



University of Colorado

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OnBase Guide - Workflow - Real-Time Search Match

Goal: To use the Real-Time Search Match Workflow Functionality in OnBase

Complexity Level: Departmental Workflow Developers, Departmental Administrative Users

4/13/2022

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Background

OnBase and CU-People (which replaced Master Data Management (MDM) in 2022) are integrated to provide real-time Search Match functionality.

Search match is a process where a document can be saved into OnBase with only basic bio/demo data (first, middle, last name and/or date of birth) and the search match process will use data from CU-People to attempt determine the correct person record and supply the resulting Student ID or Employee ID.

In OnBase workflow, a document can live in multiple life cycles at the same time. The Search Match process takes advantage of that ability to have the document stay in the original life cycle while simultaneously also being processed in the Search Match life cycle.

The basic process for invoking the real-time Search Match process boils down to four discrete steps, described in more detail below.

1. Determine if the document needs to go through Search Match in the Original life cycle.
2. Set Properties and Keywords in the Original life cycle to prepare for Search Match.
3. Execute the Search Match by adding the document from the original life cycle to the Search Match life cycle, but not removing the document from the original life cycle.
4. Evaluate the results in the Search Match life cycle.

Prerequisites

To create and configure the components for this integration, you will need to use OnBase Configuration and OnBase Studio.

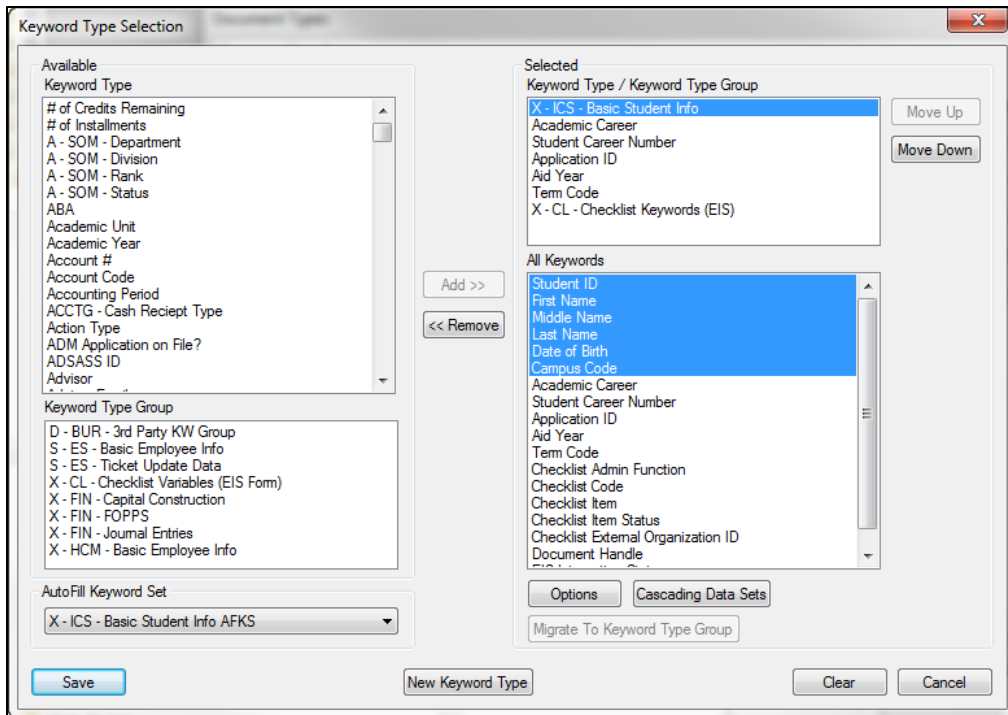
Please reference other [UIS guides](#) for installation instructions and configuring each of the products. The Workflow and System Administration MRGs also provide further details. Contact UIS_DM_Support@cu.edu for assistance if needed.

Steps to Complete in OnBase Configuration

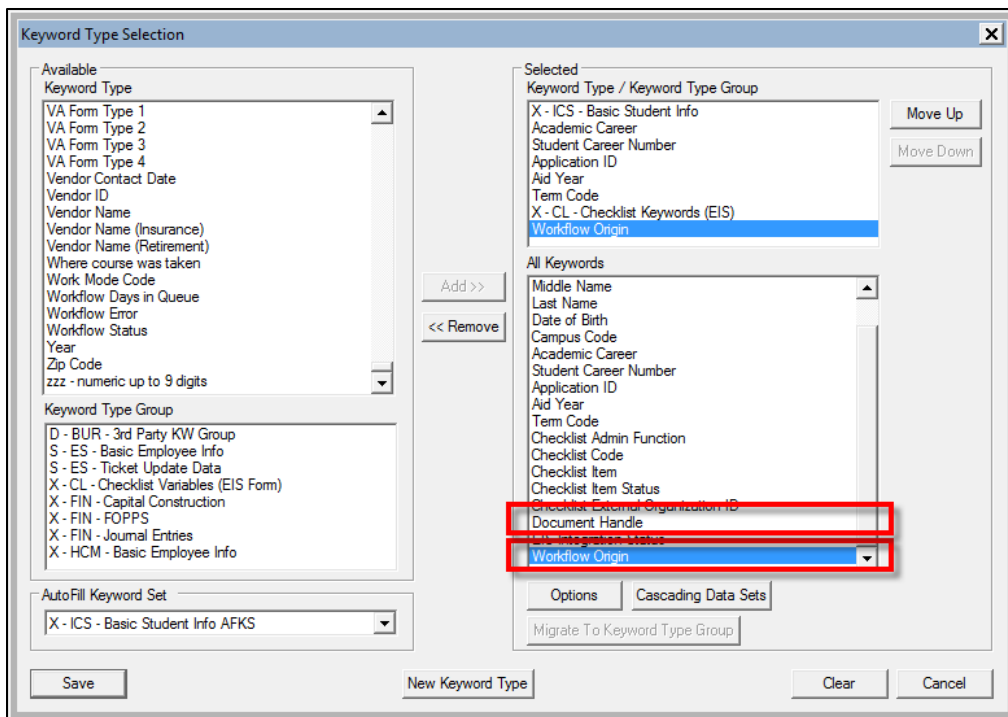
To use the OnBase Search Match functionality, there are some configuration steps you need to complete in OnBase Configuration. Refer to the System Administration MRG for additional information if necessary.

1. Create a Document Type for the original document (if it does not already exist).

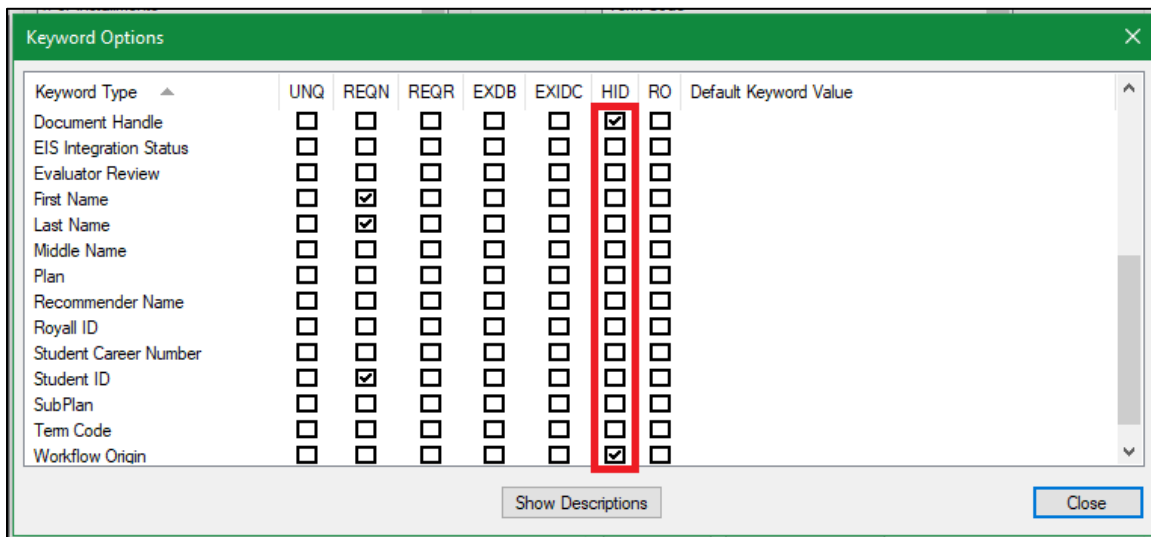
- Apply the *X - ICS - Basic Student Info* keyword type group to the document type (if it is not already). This will apply the basic student keywords for student documents. If using Search Match for employee documents, use the *X – HCM – Basic Employee Info* keyword type group instead.



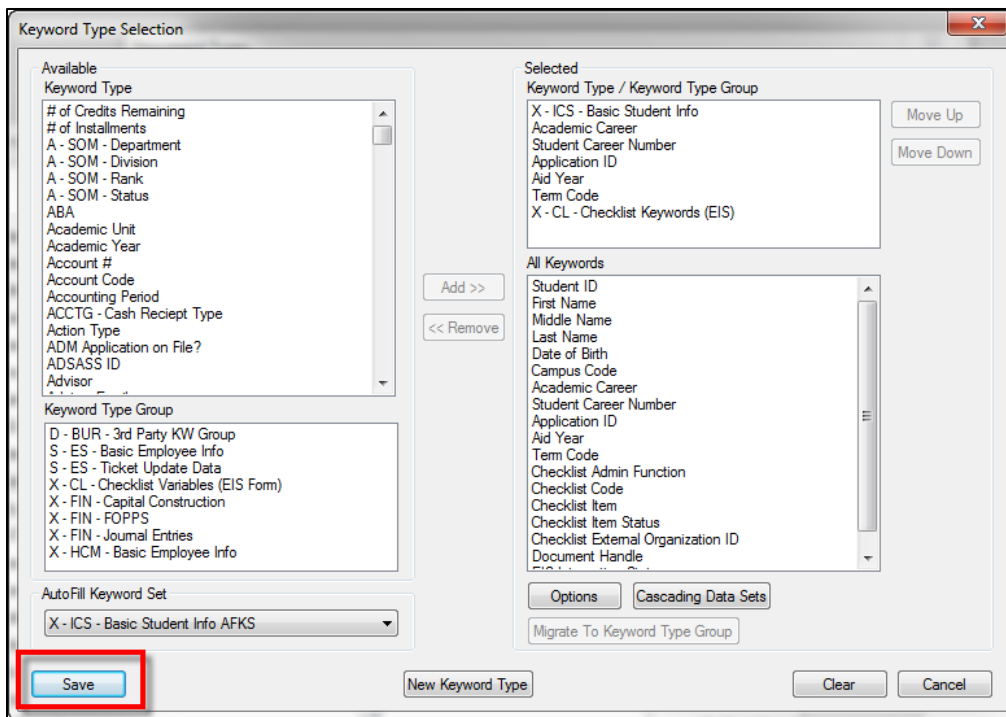
- Two additional keyword types are necessary for this process. Apply these keyword types to all document types that will be executing Search Match.
 - Workflow Origin
 - Document Handle



- You can also choose to have these keywords set as Hidden as well. Below the list of all selected keywords, click the **Options** button. In the window that opens, check the **HID** box next to each keyword as necessary.



- Click **Close** when done.
- Once all of your keyword type changes are complete, click **Save**.



7. The Search Match workflow uses a set of pre-defined Workflow Groups for managing the exceptions for each campus and functional area, ex:
 - Workflow - B - ADM - Search Match Verifier
 - Workflow - C - ADM - Search Match Verifier
 - Workflow - D - ADM - Search Match Verifier

Populate these groups with departmental users that can review, process and determine the identity of the student during the manual review steps that will be documented later in the guide. This step may also be completed using the Unity or web client.

This completes all configuration steps necessary in OnBase Configuration.

Steps to Complete in OnBase Studio

OnBase Studio is the tool where you can create Workflow life cycles, queues, tasks, actions, timers and notifications for your business processes.

The necessary configuration to check for documents that need to be routed for Search Match processing, prepare the documents, and add them to the primary life cycle is described below. However, instead of configuring each of these yourself, you may instead opt to copy the configuration from the [Example Search Match life cycle](#). Either way, this processing should be added to a queue in the life cycle for your business process, referred to throughout the guide as the “Original life cycle”.

1. Determine if the document needs to go through Search Match.

Check if the Student ID keyword value is:

- Missing

The screenshot shows a configuration window for a rule type named 'Keyword Value Exists'. The 'General' tab is active. The 'Target' dropdown is set to 'Current Item'. The 'Keyword Type' dropdown is set to 'Student ID'. There is an unchecked checkbox for 'Get Keyword Type from Property'. Below that, there are three radio button options: 'Keyword Value Exists' (which is selected), 'Keyword present on all instances of Multi-Instance Keyword Type Group' (unchecked), and 'Keyword Value Does Not Exist' (unchecked).

- All zeros

The screenshot shows a configuration window for a rule type named 'Check Keyword Value'. The 'General' tab is active. The 'Target' dropdown is set to 'Current Item'. The 'Keyword Type' dropdown is set to 'Student ID'. The 'Currency Format' dropdown is empty. The 'Operator' dropdown is set to '='. Under the 'Compare To' section, there is an unchecked checkbox for 'Allow Wildcards' and a text input field containing the value '00000000'.

2. Set Properties and Keywords to prepare for Search Match.

Certain values can be collected and applied to property values directly but cannot be applied directly to keyword values. Therefore, we must first store the value to a property (after first clearing the property value) and then set the keyword value from the property value.

- Clear WFOOrigin Property Value

Action Type
Set Property Value

General Documentation

Property Name
WFOOrigin

Property Value

Keyword

Target
Current Item

Work item property

Current date/time

Current user name
 Use real name

Current user email

User group name(s) of current user

User role name(s) of current user

Constant value

Parse tokens (%K, %D etc...)

The value is an array (separated by commas)

- o Clear DocHandle Property Value

Action Type
Set Property Value

General Documentation

Property Name
DocHandle

Property Value

Keyword

Target
Current Item

Work item property

Current date/time

Current user name
 Use real name

Current user email

User group name(s) of current user

User role name(s) of current user

Constant value

Parse tokens (%K, %D etc...)

The value is an array (separated by commas)

- o Set WFOOrigin Property Value to “Current life cycle Name”



Action Type
Set Property Value

General Documentation

Property Name
WFOOrigin

Property Value

Keyword

Target
Current Item

Work item property
>> Current Life Cycle Name

- Set DocHandle Property to “Document Handle”

Action Type
Set Property Value

General Documentation

Property Name
DocHandle

Property Value

Keyword
>> Document Handle

Target
Current Item

- Set Workflow Origin Keyword Value from WFOOrigin Property

Action Type
Replace Keyword

General Documentation

Target
Current Item

Keyword Type
Workflow Origin

Old Keyword

Specific Value

Currency Format

Property Name

New Keyword

Specific Value

Currency Format

System Value

Property Name
WFOOrigin

Delete All Existing Values

- Set Document Handle Keyword Value from DocHandle Property



Action Type
Replace Keyword

General Documentation

Target
Current Item

Keyword Type
Document Handle

Old Keyword
 Specific Value

 Currency Format

 Property Name

New Keyword
 Specific Value

 Currency Format

 System Value

 Property Name

Delete All Existing Values

- Execute the Search Match by adding the document from the original life cycle to the Search Match life cycle, but not removing the document from the original life cycle.

Action Type
Add Item to Other Life Cycle

General Documentation

Target
Current Item

Life Cycle
X - SM - Search Match (EIS)

Get Life Cycle from this Property

Queue
SM-Initial

Get Queue from this Property
 (leave blank to use Initial Queue)

Use Initial Queue if Property does not exist

The original document stays in the original life cycle, in the same queue, until the Search Match process is complete. This “Add Item to Other life cycle” allows the document to stay in the original life cycle while also being processed in the X – SM – SearchMatch (EIS) life cycle.

Note: A number of documents may collect in this queue of the original life cycle over time as they are processed, this is expected.

The rest of the configuration for this process is completed by UIS and is part of the primary *X – SM – Search Match (EIS)* life cycle.

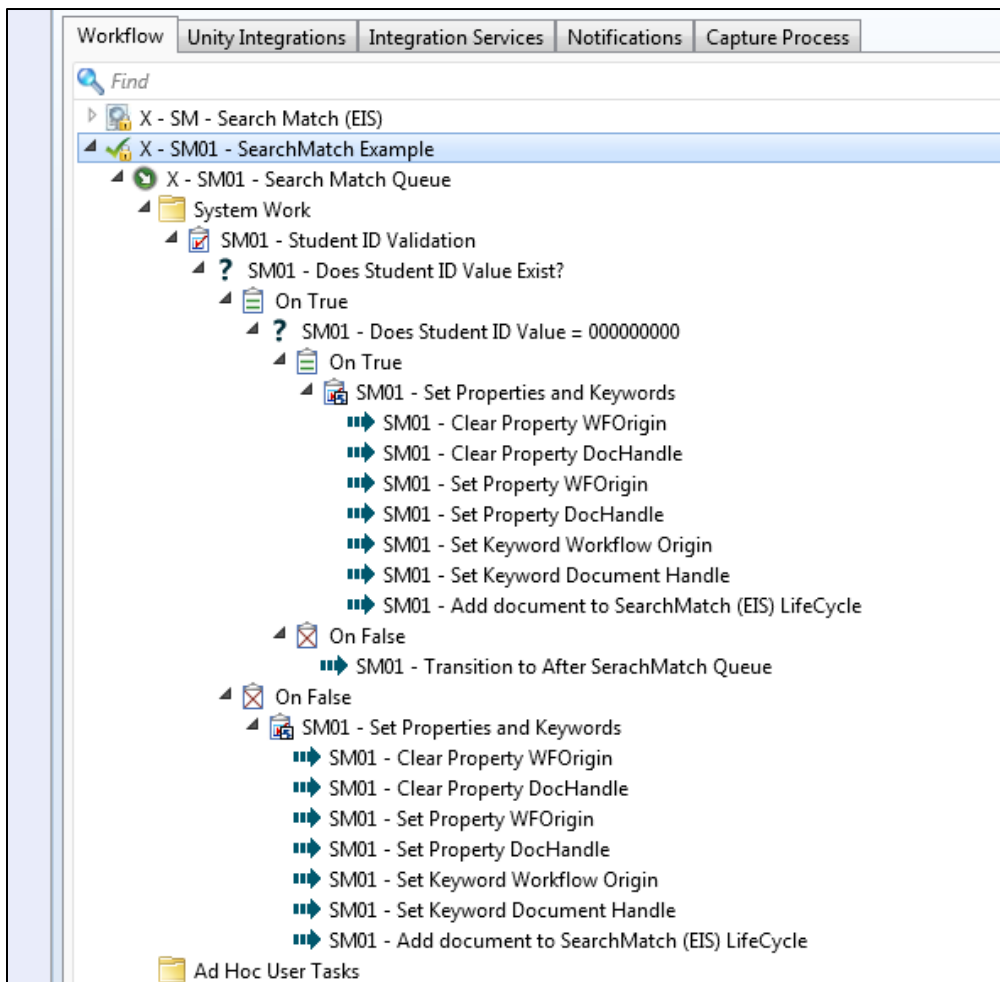
Example Search Match Life Cycle

In Studio, we have provided an example life cycle that can be used as a reference and copied into your own life cycles where needed.

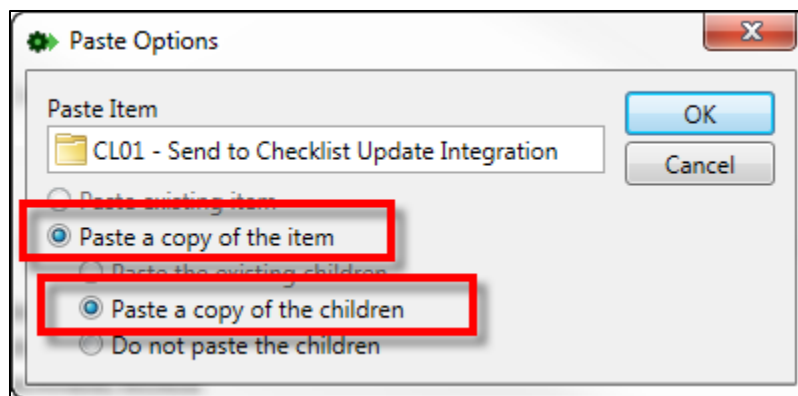
This example life cycle is called *X - SM01 - SearchMatch Example*. This life cycle has two queues, but only the first one is necessary, as the second queue would be the next step in your original life cycle for your business process.

The first queue includes the rules and actions described above that evaluate whether a document should be routed for Search Match processing, prepares the document for Search Match processing, and adds the document to the primary *X – SM – Search Match (EIS)* life cycle.





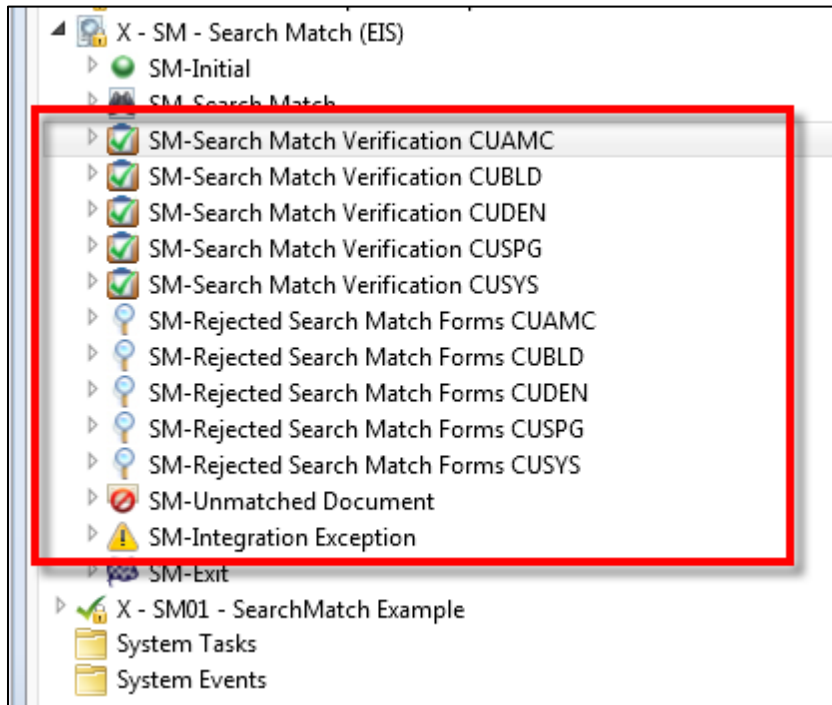
If you want to copy the example *X - SM01 - Search Match Queue* queue, please make sure that you use the 'Paste a copy of the item' and 'Paste a copy of the children' options so that you do not disturb the example life cycle.



Primary X – SM – Search Match (EIS) life cycle

The rest of the Search Match process is performed within the *X – SM – Search Match (EIS)* life cycle. **The *X – SM – Search Match (EIS)* life cycle should only be modified by UIS staff.**

Unlike the Checklist Processing life cycle, all exception handling within Search Match is also handled inside of the main life cycle.



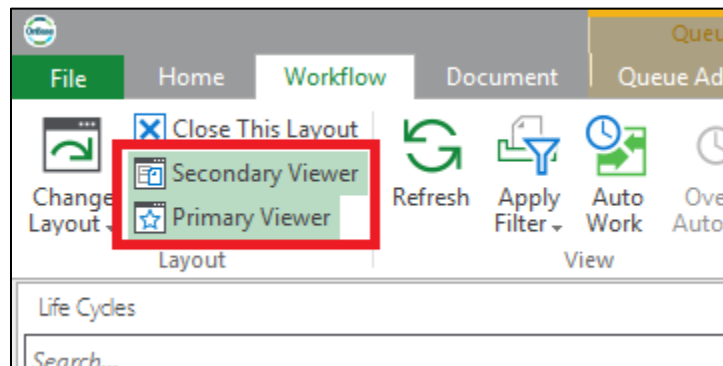
As documents enter the Search Match life cycle, a special HTML form is created with the keyword values from the original document. This is then the document routed through the life cycle to control the internal process and collect the Search Match results from CU-People.

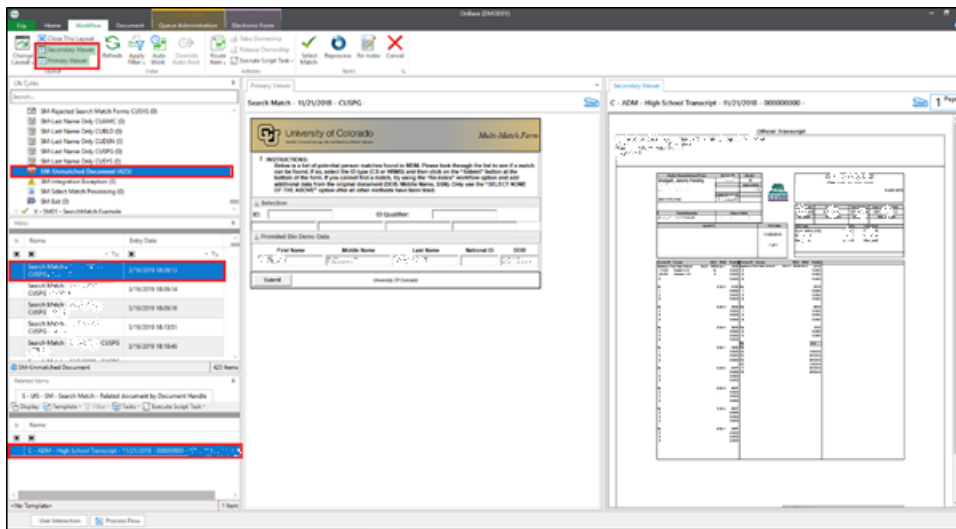
There are four possible outcomes:

- **Auto Match:** One match where Match Score ≥ 95
 - The original document is updated with the Person data from the search match HTML form.
 - The original document is moved to the next queue in the Original life cycle.
 - The HTML form that was based on the original document is deleted.
 - **NOTE:** If the one match with score greater than 95 was obtained with only first name and last name (no middle name or date of birth), this will not be considered an auto-match and will be routed for verification like if it had multiple matches or a lower score.
- **Match Requires Verification:** One match where Match Score < 95
 - See Multiple Matches below

- No match: No matches received
 - The HTML form moves to the *SM - Unmatched Document* queue in the Search Match life cycle.
 - The original document still stays in the queue in the original life cycle (again these will collect in the original life cycle queue for some time).
 - The HTML form is re-evaluated each night at 8pm to see if a match can be found.
 - If no matches can be found after 120 days, the HTML form and the Original document are both removed from the life cycles and both deleted from OnBase.

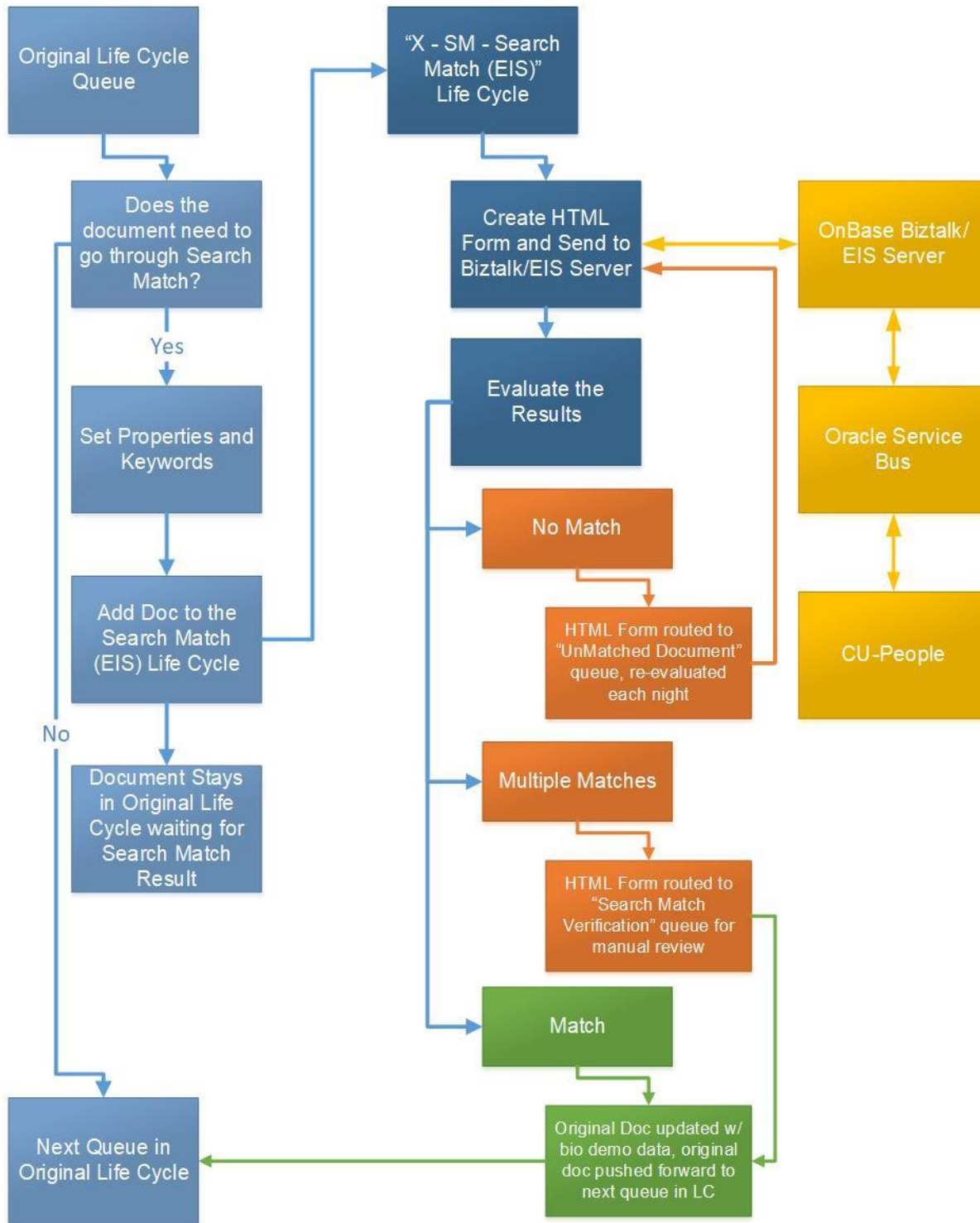
- Multiple matches: (More than 1 possible match)
 - The HTML form moves to the appropriate *SM-Search Match Verification* queue in the Search Match workflow for user review, as defined by the Campus Code keyword:
 - SM-Search Match Verification CUBLD
 - SM-Search Match Verification CUDEN
 - SM-Search Match Verification CUSPG
 - Each campus will need to have users populated in these user groups to process the multiple matches
 - Workflow - B - ADM - Search Match Verifier
 - Workflow - C - ADM - Search Match Verifier
 - Workflow - D - ADM - Search Match Verifier
 - The manual reviewer will open both the HTML form with the Search Match results and the original document at the same time to identify the correct match. This can be done by selecting both the **Primary Viewer** and **Secondary Viewer** in the Unity client.





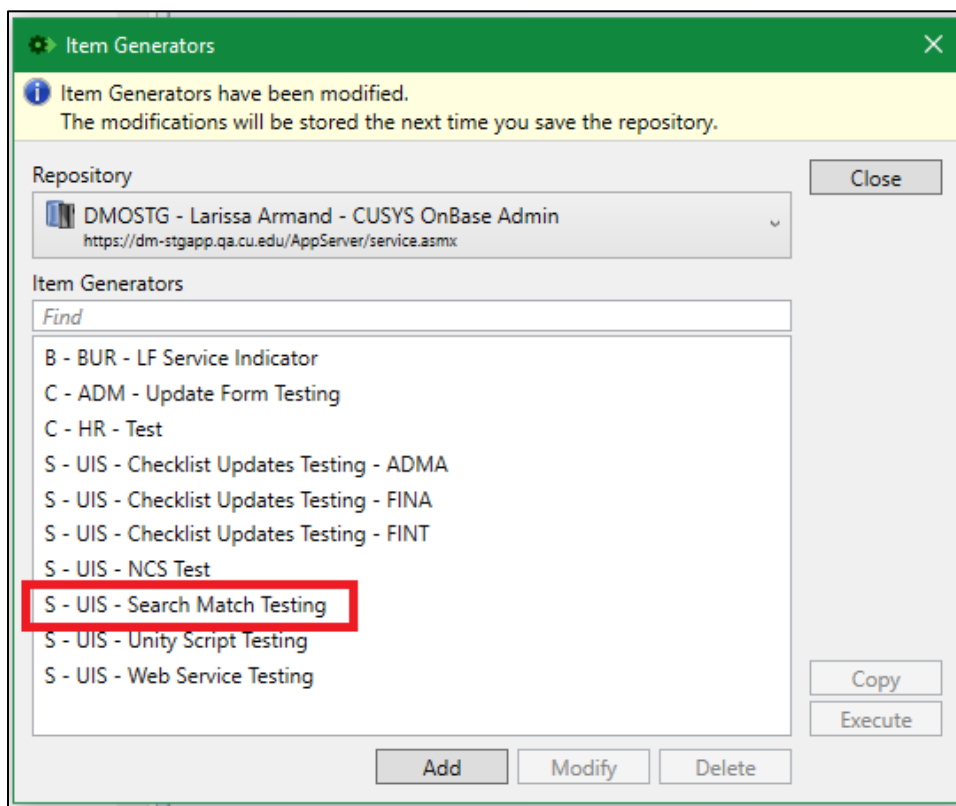
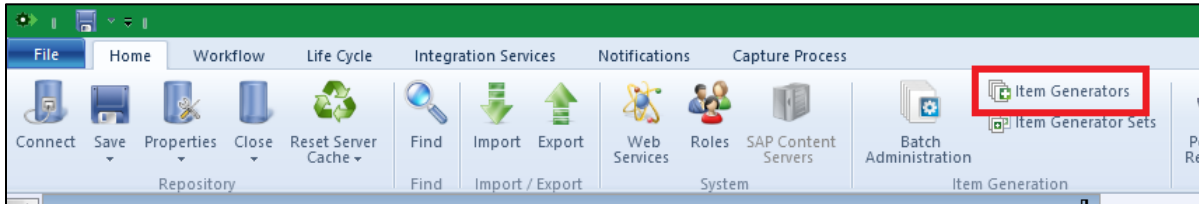
- Once the correct match has been selected, the original document will be updated with the selected Person data and moved to the next queue in the Original life cycle.
- The HTML form that was based on the original document is then deleted.

OnBase Search Match Flowchart



Testing the Solution

To test the Search Match integration, we have created multiple **Item Generators** in OnBase Studio. These let you test life cycles in a variety of ways and even specify keyword and property values and the starting queue and entry date. Refer to the Studio MRG for more information on Item Generators.



Feel free to modify this or create your own Item Generators to suit your needs with your own document types, life cycles, queues and values.

