

## Common Tags Admin and App December 2.22

## **FIRELIGHT BASE**



**COMMON TAGS ADMIN AND APP DECEMBER 2.22** 

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# Design Approach - Common Tags Admin and App Initiative

#### **Project Goals:**

- Eliminate mapping between carrier and distributor
- Improve speed to market
- Lower implementation costs
- No impact to existing rules and providers
- No impact to the outbound file passed to the client back-office systems

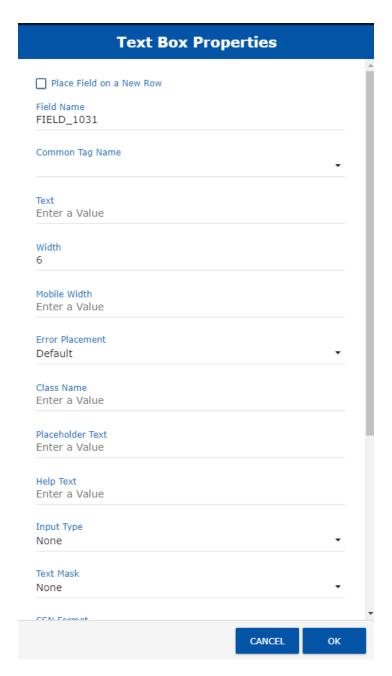
## 1 Common Tags Admin Enhancements

## 1.1 Add new Common Tag Name field to field properties in the Wizard Designer

Add new Common Tag Name field to field properties in the Wizard Designer. It will be the common field between carrier and distributor that is used to eliminate mapping rules. It will also be used for reporting purposes.

- 1. Common Tag Name field will be located directly below the current Name field (renamed Field Name).
- 2. Common Tag Name will be a dropdown list.
- 3. Common Tag Name can be NULL (add a blank at the top) set NULL as default when a new field is created, and Field Name has not been entered.
- 4. The search will be tied to this field, so users need to be able to type in this field.
- 5. Applies to the following control types: Text Box, DatePicker, Radio Button, Check Box, Dropdown List, Slider
- 6. Excluded from the following control types: Group, Panel, Text, Navigation Link, Divider, Increment Button, Image, Custom Action, Data Grid, Schedule, Address Autocomplete



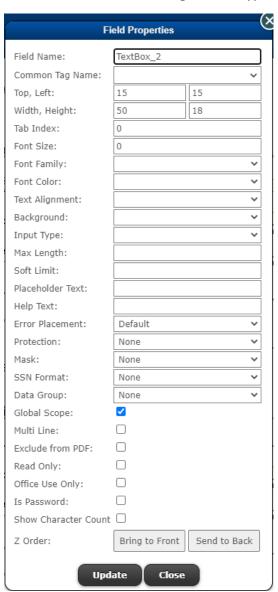


- New Common Tag Name field appears below Field Name.
- The Common Tag Name field is a dropdown list field.
- The Common Tag Name field is blank when a new field is added to a wizard.
- The Common Tag Name field contains the common tags in alphabetical order.
- The Common Tag Name field can be selected from the list.
- The common tag name appears on the correct field types and is excluded where defined.



## 1.2 Add new Common Tag Name field to field properties Form Designer

- 1. Common Tag Name field will be located directly below the current Name field (renamed Field Name).
- 2. Common Tag Name will be a dropdown list.
- 3. Common Tag Name can be NULL (add a blank at the top) set NULL as default when a new field is created, and Field has not been entered.
- 4. The search will be tied to this field, so users need to be able to type in this field.
- 5. Applies to the following control types: Text Box, Checkbox, Calendar, Radio Button, Combo Box, Signature Box, Signature Initials
- 6. Excluded from the following control types: Label, Bar Code, Button, Address Autocomplete

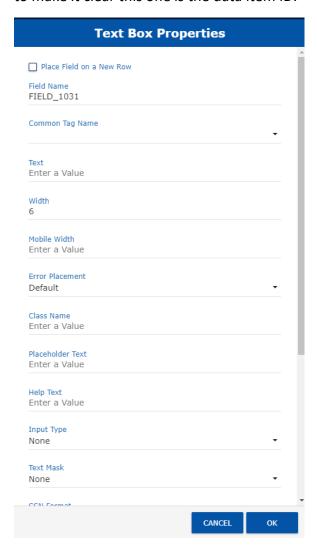




- New Common Tag Name field appears below Field Name.
- The Common Tag Name field is a dropdown list field.
- The Common Tag Name field is blank when a new field is added to a form.
- The Common Tag Name field contains the common tags in alphabetical order.
- The Common Tag Name field can be selected from the list.
- The common tag name appears on the correct field types and is excluded where defined.

## 1.3 Rename the current Name field to Field Name in Wizard Designer

Now that there are two name fields, rename the current Name field to Field Name in Wizard Designer to make it clear this one is the data item ID.



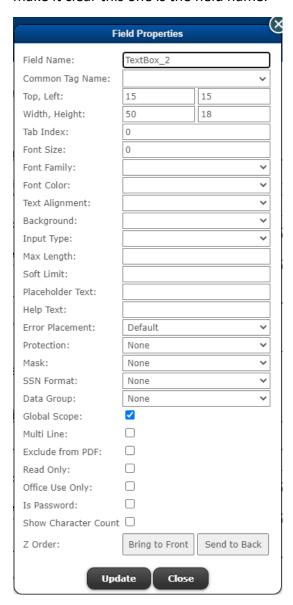
### Acceptance Criteria

• Name field in Wizard Designer for all control types is changed to Field Name.



## 1.4 Rename the current Name field to Field Name in Form Designer

Now that there are two name fields, rename the current Name field to Field Name in Form Designer to make it clear this one is the field name.



#### Acceptance Criteria

Name field in Form Designer for all control types is changed to Field Name.



## 1.5 Wizard: Set Common Tag Name if Field Name is exact match to Common Tag

If the user enters a Field Name that exactly matches a common tag, set the Common Tag Name when the user leaves the field. For example, if Field Name is set to Owner\_Gender, then set Common Tag Name to Owner Gender.

This applies when the Field Name is NULL and when the Field Name is changed from a saved value to a match a common tag. For example, Field Name is set to ClientSex and Common Tag Name is NULL or Common Tag Name is set to Annuitant\_Gender. Then the user changes Field Name to Owner\_Gender. In this example, the Common Tag Name is changed from Annuitant\_Gender to Owner\_Gender when the user leaves the Field Name field with a new value of Owner Gender.

When a common tag name exists and the user changes the Field Name that is not a common tag, do not change the common tag name. For example, Common Tag Name is set to Owner\_Gender. User changes the Field Name from Owner\_Gender or ClientSex to Client\_Sex which is not a common tag, then do not change the Common Tag Name field.

#### Acceptance Criteria

- Verify Common Tag Name is set to Field Name when it exactly matches a common tag.
- Verify it when a Field Name was NULL then changed to a value that matches a common tag.
- Verify it when a Field Name was a different saved value, then changed to a value that matches a common tag.
- Verify the Common Tag Name is updated when the user tabs off the Field Name field.
- Verify the Common Tag Name field is not set to the Field Name field when it does not match a common tag.
- Verify when the Common Tag Name field is set and the user changes the Field Name to something that is not a common tag then the Common Tag Name field does not change.

## 1.6 Form: Set Common Tag Name if Field Name is exact match to Common Tag

If the user enters a Field Name that exactly matches a common tag, set the Common Tag Name when the user leaves the field. For example, if Field Name is set to Owner\_Gender, then set Common Tag Name to Owner\_Gender.

This applies when the Field Name is NULL and when the Field Name is changed from a saved value to a match a common tag. For example, Field Name is set to ClientSex and Common Tag Name is NULL or Common Tag Name is set to Annuitant\_Gender. Then the user changes Field Name to Owner\_Gender. In this example, the Common Tag Name is changed from Annuitant\_Gender to Owner\_Gender when the user leaves the Field Name field with a new value of Owner\_Gender.

When a common tag name exists and the user changes the Field Name that is not a common tag, do not change the common tag name. For example, Common Tag Name is set to Owner\_Gender. User changes the Field Name from Owner\_Gender or ClientSex to Client\_Sex which is not a common tag, then do not change the Common Tag Name field.



- Verify Common Tag Name is set to Field Name when it exactly matches a common tag.
- Verify it when a Field Name was NULL then changed to a value that matches a common tag.
- Verify it when a Field Name was a different saved value, then changed to a value that matches a common tag.
- Verify the Common Tag Name is updated when the user tabs off the Field Name field.
- Verify the Common Tag Name field is not set to the Field Name field when it does not match a common tag.
- Verify when the Common Tag Name field is set and the user changes the Field Name to something that is not a common tag then the Common Tag Name field does not change.

## 1.7 Add Search to Common Tag Name in Wizard and Form Designers

Add search to the new Common Tag Name field to make it easier for clients to find the correct common tags by returning common tags that match any typed values. This search needs to be improved over the current 'contains' search on the Name field (data item ID). This search will not be dependent upon anything typed in the Field Name field.

Example 1: owner phone will return all common tags with any combo of these two words, Owner\_Type\_PhoneNumber, JointOwner\_Type\_PhoneNumber, and ContingentOwner\_Type\_PhoneNumber common tags, where the owner common tags will be at the top of the filtered list followed by contingent and joint owner phone tags.

Example 2: One word phone returns all PhoneNumber tags, Owner\_Type\_PhoneNumber tags, JointOwner\_Type\_PhoneNumber, ContingentOwner\_Type\_PhoneNumber, Annuitant\_Type\_PhomeNumber, Insured\_Type\_PhoneNumber, etc.

\*Where Type = Primary, Home, Business, Mobile, Alternate

- Search returns common tag names with values typed in the common tag name field, such as owner phone.
- Test search in all browsers to be sure it works.



## 1.8 Wizard: Add dropdown list specific functionality to list name dialog.

This dialog will be used to lead clients towards using common tag list names, which will eliminate the need for mapping between carrier and distributor and assist in cutting down on implementation time for new clients. It applies to Control Types: Dropdown List, Checkbox, Radio Button.

The dropdown list dialog in the wizard designer will have the following layout and functionality.

#### Field Properties:

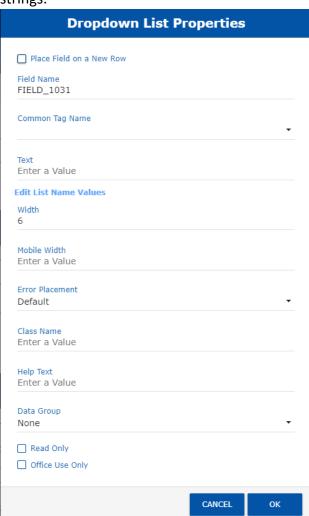
1. Add the link to open the dialog on the Edit List Name Values field (currently named Edit Source Items).

#### Dialog:

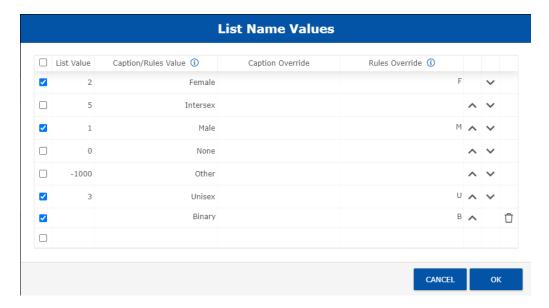
- 2. Columns left to right are: Select, List Value, Caption/Rules Value, Caption Override, and Rules Override.
- 3. Enabled and disabled dialog fields are as follows:
  - a. Enabled values on Common Tag List Rows: Select, Caption Override, and Rules Override
  - b. Disabled values on Common Tag List Rows: List Value and Caption/Rules Value
  - c. Enabled values on user-created rows: Select, Caption/Rules Value, and Rules Override
  - d. Disabled values on user-created rows: List Value and Caption Override
- 4. If a common tag is selected, the dialog values are populated from the selected Common Tag Name field.
- 5. List Value always contains a value if there is an associated Common Tag Name and is always blank on user-created rows.
- 6. Add Up / Down control on each row to allow the user to sort the list. This includes the last user-created row.
- 7. If Common Tag Name <> NULL and a list exists:
  - a. When the common tag is selected in the Common Tag Name field, the list is built.
  - b. All options are checked by default except the blank row at the end.
  - c. One blank unchecked row is inserted at the bottom. As soon as that row is checked, add a new blank unchecked row at the bottom.
  - d. User can check/uncheck all rows or specific rows.
- 8. If Common Tag Name = NULL or the selected common tag name does not have a list, and the user is opening the dialog for the first time:
  - a. Opens with one blank unchecked row.
  - b. As soon as that row is checked, add a new blank unchecked row at the bottom.
  - c. User can check/uncheck all rows or specific rows.
- 9. If Common Tag Name = NULL or the selected common tag name does not have a list, and the user is opening the dialog after it has been populated with data:
  - a. Opens with all previously selected and entered rows.
  - b. One blank unchecked row is inserted at the bottom. As soon as that row is checked, add a new blank unchecked row at the bottom.
  - c. User can check/uncheck all rows or specific rows.



- 10. If a row is not selected (unchecked), leave data as entered. Only save one blank row at the end of the grid.
- 11. Add standard OK/Cancel buttons to dialog.
  - a. If no row is selected, disable the OK button.
  - b. User-created rows, Caption/Rules Value is required. If any user-created row is checked and Caption/Rules Value is blank, disable the OK button.
- 12. Add a Delete icon to the end of all user-created rows that contain data (excludes empty row at the end).
- 13. Allow edits to Caption Override. String format and defaults to NULL. If Caption Override is blank, Caption is stored.
- 14. Allow edits to Rules Override. String format and defaults to NULL. If Rules Override is blank, Caption is stored.
- 15. JSON should contain Caption/Rules Value, Caption Override, and Rules Override fields.
- 16. The rows in the table should be stored as a JSON object array instead of a list of pipe delineated strings.







- Note1: All references to NULL are the same as blank.
- Note2: All references to a common tag name with a list, indicates a list is associated with the common tag name, such as Owner Gender.
- Note3: All references to a common tag name that does not have a list, indicates there is no list associated with the common tag name, such as Owner DOB.

#### **Dropdown List:**

- A dialog opens from the Edit List Name Values link.
- If a common tag name is selected with a list, the dialog values are populated from the selected Common Tag Name field.
- Dialog columns are Select, List Value, Caption/Rules Value, Caption Override, Rules Override.
- Enabled and disabled fields are:
  - Enabled values on Common Tag List Rows: Select, Caption Override, and Rules Override
  - Disabled values on Common Tag List Rows: List Value and Caption/Rules Value
  - Enabled values on user-created rows: Select, Caption/Rules Value, and Rules Override
  - Disabled values on user-created rows: List Value and Caption Override
- List Value always contains a value if there is an associated Common Tag Name and is always blank on user-created rows.
- Caption/Rules Value is disabled on common tag list rows and enabled on user-created rows.
- Up and down control moves rows in the selected direction to display the sort order in the App UI.
- If a common tag name is selected, all rows are checked by default the first time it is opened, except the last blank row.



- One blank unselected row always appears at the bottom of the list. When checked, a new blank unchecked row appears at the bottom. There is no limit to the number of user-created rows.
- Check/Uncheck All toggles by checking and unchecking all rows.
- If no common tag name is selected or the selected common tag name does not have a list:
  - User opens the first time: one unchecked blank row appears in the dialog.
  - User opens after populated with saved list: all previously entered rows and selections appear.
- If a row is not selected (unchecked), all data remains as entered. Only one blank row is able to be saved at the end of the grid.
- If no row is selected, OK button is disabled.
- Delete icon appears on user-created rows that contain data.
- If any user-created row is checked and Caption/Rules Value is blank, OK button is disabled.
- Can edit caption override on common tag list rows only defaults to blank. Can enter any value in the field.
- Can edit rules override defaults to blank. Can enter any value in the field.
- OK / Cancel buttons appear in the dialog.

## 1.9 Form: Add combo box specific functionality to list name dialog.

This dialog will be used to lead clients towards using common tag list names, which will eliminate the need for mapping between carrier and distributor and assist in cutting down on implementation time for new clients. It applies to Control Types: Combo Box, Checkbox, Radio Button.

The combo box dialog in the form designer will have the following layout and functionality.

#### Field Properties:

1. Add the link to open the dialog on the Edit List Name Values field (currently named Edit Source Items).

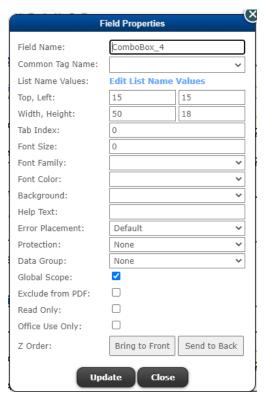
#### Dialog:

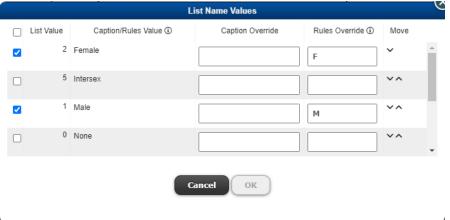
- 2. Columns left to right are: Select, List Value, Caption/Rules Value, Caption Override, and Rules Override.
- 3. Enabled and disabled dialog fields are as follows:
  - a. Enabled values on Common Tag List Rows: Select, Caption Override, and Rules Override
  - b. Disabled values on Common Tag List Rows: List Value and Caption/Rules Value
  - c. Enabled values on user-created rows: Select, Caption/Rules Value, and Rules Override
  - d. Disabled values on user-created rows: List Value and Caption Override
- 4. If a common tag is selected, the dialog values are populated from the selected Common Tag Name field.

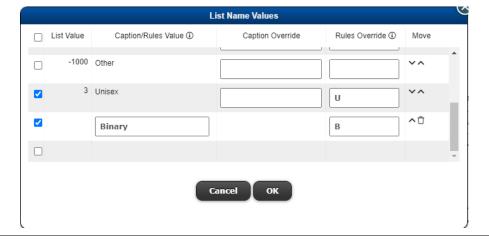


- 5. List Value always contains a value if there is an associated Common Tag Name and is always blank on user-created rows.
- 6. Add Up / Down control on each row to allow the user to sort the list. This includes the last user-created row.
- 7. If Common Tag Name <> NULL and a list exists:
  - a. When the common tag is selected in the Common Tag Name field, the list is built.
  - b. All options are checked by default except the blank row at the end.
  - c. One blank unchecked row is inserted at the bottom. As soon as that row is checked, add a new blank unchecked row at the bottom.
  - d. User can check/uncheck all rows or specific rows.
- 8. If Common Tag Name = NULL or the selected common tag name does not have a list, and the user is opening the dialog for the first time:
  - a. Opens with one blank unchecked row.
  - b. As soon as that row is checked, add a new blank unchecked row at the bottom.
  - c. User can check/uncheck all rows or specific rows.
- 9. If Common Tag Name = NULL or the selected common tag name does not have a list, and the user is opening the dialog after it has been populated with data:
  - a. Opens with all previously selected and entered rows.
  - b. One blank unchecked row is inserted at the bottom. As soon as that row is checked, add a new blank unchecked row at the bottom.
  - c. User can check/uncheck all rows or specific rows.
- 10. If a row is not selected (unchecked), leave data as entered. Only save one blank row at the end of the grid.
- 11. Add standard OK/Cancel buttons to dialog.
  - a. If no row is selected, disable the OK button.
  - b. User-created rows, Caption/Rules Value is required. If any user-created row is checked and Caption/Rules Value is blank, disable the OK button.
- 12. Add a Delete icon to the end of all user-created rows that contain data (excludes empty row at the end).
- 13. Allow edits to Caption Override. String format and defaults to NULL. If Caption Override is blank, Caption is stored.
- 14. Allow edits to Rules Override. String format and defaults to NULL. If Rules Override is blank, Caption is stored.
- 15. JSON should contain Caption/Rules Value, Caption Override, and Rules Override fields.
- 16. The rows in the table should be stored as a JSON object array instead of a list of pipe delineated strings.











- Note1: All references to NULL are the same as blank.
- Note2: All references to a common tag name with a list, indicates a list is associated with the common tag name, such as Owner Gender.
- Note3: All references to a common tag name that does not have a list, indicates there is no
  list associated with the common tag name, such as Owner\_DOB.

#### Dropdown List:

- A dialog opens from the Edit List Name Values link.
- If a common tag name is selected with a list, the dialog values are populated from the selected Common Tag Name field.
- Dialog columns are Select, List Value, Caption/Rules Value, Caption Override, Rules Override.
- Enabled and disabled fields are:
  - Enabled values on Common Tag List Rows: Select, Caption Override, and Rules Override
  - Disabled values on Common Tag List Rows: List Value and Caption/Rules Value
  - Enabled values on user-created rows: Select, Caption/Rules Value, and Rules Override
  - Disabled values on user-created rows: List Value and Caption Override
- List Value always contains a value if there is an associated Common Tag Name and is always blank on user-created rows.
- Caption is disabled on common tag list rows and enabled on user-created rows.
- Up and down control moves rows in the selected direction to display the sort order in the App UI.
- If a common tag name is selected, all rows are checked by default the first time it is opened, except the last blank row.
- One blank unselected row always appears at the bottom of the list. When checked, a new blank unchecked row appears at the bottom. There is no limit to the number of user-created rows.
- Check/Uncheck All toggles by checking and unchecking all rows.
- If no common tag name is selected or the selected common tag name does not have a list:
  - User opens the first time: one unchecked blank row appears in the dialog.
  - User opens after populated with saved list: all previously entered rows and selections appear.
- If a row is not selected (unchecked), all data remains as entered. Only one blank row is able to be saved at the end of the grid.
- Delete icon appears on user-created rows that contain data.
- Can edit caption override on common tag list rows only- defaults to blank. Can enter any value in the field.
- Can edit rules override defaults to blank. Can enter any value in the field.



- OK / Cancel buttons appear in the dialog.
- If no row is selected, OK button is disabled.
- If any user-created row is checked and Caption/Rules Value is blank, OK button is disabled.

## 1.10 Wizard: Add checkbox and radio button specific functionality list name dialog

This dialog will be used to lead clients towards using common tag list names, which will eliminate the need for mapping between carrier and distributor and assist in cutting down on implementation time for new clients. It applies to Control Types: Dropdown List, Checkbox, Radio Button.

The checkbox and radio dialog in the wizard designer will have the following layout and functionality.

#### Field Properties:

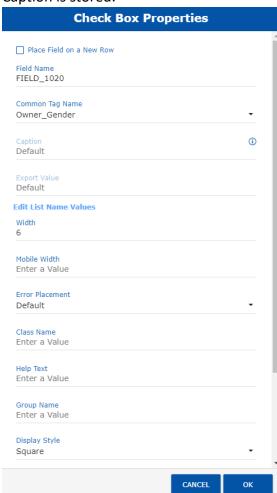
- 1. Relabel the Text field in the field properties as Caption and add a tooltip.
- 2. Move the Export Value field below the Caption field.
- 3. Add a link to the Export Value field to open dialog if applicable (see below).

#### Dialog:

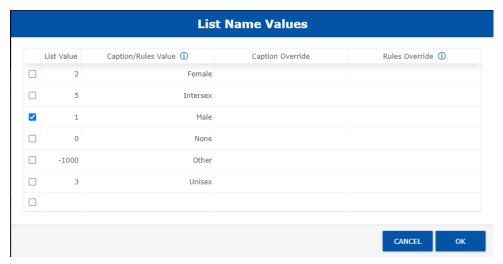
- 4. Columns left to right are Select, List Value, Caption/Rules Value, Caption Override, Rules Override.
- 5. If a common tag is selected, the dialog values are populated from the selected Common Tag Name field.
- 6. If Common Tag Name <> NULL and a list exists, add a link 'Edit List Name Values' to the Export Value field to open dialog and:
  - a. Disable Caption/Rules Value field in field properties. Default to 'Default' before a list is saved.
  - b. Add a tooltip to Caption: The Caption/Rules Value and Export Value fields are disabled if a Common Tag Name is selected and filled from the rules override value.
  - c. Disable the Export Value field.
  - d. Enabled and disabled dialog fields are as follows:
    - Enabled values on Common Tag List Rows: Select (see exceptions below), Caption Override, and Rules Override
    - ii. Disabled values on Common Tag List Rows: List Value and Caption/Rules Value
    - iii. Enabled values on user-created rows: Select (see exceptions below), Caption/Rules Value, and Rules Override
    - iv. Disabled values on user-created rows: List Value and Caption Override
  - e. List Value always contains a value if there is an associated Common Tag Name and is always blank on user-created rows.
  - f. All rows are unchecked by default.
  - g. Check/Uncheck All option does not appear (visible only in the dropdown list).



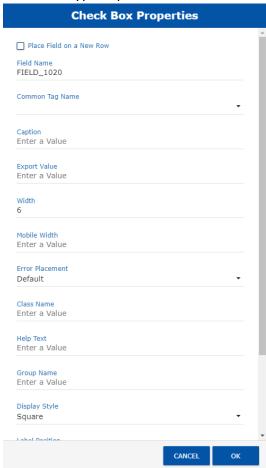
- h. One blank unchecked row appears as the last row when the list opens. More than one row cannot be added.
- User can only select one row.
- j. If a row is not selected (unchecked), leave data as entered. Only save one blank row at the end of the grid.
- k. When the user closes the dialog, the Caption/Rules Value in the selected row is inserted in the disabled Caption field (formerly Text field).
- I. When the user closes the dialog, the Rules Override value will show in the disabled Export Value field. If Rules Override is blank, display the Caption. If both are blank, leave blank.
- m. Add standard OK/Cancel buttons to dialog.
  - i. If no row is selected, disable the OK button.
  - ii. User-created row, Caption/Rules Value is required. If the user-created row is checked and Caption/Rules Value is blank, disable the OK button.
- n. Allow edits to Caption Override. String format and defaults to NULL. If Caption Override is blank, Caption is stored.
- o. Allow edits to Rules Override. String format and defaults to NULL. If Rules Override is blank, Caption is stored.







- 7. If Common Tag Name = NULL or the selected common tag name does not have a list, remove the link to open the dialog and tooltip.
  - a. Enable the Caption and Export Value fields.
  - b. Default Caption field in field properties to 'Enter a Value'. Users can type value.
  - c. Users can type Export Value.





- Note1: All references to NULL are the same as blank.
- Note2: All references to a common tag name with a list, indicates a list is associated with the common tag name, such as Owner Gender.
- Note3: All references to a common tag name that does not have a list, indicates there is no list associated with the common tag name, such as Owner DOB.

#### Checkbox / Radio Button:

- Text field label changed to Caption.
- Tooltip is shown on the Caption field with the correct text if a common tag name is selected, else it does not appear.
- Export Value field position moved to below Caption field.
- If a common tag name is selected with a list, in the field properties:
- The caption field is disabled and defaults to Default before the list is saved.
- The export field is disabled and a link Edit List Name Values opens the dialog.
- If a common tag name is not selected or the selected common tag name does not have a list:
- The link to open the dialog does not exist and the Caption and Export Value fields are enabled.
- Can type caption value.
- Can type export value.
- Dialog columns are Select, List Value, Caption/Rules Value, Caption Override, Rules Override.
- Enabled and disabled fields are:
  - Enabled values on Common Tag List Rows: Select (see exceptions below), Caption Override, and Rules Override
  - Disabled values on Common Tag List Rows: List Value and Caption/Rules Value
  - Enabled values on user-created rows: Select (see exceptions below), Caption/Rules Value, and Rules Override
  - Disabled values on user-created rows: List Value and Caption Override
- List Value always contains a value if there is an associated Common Tag Name and is always blank on user-created rows.
- Caption/Rules Value in the dialog is disabled on common tag list rows; enabled on usercreated rows.
- All rows are unchecked by default when first opened.
- Check/Uncheck All does not appear.
- Page up / down does not appear on any rows.
- Users can only select one row at a time.
- No additional user rows are added when the blank row is selected.



- If a row is not selected (unchecked), all data remains as entered. Only one blank row is able to be saved at the end of the grid.
- Upon dialog close, the Caption/Rules Value in the selected row is inserted in the disabled Caption field.
- Upon dialog close, the Rules Override value will show in the disabled Export Value field. If Rules Override is blank, Caption is displayed. If both are blank, Export Value is blank (shows Default).
- If no row is selected, OK button is disabled.
- If the user-created row is checked and Caption/Rules Value is blank, OK button is disabled.
- Can edit caption override on common tag name list rows defaults to blank. Can enter any value in the field.
- Can edit rules override defaults to blank. Can enter any value in the field.
- OK / Cancel buttons appear in the dialog.

## 1.11 Form: Add checkbox and radio button specific functionality list name dialog

This dialog will be used to lead clients towards using common tag list names, which will eliminate the need for mapping between carrier and distributor and assist in cutting down on implementation time for new clients. It applies to Control Types: Combo Box, Checkbox, Radio Button.

The checkbox and radio dialog in the form designer will have the following layout and functionality.

#### Field Properties:

- 1. Move the Export Value field below the Common Tag Name field.
- 2. Add a link to open dialog if applicable (see below).

  Note: there is no Text/Caption field in field properties on Forms.

#### Dialog:

- 3. Columns left to right are Select, List Value, Caption/Rules Value, Rules Override.

  Note: Caption Override is removed from the dialog since it does not apply (visible in the wizard checkbox/radio button and form combo box).
- 4. If a common tag is selected, the dialog values are populated from the selected Common Tag Name field.
- 5. If Common Tag Name <> NULL and a list exists, add a link 'Edit List Name Values' to the Export Value field to open dialog and:
  - a. Disable the Export Value field. Default to 'Default' before a list is saved.
  - b. Enabled and disabled dialog fields are as follows:
    - i. Enabled values on Common Tag List Rows: Select (see exceptions below) and Rules
       Override
    - ii. Disabled values on Common Tag List Rows: List Value and Caption/Rules Value

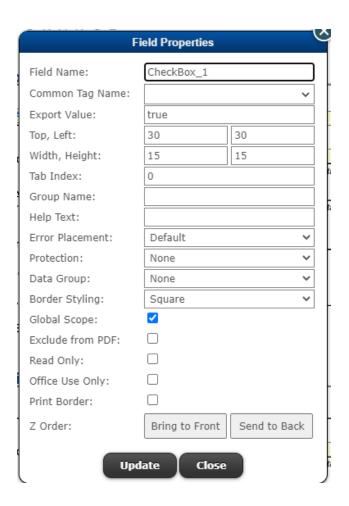


- iii. Enabled values on user-created rows: Select (see exceptions below), Caption/RulesValue, and Rules Override
- iv. Disabled values on user-created rows: List Value
- c. List Value always contains a value if there is an associated Common Tag Name and is always blank on user-created rows.
- d. All rows are unchecked by default.
- e. Check/Uncheck All option does not appear (visible only in the combo box).
- f. One blank unchecked row appears as the last row when the list opens. More than one row cannot be added.
- g. User can only select one row.
- h. If a row is not selected (unchecked), leave data as entered. Only save one blank row at the end of the grid.
- i. When the user closes the dialog, the Rules Override value will show in the disabled Export Value field. If Rules Override is blank, display the Caption. If both are blank, leave blank.
- j. Add standard OK/Cancel buttons to dialog.
  - i. If no row is selected, disable the OK button.
  - ii. User-created row, Caption/Rules Value is required. If the user-created row is checked and Caption/Rules Value is blank, disable the OK button.
- k. Allow edits to Rules Override. String format and defaults to NULL. If Rules Override is blank, Caption is stored.



- 6. If Common Tag Name = NULL or the selected common tag name does not have a list, remove the link to open the dialog and enable the Export Value field.
  - a. Users can type Export Value.





- Note1: All references to NULL are the same as blank.
- Note2: All references to a common tag name with a list, indicates a list is associated with the common tag name, such as Owner\_Gender.
- Note3: All references to a common tag name that does not have a list, indicates there is no list associated with the common tag name, such as Owner\_DOB.

#### Checkbox / Radio Button:

- Export Value field position moved to below Common Tag Name field.
- If a common tag name is selected with a list, in the field properties:
- The export field is disabled and a link Edit List Name Values opens the dialog.
- If a common tag name is not selected or the selected common tag name does not have a list:
  - The link to open the dialog does not exist and the Export Value field is enabled.
  - Can type export value.



- Dialog columns are Select, List Value, Caption/Rules Value, Rules Override. Caption Override does not appear.
- Enabled and disabled fields are:
  - Enabled values on Common Tag List Rows: Select (see exception below) and Rules
     Override
  - Disabled values on Common Tag List Rows: List Value and Caption/Rules Value
  - Enabled values on user-created rows: Select (see exception below), Caption/Rules Value, and Rules Override
  - Disabled values on user-created rows: List Value
- List Value always contains a value if there is an associated Common Tag Name and is always blank on the user-created row.
- All rows are unchecked by default when first opened.
- Check/Uncheck All does not appear.
- Page up / down does not appear on any rows.
- Users can only select one row at a time.
- No additional user rows are added when the blank row is selected.
- If a row is not selected (unchecked), all data remains as entered. Only one blank row is able to be saved at the end of the grid.
- Upon dialog close, the Rules Override value will show in the disabled Export Value field. If Rules Override is blank, Caption is displayed. If both are blank, Export Value is blank (shows Default).
- If no row is selected, OK button is disabled.
- If the user-created row is checked and Caption/Rules Value is blank, OK button is disabled.
- Can edit rules override defaults to blank. Can enter any value in the field.
- OK / Cancel buttons appear in the dialog.

## 1.12 Wizard: Build dropdown list when adding or changing the Common Tag Name field

Build the list the first time the common tag name is selected, and the list dialog is opened. The user can change the Common Tag Name field after it has been selected. Add logic for all the scenarios on the Wizard dropdown list fields.

- 1. If Common Tag Name changed from NULL to <> NULL and a list exists and the list dialog is opened the first time, automatically add the list from the Common Tag Name list. When the list dialog is opened, all common tag list items are selected by default.
- 2. If Common Tag Name changed from NULL to <> NULL and a list exists and the list dialog is opened after the first time, automatically add the list from the Common Tag Name list. When the list dialog is opened, all common tag list items are unselected by default. Append any user-created rows from the prior list to the bottom of the new list with the same selections checked.



Since FireLight is not merging common tag rows with the prior list, users may see duplicate rows in the list, one from the newly selected common tag and the other which was an existing row prior to adding the common tag. The difference will be the common tag row has a list value and the existing row does not; if an export value existed it is now shown in the Rules Override.

- 3. If Common Tag Name changed from one common tag with a list to another that has a list, automatically reset the list to the new Common Tag Name list. When the list dialog is opened, all are selected by default. Append any user-created rows from the prior list to the bottom of the new list with the same selections checked.
- 4. If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag with no list, include only the selected rows from the prior list in the new list. Automatically move the List Value if not blank and set the Rules Override = to the List Value if Rules Override = NULL, else do not change the Rules Override (the list value will be blank after it is moved).

Add message when Common Tag Name is changed and a list was already built: You are changing the saved list name values and sort order, do you want to proceed? OK / Cancel. If Cancel is selected, default to the prior value.

Note: If the user changes the Field Name to a common tag and that automatically updates the Common Tag Name field that contains a value, the message appears that the saved list is being changed. If OK is selected the Common Tag Name is updated. If Cancel is selected, the Common Tag Name is not updated and the Field Name field is retained.

#### Example:

Field Name = ClientGender

Common Tag Name = Insured\_Gender

List is opened, a selection is made, user row entered, etc. Saved

Now change the Field Name to Owner\_Gender

Common Tag Name automatically changes to Owner\_Gender

Message appears - user selects [Cancel].

Field Name is Owner\_Gender

#### Acceptance Criteria

- Common Tag Name changed from NULL to <> NULL and a list exists, automatically add the list from the Common Tag Name list. If applicable, user-created rows from the prior list appear at the bottom.
- Verify when a common tag name is added to a field with an existing list in 2.21 and the dialog
  is opened the first time in 2.22 that all existing prior rows with export values are cleared from
  the List Value field and moved to the Rules Override field.

Common Tag Name is Insured Gender



- If Common Tag Name changed from one common tag with a list to another that has a list, the list is reset to the new Common Tag Name list. If applicable, user-created rows from the prior list appear at the bottom.
- If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag with
  no list, only the selected rows from the prior list appear in the new list as checked. All List
  Values are cleared. If applicable, Rules Override is set to the prior List Value if Rules Override
  was blank, else Rules Override is not reset.
- When the common tag name field is changed and a saved list exists, see a warning message:
   You are changing the saved list name values and sort order, do you want to proceed? OK / Cancel.
- If OK is selected, then the common tag name field and list are reset accordingly.
- If Cancel is selected, then the common tag name field is not changed.
- Test example with automatic Common Tag Name field change and Cancel (see bottom of Description).

## 1.13 Form: Build checkbox / radio button list when adding or changing the Common Tag Name field

Build the list the first time the common tag name is selected, and the list dialog is opened. The user can change the Common Tag Name field after it has been selected. Add logic for all the scenarios on the Form checkbox and radio button fields.

- If Common Tag Name changed from NULL to <> NULL and a list exist, disable the export value and
  caption fields, and enable the link to open the dialog. Build the list from the selected common tag
  name field. If an export value and/or caption was entered prior to selecting a common tag, in the
  blank row at the bottom, insert the caption in the Caption field, set the Rules Override according
  to the Versioning Manager and check the row.
- If Common Tag Name changed from one common tag with a list to another that has a list, automatically reset the list to the new Common Tag Name list. If it applies, add the data from the checked user-created row in the prior list in the last row of the new list with the same selection checked.
- 3. If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag name with no list, and one row was selected in the prior list, and a Rules Override was entered, insert the Rules Override in the enabled Export Value field, else if no Rules Override, insert the List Name in the enabled Export Value field. If both are blank, then the Export Value is blank.
- 4. Add message when Common Tag Name is changed and a list was already built: You are changing the saved list name values, do you want to proceed? OK / Cancel. If Cancel is selected, default to the prior Common Tag Name value.

**Note**: If the user changes the Field Name to a common tag and that automatically updates the Common Tag Name field that contains a value, the message appears that the saved list is being



changed. If OK is selected the Common Tag Name is updated. If Cancel is selected, the Common Tag Name is not updated, and the Field Name field is retained.

Example:

Field Name = ClientGender

Common Tag Name = Insured Gender

List is opened, a selection is made, user row entered, etc. Saved

Now change the Field Name to Owner Gender

Common Tag Name automatically changes to Owner Gender

Message appears - user selects [Cancel].

Field Name is Owner Gender

Common Tag Name is Insured Gender

#### Acceptance Criteria

- If Common Tag Name changed from NULL to <> NULL and a list exists, and an export value
  was entered prior to the change, export value field is disabled, and link to open the dialog is
  enabled. In the blank checked row at the bottom, the export value appears in the List Name
  and Rules Override fields.
- Test for different rules override values
- If Common Tag Name changed from one common tag with a list to another that has a list, the
  list is reset to the new Common Tag Name list. If it applies, data from the checked usercreated last row in the prior list appears in the new list as the last row with the selection
  checked.
- If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag name with no list, and one row was selected in the prior list, and a Rules Override was entered, the Rules Override appears in the enabled Export Value field, else if no Rules Override, the List Name appears in the enabled Export Value field. If both are blank, then the Export Value is
- When the common tag name field is changed and a saved list exists, see a warning message: You are changing the saved list name values, do you want to proceed? OK / Cancel.
- If OK is selected the common tag name field and list are reset accordingly.
- If Cancel is selected the common tag name field is not changed.
- Verify a slightly different message appears on checkbox than combo box.
- Test example with automatic Common Tag Name field change and Cancel (see bottom of Description).

## 1.14 Wizard: Build checkbox / radio button list when adding or changing the Common Tag Name field

Build the list the first time the common tag name is selected, and the list dialog is opened. The user can change the Common Tag Name field after it has been selected. Add logic for all the scenarios on the Wizard checkbox and radio button fields.



- 1. If Common Tag Name changed from NULL to <> NULL and a list exist, disable the export value and caption fields, and enable the link to open the dialog. Build the list from the selected common tag name field. If an export value and/or caption was entered prior to selecting a common tag, in the blank row at the bottom, insert the caption in the Caption field, set the Rules Override according to the Versioning Manager and check the row.
- 2. If Common Tag Name changed from one common tag with a list to another that has a list, automatically reset the list to the new Common Tag Name list. If it applies, add the data from the user-created row in the prior list in the last row of the new list with the same selection checked.
- 3. If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag name with no list, and one row was selected in the prior list, and a Rules Override was entered, insert the Rules Override in the enabled Export Value field, else if no Rules Override, insert the List Value in the enabled Export Value field. If both are blank, then the Export Value is blank. Additionally, insert the Caption/Rules Value from the dialog in the field properties Caption.

Add message when Common Tag Name is changed and a list was already built: You are changing the saved list name values, do you want to proceed? OK / Cancel. If Cancel is selected, default to the prior Common Tag Name value.

Note: If the user changes the Field Name to a common tag and that automatically updates the Common Tag Name field that contains a value, the message appears that the saved list is being changed. If OK is selected the Common Tag Name is updated. If Cancel is selected, the Common Tag Name is not updated and the Field Name field is retained.

#### Example:

Field Name = ClientGender

Common Tag Name = Insured\_Gender

List is opened, a selection is made, user row entered, etc. Saved

Now change the Field Name to Owner\_Gender

Common Tag Name automatically changes to Owner\_Gender

Message appears - user selects [Cancel].

Field Name is Owner\_Gender

Common Tag Name is Insured\_Gender

Field Name is Owner\_Gender

Common Tag Name is Insured Gender

#### Acceptance Criteria

 If Common Tag Name changed from NULL to <> NULL and a list exists, and an export value and/or caption were entered prior to the change, export value and caption fields are disabled, and link to open the dialog is enabled. In the blank checked row at the bottom, the export value appears in the List Name and Rules Override fields, and the caption appears in the Caption.



- Test for different rules override values
- If Common Tag Name changed from one common tag with a list to another that has a list, the list is reset to the new Common Tag Name list. If it applies, data from the checked user-created last row in the prior list appears in the new list as the last row with the selection checked.
- If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag name with no list, and one row was selected in the prior list, and a Rules Override was entered, the Rules Override appears in the enabled Export Value field, else if no Rules Override, the List Name appears in the enabled Export Value field. If both are blank, then the Export Value is blank. Additionally, the caption in the selected row appears in the enabled Caption field.
- When the common tag name field is changed and a saved list exists, see a warning message: You are changing the saved list name values, do you want to proceed? OK / Cancel.
- If OK is selected the common tag name field and list are reset accordingly.
- If Cancel is selected the common tag name field is not changed.
- Verify a slightly different message appears on checkbox than combo box.
- Test example with automatic Common Tag Name field change and Cancel (see bottom of Description).

## 1.15 Form: Build combo box when adding or changing the Common Tag Name field

Build the list the first time the common tag name is selected, and the list dialog is opened. The user can change the Common Tag Name field after it has been selected. Add logic for all the scenarios on the Form combo box fields.

- 1. If Common Tag Name changed from NULL to <> NULL and a list exists and the list dialog is opened the first time, automatically add the list from the Common Tag Name list. When the list dialog is opened, all common tag list items are selected by default.
- 2. If Common Tag Name changed from NULL to <> NULL and a list exists and the list dialog is opened after the first time, automatically add the list from the Common Tag Name list. When the list dialog is opened, all common tag list items are unselected by default. Append any user-created rows from the prior list to the bottom of the new list with the same selections checked.
  - Since FireLight is not merging common tag rows with the prior list, users may see duplicate rows in the list, one from the newly selected common tag and the other which was an existing row prior to adding the common tag. The difference will be the common tag row has a list value and the existing row does not; if an export value existed it is now shown in the Rules Override.
- 3. If Common Tag Name changed from one common tag with a list to another that has a list, automatically reset the list to the new Common Tag Name list. When the dialog is opened, all are selected by default. Append any user-created rows from the prior list to the bottom of the new list with the same selections checked.



4. If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag with no list, include only the selected rows from the prior list in the new list. Automatically delete the List Value if not blank and set the Rules Override = to the List Value if Rules Override = NULL, else do not change the Rules Override.

Add message when Common Tag Name is changed and a list was already built: You are changing the saved list name values and sort order, do you want to proceed? OK / Cancel. If Cancel is selected, default to the prior value.

Note: If the user changes the Field Name to a common tag and that automatically updates the Common Tag Name field that contains a value, the message appears that the saved list is being changed. If OK is selected the Common Tag Name is updated. If Cancel is selected, the Common Tag Name is not updated, and the Field Name field is retained.

#### Example:

Field Name = ClientGender

Common Tag Name = Insured\_Gender

List is opened, a selection is made, user row entered, etc. Saved

Now change the Field Name to Owner\_Gender

Common Tag Name automatically changes to Owner\_Gender

Message appears - user selects [Cancel].

Field Name is Owner\_Gender

Common Tag Name is Insured\_Gender

Field Name is Owner\_Gender

Common Tag Name is Insured Gender



- Common Tag Name changed from NULL to <> NULL and a list exists, automatically add the list from the Common Tag Name list. If applicable, user-created rows from the prior list appear at the bottom.
- Verify when a common tag name is added to a field with an existing list in 2.21 and the dialog is opened the first time in 2.22 that all existing prior rows with export values are cleared from the List Value field and moved to the Rules Override field.
- If Common Tag Name changed from one common tag with a list to another that has a list, the list is reset to the new Common Tag Name list. If applicable, user-created rows from the prior list appear at the bottom.
- If Common Tag Name is changed from <> NULL with a list to NULL or to a common tag with
  no list, only the selected rows from the prior list appear in the new list as checked. All List
  Values are cleared. If applicable, Rules Override is set to the prior List Value if Rules Override
  was blank, else Rules Override is not reset.
- When the common tag name field is changed and a saved list exists, see a warning message:
   You are changing the saved list name values and sort order, do you want to proceed? OK /
   Cancel.
- If OK is selected then the common tag name field and list are reset accordingly.
- If Cancel is selected then the common tag name field is not changed.
- Test example with automatic Common Tag Name field change and Cancel (see bottom of Description).

## 1.16 Adjust Common Tag List Loading Format

When loading common tag lists on the server, load all common tag list items into the new ListInfo format instead of a string.

## 1.17 Adjust VersioningManager to Convert ListInfo Source for Wizard Items

When loading a wizard field, convert any existing data to an object format, specifically the ListInfo class. This should be able to handle both pipe-delineated strings prior to 2.22, and JSON objects stored as a string during/after 2.22.

When the dialog is opened the first time in 2.22 with the 2.21 data, the rules override field will be set as follows:

- 1. If Pipe | Value: Insert the export value in the Rules Override field (example Binary | B)
- 2. If Pipe | No Value: Rules Override will be set to {blank} (example Binary |)
- 3. If No Pipe | Value: Set the Rules Override field to NULL or empty (example Binary)
- 4. If No Caption | Value: Set the Caption to {blank} and the Rules Override to the value (example |B)



- If 'Caption', then Caption = Caption, Rules Override = blank
- If 'Caption|', then Caption = Caption, Rules Override = {blank}
- If 'Caption | ExportValue', then Caption = Caption, Rules Override = ExportValue
- If '| ExportValue', then Caption = {blank}, Rules Override = ExportValue
- If '|', then Caption = {blank}, Rules Override = {blank}

## 1.18 Adjust VersioningManager to Convert ListInfo Source for Forms Items

When loading a form field, convert any existing data to an object format, specifically the ListInfo class. This should be able to handle both pipe-delineated strings prior to 2.22, and JSON objects stored as a string during/after 2.22.

When the dialog is opened the first time in 2.22 with the 2.21 data, the rules override field will be set as follows:

- 1. If Pipe | Value: Insert the export value in the Rules Override field (example Binary | B)
- 2. If Pipe | No Value: Rules Override will be set to {blank} (example Binary | )
- 3. If No Pipe | Value: Set the Rules Override field to NULL or empty (example Binary)
- 4. If No Caption | Value: Set the Caption to {blank} and the Rules Override to the value (example | B)

#### Acceptance Criteria

- If 'Caption', then Caption = Caption, Rules Override = blank
- If 'Caption|', then Caption = Caption, Rules Override = {blank}
- If 'Caption | ExportValue', then Caption = Caption, Rules Override = ExportValue
- If '| ExportValue', then Caption = {blank}, Rules Override = ExportValue
- If '|', then Caption = {blank}, Rules Override = {blank}

## 1.19 Form: Adjust VersioningManager to update field type to Radio Button on Legacy Checkboxes

Legacy checkboxes saved on forms (version 2.12 and earlier) will not work with the new Common Tag changes since the export value field is disabled (needs to be enabled when a Common Tag Name is selected). Update the field type from checkbox to radio button in the Versioning Manager.

#### Reference iConnect 246664:

And there are several other organizations that have checkbox fields with non-true export values: ATH, AMA, PHX, SAG, PAC, ALZ, SYM, FTA, NWL, HML

#### Acceptance Criteria

• Look at the iConnect and locate legacy form examples that can be loaded, then add a Common Tag Name and make sure the export value can be set to other than true.



## 1.20 Wizard: Add wizard history audits when Common Tag Name is added/changed.

When the Common Tag Name field is added/changed/deleted, add audits to the Wizard History - this is shown on the Wizard History tab in the Wizard Library option.

#### Audits:

Common Tag Name 'name' added.

Common Tag Name changed from 'name' to 'name'.

Common Tag Name changed from 'name' to 'NULL'.



#### Acceptance Criteria

- Verify audit appears when a common tag name is added the first time.
- Verify audit shows the old and new common tag name when it is changed.
- Verify audit appears when a common tag name is removed, changed to NULL.

## 1.21 Form: Add form history audits when Common Tag Name is added/changed.

When the Common Tag Name field is added/changed/deleted, add audits to the Form History - this is shown on the Form History tab in the Form Library option.

#### Audits:

Common Tag Name 'name' added.

Common Tag Name changed from 'name' to 'name'.

Common Tag Name changed from 'name' to 'NULL'.



- Verify audit appears when a common tag name is added the first time.
- Verify audit shows the old and new common tag name when it is changed.
- Verify audit appears when a common tag name is removed, changed to NULL.



## 2 Common Tags FLApp Enhancements

### 2.1 Wizard: Update new field definitions for loading existing data in new format

The new field definition for field types, dropdown, checkbox, and radio button needs to be updated to load the existing data in the new format.

Wizard dropdowns will continue to use the same storage system (a separate data item with suffix), but the stored data should be converted into an array of ListInfo items to match the new field properties format.

Checkboxes and radio buttons should remain the same (stored with a specific caption and export value) but will still need to load the full item source on the server so value syncing can be performed between different data items with the same common tag.

The value should always be set to the Rules Override if it exists. If it does not, the value should instead be the Caption.

#### Acceptance Criteria

- The existing list for dropdown list field types displays correctly in the wizard.
- The existing caption/export value should still show up and be stored correctly as the value of the checkbox.
- New lists for dropdown fields show up correctly
- Checkboxes render the Caption of the item selected on the field and use the Rules Override or Caption as the field value.

### 2.2 Form: Update new field definitions for loading existing data in new format

The new field definition for field types, combo box, checkbox, and radio button needs to be updated to load the existing data in the new format.

Forms dropdown items will need to read the new ListInfo format instead of the old string format.

Checkboxes and radio buttons should remain the same (stored with a specific export value) but will still need to load the full item source on the server so value syncing can be performed between different data items with the same common tag. Captions are not relevant to forms radio buttons/checkboxes.

The value should always be set to the Rules Override if it exists. If it does not, the value should instead be the Caption.

- The existing list for combo box field types displays correctly in the forms.
- The export value is still stored for any existing checkboxes that use the old string storage format



- New combo boxes will use the Rules Override or Caption as the value for the field when selected
- New checkboxes/radio buttons will use the Rules Override or Caption as the value for the field when selected

## 2.3 Update rules engine to support loading existing data in new format

Update rules engine to support loading existing data in the new format for field types of dropdown and combo box.

All rules that change lists need to use the new ListInfo class instead of delineated strings.

The rule should add Caption and Rules Override to any ListInfo items. If the data in the rules contains a pipe delimited string, then use the first part as the Caption, and the second part as the RulesOverride, otherwise use the string as the Caption and set the RulesOverride to Null.

## 2.4 Create Common Tag Data Items During Activity Initialization

Each common tag data item will need a shared static suffix to make it more unlikely that a user's rules will change it directly.

This suffix should be the CommonTagDataItemPostFix property defined in Constants.

During activity initialization, we'll need to loop through every field and create a new data item for each field that has a common tag (unless a data item for that common tag already exists).

#### Acceptance Criteria

- Create a new data item during initialization for each type of common tag assigned to a field.
- Each common tag data item should contain the suffix to make them unique.

#### 2.5 Create Common Tag Data Item Map

Build a map of data items, common tags, and vice versa.

When a value is changed on a common tag data item or a field data item with a selected common tag, propagate those changes to all other data items sharing the common tag.

This map will need to be accessible to the rules engine so it can be used during the sync process to change values across multiple linked data items.

- Create a map to allow lookups of all data items from a particular common tag.
- Create a map to allow lookups of common tags for a specific data item.
- Both maps should be accessible from the Rules Engine.



## 2.6 Build a Map of Field List Sources for all Data Item IDs with a List

When each activity is loaded, loop through each field and build a map of data items to list sources. This map should merge all lists for any fields that share a data item.

The map will be used when a field value changes to look up the full list of possible values in the rules engine. If duplicates exist with different data, merge the duplicates together while retaining as much data as possible.

The same should happen for common tags. Common Tag Names have their own data items, and each list should be shared between any dropdowns lists/combo boxes, radio buttons, and checkboxes that have a matching common tag.

#### Acceptance Criteria

- Applies to all uniquely named data item IDs with a list and a common tag name and without a common tag.
- The list is merged for multiple uniquely named data item IDs.
- If two data item IDs have different lists, lists are merged for the two data item IDs. Example: Distributor d\_owner\_gender Owner\_Gender:
  - 1|Male|m
  - 2|Female|f
  - null|Other|o

Carrier owner gender - Owner Gender:

- 1|Male|m
- 2|Female|f

null|something|s

Merged list for Owner Gender will be:

- 1|Male|m
- 2|Female|f
- null|Other|o

null|something|s

Another example with many combinations of data item ID and common tag name:

Data Item ID Common Tag Name Caption Rules Override

ClientSex NULL Male NULL
ClientSex Owner\_Gender Male M
OwnerGender Owner\_Gender Man M
Owner Gender Owner Gender Male 1



## 2.7 Rules Engine Common Tag Value Syncing

The rules engine will need to maintain two-way sync between all data items and common tag name item values. For example, if a data item is changed that has a common tag associated with it, the common tag name data item will also need to be updated. Any other data items with the same common tag name must also be updated.

When a data item with a list map from story <Build a Map of Field List Sources> is updated, the correct item in the list will need to be found and used as the data item value.

When a value for a dropdown is changed, if a matching item is not found in sync destinations, do not change the data item.

When a linked data item changes, if the field is a dropdown, validate the value against the list of items specified in the field definition. If no matching field is found, do not change the data item.

#### **Dropdowns/Checkboxes/Radio Buttons:**

For example, in the case of a dropdown with a Common Tag of Owner\_Gender, if a value of "Male" is selected, a field update is triggered passing "Male" as the new value.

Look up the list source of the field. The field data item will receive a value of Male.

Then, look up the list item associated with the caption Male from the list source of the original field that was changed. If the row has a List Value associated with it, the Common Tag data item of Owner\_Gender will receive a value of the ListValue of that row, which is 1. If the row does not have a List Value, clear out the data item value of the Owner\_Gender common tag.

Finally, loop through all other fields with the same Common Tag set. For each one, load the list source and see if there is a matching record for that field. If there is a matching record, set the value of the field's data item to the caption or rules override. If there is no matching record, do not change the data item value.

#### **Text Fields:**

The value entered should always be saved in both the field data item and the Common Tag data item if it exists.

If a textbox with the data item ID of d\_Owner\_Age and a common tag of Owner\_Age is set to "25", a field update will occur with the value "25".

The rules engine will update the value and detect that the field has a common tag. At that time, the common tag data item value is set to "25".

All other fields with the same common tag are then found and their values are also be updated to "25".



Examples of Field Name of ClientMailState and Common Tag Name of Owner\_MailingAddress\_State Example 1: In the designer list dialog the following is entered:

List Value	Caption/Rules Value	Caption Override	Rules Override
1	Alabama	AL	ZAL

In the App 'AL' appears and is selected from the dropdown.

In the Data Item Collection we have two NVP entries that look as follows:

OwnerState: ZAL

Owner MailingAddress State: 1

#### Example 2: In the designer list dialog the following is entered::

List Value	Caption/Rules Value	Caption Override	Rules Override
1	Alabama	AL	NULL

In the App 'AL' appears and is selected from the dropdown.

In the Data Item Collection we have two NVP entries that look as follows:

OwnerState: Alabama (the Caption is in the Data Item Collection)

Owner MailingAddress State: 1

#### Example 3: In the designer list dialog the following is entered:

List Value	Caption/Rules Value	Caption Override	Rules Override
1	Alabama	NULL	NULL

In the App 'Alabama' appears and is selected from the dropdown.

In the Data Item Collection we have two NVP entries that look as follows:

OwnerState: Alabama

Owner\_MailingAddress\_State: 1

#### Example 4: In the designer list dialog the following is entered:

List Value	Caption/Rules Value	Caption Override	Rules Override
1	Alabama	AL	1

In the App 'AL' appears and is selected from the dropdown.

In the Data Item Collection we have two NVP entries that look as follows:

OwnerState: 1

Owner MailingAddress State: 1

- Verify distributor and carrier data items that are changed on different pages in the same activity are synced in both directions every time one of the data item values are changed.
- Make sure we break out after max count is reached (new iteration count different than existing iteration count).
- For dropdowns, only change the value of synced data items if the destination item has a list item matching the new value.



## 2.8 Add Rule Tracing for Common Tag Sync

When a data item is synced because a field or common tag data item changes, publish the rules tracing event.

Add another event if data cannot be synced to multiple data items (non-matching lists), or any time an error is encountered while attempting to sync values across data items.

When an activity is initialized, add a rule trace when any data items exist with more than one common tag.

Leverage the same rule tracing system already in place.

#### Acceptance Criteria

- A rule tracing event should be published whenever a sync is performed.
- A rule tracing event should be published when an error occurs during a sync.
- A rule tracing event should be published when a sync attempt cannot find a matching dropdown value on a destination data item.
- These rule traces should be visible in the Rule Tracing admin debugger page.

## 2.9 Update Common Tag Data Item Suffix

Change the suffix used with common tag data items to ITCT.

## 2.10 Remove Common Tag Data Items from IApplicationService.GetFormData

The provider method BOApplicationService.GetFormData should be updated to exclude all common tag data items by default (items ending in "ITCT").

Add a new method to retrieve only the common tag data items for a particular activity.

Because providers are built/deployed out of cycle from the rest of FireLight, we cannot add new flags to the existing GetFormData method. To accommodate access to Common Tag items, a new method must be added.

#### Acceptance Criteria

- By default, GetFormData should only return non-common-tag data items.
- A new method (GetCommonTagFormData) should return all common tag data items.

## 2.11 Rollback Wizard Empty String Conversion

The change made to wizard to prevent changes from "" to null needs to be rolled back. This has the potential to significantly impact a lot of different rules. The original change was to add an attribute to the UpdateField model to prevent the conversion of "" to null.



## 2.12 Adjust Common Tag Sync to Handle Null/Empty String

Adjust the common tag sync process to evaluate null, "" and "{blank}" as the same value in a dropdown/checkbox/radio button.

### 2.13 Verify SetComboBox Rules

Verify that the setcombobox rule node still functions appropriately with null/empty string values after the wizard null/"" conversion is rolled back.

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