Basic System Architecture 2
Database Modeling

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Topic: Data Base Modeling and Basic System Architecture 2

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This Lesson will Cover:

- Quick Review of the UI and Viewing Data in the System
- Tabs
- Trackor Classes
- Cascading Drop-Down Fields
- Applets
- External Tabs
- External Applets
- Notifications
- Portals

Topic: Data Base Modeling and Basic System Architecture 2

Let's Quickly Review the Main Ways of Viewing Data in OneVizion.

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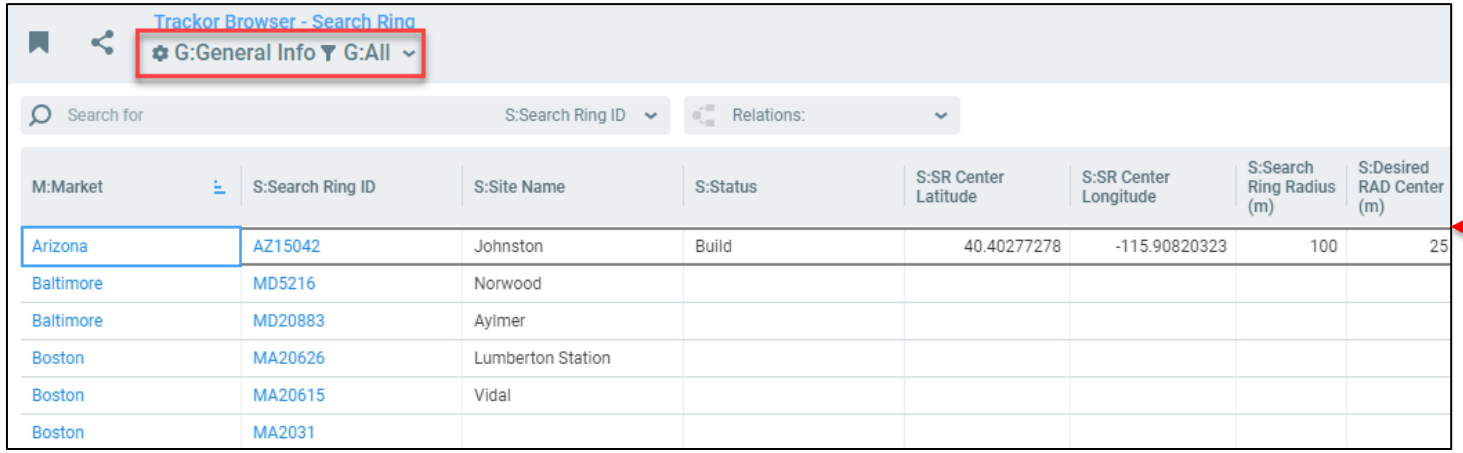
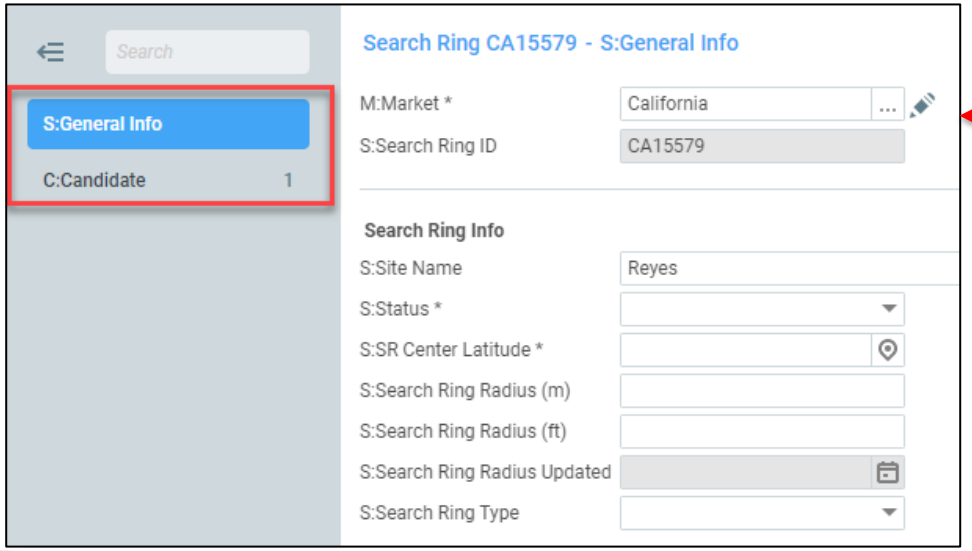


The Grid – Rows and Columns

- Controlled by Views and Filters



Tabs and Applets

- Arrange Data Structurally

Topic: Enhancing the Maintenance Application

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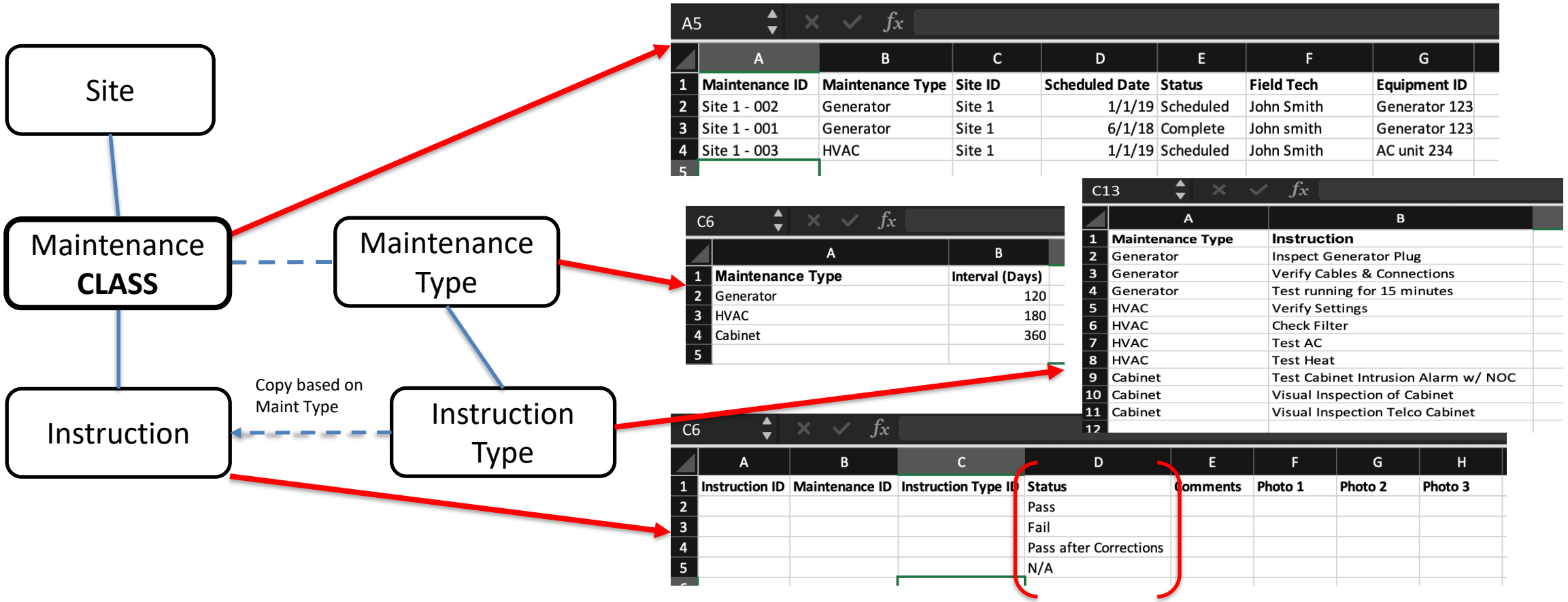


A5

	A	B	C	D	E	F	G
1	Maintenance ID	Maintenance Type	Site ID	Scheduled Date	Status	Field Tech	Equipment ID
2	Site 1 - 002	Generator	Site 1	1/1/19	Scheduled	John Smith	Generator 123
3	Site 1 - 001	Generator	Site 1	6/1/18	Complete	John smith	Generator 123
4	Site 1 - 003	HVAC	Site 1	1/1/19	Scheduled	John Smith	AC unit 234
5							

C6

	A	B
1	Maintenance Type	Interval (Days)
2	Generator	120
3	HVAC	180
4	Cabinet	360
5		

C13

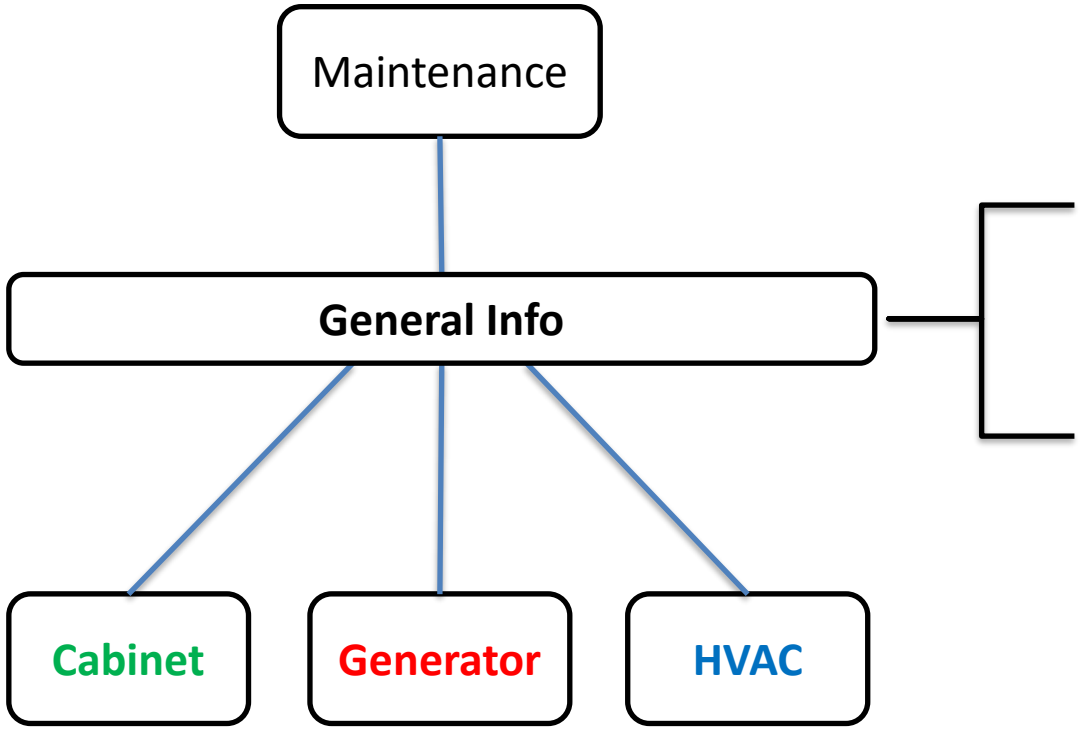
	A	B
1	Maintenance Type	Instruction
2	Generator	Inspect Generator Plug
3	Generator	Verify Cables & Connections
4	Generator	Test running for 15 minutes
5	HVAC	Verify Settings
6	HVAC	Check Filter
7	HVAC	Test AC
8	HVAC	Test Heat
9	Cabinet	Test Cabinet Intrusion Alarm w/ NOC
10	Cabinet	Visual Inspection of Cabinet
11	Cabinet	Visual Inspection Telco Cabinet
12		

C6

	A	B	C	D	E	F	G	H
1	Instruction ID	Maintenance ID	Instruction Type ID	Status	Comments	Photo 1	Photo 2	Photo 3
2				Pass				
3				Fail				
4				Pass after Corrections				
5				N/A				

Topic: Enhancing the Maintenance Application

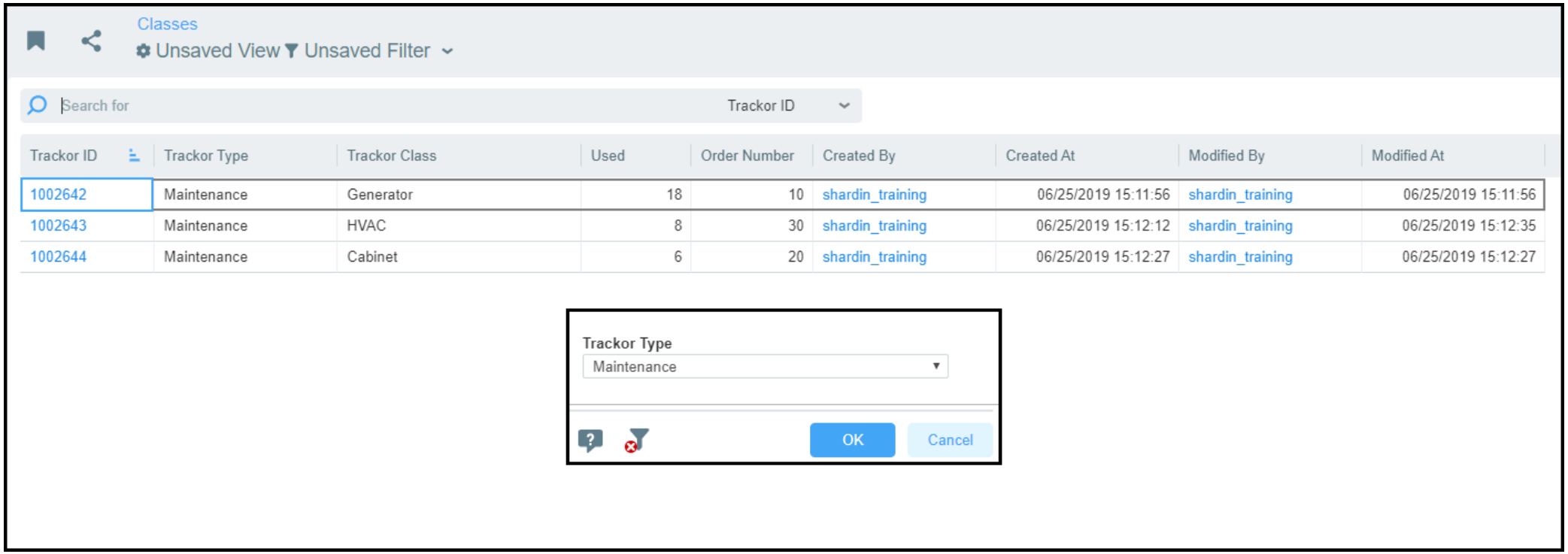
We are going to add a number of additional fields to the Maintenance Trackor that give us more information about the components that are being maintained, BUT, the physical properties of each component type (or, Class) vary significantly.



Configured Field Label	Data Type	Assigned Tab(s)
Maintenance Class	**DB Drop-Down**	**General Info**
Manufacturer	Drop-Down	General Info
Manufacturer's Model Number	Drop-Down	General Info
Scheduled Date	Date	General Info
Status	Drop-Down	General info
Field Tech	Text	General Info
Maintenance Manual	Electronic File	General Info
Environment	Drop-Down	Cabinet
Mounting	Drop-Down	Cabinet
Cooling	Drop-Down	Cabinet
NOC Monitored?	Checkbox	Cabinet
Fuel Type	Drop-Down	Generator
Power Rating (KW)	Number	Generator
BTUs	Drop-Down	HVAC
Washable Electrostatic Filter?	Checkbox	HVAC
Voltage	Drop-Down	HVAC, Generator
Phase	Drop-Down	HVAC, Generator

Topic: Adding Classes to the Maintenance Trackor Type

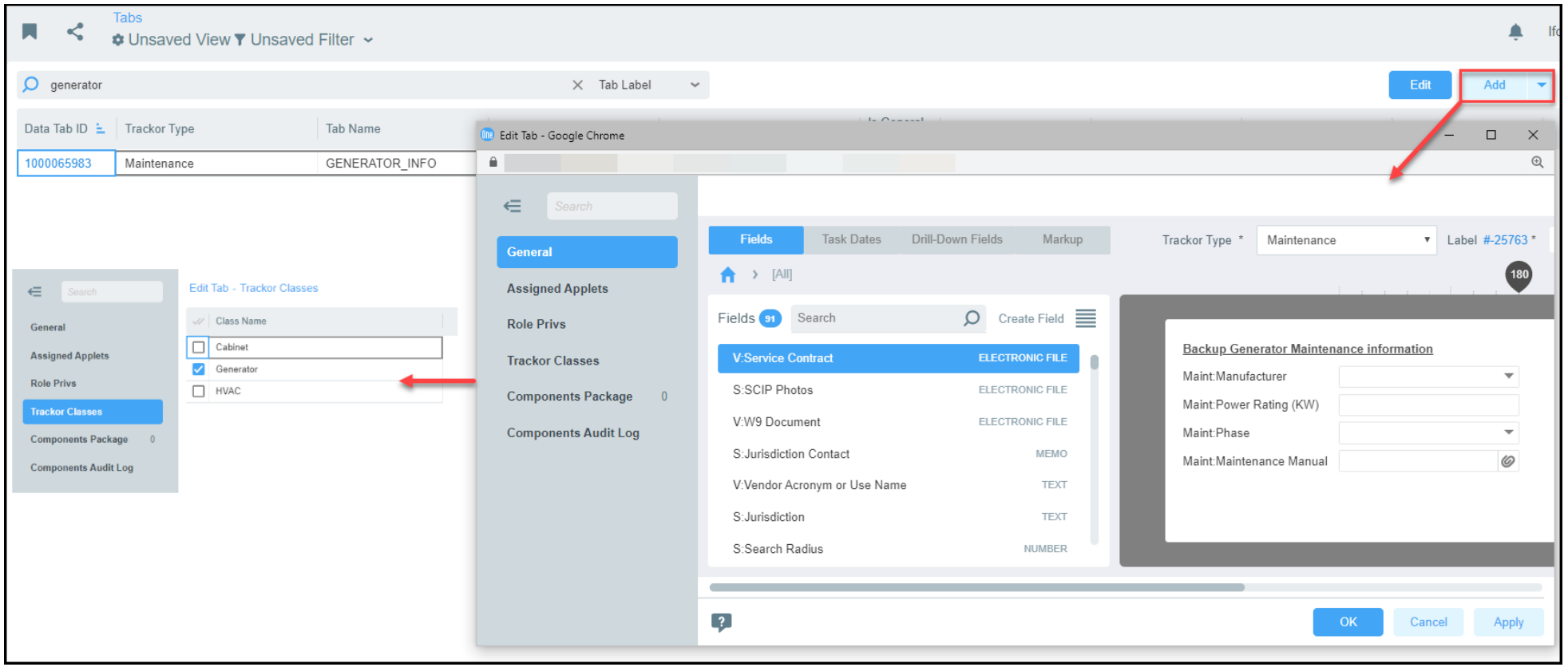
Go to the Trackor Classes Menu, Filter to the Maintenance Trackor and Add the three (3) new Classes – Cabinet, Generator and HVAC.



Note: Administrators may also Add/Edit Trackor Classes directly from the Tab and Applet forms.

Topic: Create tabs for each of the new Trackor Classes

Similarly, we are going to add three (3) new tabs – one for each Class – and put the appropriate fields on each tab based upon its Class – General Info contains generic fields . . .



Topic: Create tabs for each of the new Trackor Classes

These are the four (4) new tabs, a General Info tab and a tab for each of our Classes – Cabinet, Generator and HVAC.

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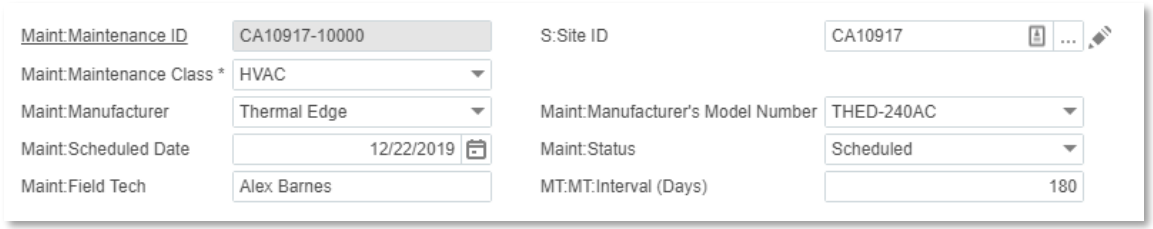
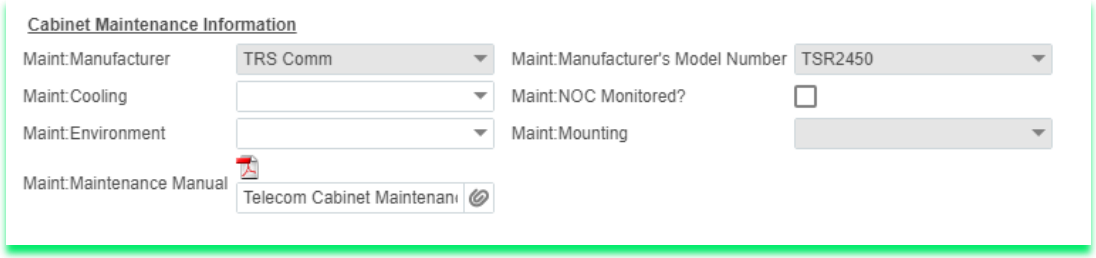
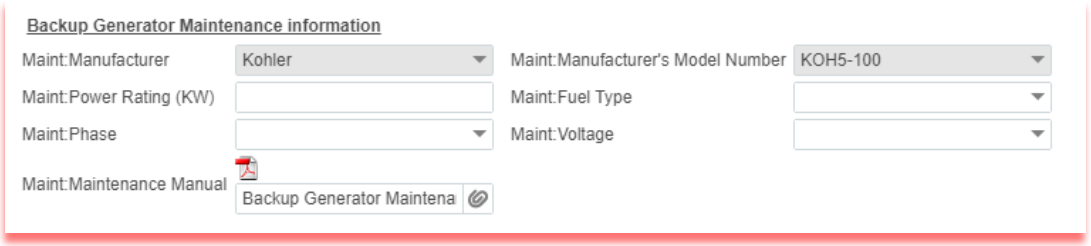
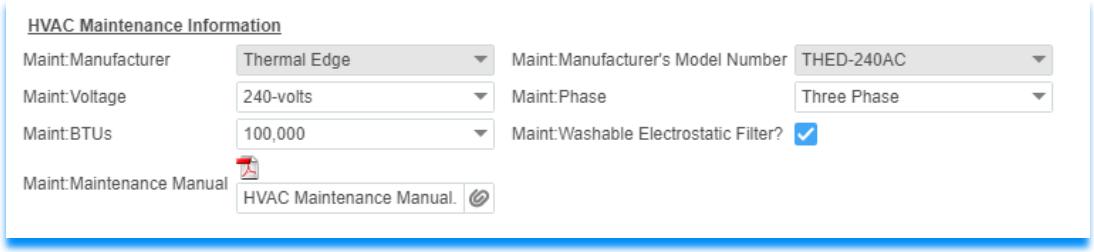


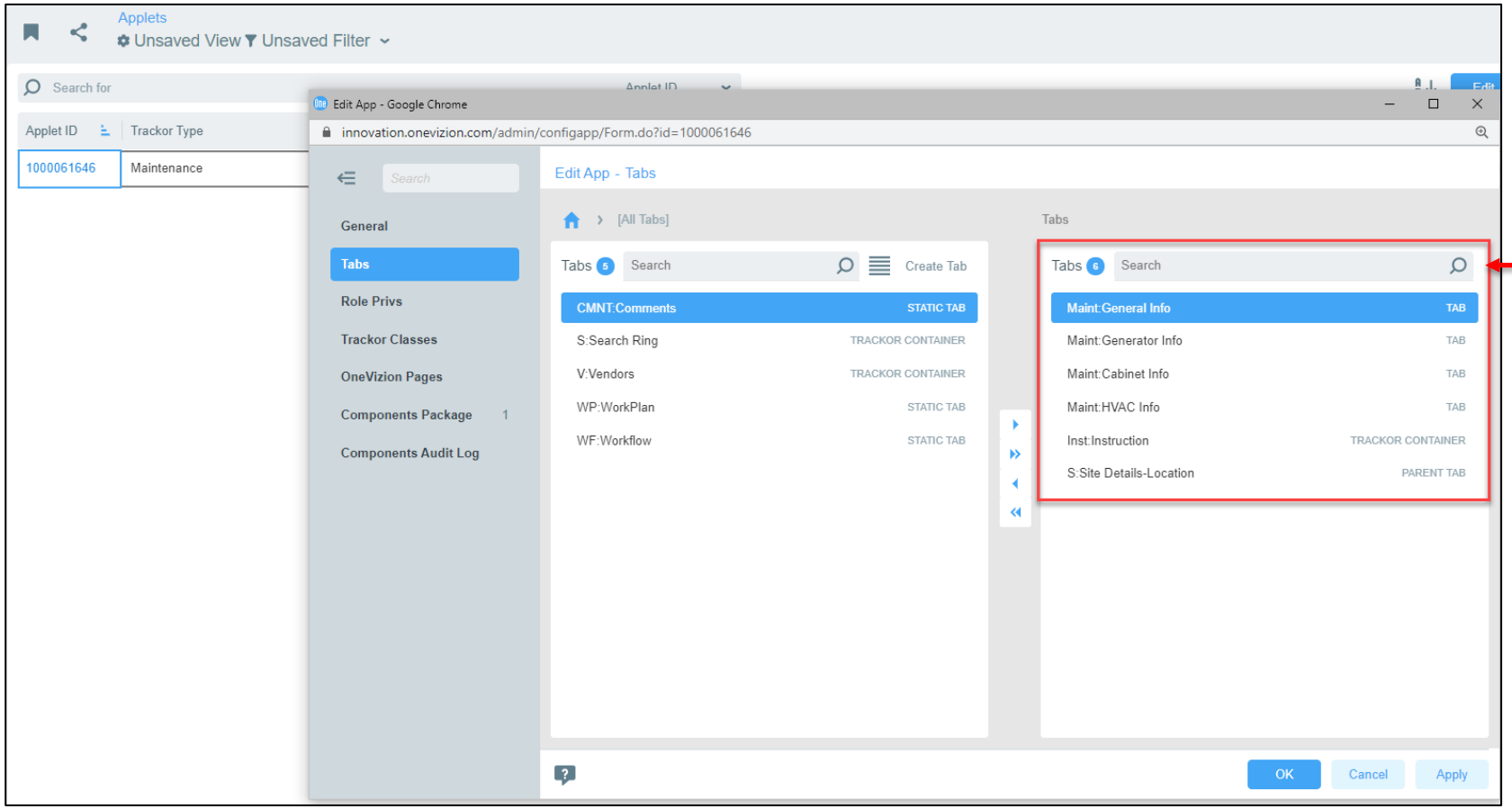






Topic: Add the new Class tabs to the Maintenance applet

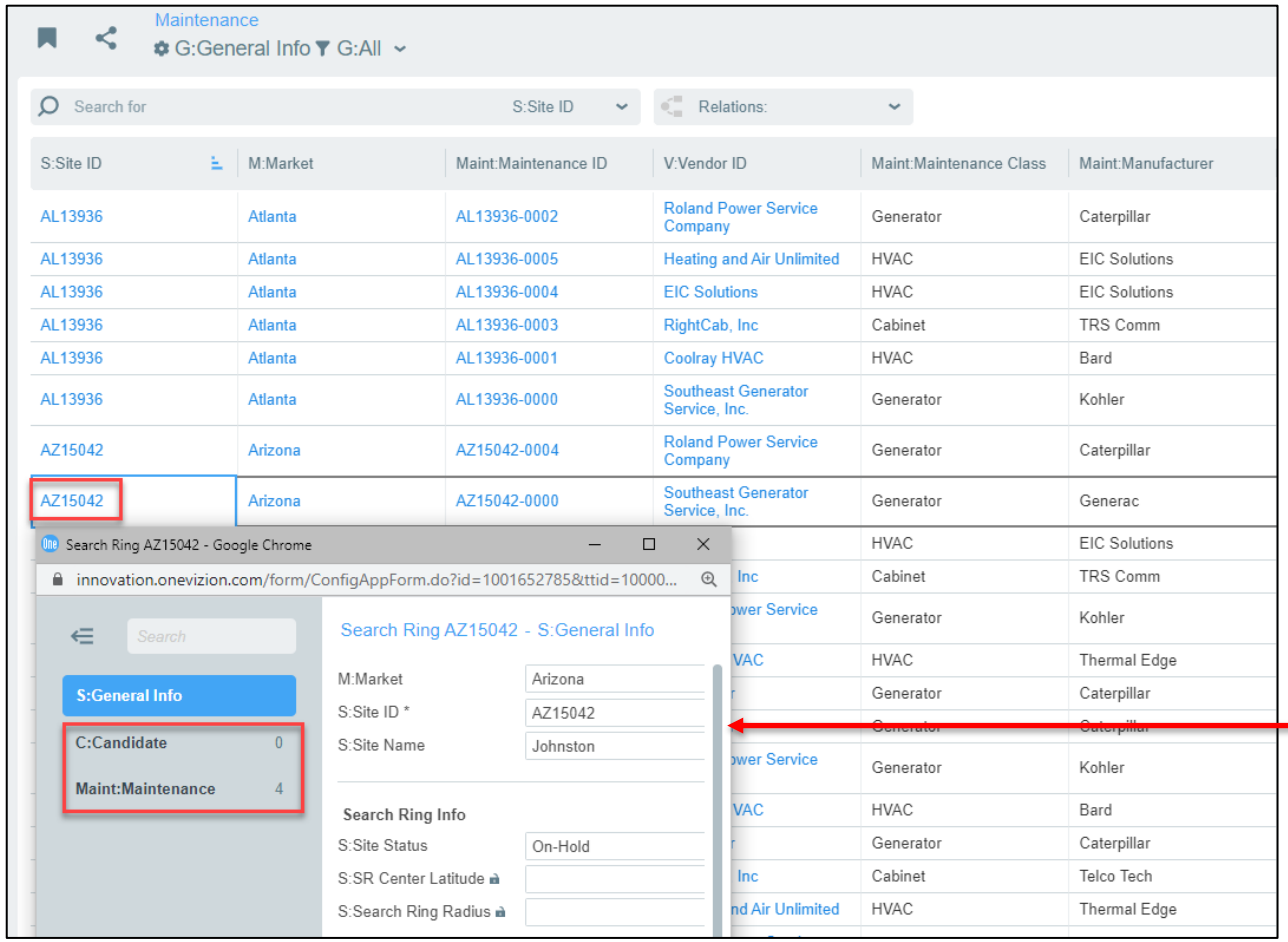
Finally, let's go to our Maintenance Applet and add all three (3) of the new Class tabs underneath the existing General Info tab . . .



The General Info tab and the tabs created earlier for all of the different Classes are placed on the Maintenance Applet.

Topic: And the Final Results

Now, when you choose a Maintenance Trackor only the tab for that specific Class appears on the Maintenance applet. We also get the General Info and Instructions child tabs . . .



The General Info tab and the tabs created earlier for all of the different Classes are placed on the Maintenance Applet.

Topic: Trackor Classes - Summary

Trackor Classes are a GREAT feature to use when you want to track multiple entities with significantly different properties in the same Trackor Type. A perfect application is a Master Parts Catalog where you might want to have Antennas, Cables, Radio, Cabinets, etc. in the same data store . . .

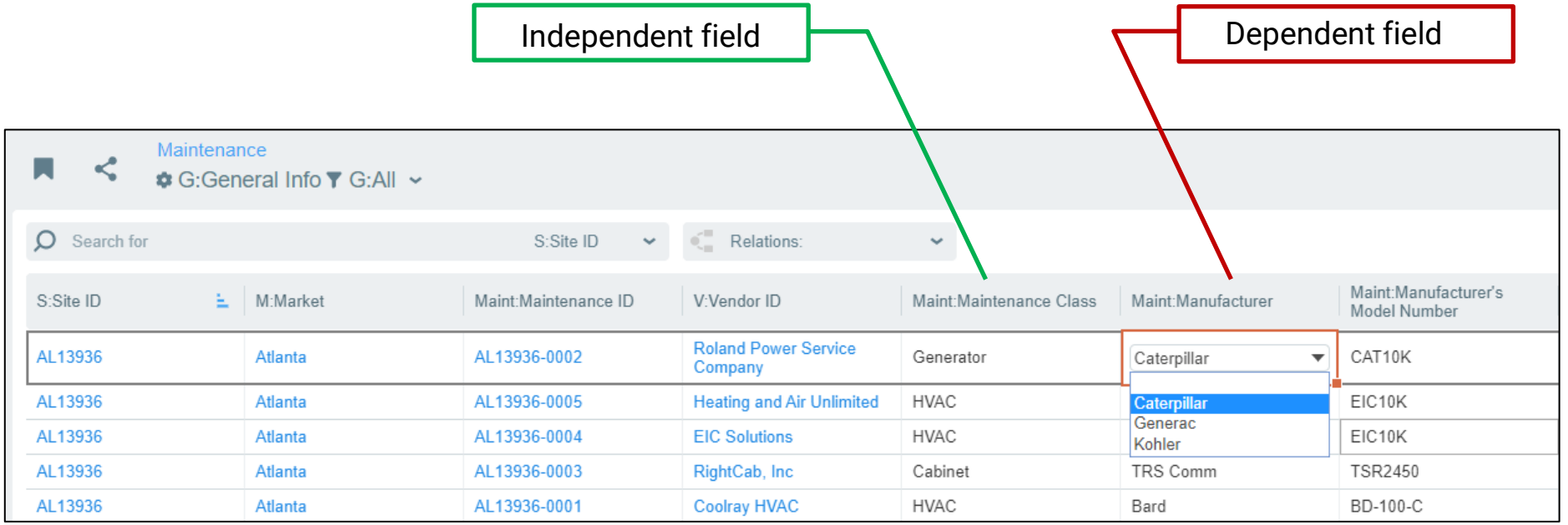
Summary of Steps

- Add the new Classes to the Trackor Type
- Build a tab (or, tabs) for each Trackor Class
- Assign each tab to one or more Classes using the X-Ref menu
- Assign Child Trackors to the Classes using the X-Ref menu
- Place the tabs on the Track Type applet along under the General Info
- Build Favorites to combine Views and Filters into Class oriented data pages
- Manage and access your Data in a structured and organized fashion!!

REMINDER – When creating new records in a Trackor Type that has Classes – you must specify the Class then hit APPLY to set the Class before you will get the Class specific tab(s)

Topic: Cascading Drop-Downs

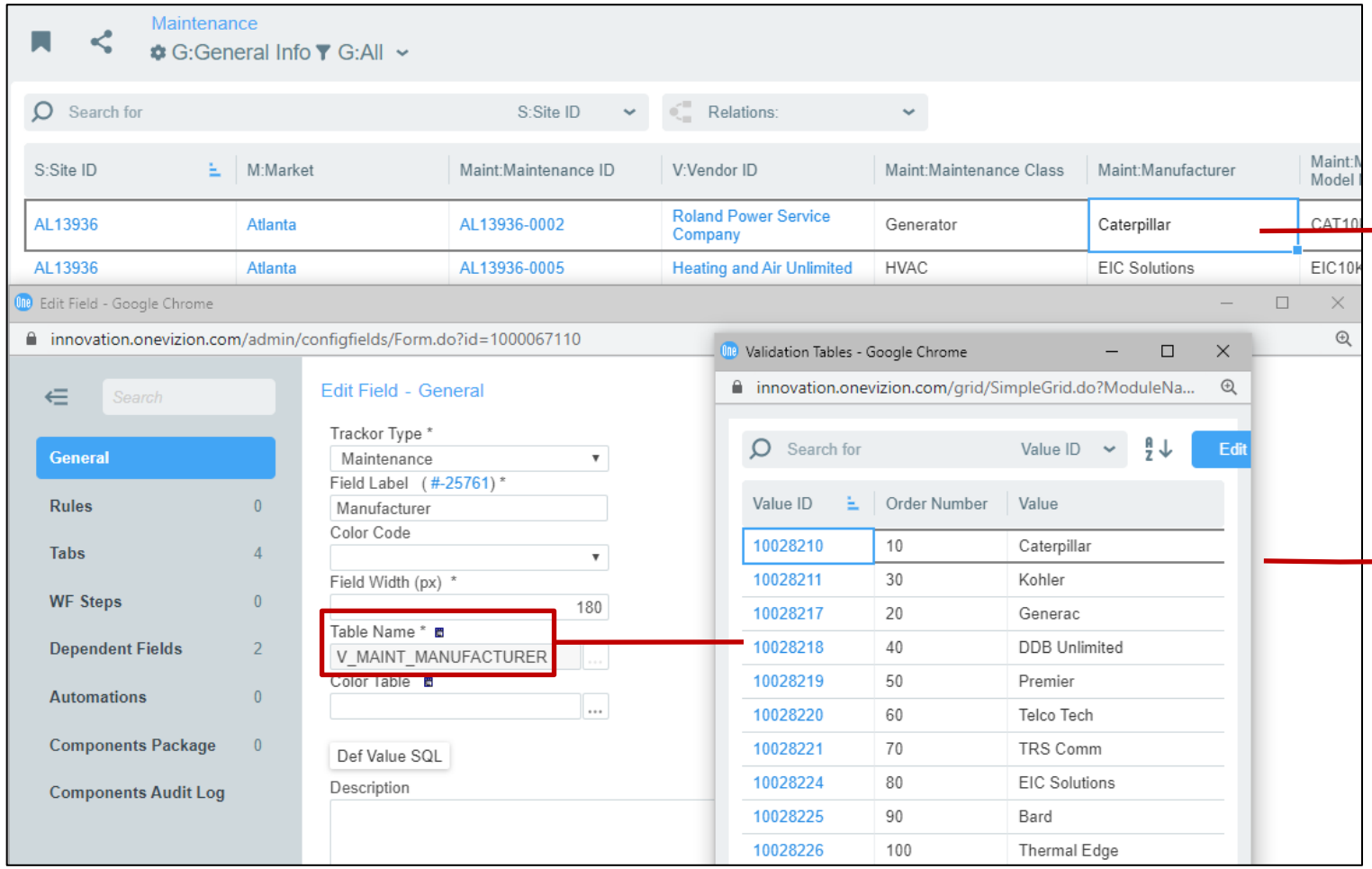
Cascading Drop-Downs allow you to control what values appear in the drop-down list of a *dependent* field based upon the value that has been selected from an *independent* field.



When the Generator Class is selected notice that only Generator Manufacturers are presented in the drop-down list. This is controlled by a OneVizion feature called Cascading Drop-downs.

Topic: Cascading Drop-Downs

Put all desired values into the V-Table of the Dependent Field . . .



Dependent field

V-Table Values for all possible dependencies

Topic: Cascading Drop-Downs

Use the Cascading Drop-Down Link dialogue box and Assign to define the field value dependencies.

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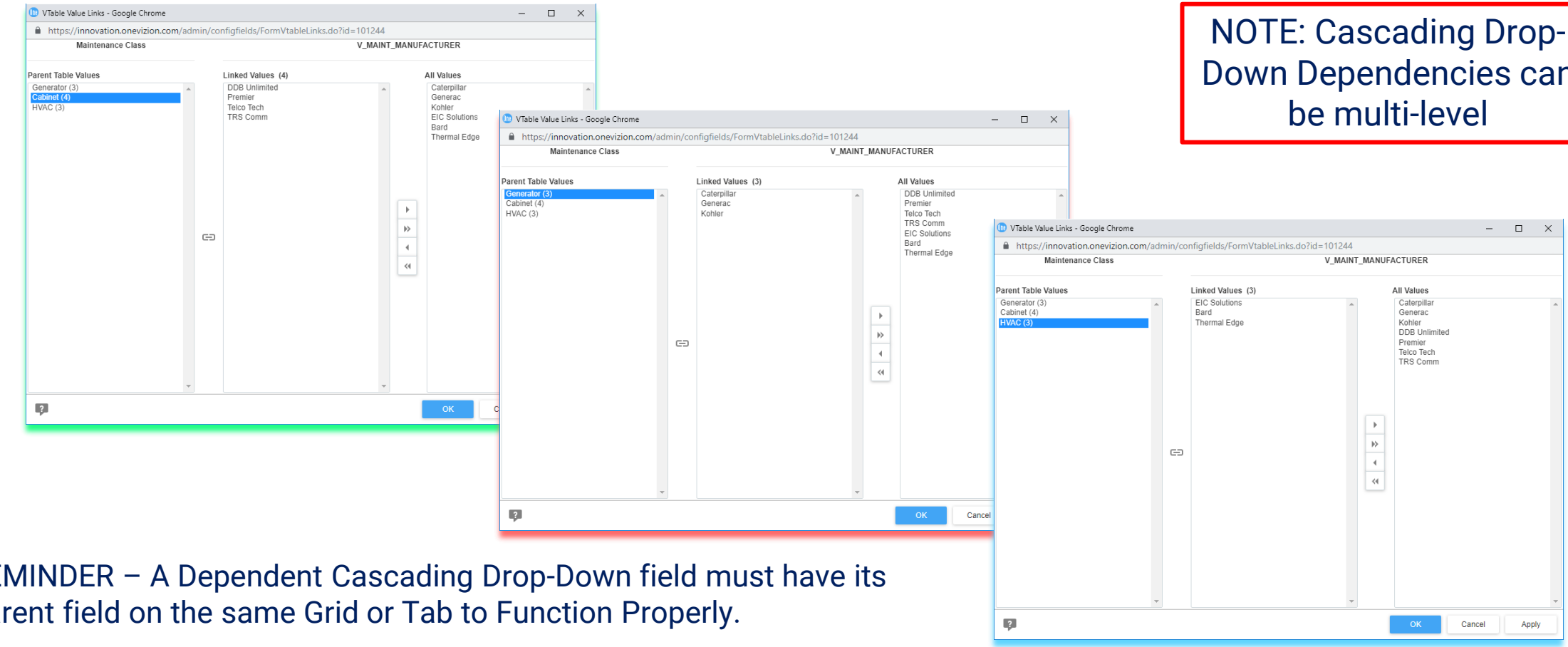


NOTE: Cascading Drop-Down Dependencies can be multi-level

REMINDER – A Dependent Cascading Drop-Down field must have its Parent field on the same Grid or Tab to Function Properly.

Topic: External Tab and External Applets

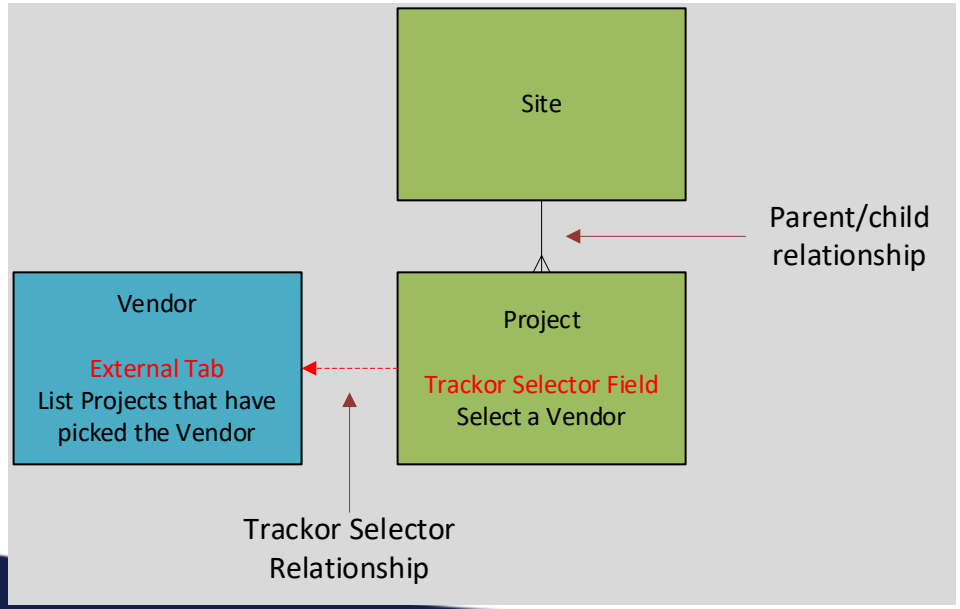
External Tabs and External Applets are ways of accessing Data in OneVizion that might be related but is not associated by means of a Parent-Child relationship, or, accessing data completely outside of OneVizion . . .

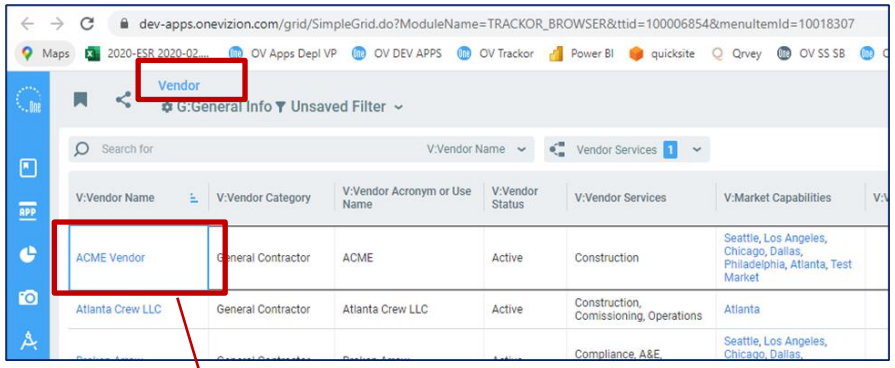
Overview of External Tab and Applets

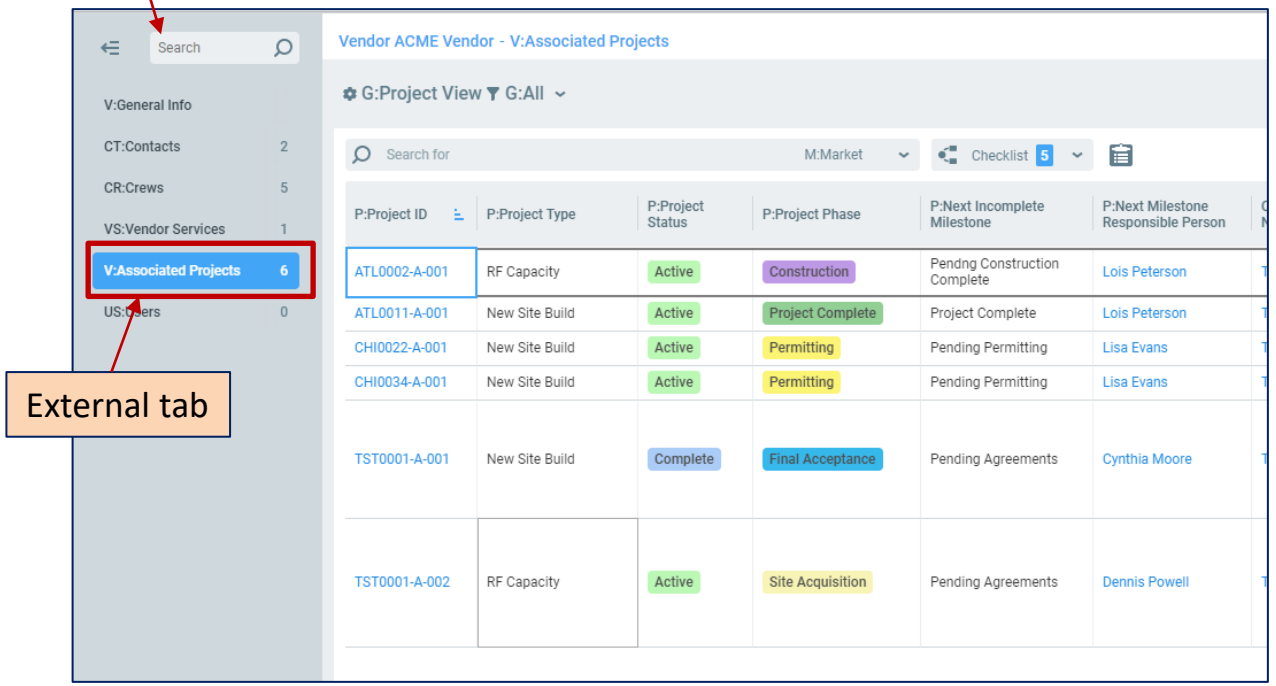
- Function Very Similar to Standard Tabs and Applets
- Offer great Flexibility for Accessing data outside of standard Parent-Child relationships
- Can use URL's to access data from other systems external to OneVizion
- Ability to attach SQL queries to External Tabs and Applets make them very powerful
- Access and privileges controlled by the OneVizion security model
- External Tabs and Applets can be accessed by convenient icons presented on ribbon.

What is an External Tab

- The External Tab is used to display records that have been associated to the trackor record through a Trackor Selector field
- In this example, there is not a direct parent/child relationship between the Project and Vendor
- However, Vendors are assigned to projects through trackor selector fields
- When the user opens the Vendor record, the Projects that have been assigned to the Vendor are visible on the External Tab







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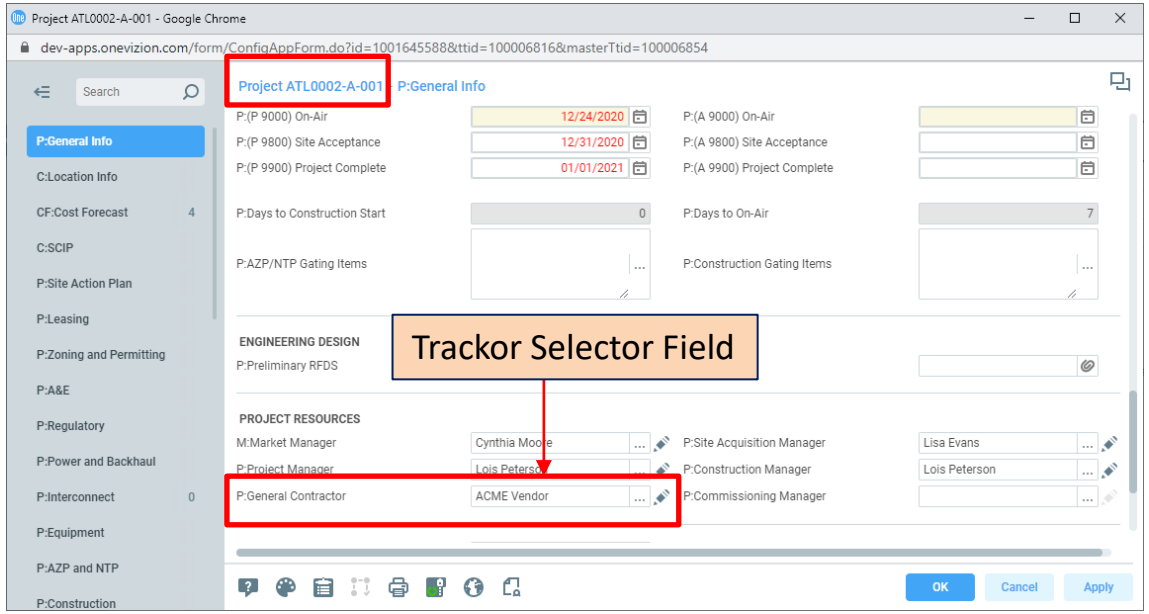
What is a Trackor Selector field

- A Trackor Selector is a field type that allows the user to pick a record from another Trackor
- In this example, once the General Contractor is selected from the Vendor trackor and is not visible on the Project General Info tab
- The ‘Short Name’ on the field definition page allows the user to add fields from related record to the grid through Drill Down Fields
- System administrators may add drill down fields to tabs
- Of course, once the Trackor Selector is in place, an External Tab can be used on the Vendor trackor to list the Project that have selected the vendor



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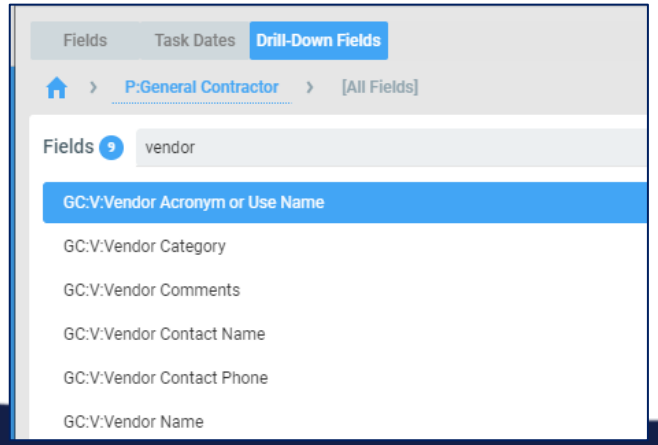
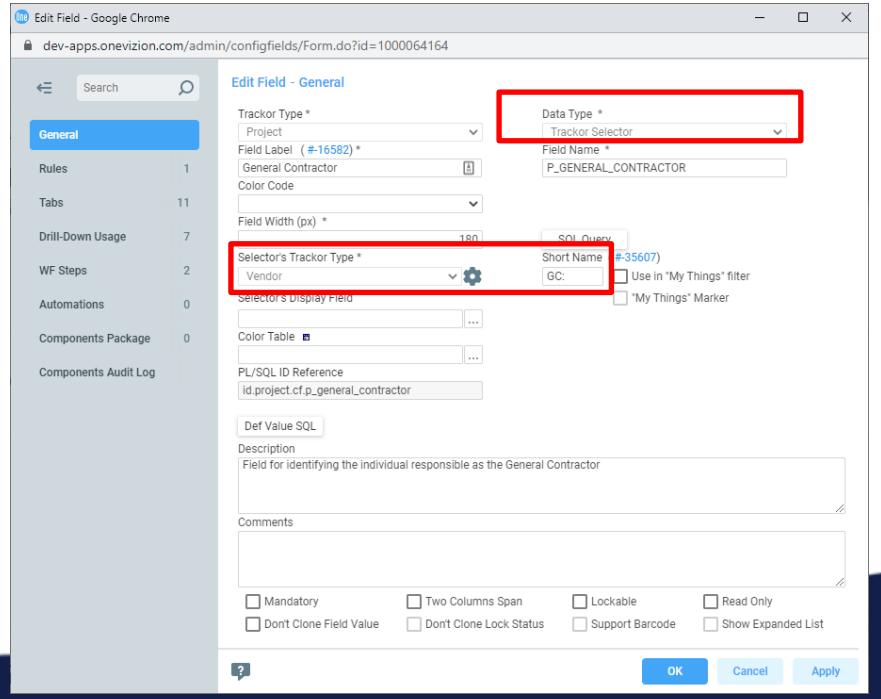
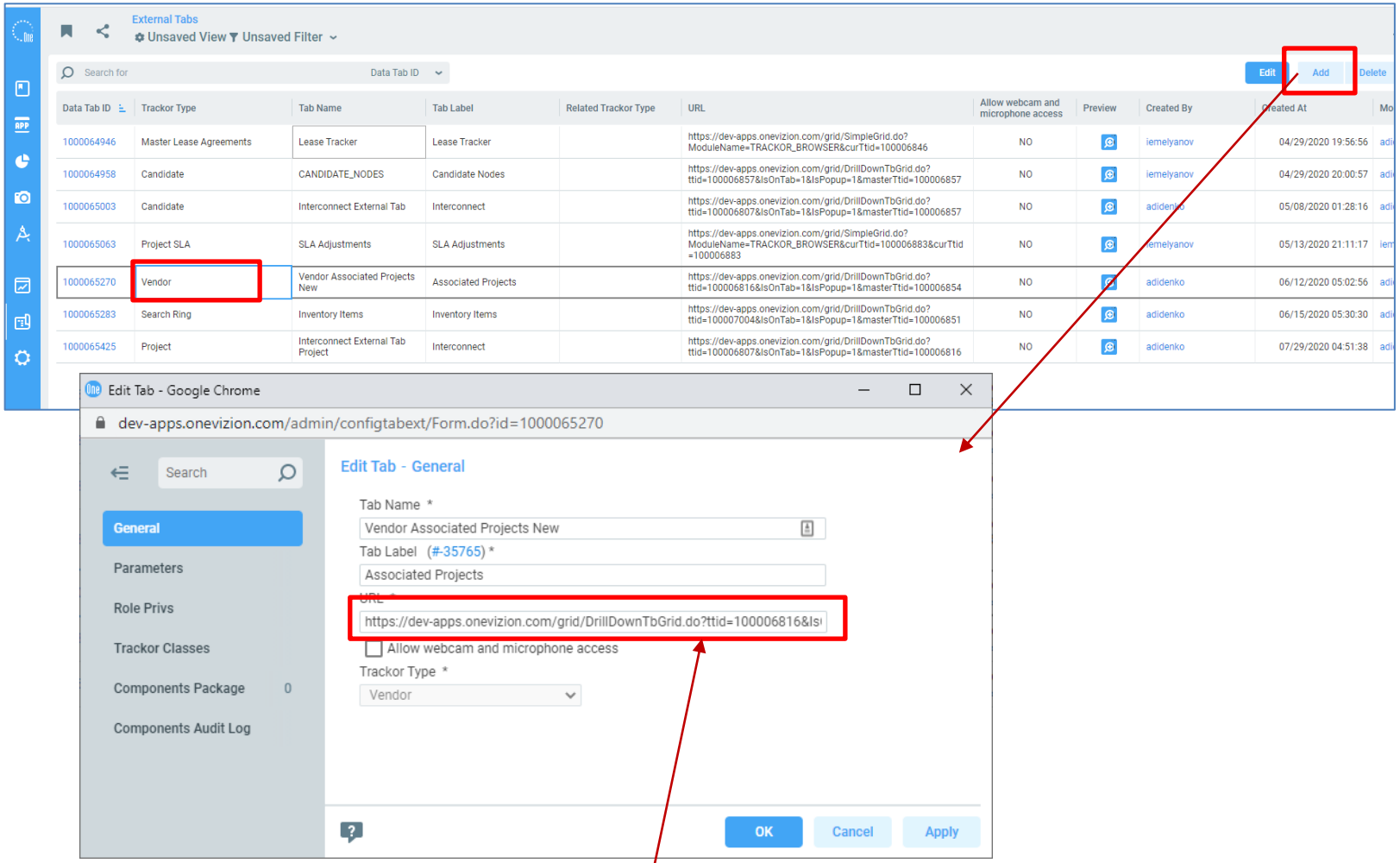
Trackor Selector Drill Down fields





How to configure an External Tab

- First, open the External Tabs application page
- Click Add
- Update 3 fields on the General tab
  1. Enter Tab Name
  2. Enter the Tab Label
  3. Modify the URL
- Update the system address and 2 Trackor Keys
- In this example, the FIRST Trackor Key is the Project Trackor where the Trackor Selector field is published
- In this example the SECOND Trackor Key is the Vendor Trackor where we want to publish the external tab



System Address

Trackor Key (Project trackor)

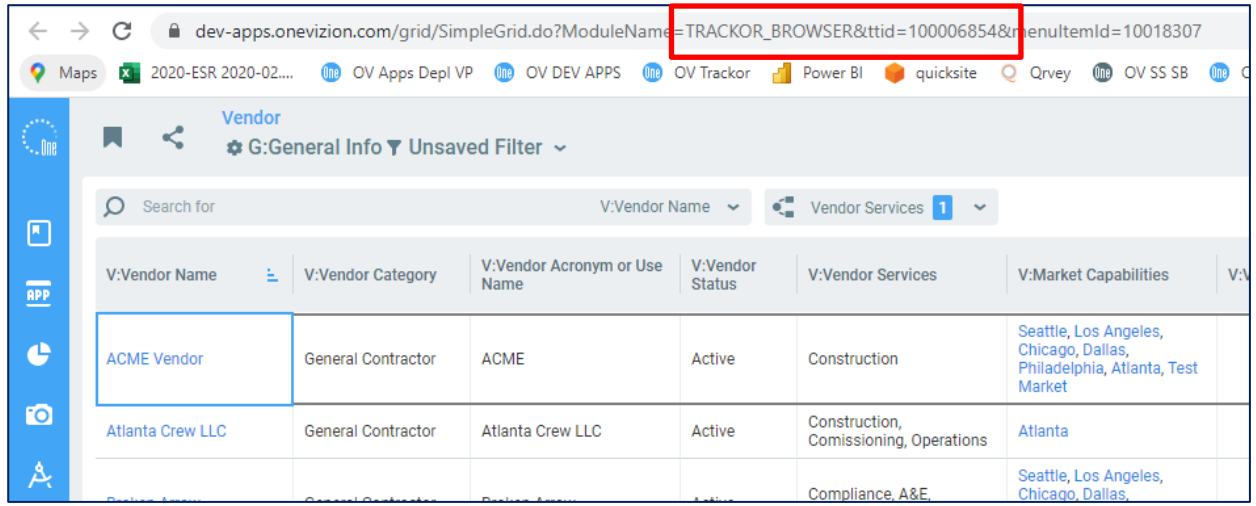
Trackor Key (vendor trackor)

https://dev-apps.onevizion.com/grid/DrillDownTbGrid.do?ttid=100006816&IsOnTab=1&IsPopup=1&masterTtid=100006854

Trackor Keys

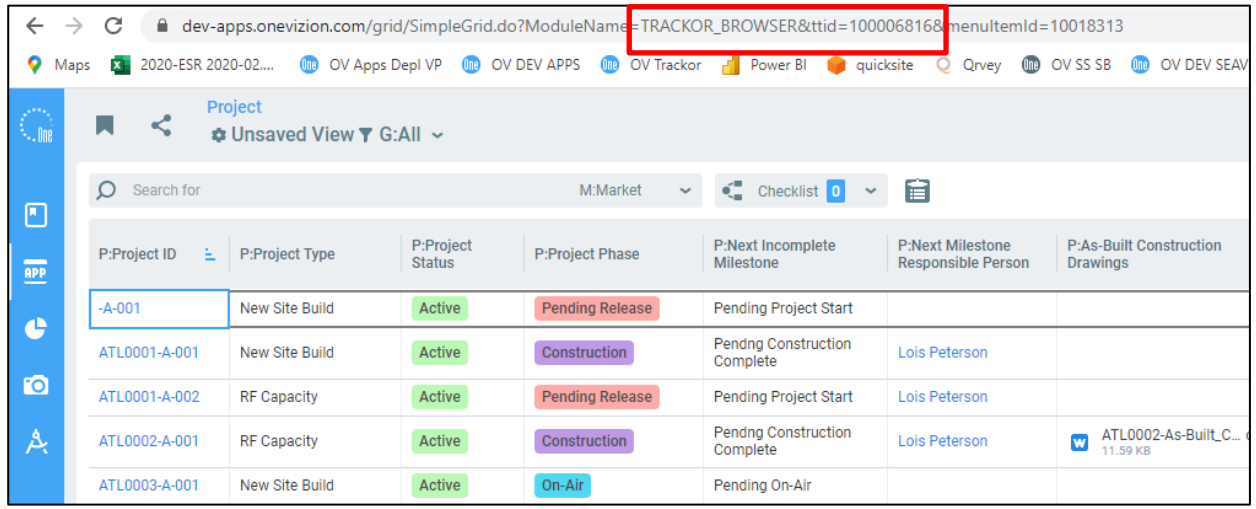
Destination Trackor Key ID = 100006854

- Open the Tracker page. Copy the Trackor Key from the URL
- This is the Tracker where the external tab will be published



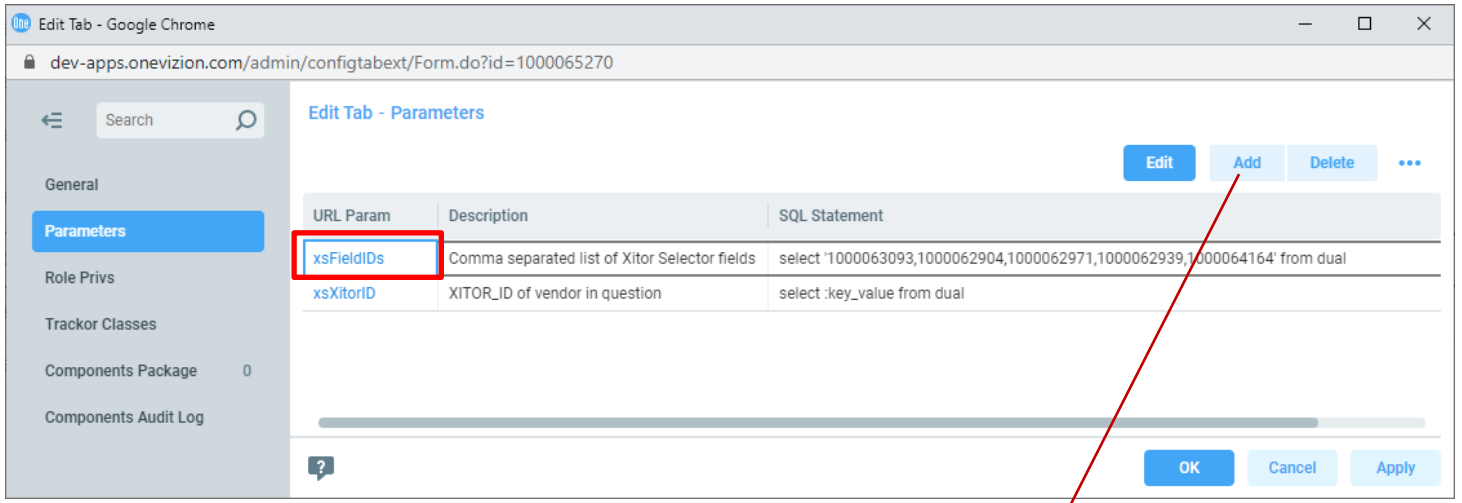
Source Trackor Key ID = 100006816

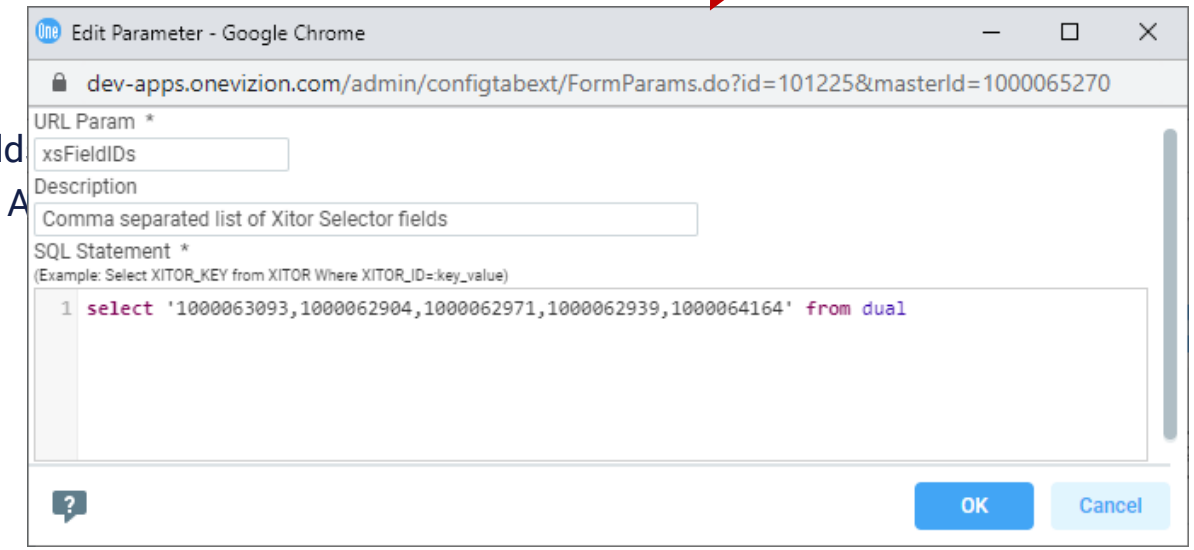
- Tracker where the Tracker Selector field is located



Parameter 1

- Click the Parameters tab
- Click Add
- Update 2 fields, copy the values below
  - URL Param
  - Description
- Modify the Select statement by replacing Trackor Selector Field IDs
- In this example the Project Trackor has multiple trackor selector field
- The External Tab will list all projects where the vendor is selected in A





xsFieldIDs

Comma separated list of Xitor Selector fields

select '1000063093,1000062904,1000062971,1000062939,1000064164' from dual

Field ID for Trackor Selector field
(Project trackor, P:General Contractor)

Trackor Selector Field ID

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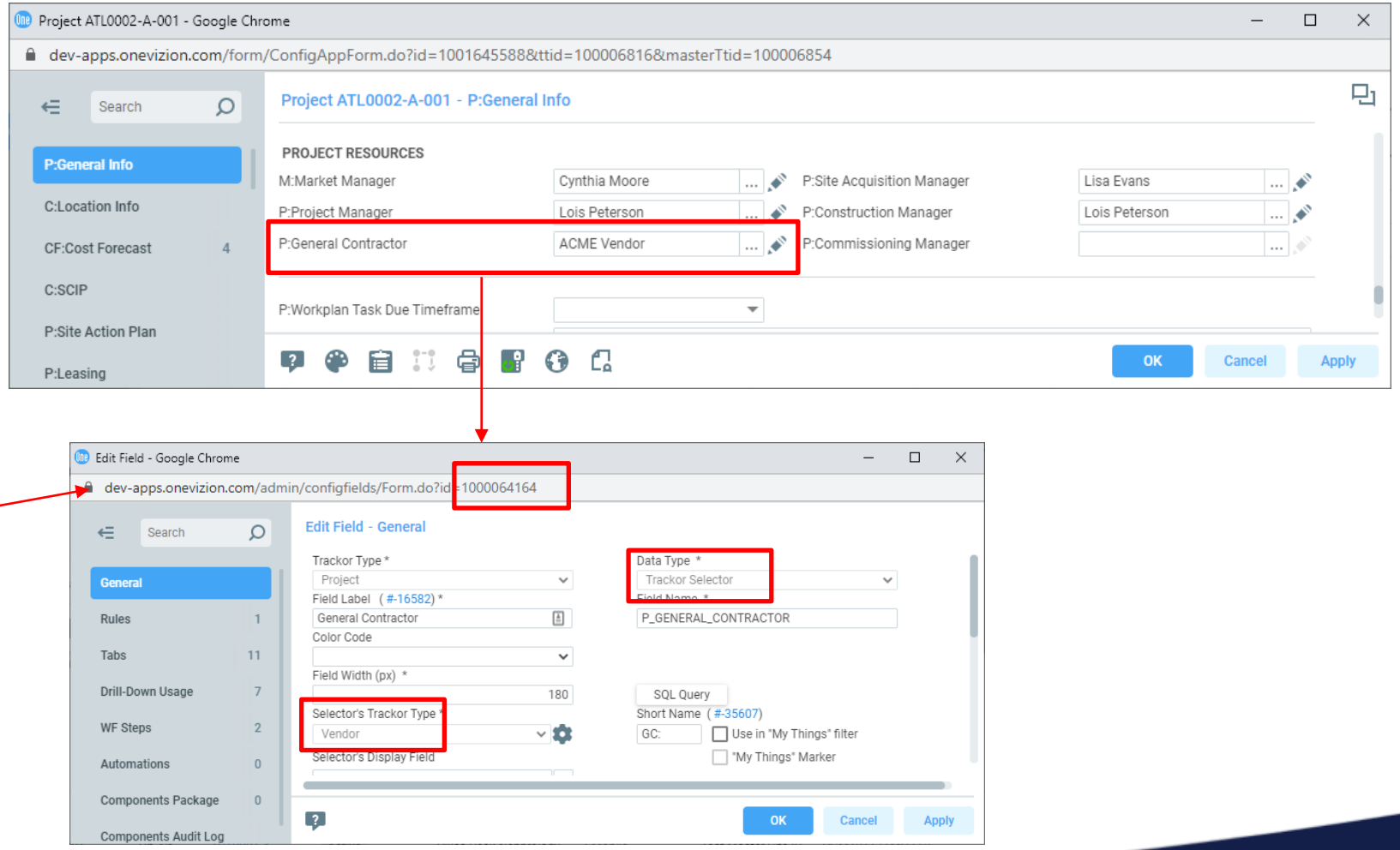
Locate the Trackor Selector fields that are published on the source Trackor

In this example, the P:General Contractor trackor selector field is published on the P:General Info tab

Click the label and select ‘Field Info’

Field ID = 1000064164



Parameter 2

- Click Add
- Update 3 fields, copy the values below
  - URL Param
  - Description
  - SQL Statement

- Click OK, External Tab complete

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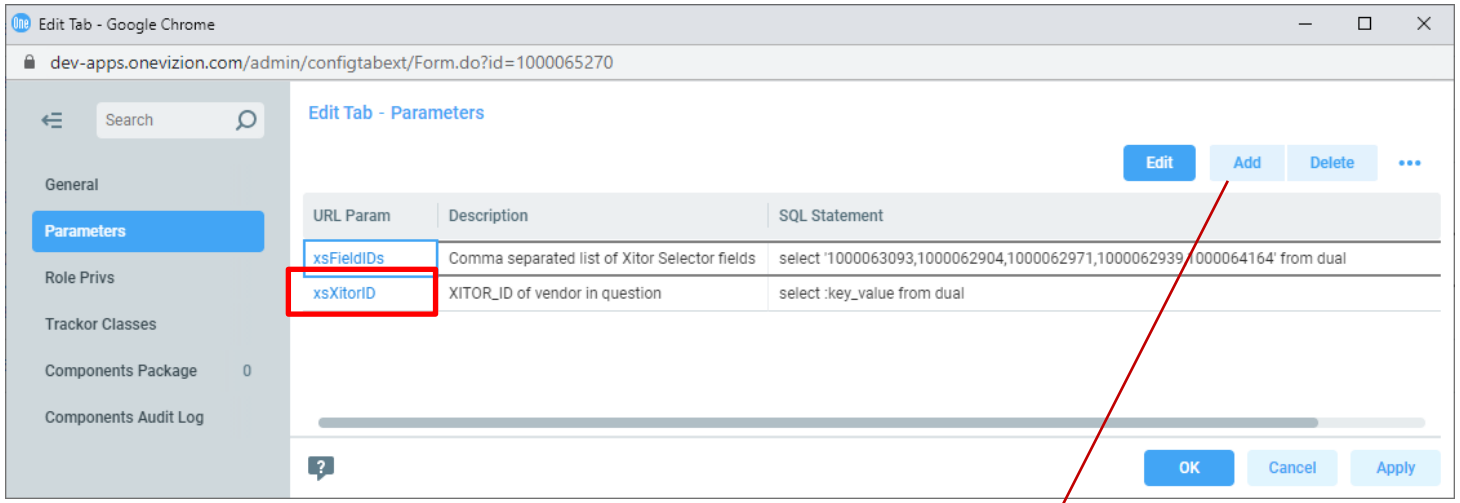
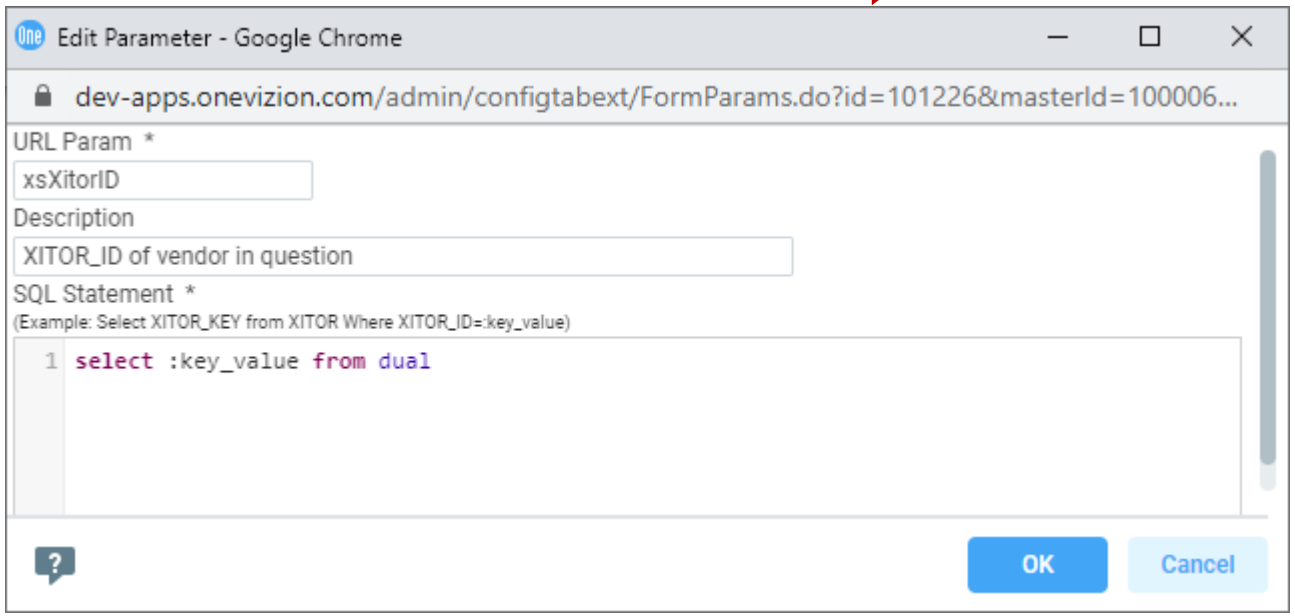
xsXitorID

XITOR_ID of vendor in question

select :key_value from dual

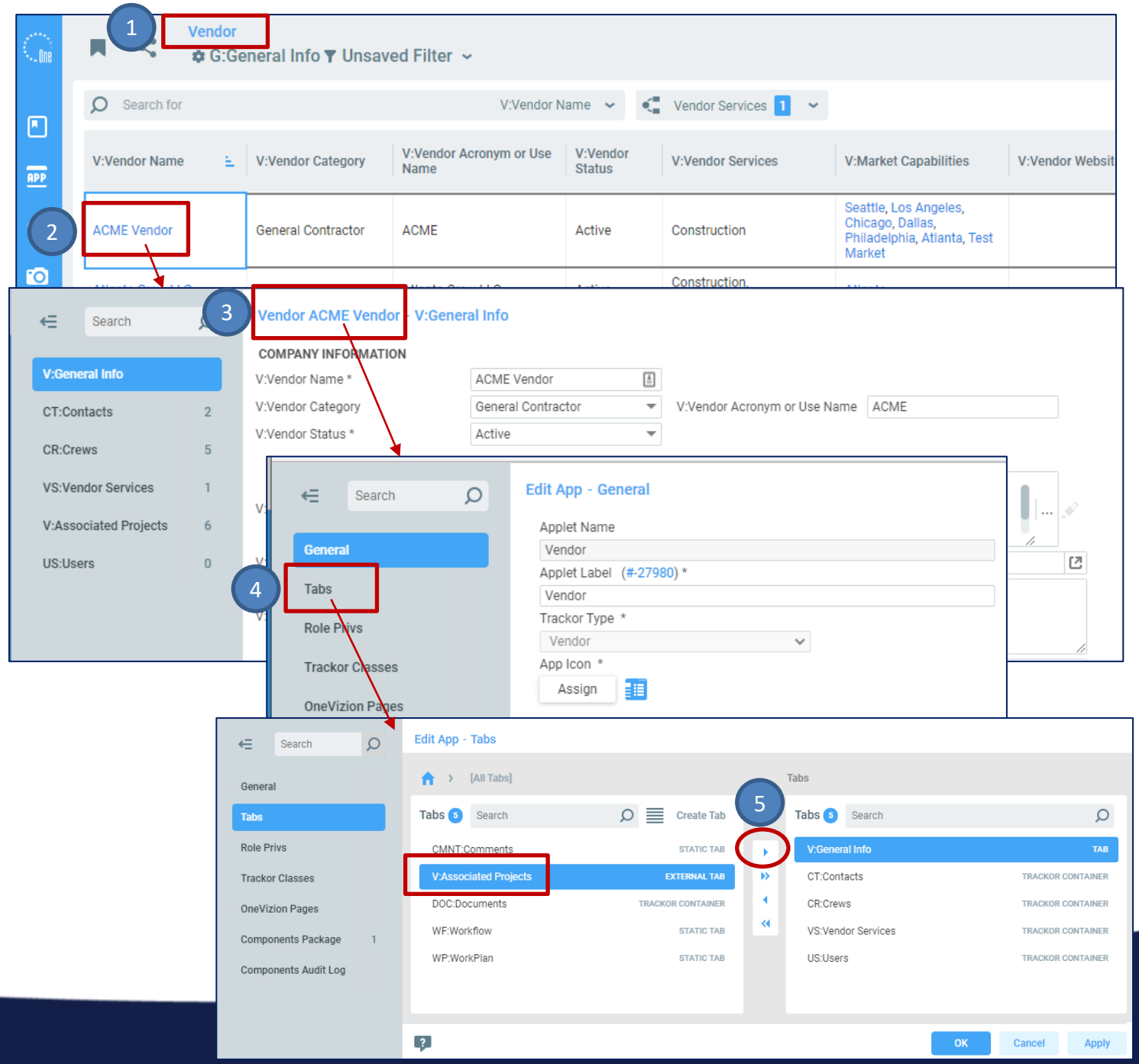




How to Publish an External Tab

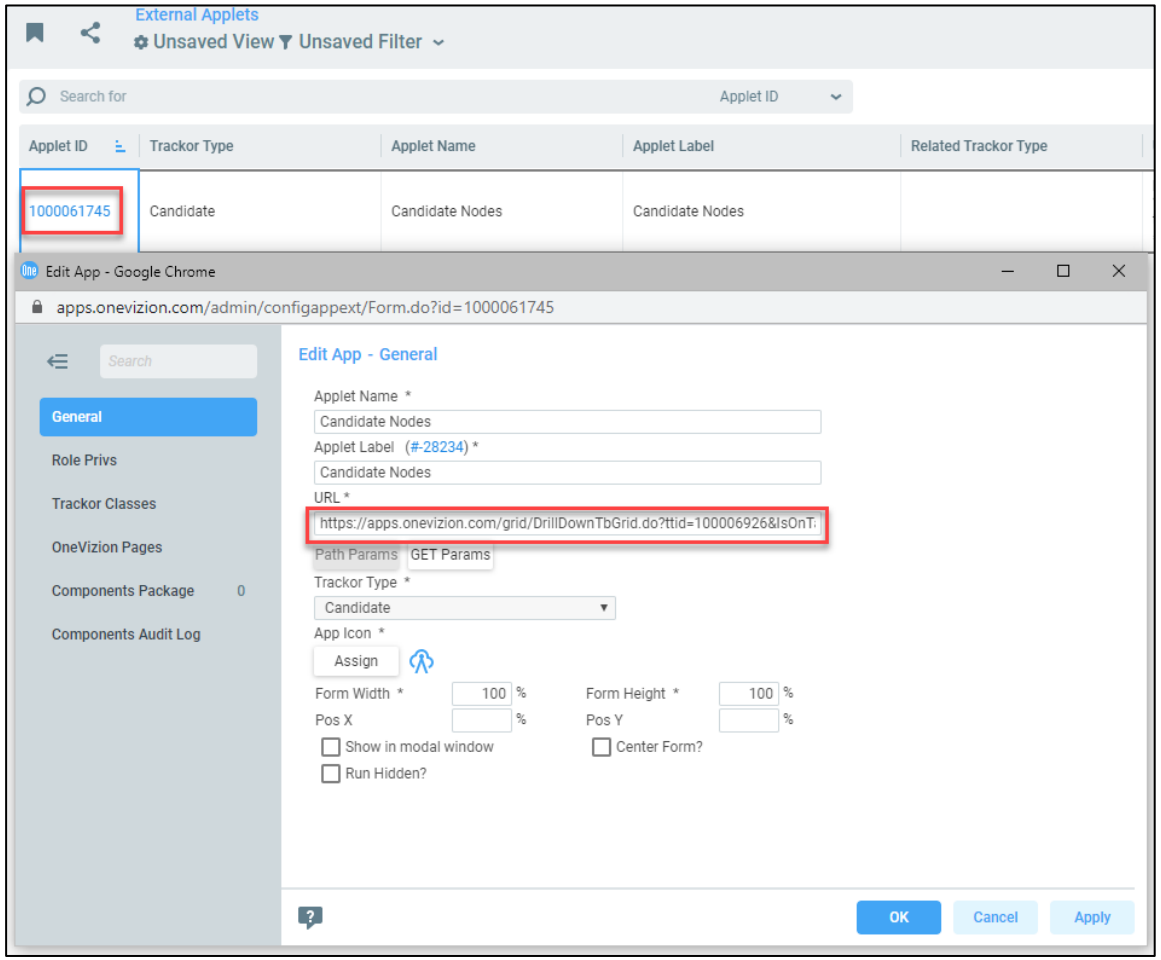
1. Open the destination application
2. Click any vendor key
3. Click the Tracker Editor Link at the top of the page
4. Click Tabs
5. Select the new external tab V:Associated Projects on the left, use the center arrow to move the tab to the published tab list on the right.

Click and drag the tab to position the tab in the desired position



Topic: External Applets

A similar capability can be accomplished with External Applets.



Topic: External Applets

A similar capability can be accomplished with External Applets. These also allow access to data via a SQL query and can be quickly accessed via an icon.

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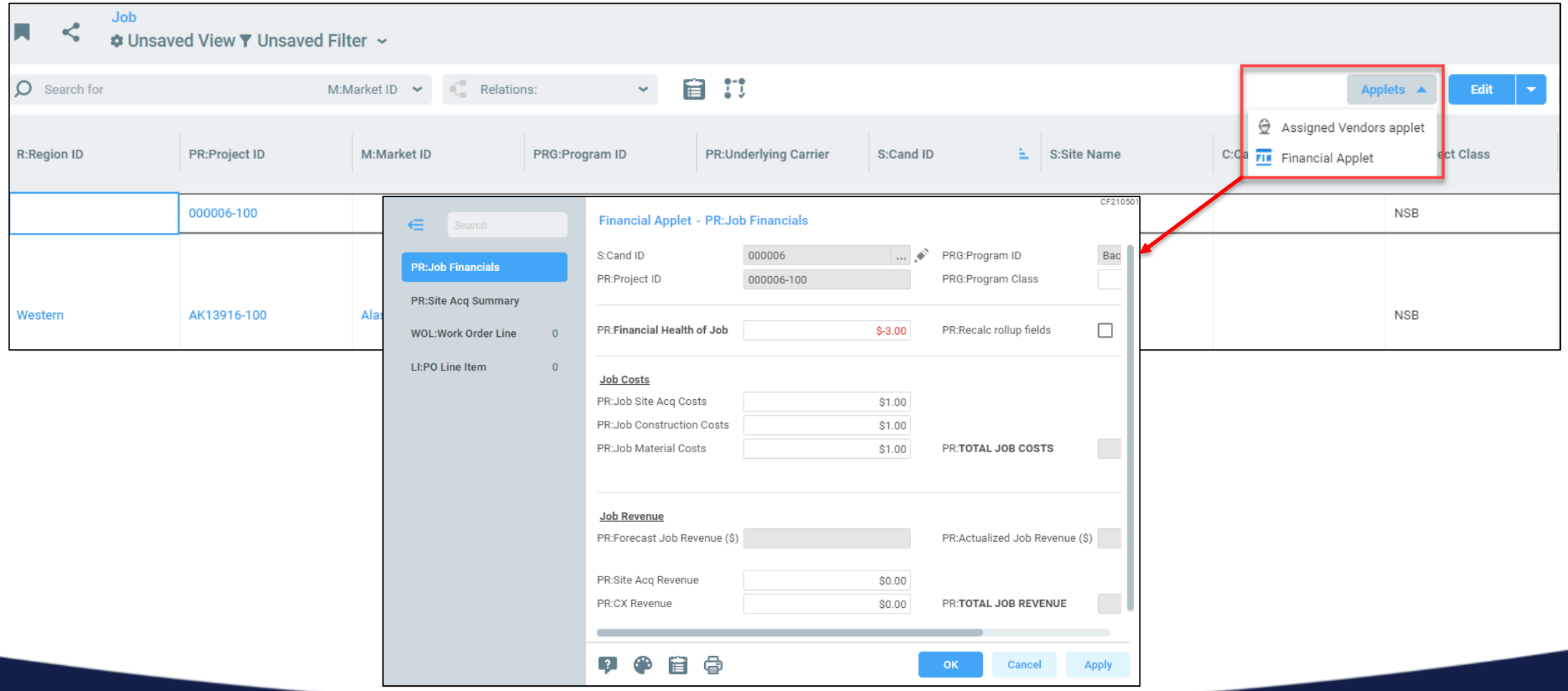
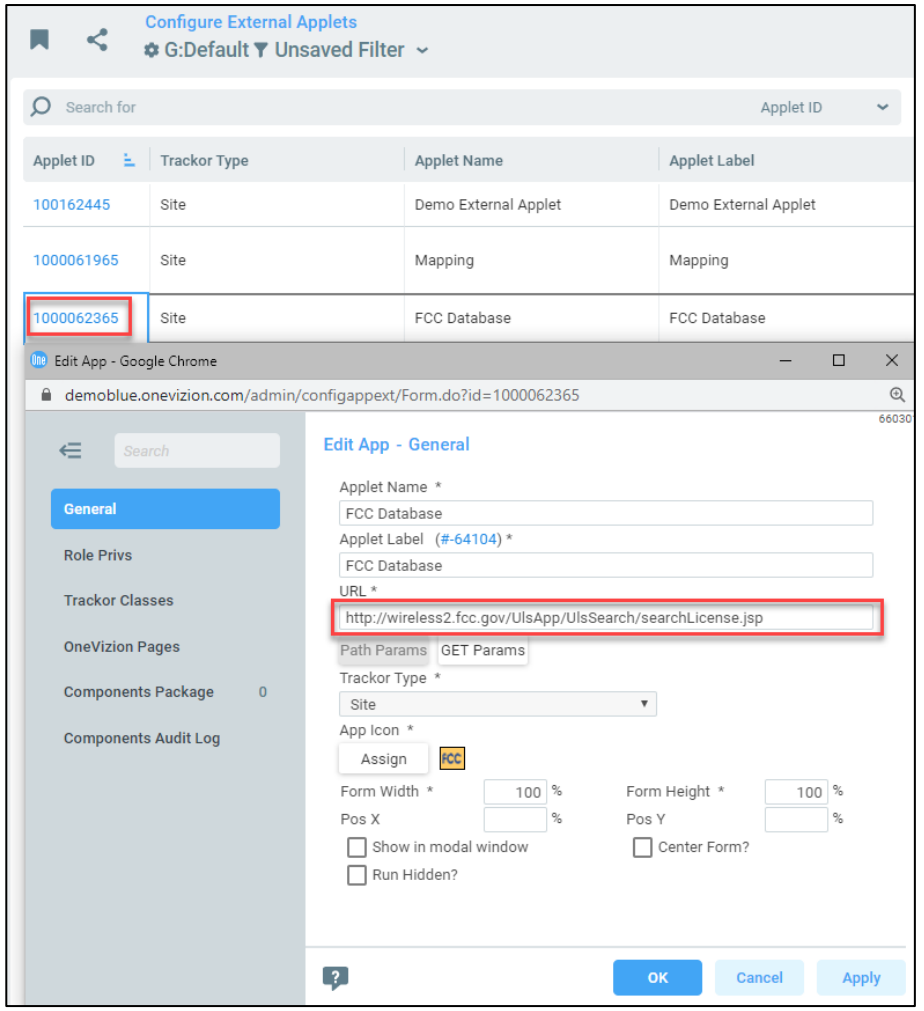


Topic: External Applets

Similarly, External Applets can be used to provide quick access of external websites – for example – the FCC License Database . . .



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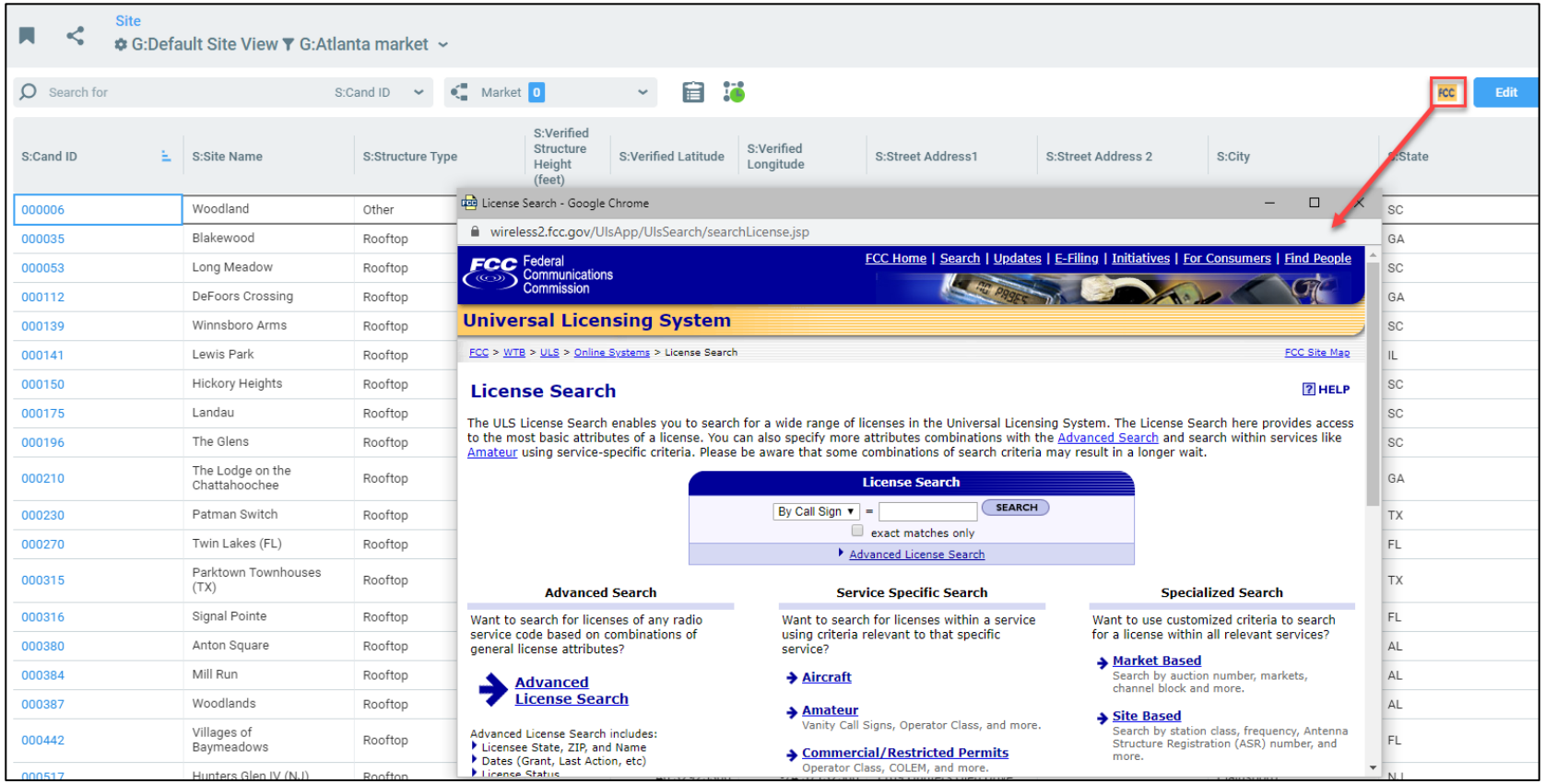


Topic: Notifications

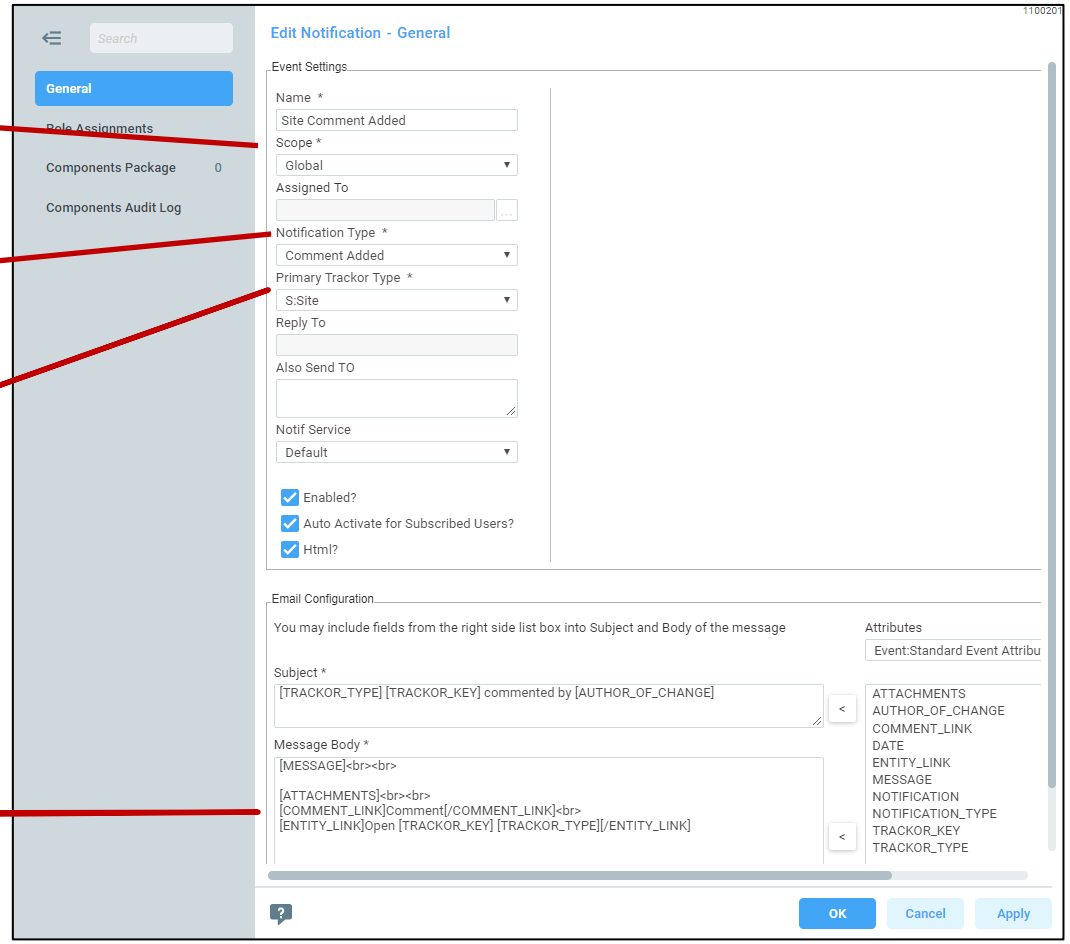
OneVizion features a Notification system that can send emails to individual users or group of users based upon system event triggers. The message text can be customized.

Scope (Local vs. Global)

Notification Type
- Trackor Added
- Trackor Updated
- Trackor Deleted
- Task Date Updated
- Etc.

Primary Trackor Type

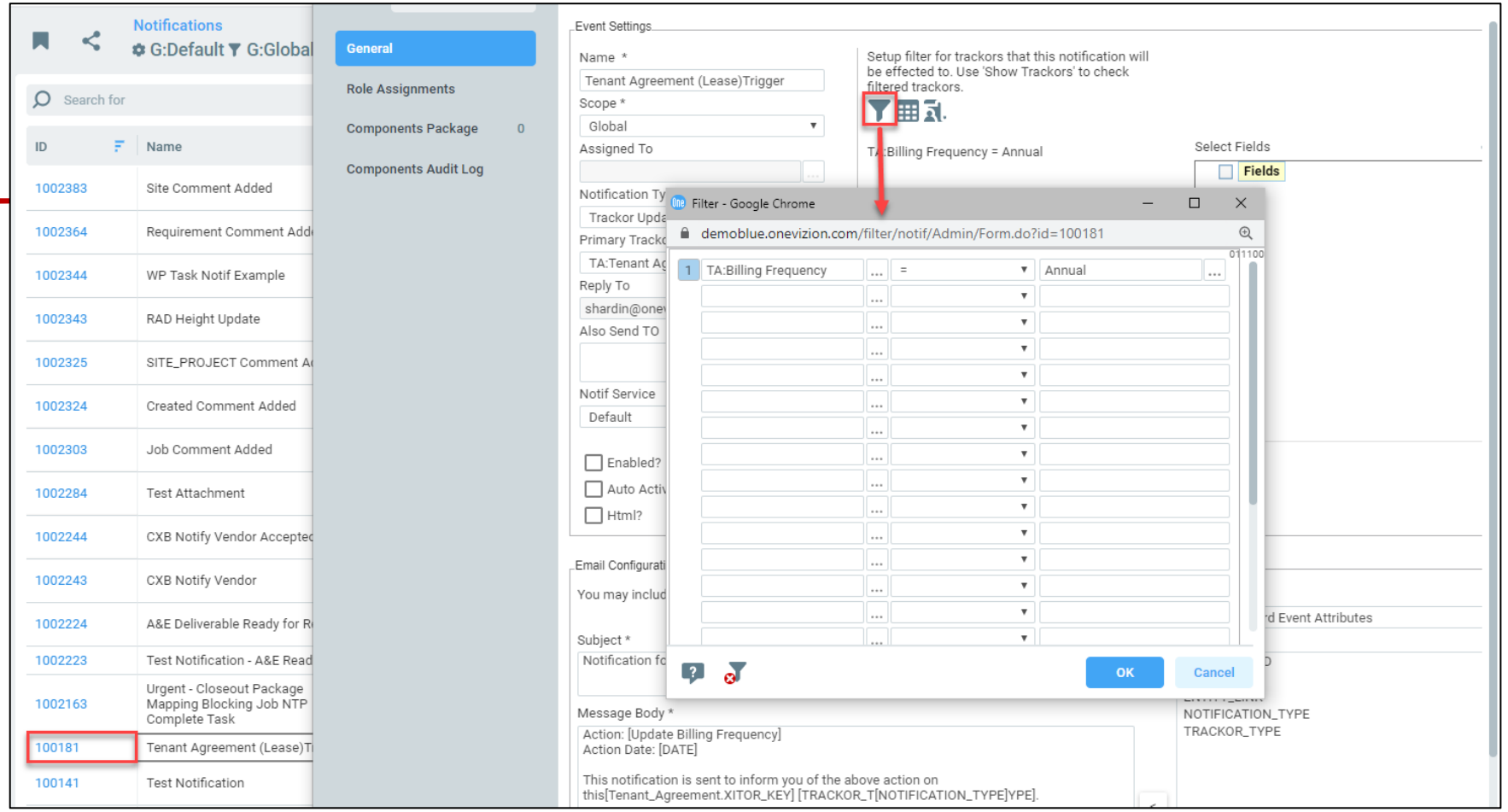
Message Body (Configured Fields and other Variables can be used)



Topic: Notifications

OneVizion features a Notification system that can send emails to individual users or group of users based upon system event triggers. The message text can be customized.

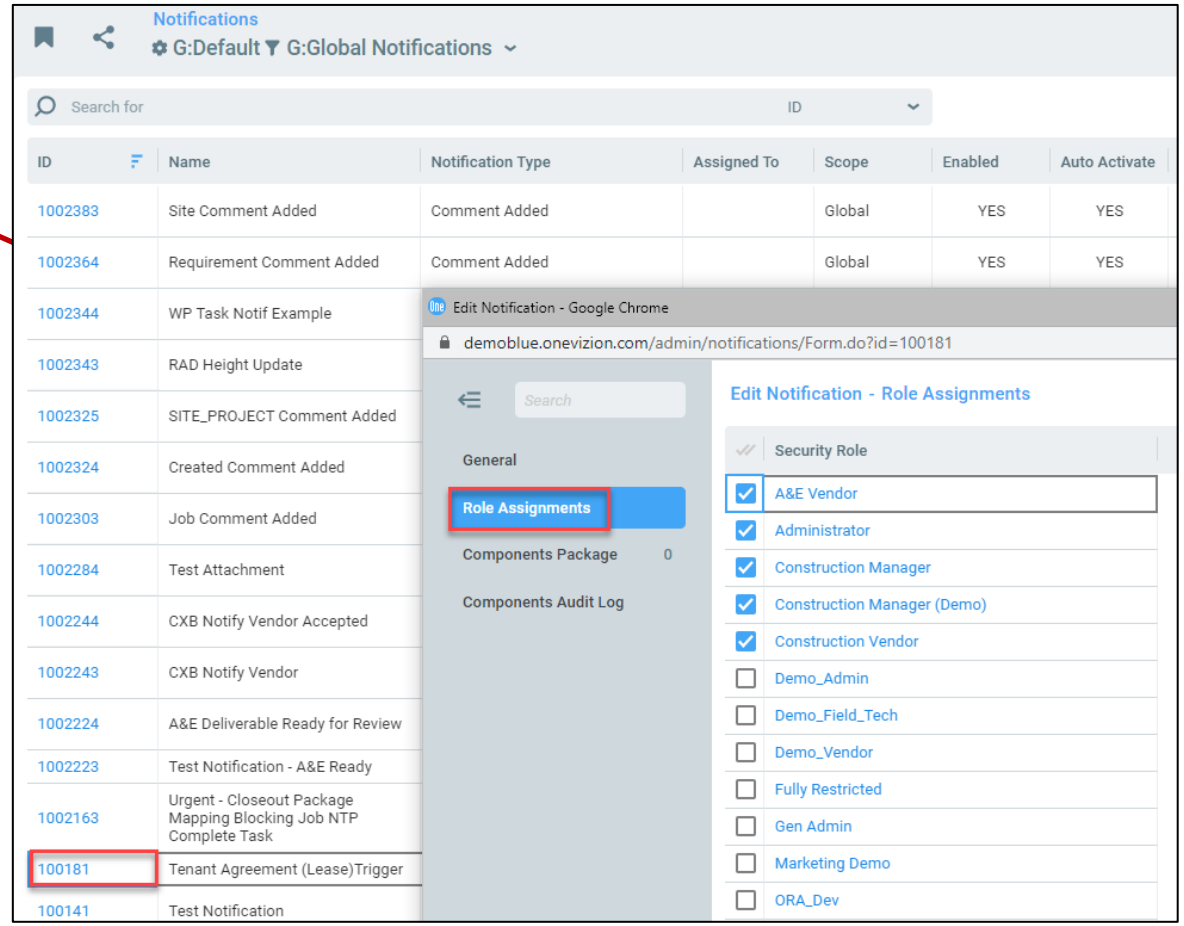
Filters Can also be added. In this case we are ensuring that a legitimate Maintenance Item has been created by checking for a Maintenance ID



Topic: Notifications

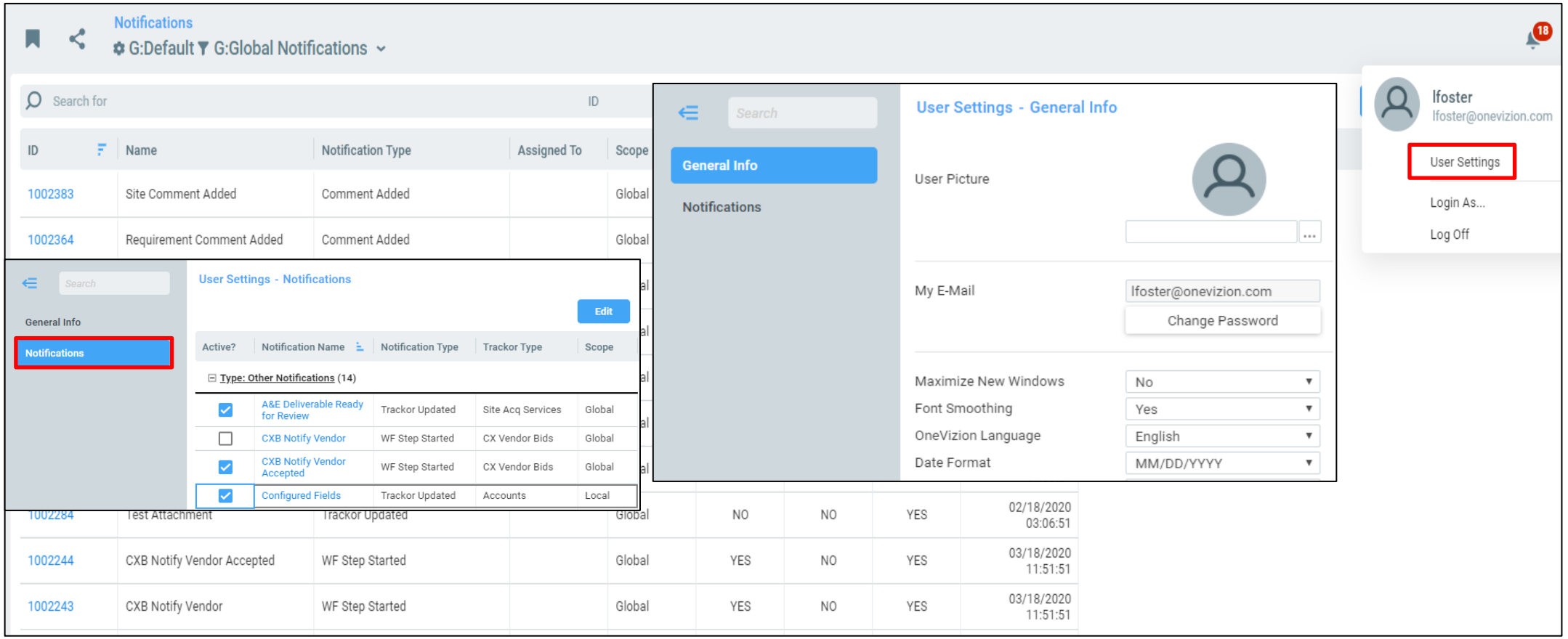
OneVizion features a Notification system that can send emails to individual users or group of users based upon system event triggers. The message text can be customized.

SysAdmin can assign Notifications to specific Security Roles



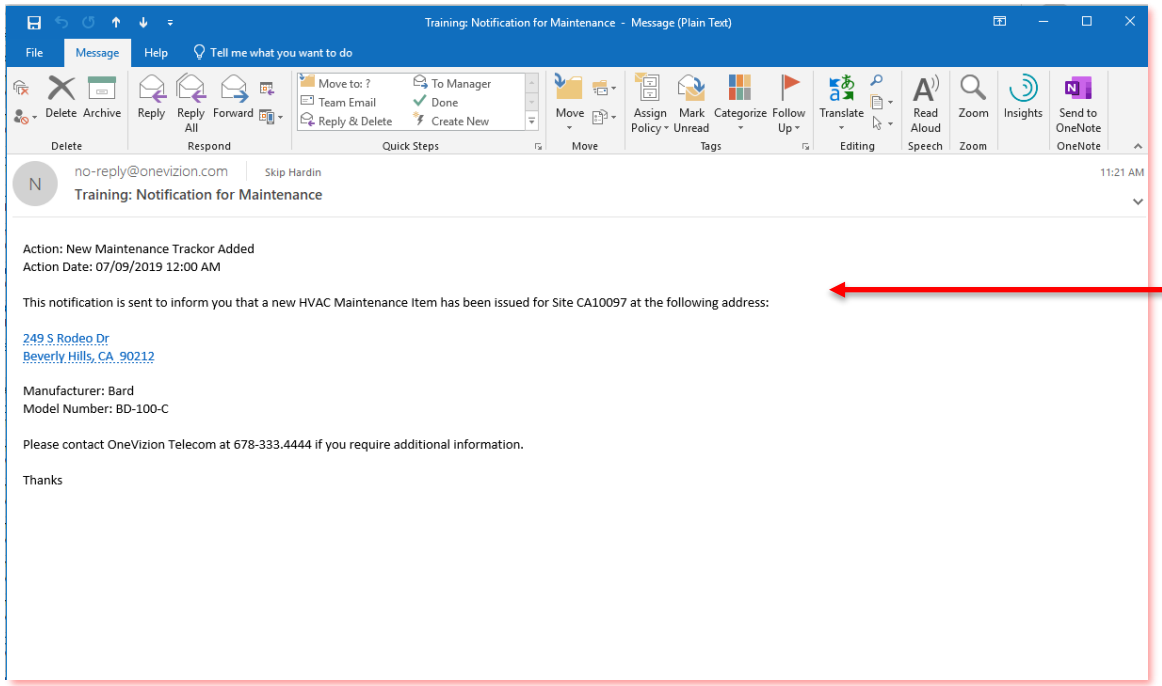
Topic: Notifications

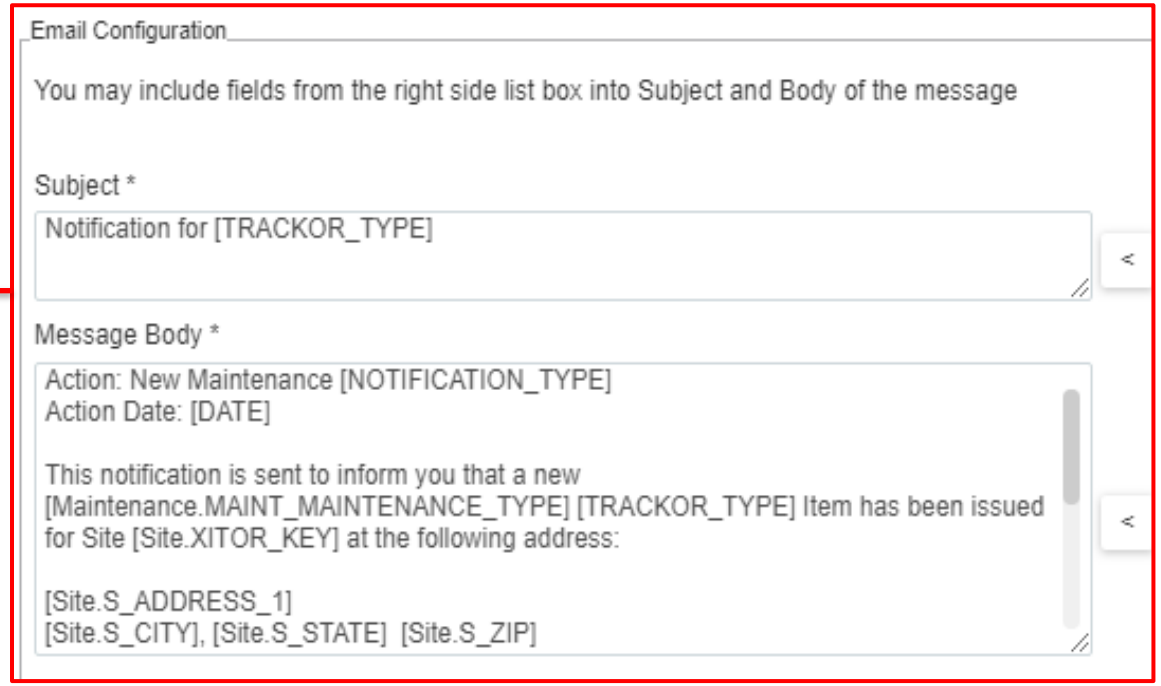
Users can subscribe to Global Notifications if the System Admin has given them access privileges for that specific notification.



Topic: Notifications

The message text can be customized using embedded tags that map to Configured Fields and/or System Identifiers such as key field IDs.

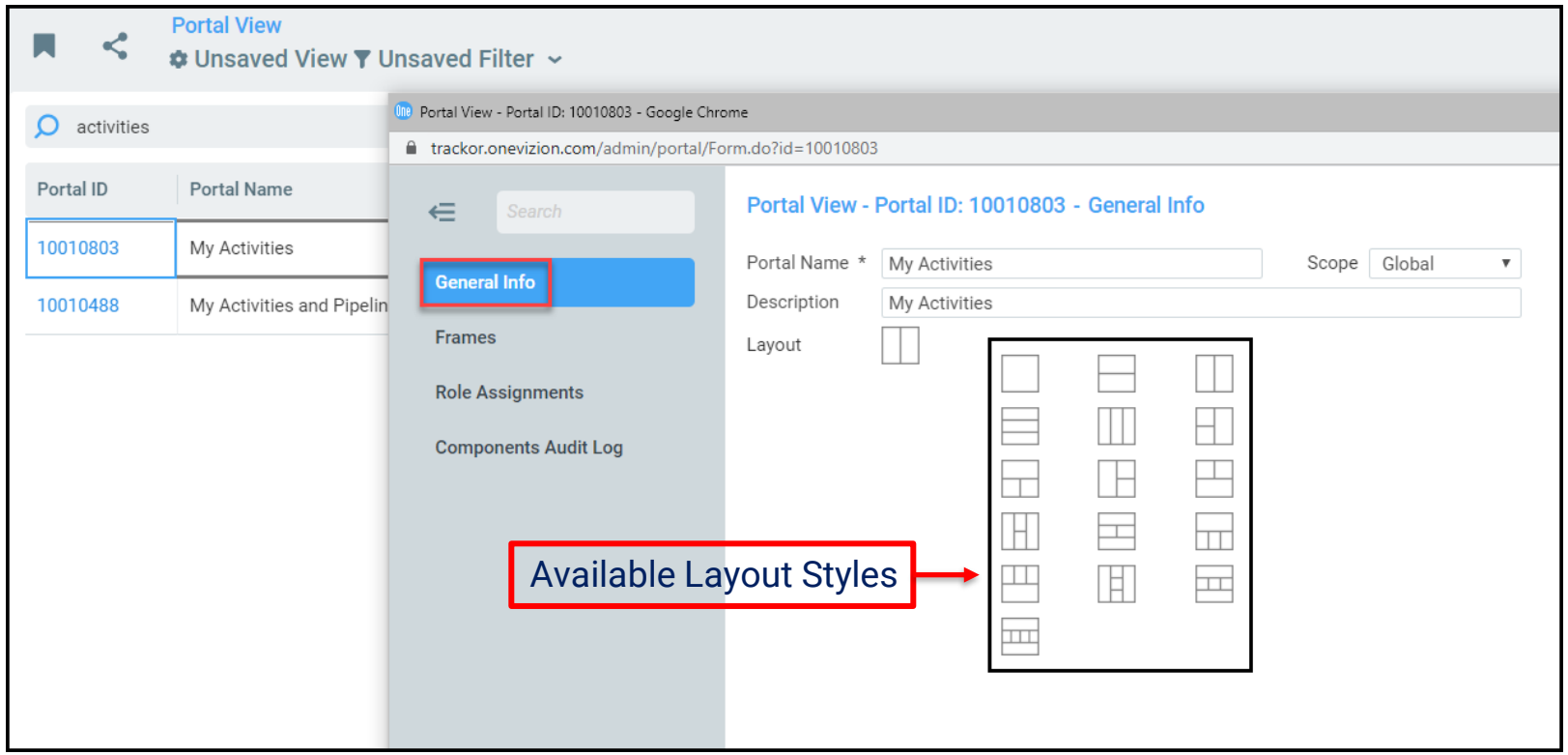




Topic: Portals

Portals are a very useful feature of the OneVizion application that allows administrators or user to configure multi-frame data screens to facilitate data review, entry and updates.

OneVizion
Simply Smarter Information Management



Building Portals Involves:

- Deciding what ***Information*** you wish to present in your Portal
- Deciding upon a ***Screen Layout***
- Deciding what type of ***Data Objects*** will occupy your frames (e.g., Grid, Dashlet, Applet, etc.)
- Setting up the ***Linkage*** between frames
- Deciding what ***Tools and Features*** are available for each frame
- Testing

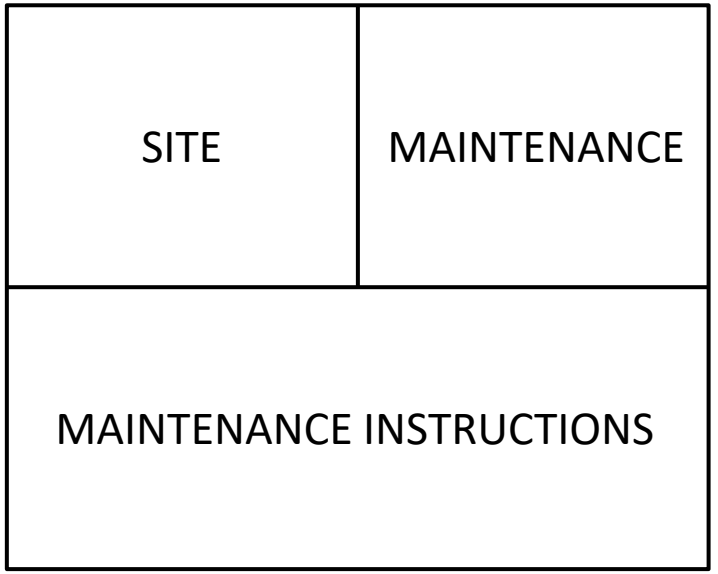
Topic: Portals

Portals are a very useful feature of the OneVizion application that allows administrators or users to configure multi-frame data screens to facilitate data review, entry and updates.

OneVizion
Simply Smarter Information Management

Building Portals Involves:

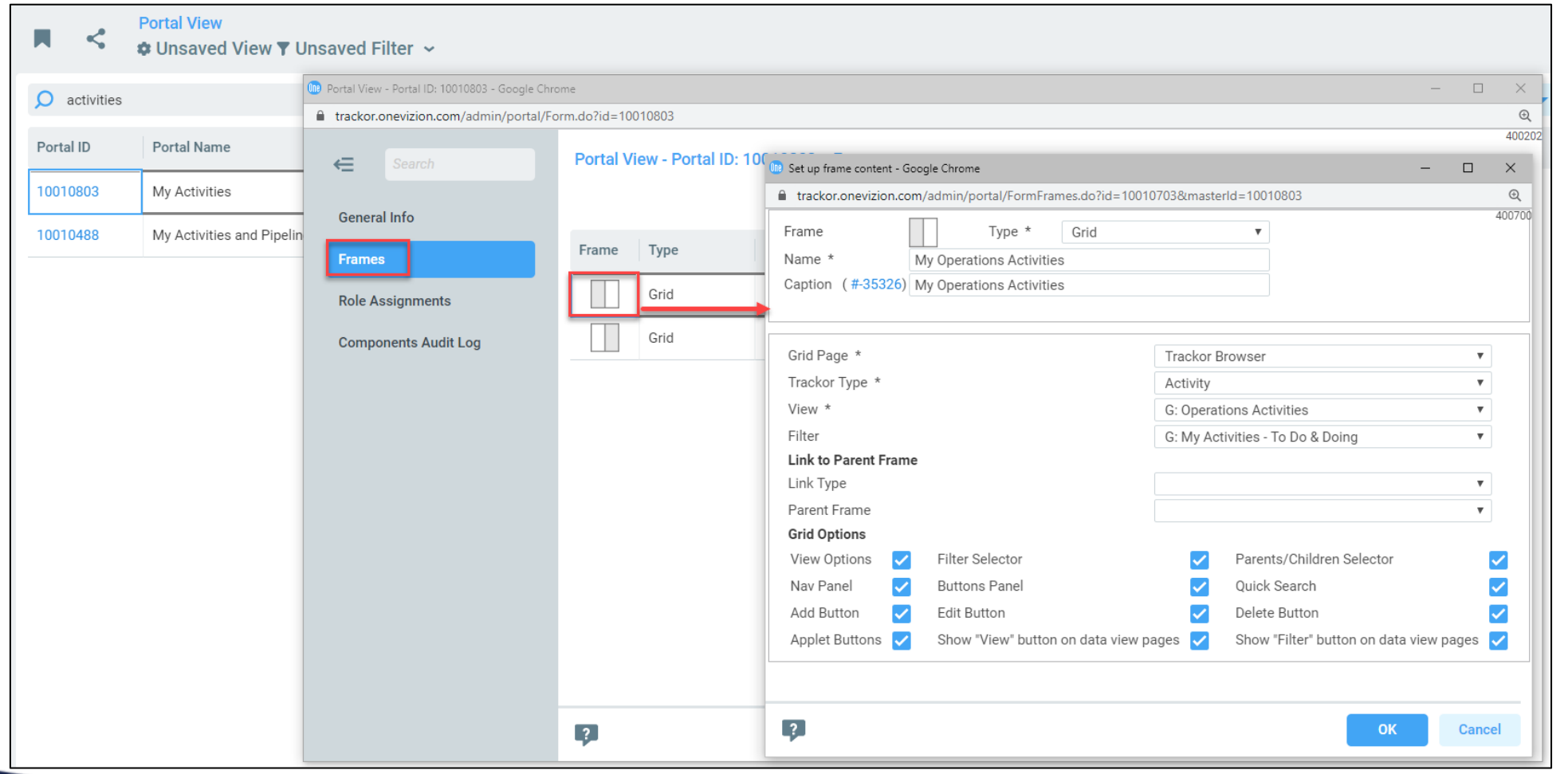
- Deciding what ***Information*** you wish to present in your Portal
  - Site, Maintenance and Maintenance Items
- Deciding upon a ***Screen Layout***
  - Two Frames on Top and a Single Frame One Bottom
- Deciding what type of ***Data Objects*** will occupy your frames
  - Trackor Browsers (Grids)
- Setting up the ***Linkage*** between frames
  - Link Dependent Frame to Parent via Parent-Child Relationships
- Deciding what ***Tools and Features*** are available for each frame
  - View, Fields, P-C Navigator, Quick Search, etc.



Topic: Portals

Configuring a Child grid frame and linking to a Parent grid frame by Parent-Child relationship

OneVizion
Simply Smarter Information Management



OneVizion Documentation

For more information regarding these topics, visit wiki.onevizion.com

Thank You