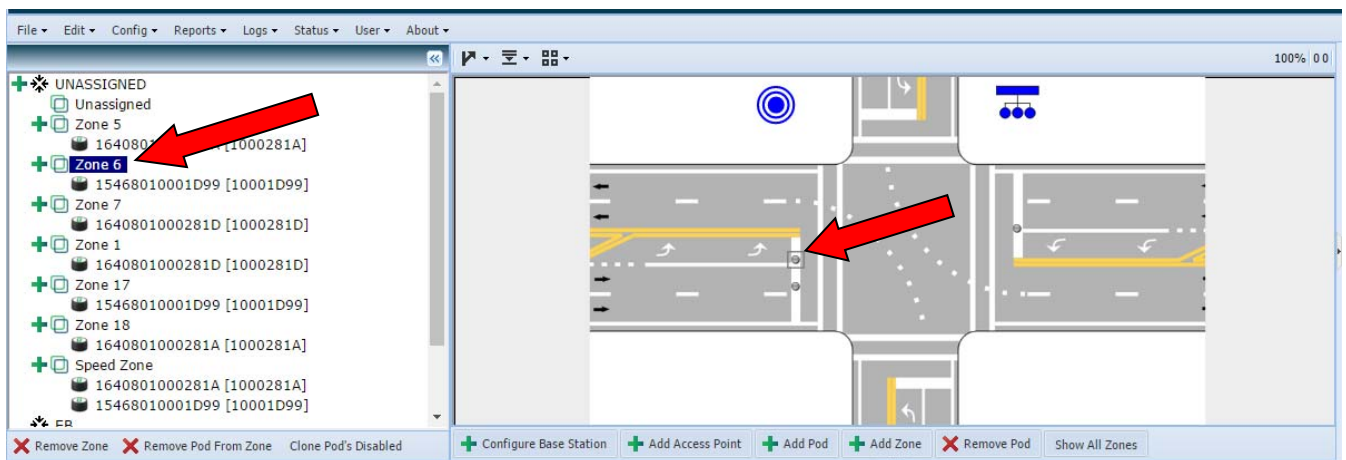


This screen configures the detector channel output that the zone will drive. In this example we will choose Detector output 4 by using the slider bar.

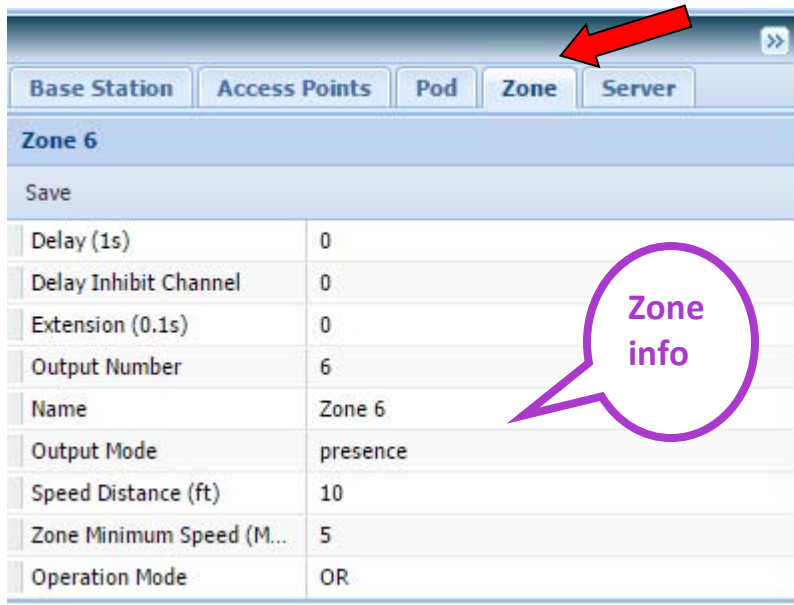




Enter Finish to commit the changes. The zone is indicated on the Tree View as shown below

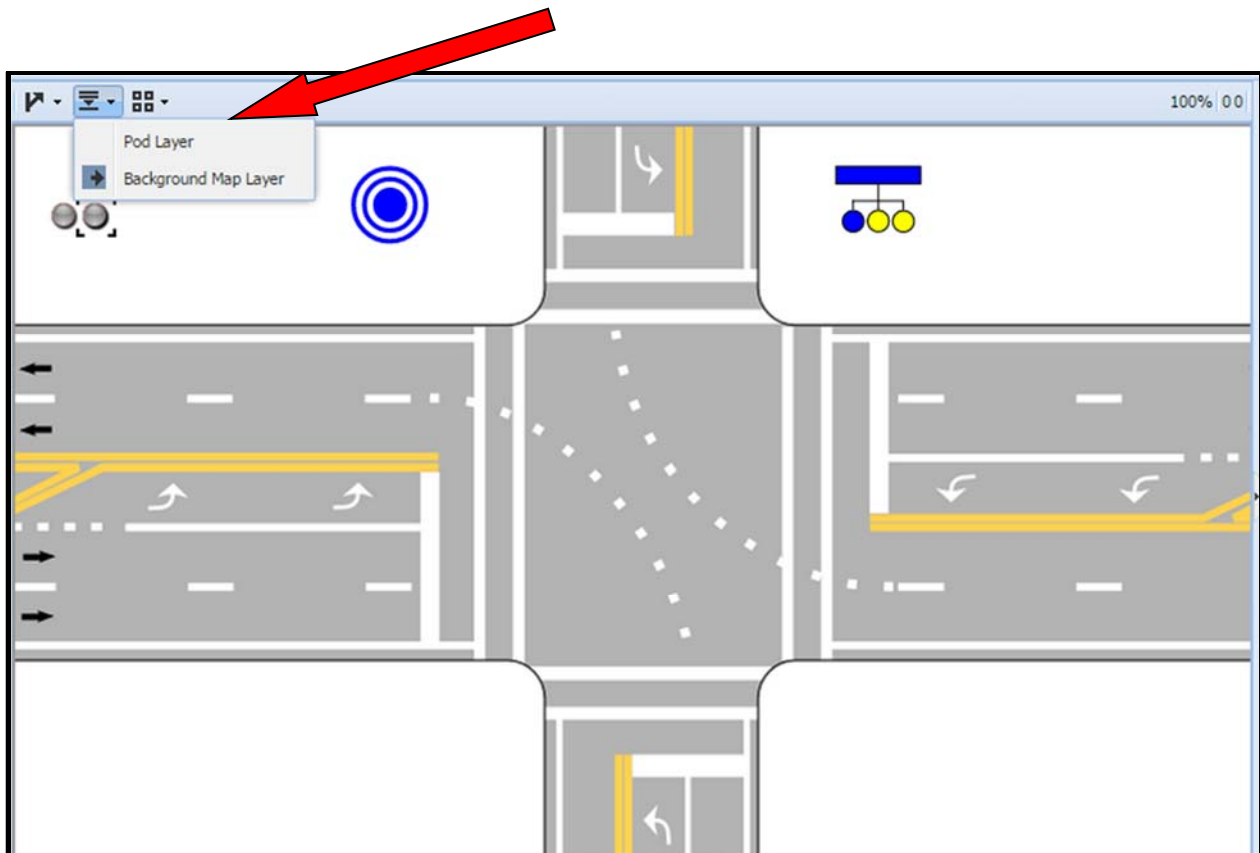


It will also be shown on the Left Pane if you select the zone Tab



Now we would like to place the PODs on the map to show proper road placement. Select the layer icon as shown on the menu bar above the map

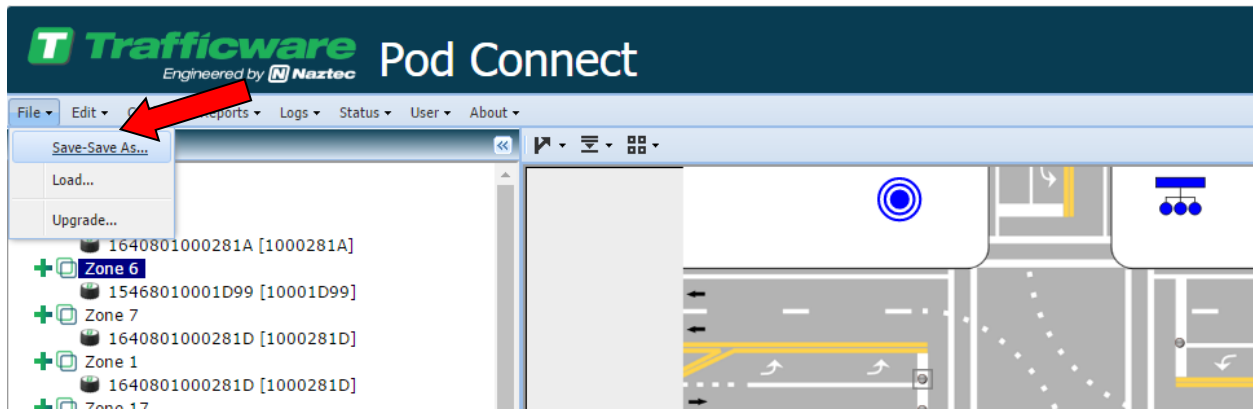




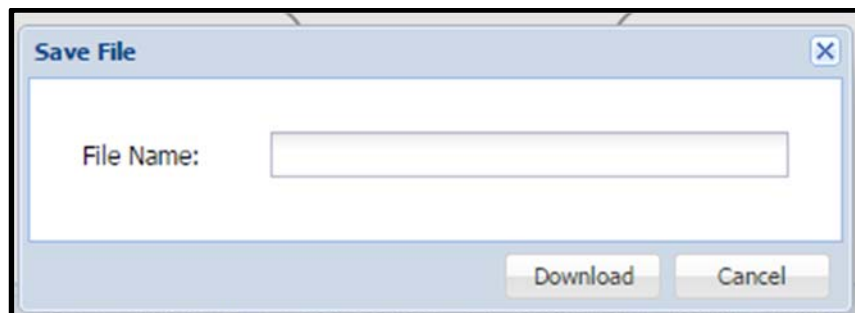
The POD Layer is the layer that should be chosen. It allows you to place the PODS on the road.



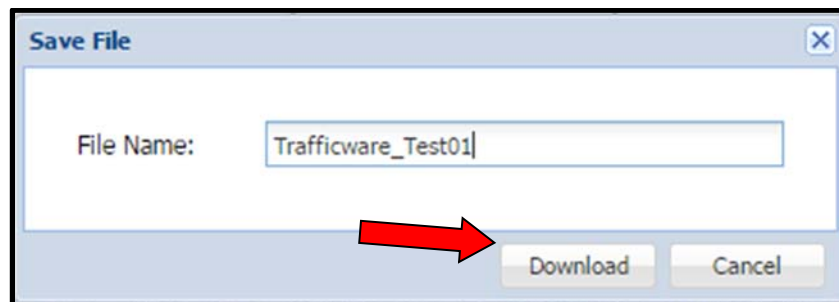
Once the PODs are set on the map you should save the configuration. Select the Menu Item FILE->SAVE-SAVE AS.



The following screen will be displayed



Enter the File Name

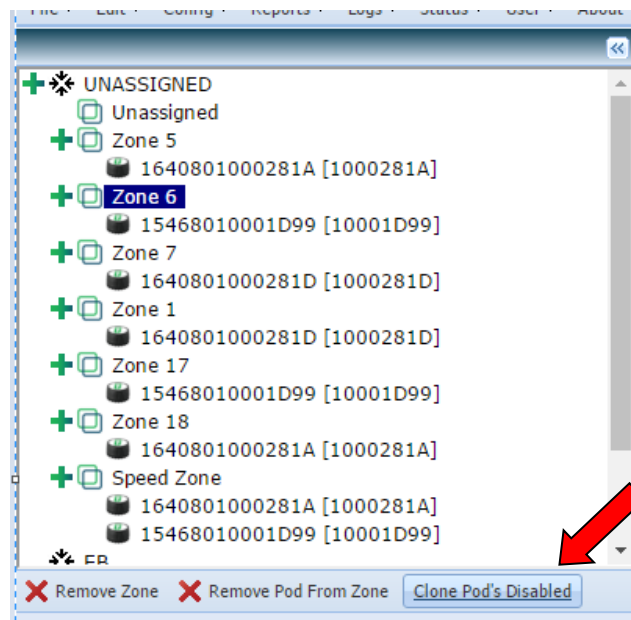


Select **Download** to save.

Selecting the Show All Zones checkbox in the Map Pane turns on all of the zone indicators on the map at once. A non-detecting zone is grey, a detecting zone is indicated as red.



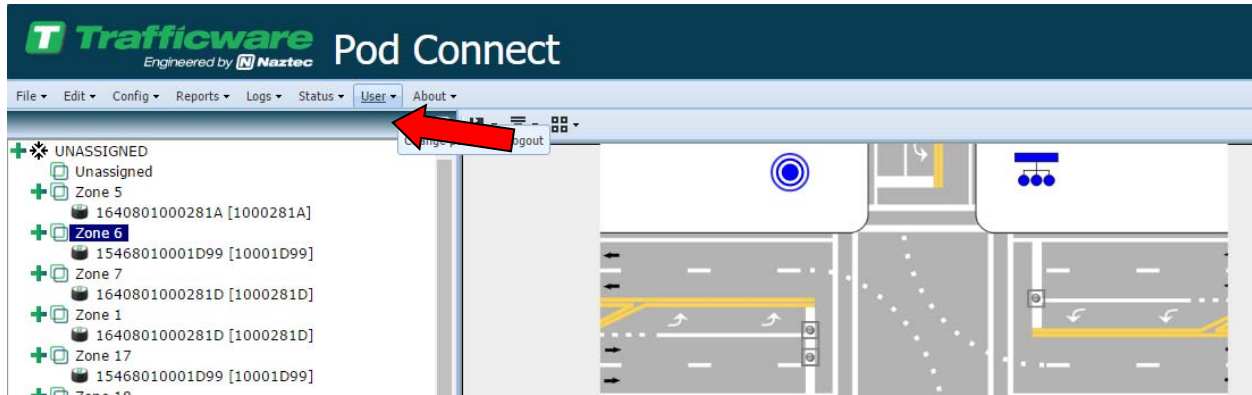
Selecting the Clone Pod Checkbox in the Tree Pane allows you to place the same pod in multiple Zones. Click the checkbox, then select and drag a pod from one zone to another, and instead of moving the pod, it will be duplicated into the new zone.



This clone pod feature in combination with the Zone And/Or logic allows for a wide variety of useful scenarios and configuration possibilities.

7. Resetting the Pod Connect System Passwords

In order to protect the pod system from intrusion the default password should be reset on setup. In order to reset the password after logging in, click on the User menu item in the top menu.



This will load the user settings page.

If logged in as Admin the user settings page allows setting the passwords for both the “User” account and the “Admin” account. In order to change a password, enter matching passwords in the two fields for either the “User” account or the “Admin” account and submit.

Enter and confirm new passwords for both accounts and click submit. Retain a record of these passwords for future reference.