

User Manual - Asset Management Equipment Register

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SUMMARY

This documentation has been developed to be used in conjunction with the Asset Management Equipment Register application. The tool described in this document is utilised to:

- Generate Tags to be used to create items in the Ellipse equipment register
- Modify existing Ellipse equipment
- Replace existing Ellipse equipment
- Dispose of existing Ellipse equipment
- Provide attribution to generated and existing Ellipse equipment

The tool contains approximately 35 000 existing Ellipse equipment tags allowing the tool to create the next acceptable sequence number for a generated tag. Along with this, it allows the user to modify attributes to existing equipment, replace them with new equipment and dispose of equipment that no longer exists in the field.

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1. INTRODUCTION

The aim of this documentation is to allow the user to become familiar with the tool before and during use. If issues arise while utilising this tool, this documentation should be consulted before seeking additional assistance from personnel.

This documentation will be separated based on the functionality of the tool. The main sections of this report will include:

- Start-up and Navigation.
- Tag Generation.
- Assigning Attributes.
- Exporting work.
- Additional Options.
- Contact and Additional Information.

2. START-UP AND NAVIGATION

To start-up the tool, locate the folder in your directory that contains the folder named “Code Generator”. An image of what this may look like is below, Figure 1:

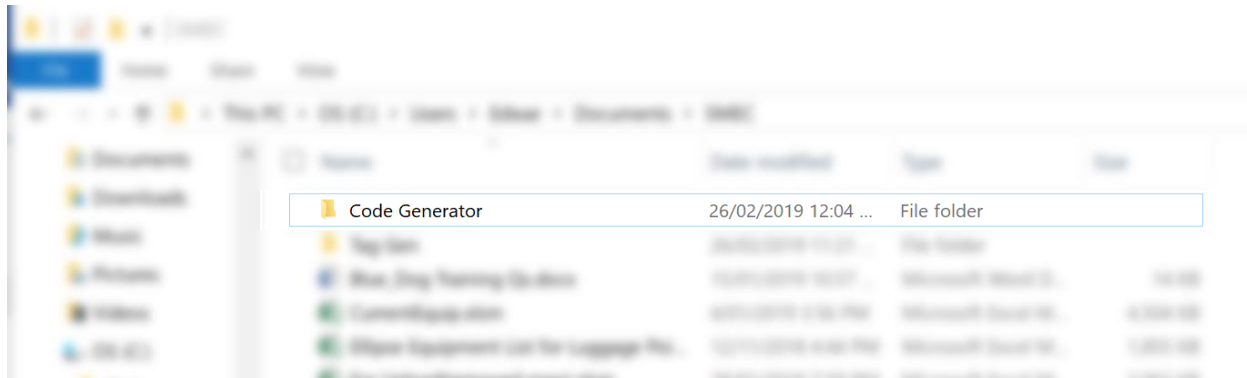


Figure 1: Folder to select

After opening this folder, you will be presented with numerous files. To run the program, select the “.exe” file, shown below within the red box; Figure 2:

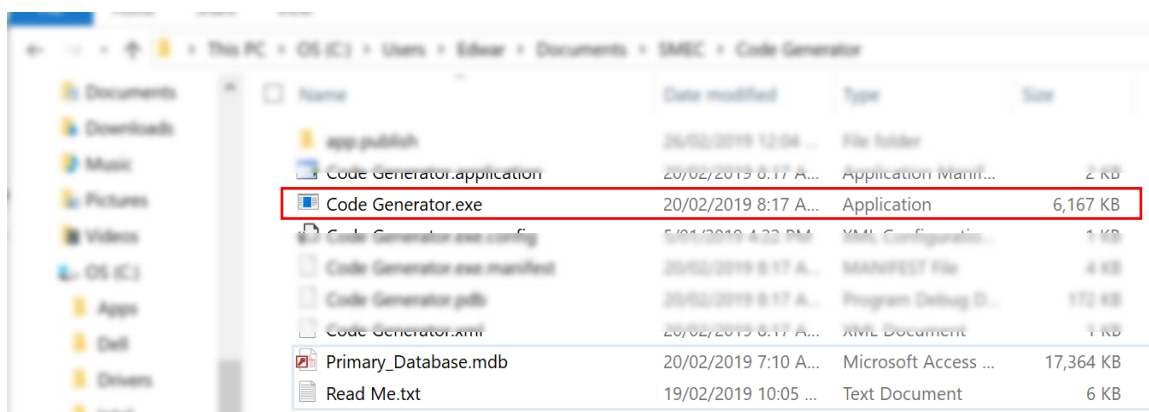


Figure 2: Relevant Files

In the above Figure, the “*Primary_Database.mdb*” is shown. The database stores all the relevant information and does not need to be opened, however, it needs to exist.

When the “.exe” file is selected the program will run. The first “Form” you will encounter will be the Main Menu. Described in the following section.

2.1. MAIN MENU

When the program is first started the user will be presented with the following screen, Figure 3:



Figure 3: Main Menu Screen

From this screen, multiple options are available. The different button options and their details are outlined further below, in individual sections.

2.1.1. Create Tags Button

This button is selected to direct the user to a form that allows the creation of ‘In Service’ or ‘Proposed’ equipment. The concept of ‘In Service’ is defined by equipment that is not yet recorded in Ellipse however, are currently commissioned and actively functional.

Equipment that is ‘Proposed’, is equipment that is intended to soon be in service and when commissioned will require maintenance schedules. This equipment can be in the process of being commissioned, or still within design phase.

To understand more about this action continue reading section 3.1.

2.1.2. Modify / Replace / Dispose Equipment Button

Selection of this button occurs when the user requires: modification to the attributes associated with a piece of equipment; physically changing the piece of equipment in the field; or the equipment is being retired from service, either physically being removed or being turned off permanently.

Continue reading section 3.2 to learn more about this action.

2.1.3. Equipment Attributes Button

After an equipment list exists in the tool, by using the other buttons described above, attributes can be collected for the list of tags.

Section 4 outlines how to effectively use this aspect of the tool.

2.1.4. Export and Submit Button

When a complete list of tags has been created, with or without attributes, it can be exported into excel. At any time during the use of the tool, the tags, alone or with attributes, can be extracted to allow viewing outside of the tool before it is exported into the submission format.

Further information on the exporting of information can be found in section 5.

2.1.5. Additional Options Button

The additional options available to the users while utilising the tool are accessible through this button. These options include:

- Updating the Existing Equipment Database
- Approving a Save
- Importing a Save
- Deleting a Save

These options allow the user to maintain an up-to-date tool to continue Tag creation without the need for continuous tool edition upgrades. It also allows user to remove old work that is no longer needed, continue a colleagues work or approve a list of Tags that have already been submitted.

Utilisation of these features is outlined further in section 6.

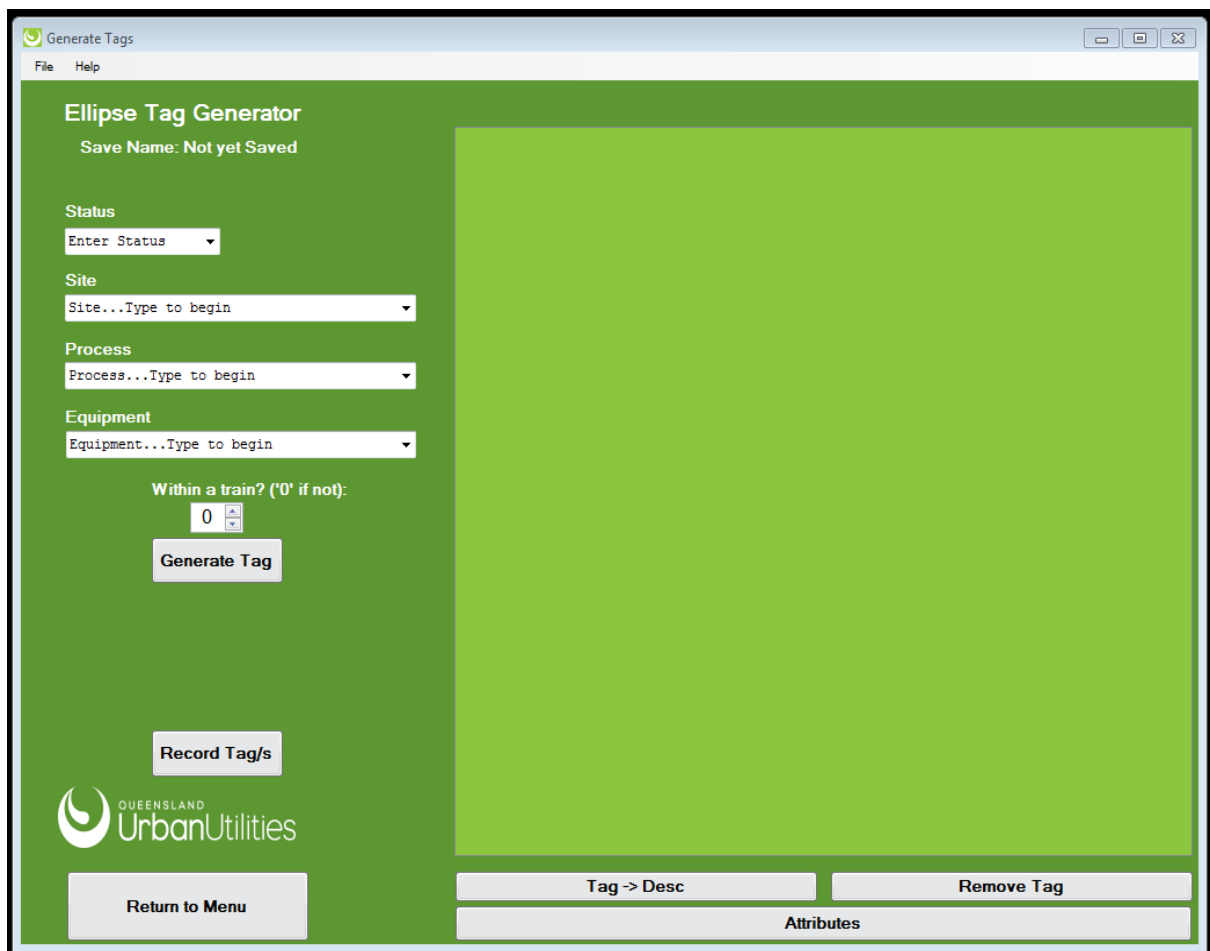
3. TAG GENERATION AND MANIPULATION

To be able to assign attributes to equipment that are within the field, or soon to be in the field, it is first necessary to inform the tool what the unique identifying tags for this equipment will be, in Ellipse. The Tag when entered through this tool is categorised into one of five different headings.

‘In Service’ and ‘Proposed’ equipment utilise the same form, whereas the ‘Modify’, ‘Replace’, and ‘Dispose’ equipment utilise another, collective, form. The following sections describe the differences and how to use each form effectively.

3.1. CREATE NEW/ PROPOSED EQUIPMENT

The following screen is presented when the user has selected the “Create Tags” Button on the Main Menu of this tool; Figure 4:



The screenshot shows a web application window titled "Generate Tags" with a menu bar containing "File" and "Help". The main content area has a green background and is titled "Ellipse Tag Generator". Below the title, it says "Save Name: Not yet Saved". There are four dropdown menus: "Status" (with "Enter Status" selected), "Site" (with "Site...Type to begin" selected), "Process" (with "Process...Type to begin" selected), and "Equipment" (with "Equipment...Type to begin" selected). Below these is a label "Within a train? ('0' if not):" followed by a text input field containing "0" and a "Generate Tag" button. At the bottom left is a "Record Tag/s" button. The bottom right has a "Return to Menu" button. The bottom of the window has a footer with the "QUEENSLAND UrbanUtilities" logo and two buttons: "Tag -> Desc" and "Remove Tag". The word "Attributes" is also visible at the bottom.

Figure 4: “Create Tags” Form

This form's purpose is to create "In Service" and "Proposed" Tags for equipment. To generate a new Tag, the following steps are followed:

1. Select status, "In Service" or "Proposed".
2. Select site, typing will allow easier filtering.
3. Select process, typing will allow easier filtering.
4. Select equipment, typing will allow easier filtering.
5. Determine if the sequence should include a train-leading number, "0001/ 1001".
6. Click "Generate Tag" Button.

Once the Tag has been generated, the user can replicate this style of Tag. A counter will now be available below the generated Tag that allows the user to enter the number of copies they would like to record. If this number exceeds "1" then the tool will record the number specified by the user and each recorded Tag will be incremented to ensure uniqueness.

Along with this, the user can completely re-write the sequence number that the tool had generated. This is done by selecting the checkbox that is below the generated Tag. It will prompt the user to provide an alternative sequence number, after entering the proposed value the tool will ensure it has not already been taken; if available the user can record the tag, otherwise it will not record a double value.

To record the generated tag the "Record Tag/s" Button is clicked. It will then place the tag in a grouped section on the right panel (indicated by the lighter green rectangle).

An example of this form's use is shown on the following pages in section 3.1.1.

3.1.1. Example of Tag Generation

As an example, follow the steps below:

1. Select “In Service”.
2. Begin typing “ST018”, selecting “ST018 – Luggage Point...”
3. Begin typing “0811”, select “0811 – Chemical Scrubber Plant”.
4. Begin typing “Fa”, select “FAN - Fan”.
5. Leave the train-leading number as “0”.
6. Click “Generate Tag” Button.

The form will now appear as follows:

The screenshot shows a software window titled "Generate Tags" with a menu bar containing "File" and "Help". The main interface has a green background. On the left, there is a form titled "Ellipse Tag Generator" with the text "Save Name: Not yet Saved". The form includes several dropdown menus: "Status" (set to "In Service"), "Site" (set to "ST018 - LUGGAGE POINT SEWAGE TREATM"), "Process" (set to "0811 - CHEMICAL SCRUBBER PLANT 1"), and "Equipment" (set to "FAN - Fan"). Below these is a numeric input field for "Within a train? ('0' if not):" set to "0". A "Generate Tag" button is present, followed by the generated tag "ST018-0811-FAN-0003" in yellow text. There is a checkbox for "Change Sequence Number" which is unchecked. Below that is a "Copy Equipment" section with a numeric input set to "1" and a "Record Tag/s" button. At the bottom left is a "Return to Menu" button. The bottom right area contains a large green rectangular field, a "Tag -> Desc" button, a "Remove Tag" button, and an "Attributes" label.

Figure 5: "Create Tags" Example 3.1.1. - 1

From the previous Figure, the generated sequence number exemplifies the benefit of this tool, it has given the generated Tag the next number in the sequence – two fans already exist in this process. Following this, we are now going to record this Tag (by clicking “Record Tag/s” Button) then enter the next example:

1. Select “Proposed”.
2. Begin typing “ST018”, selecting “ST018 – Luggage Point...”
3. Begin typing “0210”, select “0210 – Screens”.
4. Begin typing “Tan”, select “TNK - Tank”.
5. Change the train-leading number to “2”.
6. Click “Generate Tag” Button.

This results in the following screen:

Generate Tags

File Help

Ellipse Tag Generator

Save Name: Not yet Saved
Status: Changes Made

Status
Proposed

Site
ST018 - LUGGAGE POINT SEWAGE TREATM

Process
0210 - SCREENS

Equipment
TNK - Tank

Within a train? ('0' if not):
2

Generate Tag

ST018-0210-TNK-2001

☐ Change Sequence Number

Copy Equipment:
1

Record Tag/s

Return to Menu

In Service
ST018-0811-FAN-0003

Tag -> Desc Remove Tag

Attributes

QUEENSLAND UrbanUtilities

Figure 6: "Create Tags" Example 3.1.1. - 2

Then make 20 of these tags, by making the counter on the copies go to 20 (or type '20' in the box). Then enter these Tags by clicking the "Record Tag/s" Button. This will result in the following screen:

Figure 7: "Create Tags" Example 3.1.1. - 3

As seen in the Figure above, the newest Tags have been grouped into their own 'Proposed' section to allow easy management. Now, let's complete this example with the changing of the sequence number. Create the following tag (Purpose = 'New'):

"ST018-FAN-0811-004"

Once you have created the tag specified, check the "Change Sequence Number" checkbox. You will notice that the "Record Tag/s" Button's text has changed to "Check Number". Click this button to provide your own sequence number. To enter your sequence number, use the pop-up that will appear; it appears as follows:

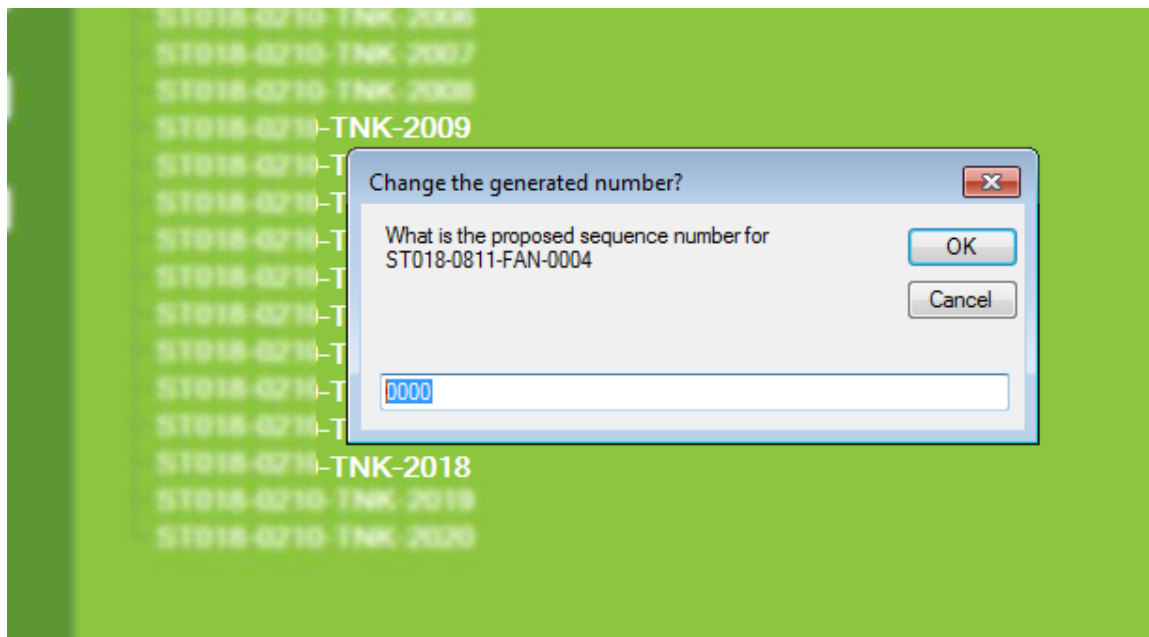


Figure 8: "Create Tags" Example 3.1.1. - 4

If you try to enter a number that already exists, “0002”, then you will be presented with:

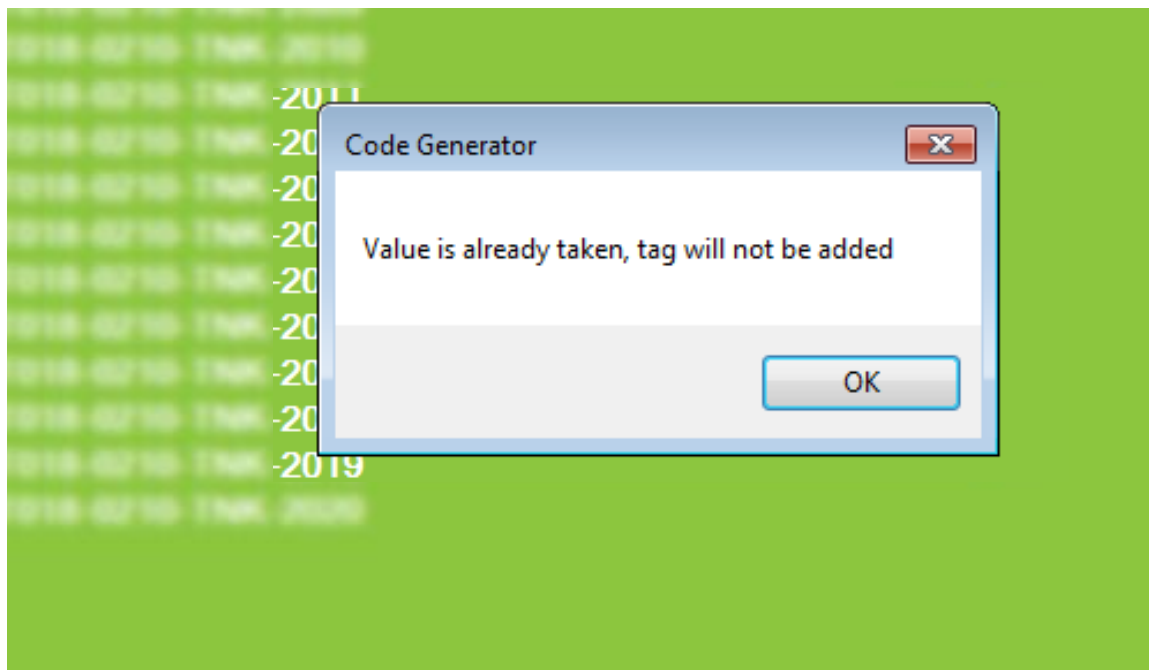


Figure 9: "Create Tags" Example 3.1.1. - 5

If you successfully enter something that does not exist, then it will record the data:

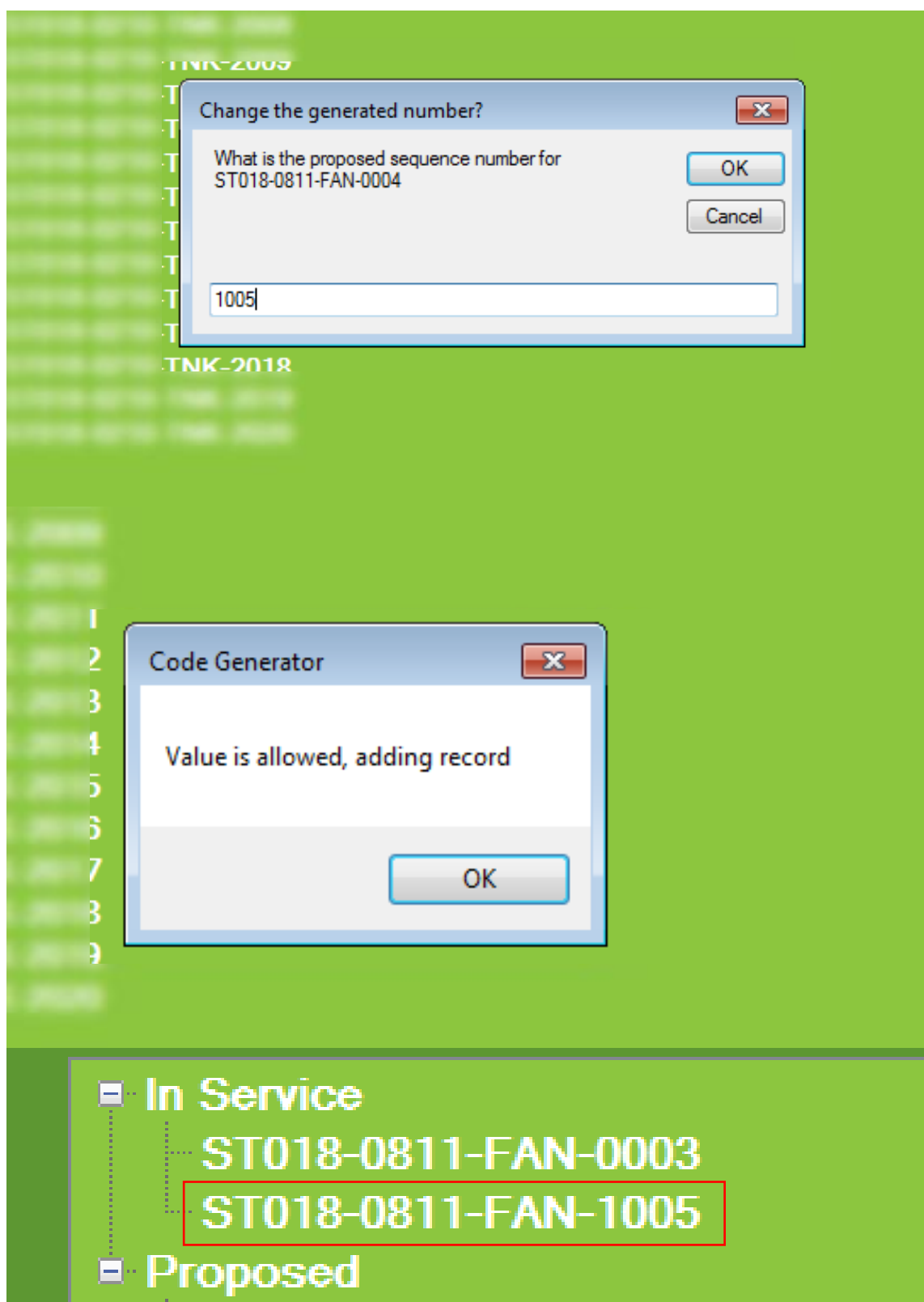


Figure 10: "Create Tags" Example 3.1.1. – 6

3.2. RECORD MODIFIED/ REPLACED/ DISPOSED EQUIPMENT

Users that select the “Modify/ Replace/ Dispose” Button from the Main Menu will be presented with a similar screen as the ‘New’ and ‘Proposed’ “Create Tags” screen. The screen will appear as follows, Figure 11:

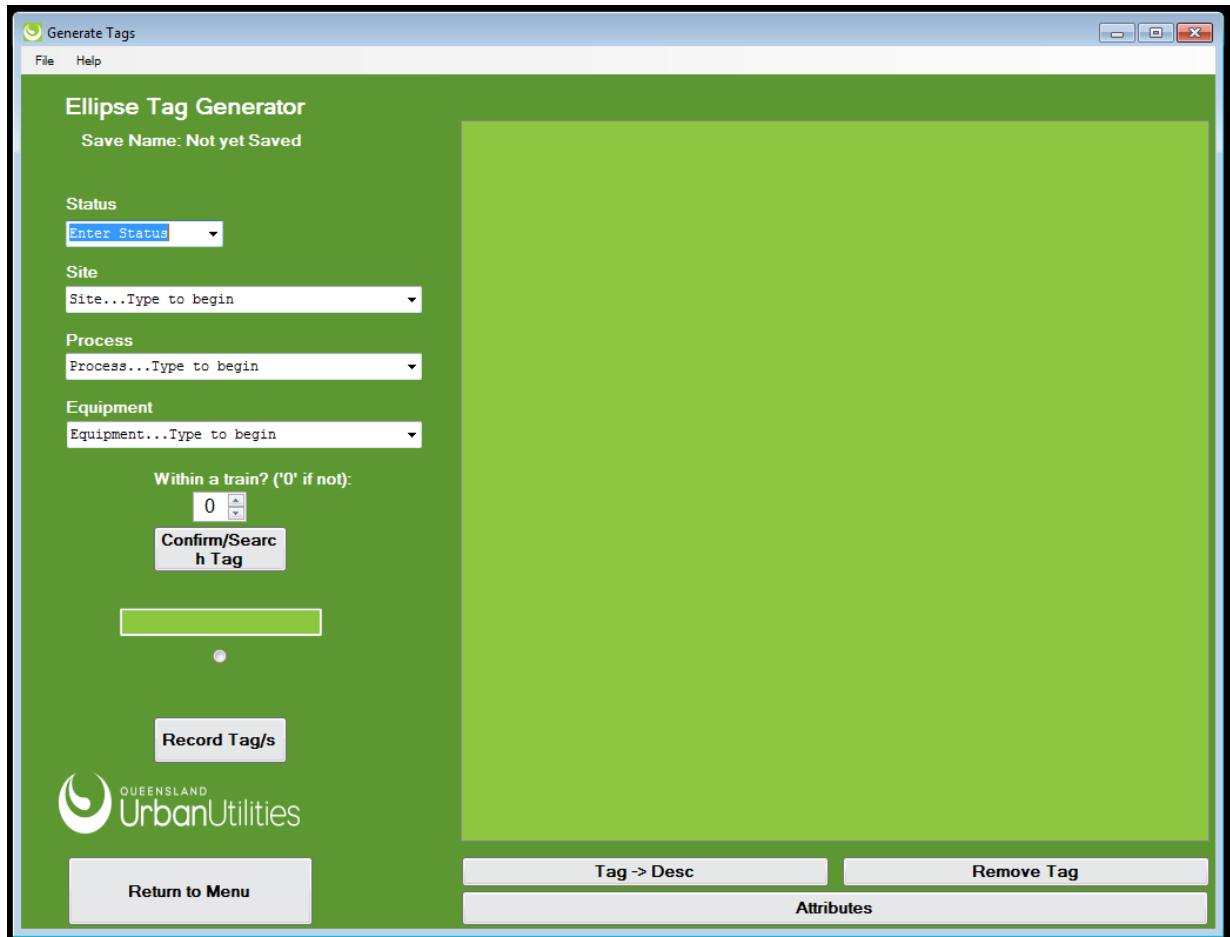


Figure 11: “Modify/Replace/Dispose” Form

Within this form the user is now presented with two options. They are able to type the ‘Plant_No’ that they are impacting (Modifying, Replacing, or Disposing); type part of the ‘Plant_No’ and search; or they can use a similar approach to the other form and construct the tag from the combo boxes and search for the correct one.

After the Tag has been verified, by clicking the “Confirm/Search Tag” Button, the “Record Tag/s” Button can be pressed to save this in the panel to the right.

Examples for each possible scenario are shown on the proceeding pages.

3.2.1. Example 1 – Knowing the exact Tag (Plant_No)

If you know the ‘Plant_No’/ ‘Tag’ of the equipment you are modifying, replacing, or disposing then type it directly into the textbox that is presented. For this example, select “Modify” as your purpose and type “ST018-FAN-0811-001” into the textbox. Your screen will appear as so:

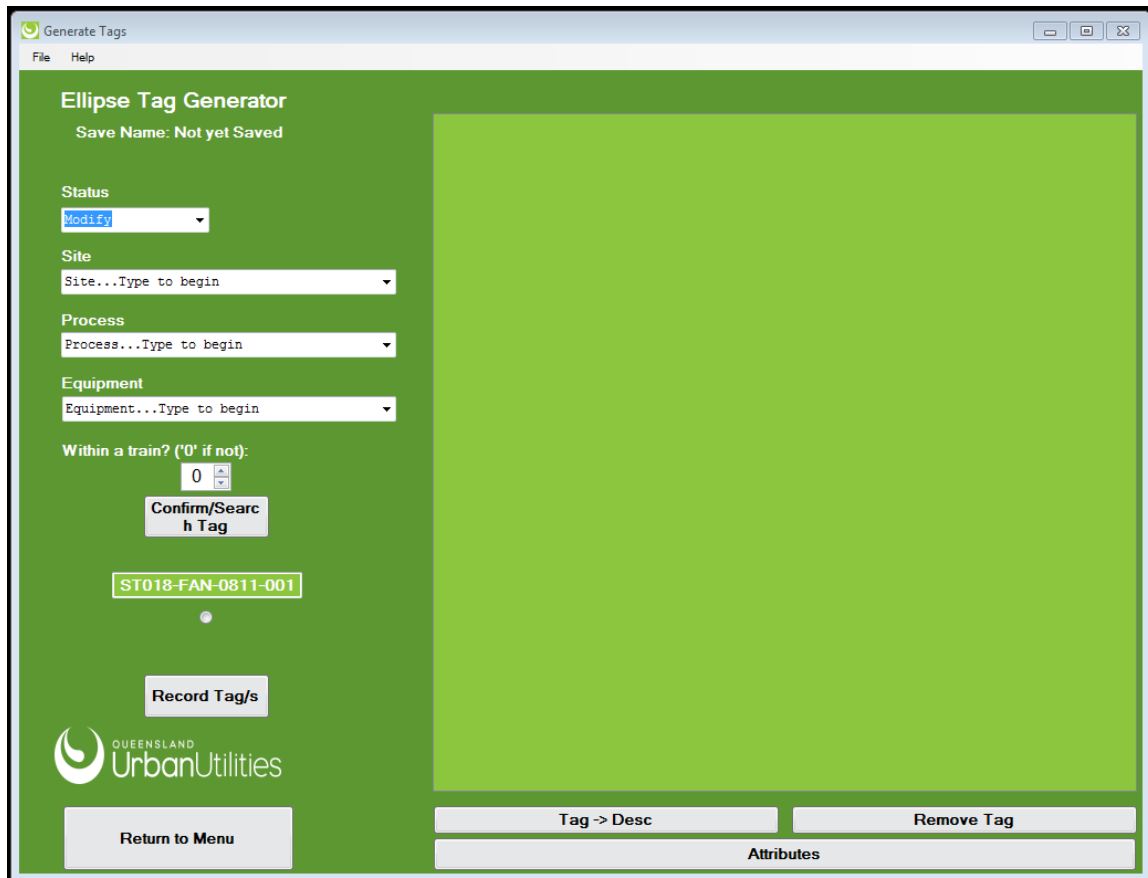


Figure 12: "M/R/D" Example 3.2.1. - 1

Now that a full Tag has been provided, it can be confirmed by clicking the “Confirm/Search Tag” button. Resulting in the following screen:

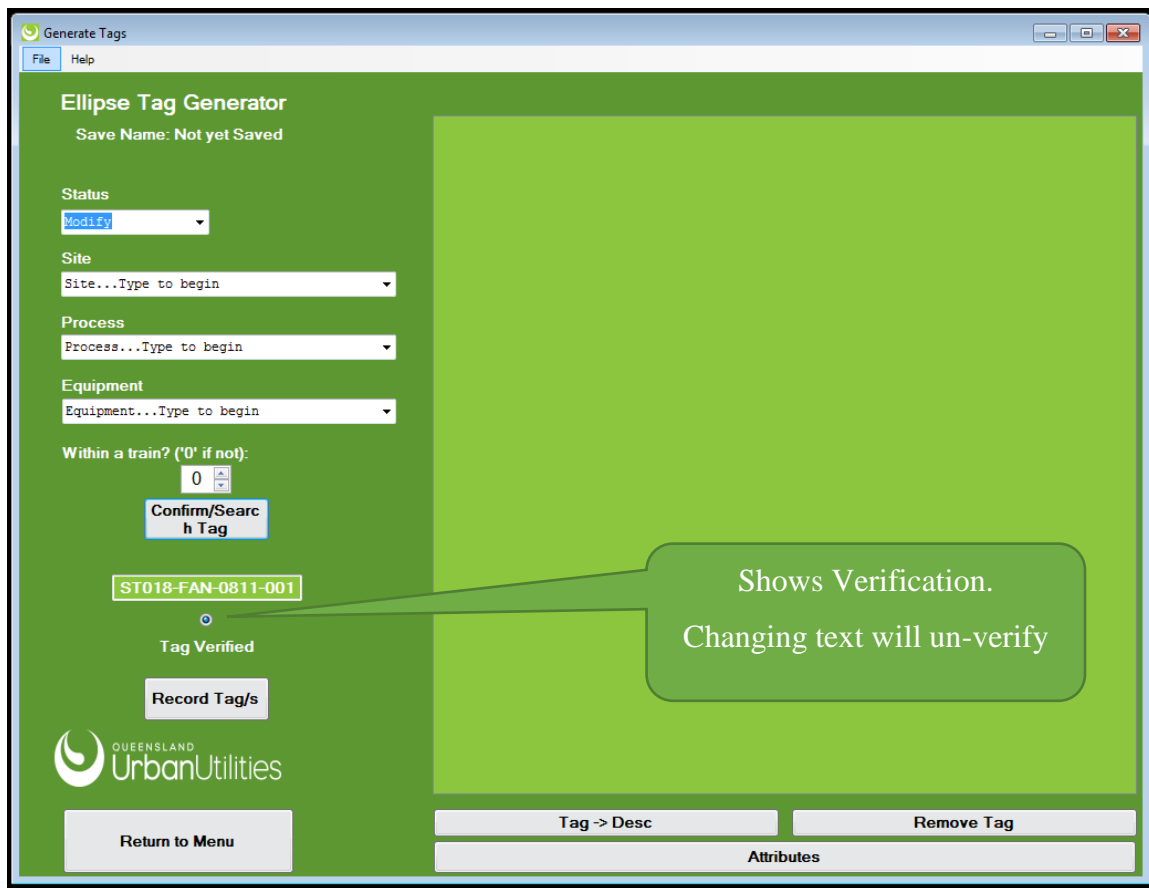


Figure 13: "M/R/D" Example 3.2.1. - 2

This Tag can now be recorded, as it has been verified, onto the right panel by pressing the “Record Tag/s” Button. A pop-up will appear to confirm that you wish to make changes to an existing equipment piece. This popup is shown below:

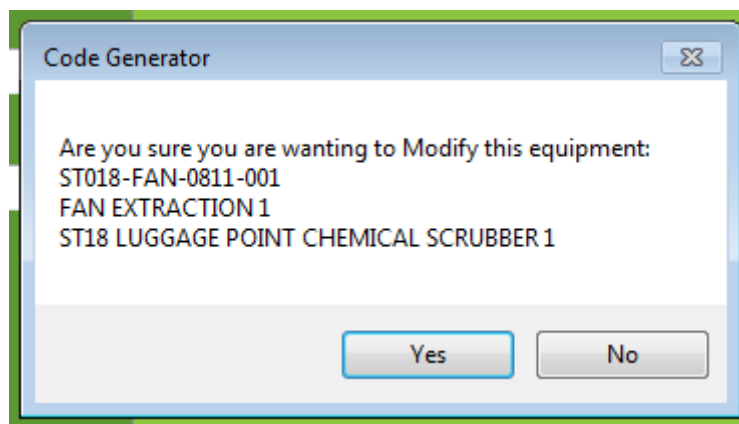


Figure 14: "M/R/D" Example 3.2.1. - 3

Selecting “Yes” will ensure this piece of equipment is added to your list of available tags for attribution.

3.2.2. Example 2 – Know part of the Tag (Plant_No)

Continuing from Example 1, 3.2.1., change the purpose to “Dispose” and type part of a Tag that we know exists, “ST018-FAN-0811”. Then press the “Confirm/Search Tag” Button. The application will now resemble the one shown below:

The screenshot shows the 'Ellipse Tag Generator' application window. The main form on the left includes fields for 'Status' (set to 'Dispose'), 'Site', 'Process', and 'Equipment', each with a 'Type to begin' prompt. Below these is a 'Within a train? ('0' if not):' field with a value of '0'. A 'Confirm/Search Tag' button is present. In the center, a text box displays 'ST018-FAN-0811'. Below this is a 'Record Tag/s' button and the Queensland UrbanUtilities logo. At the bottom left is a 'Return to Menu' button. On the right, a 'Modify' panel shows 'ST018-FAN-0811-001' with a callout 'Tag from Previous Example (3.2.1.)'. Below this is an 'Options' panel titled 'Possible Selections' which lists two options: 'ST018-FAN-0811-001' and 'ST018-FAN-0811-002', each with associated equipment names. A callout 'Pop-up to help choose correct tag' points to this panel. At the bottom right are buttons for 'Tag -> Desc', 'Remove Tag', and 'Attributes'.

Figure 15: "M/R/D" Example 3.2.2. - 1

From the options, click on the Plant_No of the equipment you wish to action, for this example, select “ST018-FAN-0811-002”. This will result in the options panel closing and the main form updating to resemble your choice.

Shown below:

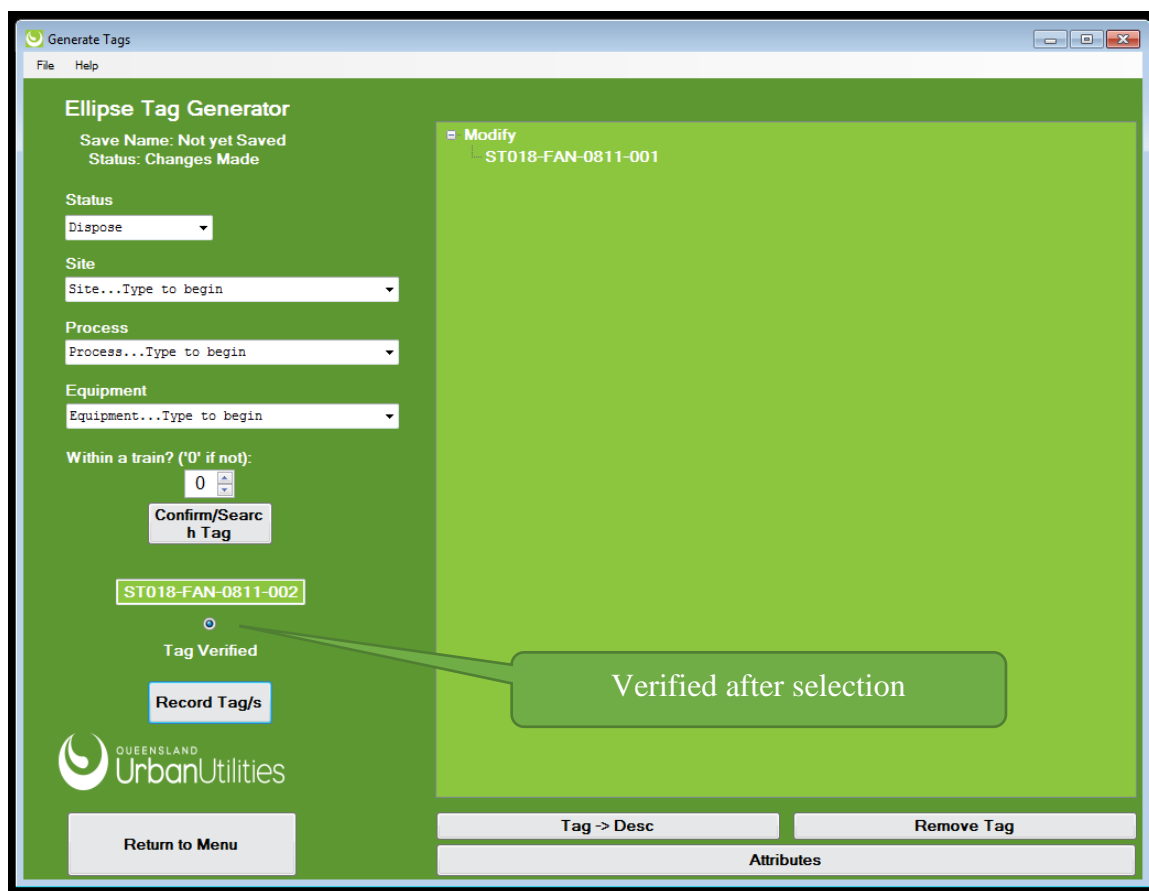


Figure 16: "M/R/D" Example 3.2.2. - 2

This tag can now be recorded, by pressing the “Record Tag/s” Button. Like previously, a pop-up will be presented to ensure you wish to adjust this equipment.

NOTE: Dispose functionality will result in the Tag being unavailable for all other purposes in the same save. You will no longer see it as an option.

3.2.3. Example 3 – Find using Combo boxes

If you are unsure what the tag is, then utilising the combo boxes may help find similar items to select from. The process behind the combo utilisation is similar to that of the previous example. For this example, set the purpose to “Replace” and create the search string “ST018-TNK-0462” using the combo boxes. Then click the “Confirm/Search Tag/s” Button. The tool will appear as shown:

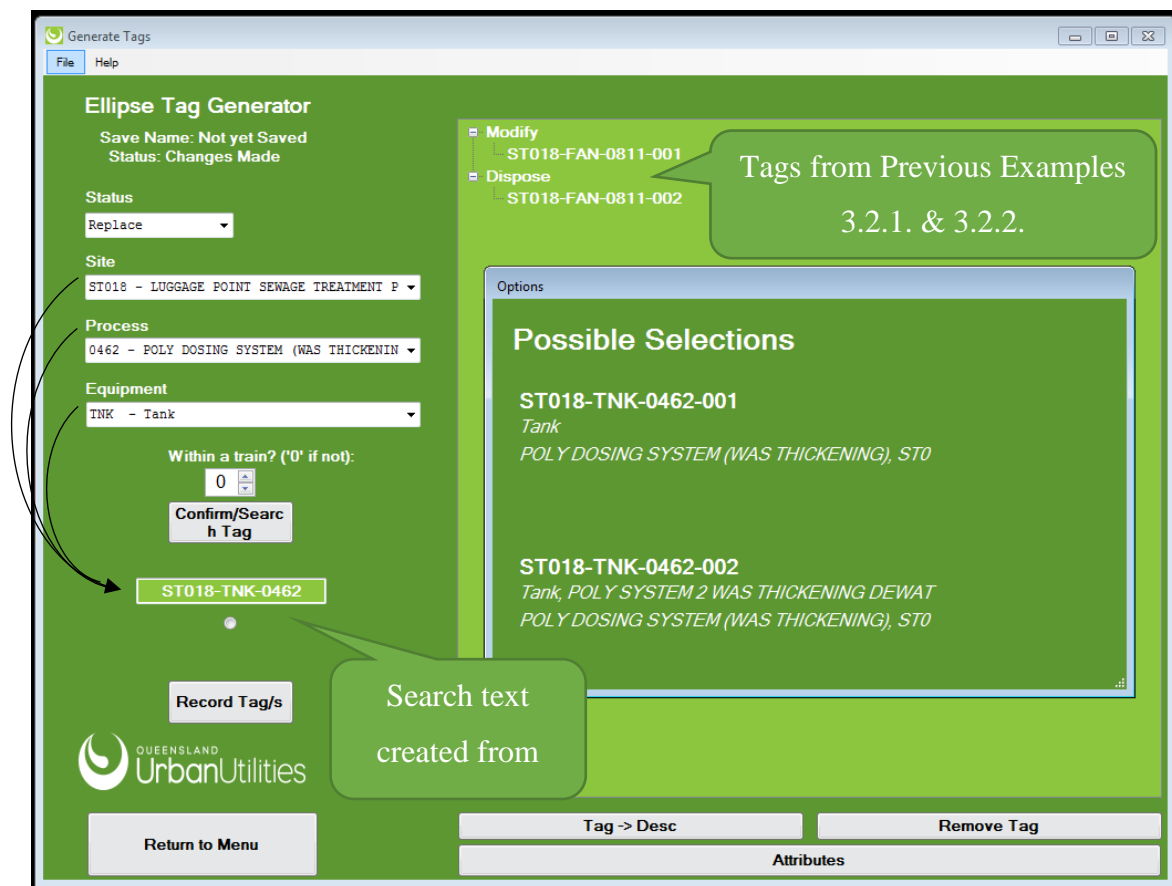


Figure 17: "M/R/D" Example 3.2.3. - 1

Using the options presented, pick the relevant Tag by pressing the Plant_No that describes your desired equipment. Once selected, confirm the tag with the “Record Tag/s” Button and answer “Yes” to the pop-up (Section 3.1.1. shows this screen).

3.2.4. Example 4 – Cannot Verify Tag

When manually entering or creating tags it is possible no matches will be found. When this occurs, the user will receive a pop-up like this:

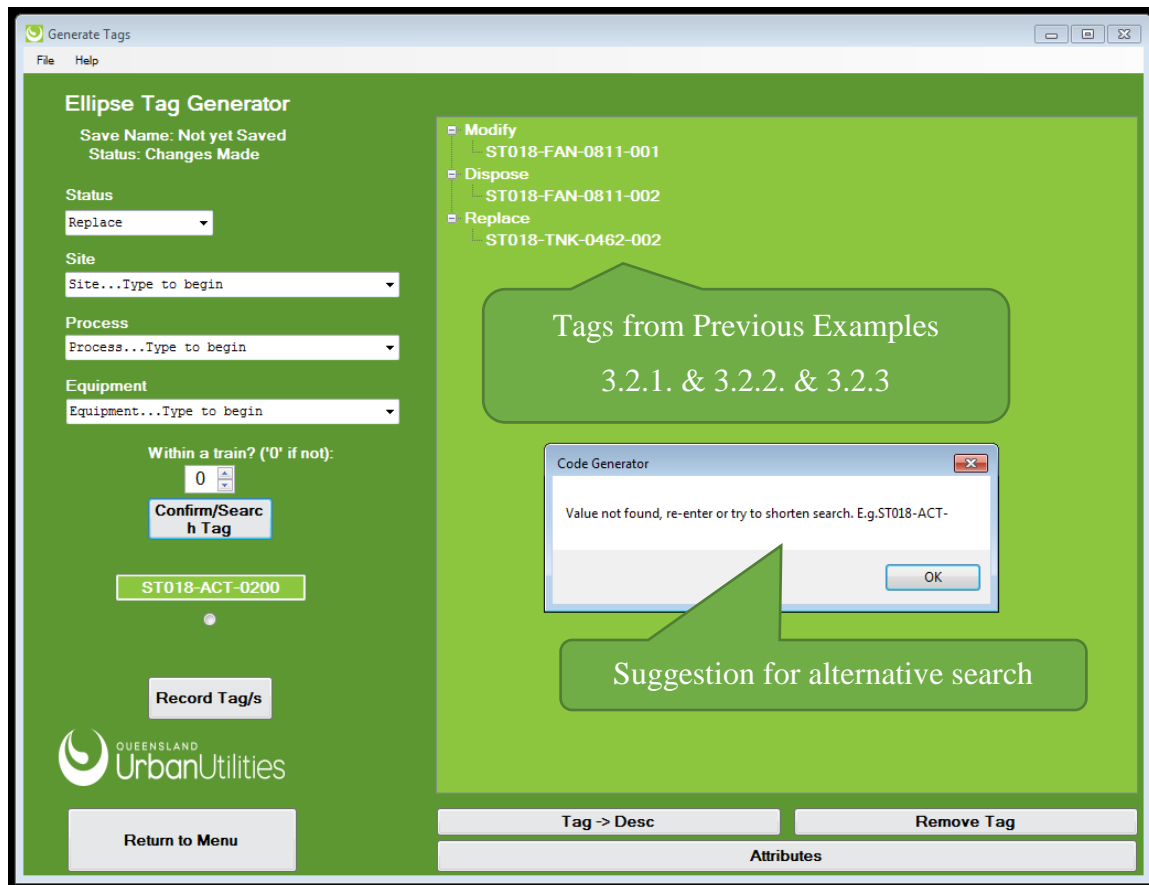


Figure 18: "M/R/D" Example 3.2.4. - 1

If a value is not found, try shortening the search to be more inclusive (i.e. if you know it is a fan, but you don't know the process you can search "ST018-FAN" and all fans will be shown). The pop-up will prompt this methodology.

3.3. SAVE TAGS

To ensure that any tags that are created can later be accessed it is essential to ensure that Tags are saved. The act of saving can occur in two ways, leaving the form to return to the menu, or by going to "File → Save". To know if you are working in a save, direct your attention to the top of the form.

If a save is not currently active the following will be seen:



Figure 19: Save Information

To be able to enter a name for the save, select “Yes” to either prompt:

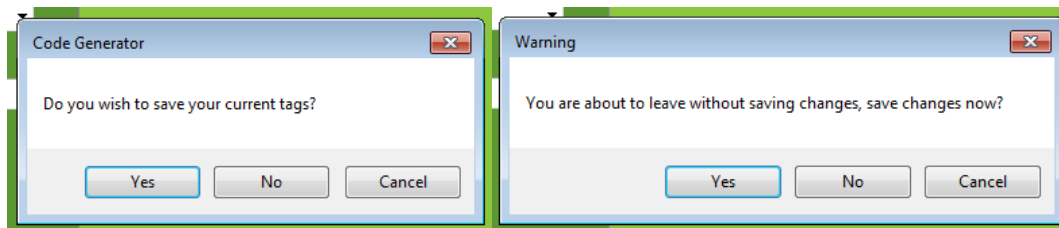


Figure 20: Save Prompts.

Left: Prompt from "File → Save". Right: Prompt from "Return to Menu" Button

Selecting “Yes” from any route will result in the following dialog, when entering a name avoid using any special characters and no spaces:

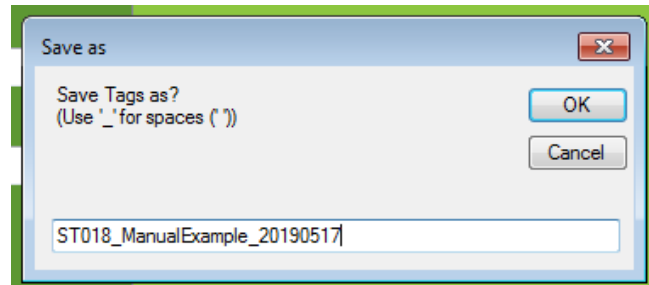


Figure 21: Save Names Pop-up

For this example, enter the name for the save, e.g. “*Manual_Example*”. Once saved, you will see the change in the top left corner:

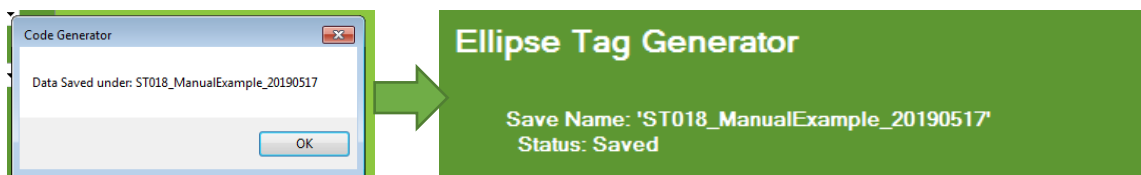


Figure 22: Save, Updating Info

3.4. LOADING SAVES

Loading Saves are very easy with the utilisation of the Menu Strip at the top of the form:

“File → Load → [Save Name]”

This will then load the data saved under that name, the right panel will update with all the Tags within that save and make changes behind the scene to the database to ensure continuity going forward. Modified/ Replaced/ Disposed Equipment lists can be opened within the Create Tags form and vice versa. This allows a singular combined list for attribution.

3.5. TAG → DESCRIPTIONS, REMOVE, AND ATTRIBUTION BUTTONS

At the base of the panel on the right on the form are three buttons, as shown below:

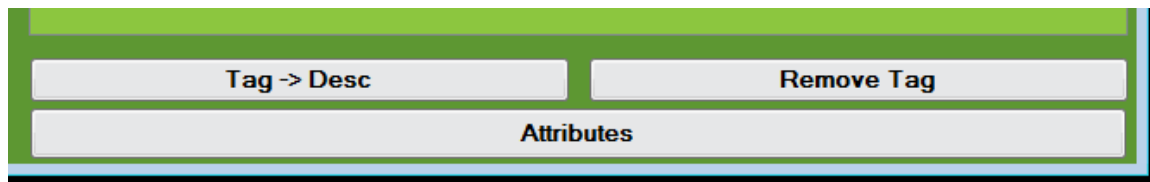


Figure 23: Buttons

3.5.1. Tag → Description Button

The “Tag-> Desc” Button is there solely for user experience, it converts the tags in the list above from Tags to Descriptions. An example of this is shown below:

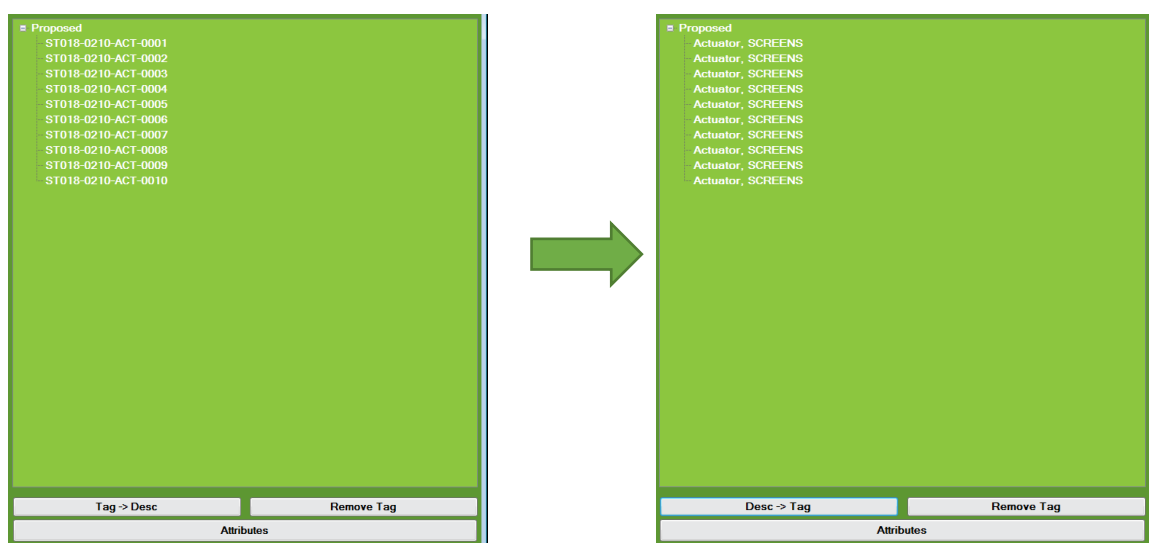


Figure 24: Effect of pressing button

3.5.2. Remove Button

In some instances you, the user, may find that a Tag is no longer needed or was miss entered. To remove a Tag, click on the Tag you wish to remove, and then press the “Remove Tag” button. The user is capable of removing any tag within the list, regardless of its category. Removing “Disposed” Equipment from the list makes it available within the existing Equipment once more. After clicking the button, the following is seen:

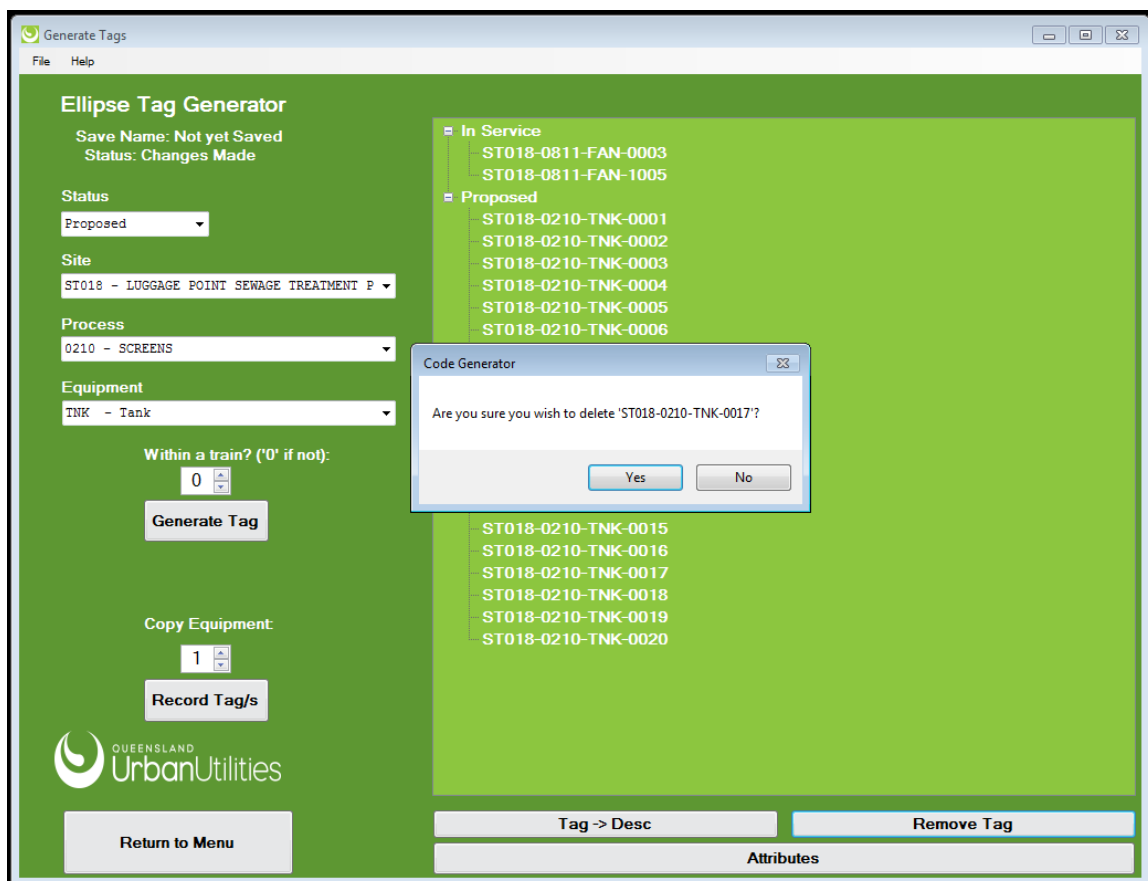


Figure 25: Removing a Tag

Selecting “Yes” will result in the tool questioning the user if they wish to remove more Tags, shown below:

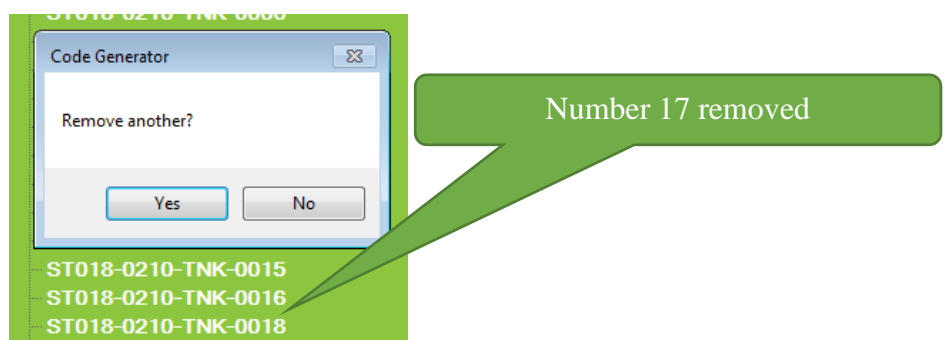


Figure 26: User prompted to remove more Tags

If the user has multiple Tags to remove, then selecting “Yes” in Figure 26 will allow more to be removed. A removed Tag, from your list, makes it an available sequence number when creating new Tags.

3.5.3. “Attributes” Button

Clicking the “Attributes” Button will allow the user to access the “Attributes” Form for the current set of Tags created. Further details into the “Attributes” Form is outlined in Section 4 of this document.

3.6. PARENTING ON CREATION OF TAGS

When equipment is added into Ellipse it is essential that the equipment is parented to another piece of equipment at the same site. This ensures that correct relations of two pieces of equipment can be seen and utilised, in relation to criticality and locality.

Automatically, the tool will generate a parent. This automatic parent is primitive in its determination of the parent and may be incorrect. To change the automatic parenting to one that is desirable and accurate, click on the Tag and press the button that appears above the Tags, next to the auto-generated parent. As shown below:

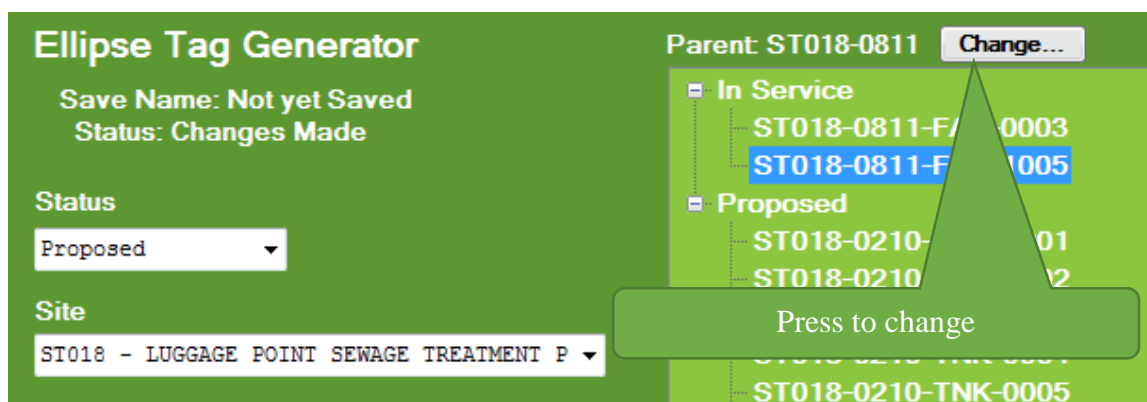


Figure 27: Showing and changing Parent

The process of picking a new parent is outlined in 4.1.1 of this Manual.

4. ASSIGNING ATTRIBUTES

The other main purpose of this tool is to allow the user to enter data for the equipment they have within their lists created in the “Create Tags” and “Modify/ Replace/ Dispose” Forms. If the user enters this form through the main menu, then the user is prompted to select the save they wish to provide attributes for using the following pop-up:

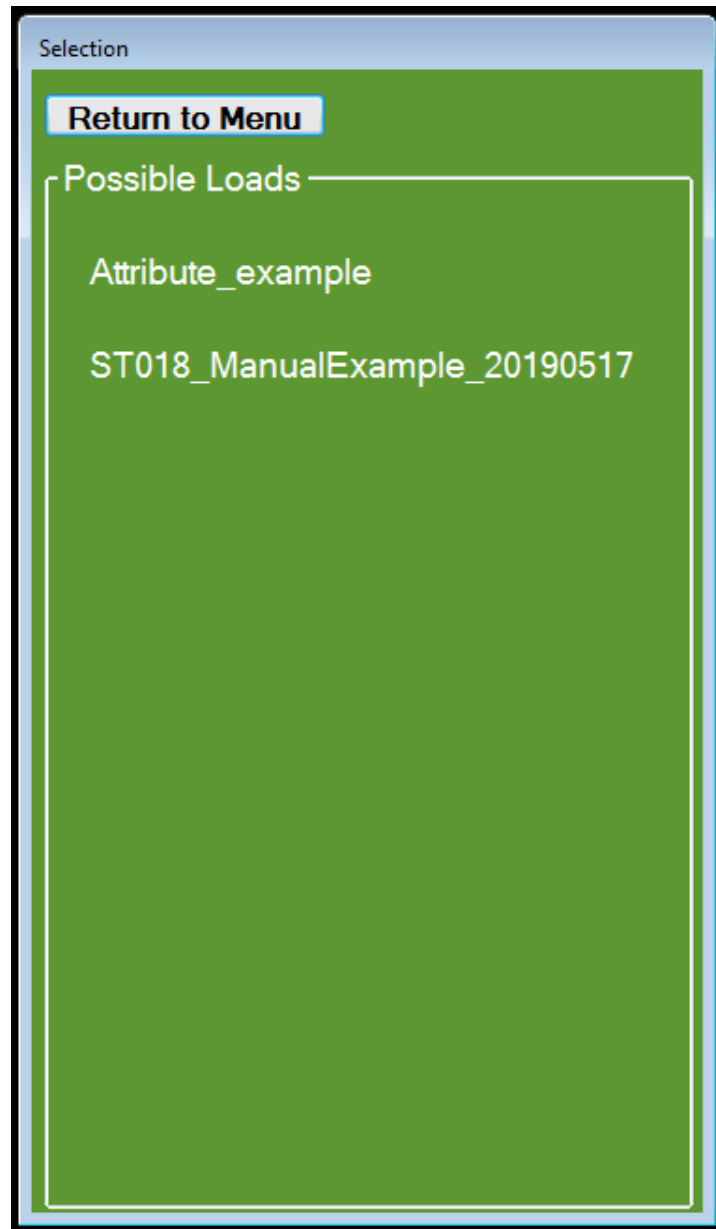


Figure 28: Load selection, from Menu

Once the user selects the desired save they wish to load, for this manual we shall use the “Attribute_Example” save, by clicking on the name, you will be presented with the attribute entry form. Shown on the following page:

Due to the size of this form, the pages will now be in landscape for the remainder of the Attribute Segment. The following is the form you will be presented when the form is first opened:

The screenshot shows a software window titled "Attribute Entry" with a menu bar containing "File" and "Help". The main interface is divided into two sections. On the left, under the heading "Attribute Entering", there is a status area with "Current Save:" and "Attributes not saved" next to it, and "Changes Saved:" below. Below this is a tree view of asset categories and their associated IDs:

- Fan
 - ST018-0811-FAN-0003
 - ST018-0811-FAN-0004
 - ST018-0811-FAN-0005
- Screen (Static)
 - ST018-0210-SCN-0001
 - ST018-0210-SCN-0002
 - ST018-0210-SCN-0003
- Filter
 - ST018-0210-FLT-0002
 - ST018-0210-FLT-0003
 - ST018-0210-FLT-0004
- VALVE
 - ST018-0230-VLV-0001
 - ST018-0230-VLV-0002
 - ST018-0230-VLV-0003
- Aerator
 - ST018-0512-AER-0001
 - ST018-0512-AER-0002
 - ST018-0512-AER-0003

The right section, titled "Attributes", is a large empty green area for data entry. At the bottom of the window, there are three buttons: "Tag -> Desc", "View in Excel", and "Return to Menu". The Queensland UrbanUtilities logo is in the bottom right corner.

Figure 29: Attribute Form

4.1. PROVIDING AND EDITING DATA

To provide data for any equipment item, simply click on the Tag you wish to provide data for. This will result in a varied result of required information based on the type of equipment selected. The following images show this variety:

The screenshot displays the 'Attribute Entry' application window. On the left, a tree view under 'Fan' lists several tags, including 'ST018-0811-FAN-0003'. The main area is a form titled 'Attributes' with a green background. It contains various input fields and dropdown menus organized in a grid. At the bottom, there are buttons for 'Tag -> Desc', 'Return to Menu', 'View in Excel', and 'Next Page'.

Attribute Entry		
File Help		
Attribute Entering		
Current Save:	Attributes not saved	
Changes Saved:		
<ul style="list-style-type: none">Fan<ul style="list-style-type: none">ST018-0811-FAN-0003ST018-0811-FAN-0004ST018-0811-FAN-0005Screen (Static)<ul style="list-style-type: none">ST018-0210-SCN-0001ST018-0210-SCN-0002ST018-0210-SCN-0003Filter<ul style="list-style-type: none">ST018-0210-FLT-0002ST018-0210-FLT-0003ST018-0210-FLT-0004VALVE<ul style="list-style-type: none">ST018-0230-VLV-0001ST018-0230-VLV-0002ST018-0230-VLV-0003Aerator<ul style="list-style-type: none">ST018-0512-AER-0001ST018-0512-AER-0002ST018-0512-AER-0003	Attributes	
Parent Plant No*:	Acquisition / Construct Date*:	Doc - O and M Manuals*:
ST018-0811	dd/mm/yyyy	
AR5 Area*:	Commission Date*:	Condition Score (Rating)*:
	dd/mm/yyyy	
AR6 Owner*:	Project (Daptive)*:	Condition Score - Date*:
		dd/mm/yyyy
AR2 Operation*:	Programme (Ellipse ProjectNo)*:	Condition Score - Source*:
Treatment		
AR1 Product*:	Purchase Order:	Consequence (Criticality)*:
AR7 Medium*:	Revaluation Value:	Consequence - Date*:
		dd/mm/yyyy
Supplier*:	Revaluation Date:	Consequence - Source*:
	dd/mm/yyyy	
Manufacturer*:	Written Down Value*:	Likelihood of Failure (Calc)*:
Make*:	Doc - Functional Spec*:	Risk (Condition Ranking)*:
Model*:	Doc - ASCON DRG*:	Replacement Cost Date -Orig*:
		dd/mm/yyyy
Tag (Current Physical):	Doc - Functional Control Diag*:	Replacement Cost Date -Current*:
		dd/mm/yyyy
Serial Number*:	Doc - Drawings*:	Replacement Cost Date -Source*:
		dd/mm/yyyy
Tag -> Desc		
Return to Menu		
View in Excel		
Next Page		

Figure 30: Fan Attribution

Attribute Entry
File Help

Attribute Entering

Current Save:
Attributes not saved
Changes Saved:

- Fan
 - ST018-0811-FAN-0003
 - ST018-0811-FAN-0004
 - ST018-0811-FAN-0005
- Screen (Static)
 - ST018-0210-SCN-0001
 - ST018-0210-SCN-0002
 - ST018-0210-SCN-0003
- Filter
 - ST018-0210-FLT-0002
 - ST018-0210-FLT-0003
 - ST018-0210-FLT-0004
- VALVE
 - ST018-0230-VLV-0001
 - ST018-0230-VLV-0002
 - ST018-0230-VLV-0003
- Aerator
 - ST018-0512-AER-0001
 - ST018-0512-AER-0002
 - ST018-0512-AER-0003

Tag -> Desc
Return to Menu

Attributes

Parent Plant No*: ST018-0210	Acquisition / Construct Date*: dd/mm/yyyy	Doc - O and M Manuals*:
AR5 Area*: 	Commission Date*: dd/mm/yyyy	Condition Score (Rating)*:
AR6 Owner*: 	Project (Daptive)*: 	Condition Score - Date*: dd/mm/yyyy
AR2 Operation*: Treatment	Programme (Ellipse ProjectNo)*: 	Condition Score - Source*:
AR1 Product*: 	Purchase Order: 	Consequence (Criticality)*:
AR7 Medium*: 	Revaluation Value: 	Consequence - Date*: dd/mm/yyyy
Supplier: 	Revaluation Date: dd/mm/yyyy	Consequence - Source*:
Manufacturer*: 	Written Down Value*: 	Likelihood of Failure (Calc)*:
Make*: 	Doc - Functional Spec*: 	Risk (Condition Ranking)*:
Model*: 	Doc - ASCON DRG*: 	Replacement Cost Date -Orig*: dd/mm/yyyy
Tag (Current Physical): 	Doc - Functional Control Diag*: 	Replacement Cost Date -Curre: dd/mm/yyyy
Serial Number*: 	Doc - Drawings*: 	Replacement Cost Date -Source: dd/mm/yyyy

View in Excel
Next Page

Figure 31: Screen Attribution

Attribute Entry
File Help

Attribute Entering

Current Save:
Attributes not saved
Changes Saved:

- Fan
 - ST018-0811-FAN-0003
 - ST018-0811-FAN-0004
 - ST018-0811-FAN-0005
- Screen (Static)
 - ST018-0210-SCN-0001
 - ST018-0210-SCN-0002
 - ST018-0210-SCN-0003
- Filter
 - ST018-0210-FLT-0002
 - ST018-0210-FLT-0003
 - ST018-0210-FLT-0004
- VALVE
 - ST018-0230-VLV-0001
 - ST018-0230-VLV-0002
 - ST018-0230-VLV-0003
- Aerator
 - ST018-0512-AER-0001
 - ST018-0512-AER-0002
 - ST018-0512-AER-0003

Tag -> Desc
Return to Menu

Attributes

Parent Plant No*: ST018-0230	Serial Number: 	Condition Score - Source*:
AR5 Area*: 	Acquisition / Construct Date*: dd/mm/yyyy	Consequence (Criticality)*:
AR6 Owner*: 	Commission Date*: dd/mm/yyyy	Consequence - Date*: dd/mm/yyyy
AR2 Operation*: Treatment	Project (Daptive)*: 	Consequence - Source*:
AR1 Product*: 	Programme (Ellipse ProjectNo)*: 	Likelihood of Failure (Calc)*:
AR7 Medium*: 	Purchase Order: 	Risk (Condition Ranking)*:
Supplier*: 	Revaluation Value: 	Replacement Cost Date -Orig*: dd/mm/yyyy
Manufacturer*: 	Revaluation Date: dd/mm/yyyy	Replacement Cost Date -Current*: dd/mm/yyyy
Make*: 	Written Down Value*: 	Replacement Cost Date -Source*: dd/mm/yyyy
Model*: 	Doc - ASCON DRG*: 	Replacement Cost Date -Updated*: dd/mm/yyyy
Design Specification*: 	Condition Score (Rating)*: 	Expected Lifespan*:
Tag (Current Physical)*: 	Condition Score - Date*: dd/mm/yyyy	Replacement Cost*:

View in Excel
Next Page

Figure 32: Valve Attribution

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4.1.1. Parent Selection

Every piece of equipment created in the Ellipse Equipment Register requires a parent, to correctly order the hierarchy that QUU employs. To give equipment a parent, simply click on the Parent Button within the attributes section of the form. Pressing this button will result in the following screen:



The image shows a 'Parent Selection' pop-up window. At the top, it says 'Choose a Parent for:' followed by the text 'ST018-0210-FLT-0004'. Below this is a large green rectangular area. At the bottom of the green area, there is a small icon and the text 'ST018'. Below the green area, there are two buttons: 'Tag -> Desc' and 'Return'.

Figure 33: Parent Selection Pop-up

From here, to select a parent, click on the parent value in the tree. This will appear as so:

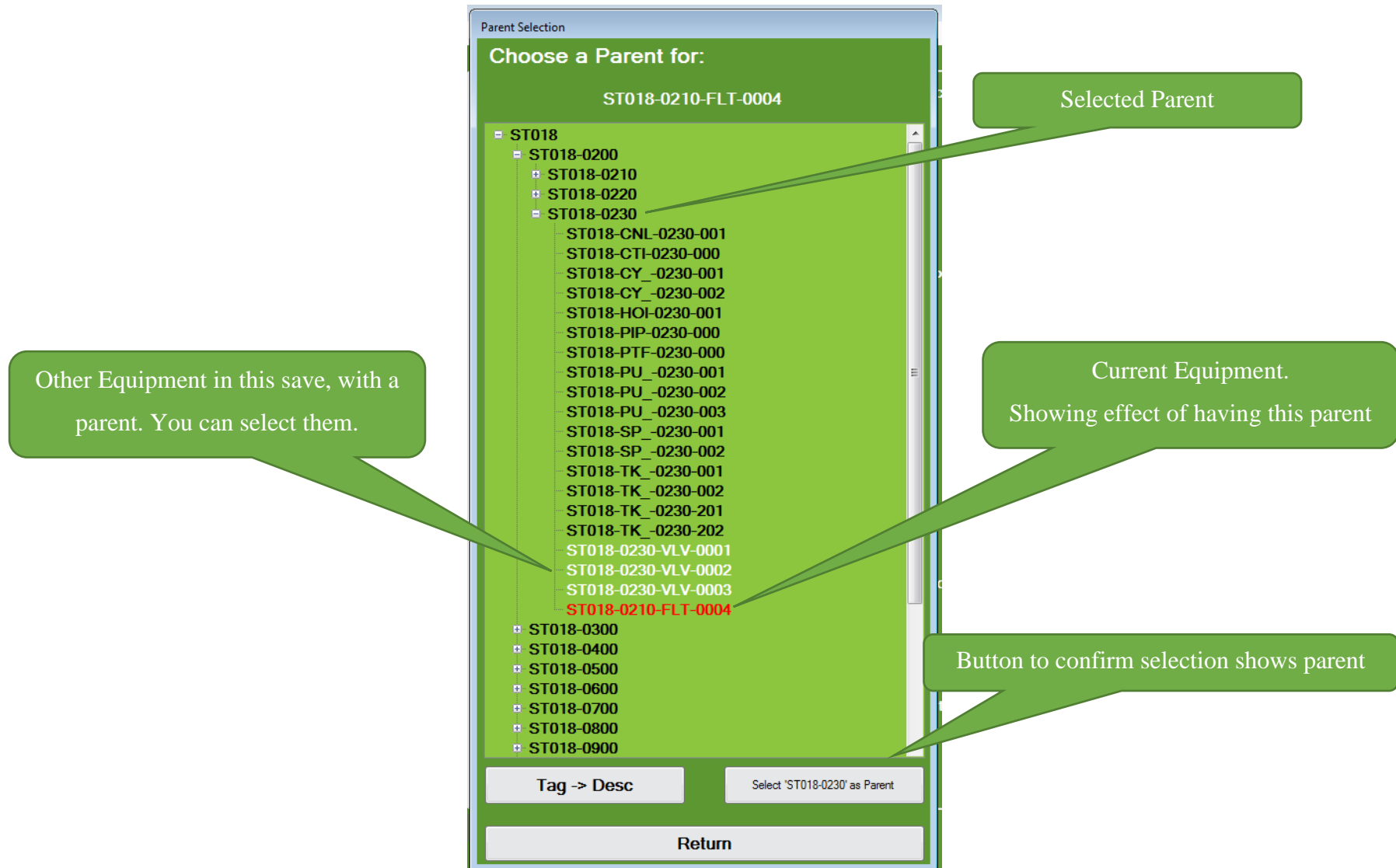


Figure 34: Parent Selection Pop-up after parent selection

It is also possible to change all the Tag Values to their Descriptions, by pressing the “Tag → Desc” Button:

Parent Selection

Choose a Parent for:

ST018-0210-FLT-0004

- ▣ LUGGAGE POINT SEWAGE TREATMENT PLANT
 - ▣ PRE TREATMENT
 - ▣ SCREENS
 - ▣ SCREENINGS WASHING
 - ▣ GRIT REMOVAL
 - CHANNEL GRIT
 - CONTROL AND INSTRUMENTATION
 - CYCLONE GRIT DREDGER 1
 - CYCLONE GRIT DREDGER 2
 - Lifting Beam, Sump Pump, Grit Removal
 - PIPEWORK AND VALVING
 - PLATFORM AND HANDRAIL
 - PUMP CENTRIFUGAL GRIT DREDGER 1
 - PUMP CENTRIFUGAL GRIT DREDGER 2
 - PUMP SUMP GRIT DREDGER
 - BRIDGE ASSEMBLY GRIT DREDGER 1
 - BRIDGE ASSEMBLY GRIT DREDGER 2
 - TANK GRIT HOPPER DREDGER 1
 - TANK GRIT HOPPER DREDGER 2
 - TANK GRIT STORAGE AND OUTLOADING 1
 - TANK GRIT STORAGE AND OUTLOADING 2
 - VALVE
 - VALVE
 - VALVE
 - ADDED VALUE
 - ▣ PRIMARY TREATMENT
 - ▣ SLUDGE TREATMENT
 - ▣ BIOLOGICAL TREATMENT
 - ▣ FINAL CLARIFICATION
 - ▣ DISINFECTION AND OUTFALL
 - ▣ ODOUR MANAGEMENT

Desc -> Tag Select 'ST018-0230' as Parent

Return

Figure 35: Parent Selection, Description Display

NOTE: You can still select a parent in this format.

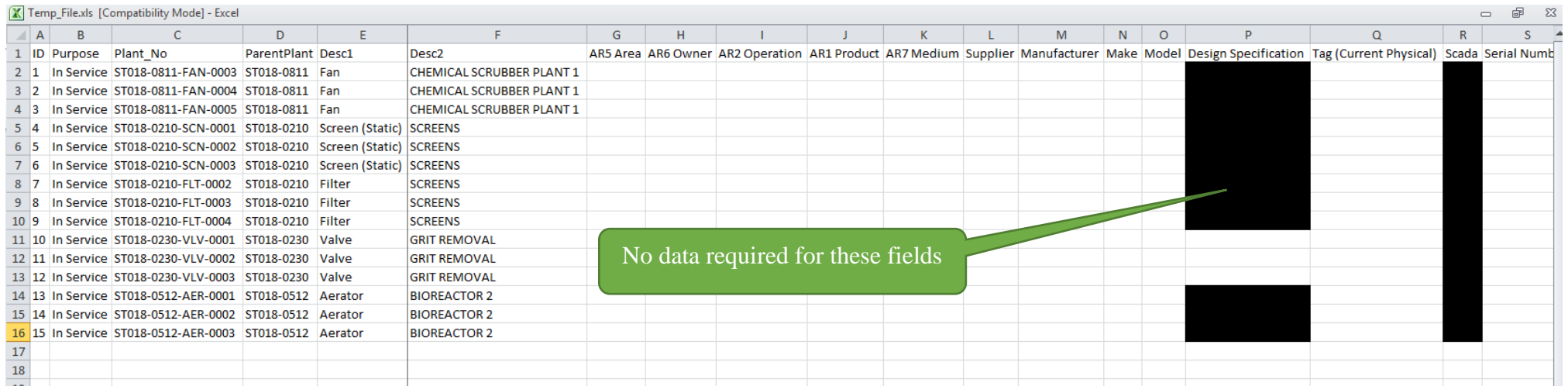
Once a selection is made, the user will press the “Select ‘ITEM SELECTED’ as Parent”. This will now be linked to the equipment you are currently providing information for, and will cause the button text to change to the parent you have selected; result shown below:

The screenshot shows the 'Attribute Entry' application window. On the left is a tree view of equipment categories: Fan, Screen (Static), Filter, VALVE, and Aerator, each with several sub-items. The main area is a form with multiple fields for data entry. A callout box points to the 'Parent Plant No*' field, which now contains the text 'ST018-0230'. Other fields include 'Acquisition / Construct Date*', 'Doc - O and M Manuals*', 'AR5 Area*', 'Commission Date*', 'Condition Score (Rating)*', 'AR6 Owner*', 'Project (Daptive)*', 'AR2 Operation*' (set to 'Treatment'), 'Programme (Ellipse ProjectNo)*', 'AR1 Product*', 'Purchase Order', 'Consequence (Criticality)*', 'AR7 Medium', 'Revaluation Value', 'Consequence - Date*', 'Supplier', 'Revaluation Date', 'Consequence - Source*', 'Manufacturer*', 'Written Down Value*', 'Likelihood of Failure (Calc)*', 'Make*', 'Doc - Functional Spec*', 'Risk (Condition Ranking)*', 'Model*', 'Doc - ASCON DRG*', 'Replacement Cost Date -Orig*', 'Tag (Current Physical)', 'Doc - Functional Control Diag*', 'Replacement Cost Date -Current', 'Serial Number*', 'Doc - Drawings*', and 'Replacement Cost Date -Source'. At the bottom are buttons for 'Tag -> Desc', 'Return to Menu', 'View in Excel', and 'Next Page'.

Figure 36: Attribute form after selecting parent

4.2. ALTERNATIVE DATA ENTRY

You may also wish to see all the data in tabulated form. This is possible by clicking the “See in Excel” Button. Pressing this button will open an instance of excel with the information that has previously been placed within the tool. It allows easy copy and pasting however, also locks the user from editing important cells. This can be seen below:



Temp_Files.xls [Compatibility Mode] - Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	ID	Purpose	Plant_No	ParentPlant	Desc1	Desc2	AR5 Area	AR6 Owner	AR2 Operation	AR1 Product	AR7 Medium	Supplier	Manufacturer	Make	Model	Design Specification	Tag (Current Physical)	Scada	Serial Num
2	1	In Service	ST018-0811-FAN-0003	ST018-0811	Fan	CHEMICAL SCRUBBER PLANT 1													
3	2	In Service	ST018-0811-FAN-0004	ST018-0811	Fan	CHEMICAL SCRUBBER PLANT 1													
4	3	In Service	ST018-0811-FAN-0005	ST018-0811	Fan	CHEMICAL SCRUBBER PLANT 1													
5	4	In Service	ST018-0210-SCN-0001	ST018-0210	Screen (Static)	SCREENS													
6	5	In Service	ST018-0210-SCN-0002	ST018-0210	Screen (Static)	SCREENS													
7	6	In Service	ST018-0210-SCN-0003	ST018-0210	Screen (Static)	SCREENS													
8	7	In Service	ST018-0210-FLT-0002	ST018-0210	Filter	SCREENS													
9	8	In Service	ST018-0210-FLT-0003	ST018-0210	Filter	SCREENS													
10	9	In Service	ST018-0210-FLT-0004	ST018-0210	Filter	SCREENS													
11	10	In Service	ST018-0230-VLV-0001	ST018-0230	Valve	GRIT REMOVAL													
12	11	In Service	ST018-0230-VLV-0002	ST018-0230	Valve	GRIT REMOVAL													
13	12	In Service	ST018-0230-VLV-0003	ST018-0230	Valve	GRIT REMOVAL													
14	13	In Service	ST018-0512-AER-0001	ST018-0512	Aerator	BIOREACTOR 2													
15	14	In Service	ST018-0512-AER-0002	ST018-0512	Aerator	BIOREACTOR 2													
16	15	In Service	ST018-0512-AER-0003	ST018-0512	Aerator	BIOREACTOR 2													
17																			
18																			
19																			

Figure 37: Tabulated Data Entry Option

Black cells are used to inform users that these fields are not required to be provided. Some fields within this sheet will have dropdown options. You will only be able to select an item out of the dropdown list. Once relevant data has been added, the user can simply close this window and the tool will update with the new information.

4.3. SAVING AND LOADING ATTRIBUTES

Saving the Attributes is as easy as saving tags, when you leave to the menu without saving you will be prompted, and you can use the “File → Save” Method. Unlike the tag saving, you will not need to provide a name; it will be saved as a subset of the already existing Tag list.

In the event the user opens the wrong Tag list from the menu, then simply use “File → Load” to open the correct Tag list. In the instance that changes have been made to this form, the user will be prompted to save current work.

For more information on how to save and load work, refer to the Tag section above, Sections 3.3 & 3.4.

5. EXPORTING WORK

To see the work the user has created through the use of the tool an export function is available. In this form, shown below, the user is able to extract all the tags they have developed while using the tool, all the attributes associated with a tag list, and export the final formatted submission form.

Figure 38: Export Form

Exporting allows users to easily track their stages of work outside of the program. The submission document/s will be given a location by the user where they can find the export files.

When a submission export is conducted, the files created should be attached to an email and sent to:

quu-m.e.equipmentrequest@UrbanUtilities.com.au

By sending this information to this address, tags can be updated in the Ellipse system. If the tags are approved and created in Ellipse, the user can continue their work with confidence in the tags they generated after following the steps outlined in Section 6.2.1.

6. ADDITONAL OPTIONS

When the user selects 'Additional Options' from the main menu they will be presented with the following screen, Figure 39:

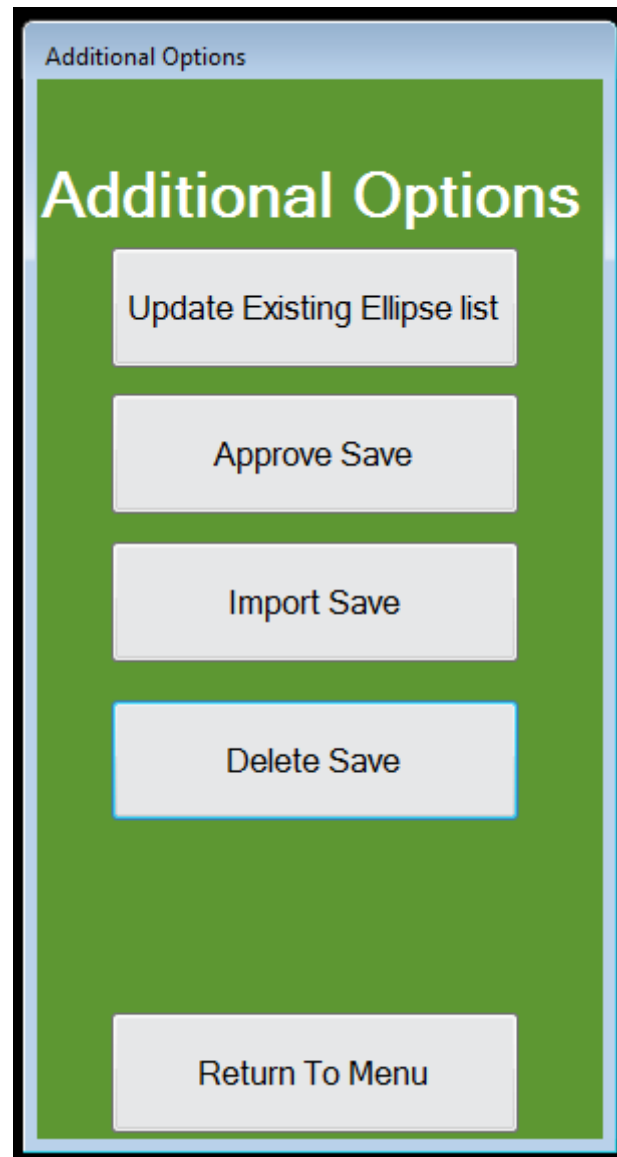


Figure 39: Additional Options window

This window allows the user to manipulate their database to achieve certain functions with their saves and to update the main equipment register. These options are outlined on the following page.

6.1. UPDATE EXISTING EQUIPMENT LIST

Due to the fact that the tool utilises a static extract of the Ellipse Equipment Register, it is necessary to allow a means to update the equipment list such that accurate tag generation can be achieved.

Monthly, the Ellipse Database is queried to extract a list of all existing equipment. When this button is selected an 'Open Dialog' is shown, the user will direct the program to the location of the data extract that you would have been provided from QUU. After you have selected the file path to this update document, the program will update your equipment list to reflect the most recent extract.

6.2. SAVE MANIPULATION

From the image shown in Figure 39, it can be seen that there are three options regarding saves.

6.2.1. Approve Save

When a submission has been made to the inbox outlined in the submission section, Section 5, then a return email will be received when the equipment request is actioned. If no issues arise, the email will inform you that the equipment has been approved and an excel sheet will be returned. Using this sheet, you can update your tool to approve your save. Similar to other actions in this tool, provide a file path to this Excel save location and it will automatically approve your save.

Once a save has been approved, it can no longer be accessed in relation to the Tag Generation Window, outlined in Section 3, it will however, allow you to provide attribution to the approved Tags.

To update a tag status from "Proposed" to "In Service" then provide the "Date Commissioned" attribute to the Tags and re-export a submission, then provide QUU with the exported data.

If the tags have not been approved then you will also receive an email of the changes the Tags will have to undergo to be approved.

6.2.2. *Import Save*

Since this tool does not have a shared database users that wish to work together on a project would not be able to without the utilisation of this option. It allows the sharing of a user created table. To share a save, have the intended sharer export their save, not submissions export (Section 5), and give this file to the recipient where they can upload it into their tool using this button.

Similar to updating the equipment list, provide the file path to the save and the user will be prompted to name this new table and the data will be added to their tool for their use.

This functionality can also be utilised to ascertain answers to questions the user may have in relation to visualising their data or bugs that they may be encountering, by providing their save to the developer or an advanced user the issues presented will be easily explained and identifiable allowing a quicker, easier, fix.

6.2.3. *Delete Save*

When you are completed with a save, Tags have been approved and the attribution data has been provided, and there is no need for this data anymore then the save can be deleted from the tool. To delete a save, simply click this button and choose the save you wish to delete, below is the view you will be presented with:

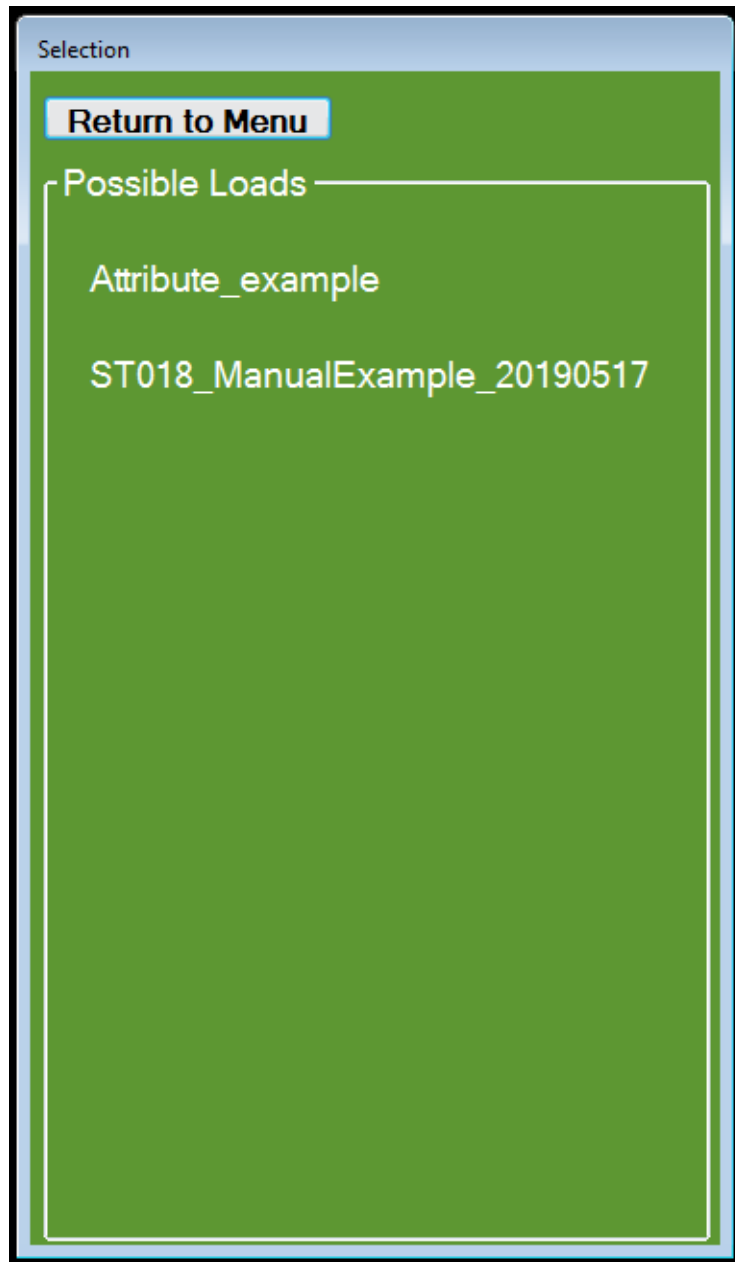


Figure 40: Selection Screen

This is the same selection window you would be presented with when entering the attribution screen, shown in Section 4 (pg. 24). When a save is selected you will be presented with the following confirmation of deletion, shown on following page.

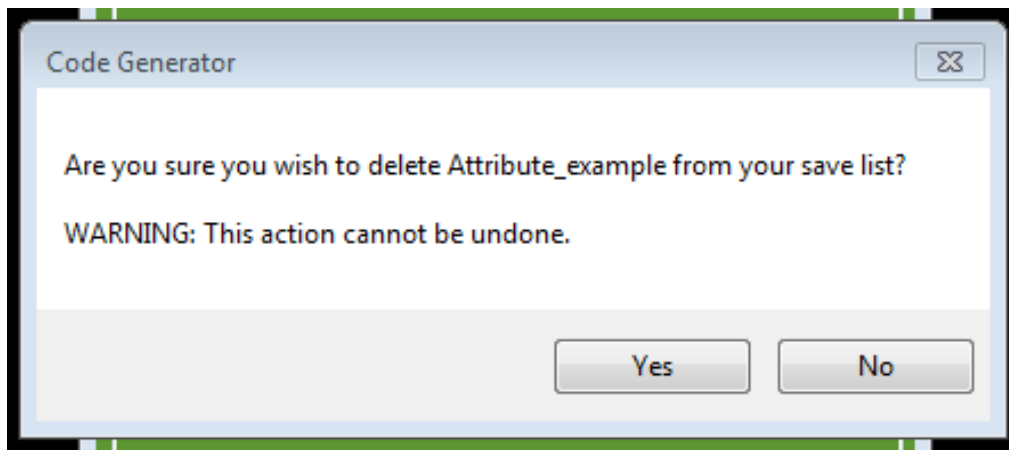


Figure 41: Confirmation of Deletion Pop-up

Selecting yes will result in the save being removed indefinitely. If a save has been exported, not a submission export, then it can be re-entered into the database at any time using the import functionality.

7. CONTACT AND ADDITIONAL INFORMATION

In the event of troubleshooting the tool, first consult this work instruction. If this document cannot solve the issues that have arisen or you wish to suggest an improvement to the tool, visual or functional, contact the following individuals:

- Davvid Edwards – Developer
(Davvid.Edwards@smec.com)
- Andrew Wearne – Senior Ellipse Co-ordinator
(Andrew.Wearne@UrbanUtilities.com.au)
- Gavin Sharp – Project Director
(Gavin.Sharp@UrbanUtilities.com.au)