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OnBase by Hyland

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

2/18/2025

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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.

Depending on the data supplied, there may be one confident match, a number of less confident matches, or no matches to existing records. Campus users will need to review results when there is uncertainty with potential matches.

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 central Search Match life cycle which is managed by UIS.

The basic process for invoking the real-time Search Match process boils down to four 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 processing.
3. Execute 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 from 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.

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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).

2. 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.
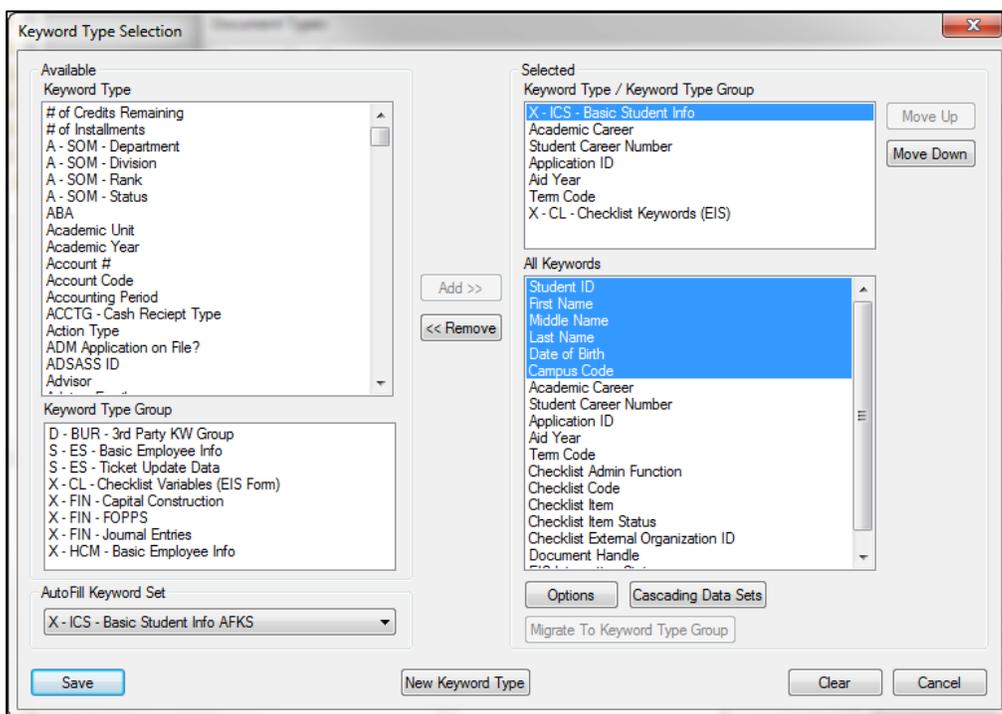
3. Two additional keyword types are necessary for this process. Apply these keyword types to all document types that will be executing Search Match.
   - Workflow Origin
   - Document Handle

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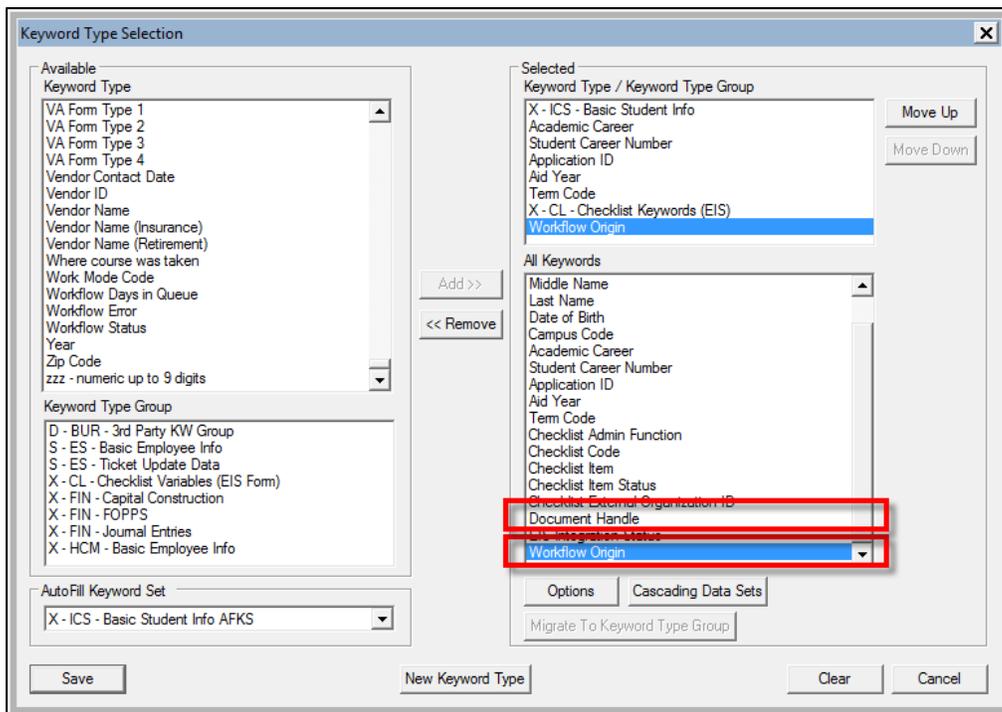
4. Click **Close** when done.

5. Once all of your keyword type changes are complete, click **Save**.
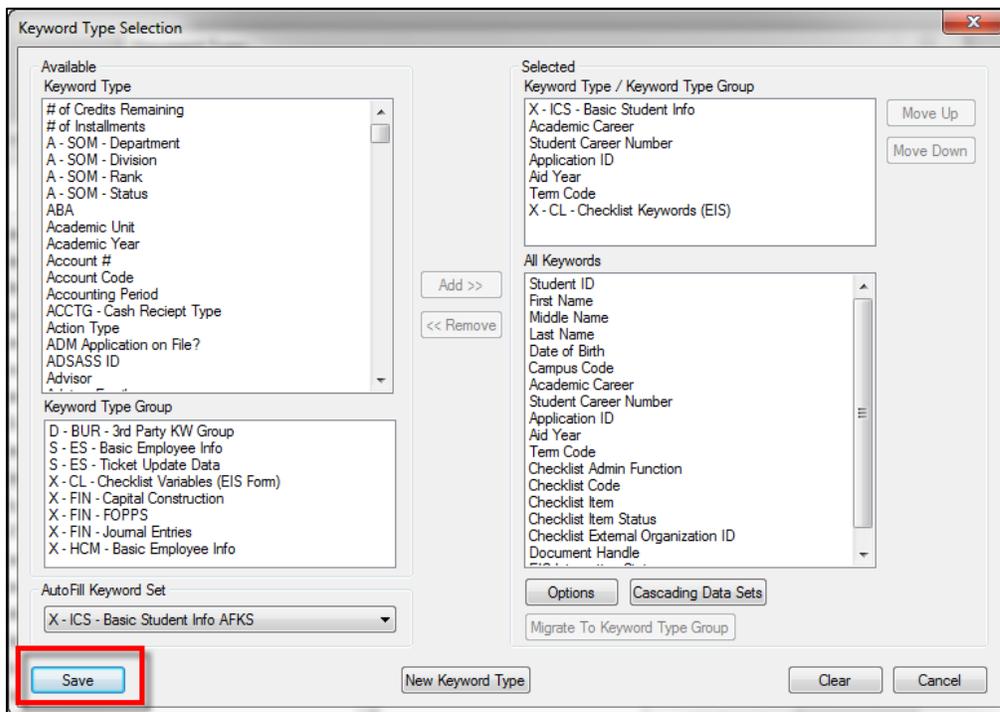
6. The Search Match workflow uses a set of pre-defined Workflow Groups for managing the exceptions for each campus and functional area, ex:

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- 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. This processing should be added to a queue in the departmental 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 or otherwise invalid (not 9 numeric characters or all 0s). We recommend using the "Evaluate Expression" rule type to perform all checks at once rather than a series of rules.

   Expression:

   ```
   IsMatch(%K00113; "^\d{9}$"; true)
   and %K00113 <> "000000000"
   ```

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. Refer to the Admin Handbook for more information about using properties.

   - Set propWFOrigin Property Value to "Current life cycle Name"

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- o Set Workflow Origin Keyword Value from propWFOrigin Property

- o Set Document Handle Keyword Value copied from >> Document Handle Property

Action Type
Copy Keyword

General | Documentation

Source Keyword
> > Document Handle

☐ Source Keyword Type from Property

Destination Keyword
Document Handle

☐ Destination Keyword Type from Property

☐ Allow copy if value is longer than the keyword type

3. **Add the document to the Search Match life cycle, but do not remove 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. The "Add Item to Other life cycle" action type 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 central Search Match life cycle will move the original document to the queue specified as the "next" queue when processing is complete.

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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.

You will need to have the next queue (after Search Match) in your departmental life cycle configured and **provide the name of that queue to UIS**.

Example Search Match Life Cycle

In Studio, we have provided an example life cycle that can be used as a reference.

This example life cycle is called *X - ICS - Example - Search Match*. This life cycle has two queues, but only the first one contains relevant configuration, as the second queue would be the next step in your original life cycle for your business process (where the document would be routed after Search Match).

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.
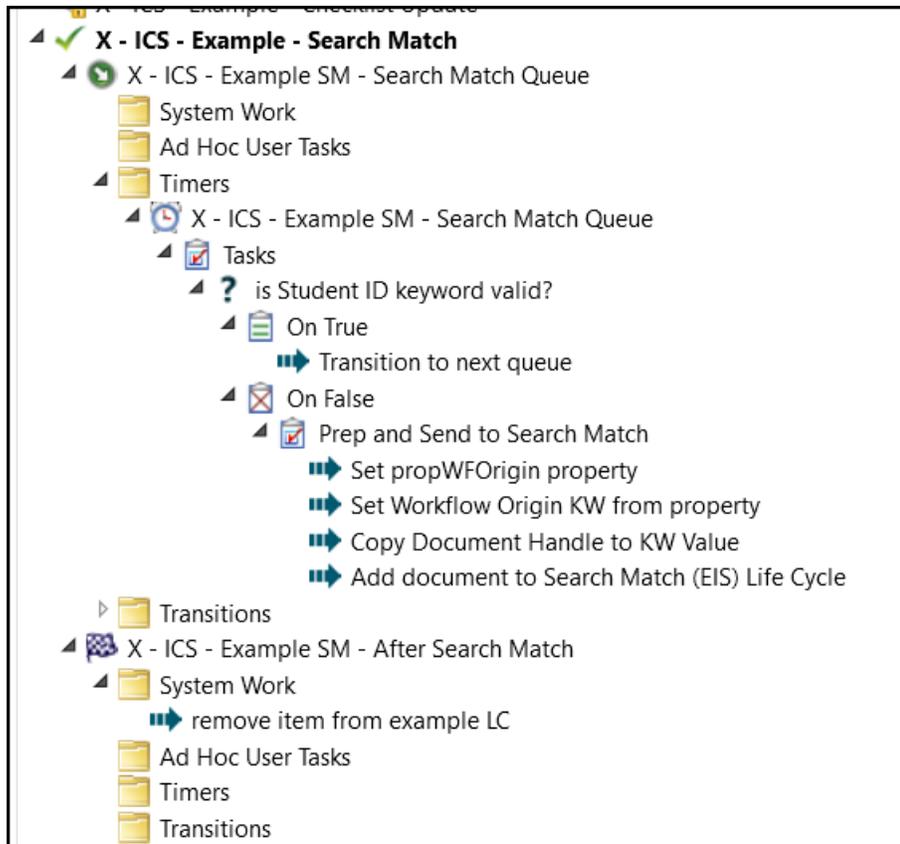
Central *X – SM – Search Match (EIS)* life cycle

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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 can only be modified by UIS.**

Unlike the Checklist Processing life cycle, all exception handling within Search Match is also handled inside of the central life cycle, in addition to verification of potential matches.
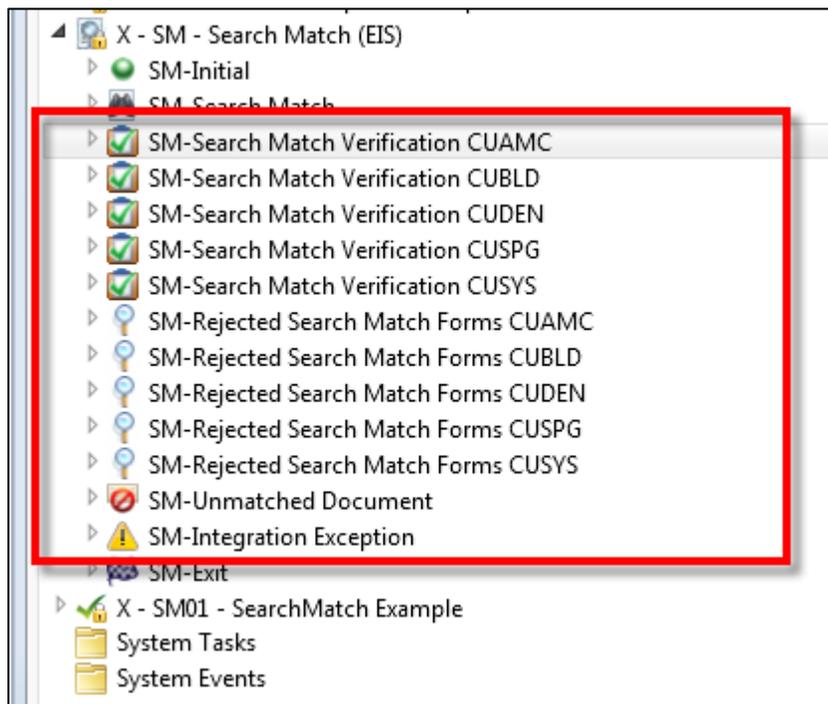
As documents enter the Search Match life cycle, an HTML form is created with the keyword values from the original document. This is then the document routed through the central life cycle to control the internal process and collect the Search Match results from CU-People.

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

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- <u>No match</u>: 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 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.

- <u>Multiple matches</u>: (More than one potential 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 be selecting both the **Primary Viewer** and **Secondary Viewer** in the Unity client.

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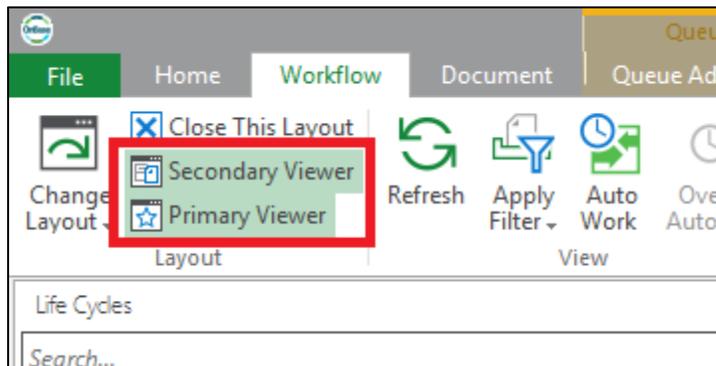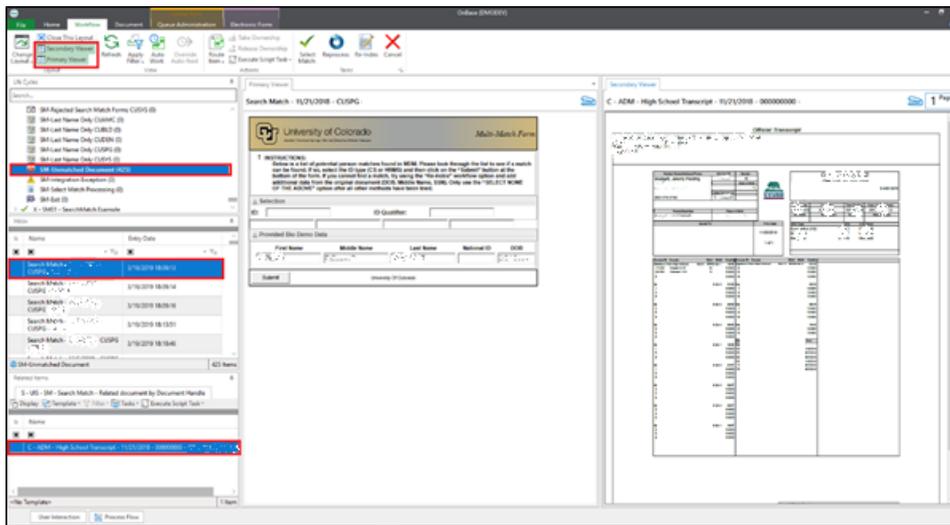
- o Once the correct match has been selected, the original document will be updated with the selected Person data and moved to the next queue in the Original life cycle.
- o The HTML form that was based on the original document is then deleted.

OnBase Search Match Flowchart

A flowchart titled "OnBase Search Match Flowchart" with the following elements:

Original Life Cycle Queue → **Does the document need to go through Search Match?**
- Yes → **Set Properties and Keywords** → **Add Doc to the Search Match (EIS) Life Cycle** → **Document Stays in Original Life Cycle waiting for Search Match Result**
- No → **Next Queue in Original Life Cycle**

Add Doc to the Search Match (EIS) Life Cycle → **"X - SM - Search Match (EIS)" Life Cycle** → **Create HTML Form and Send to Biztalk/EIS Server** → **Evaluate the Results**

Create HTML Form and Send to Biztalk/EIS Server ↔ **OnBase Biztalk/EIS Server** ↔ **Oracle Service Bus** ↔ **CU-People**

Evaluate the Results branches to:
- **No Match** → **HTML Form routed to "UnMatched Document" queue, re-evaluated each night** → (back to Create HTML Form and Send to Biztalk/EIS Server)
- **Multiple Matches** → **HTML Form routed to "Search Match Verification" queue for manual review** → **Match**
- **Match** → **Original Doc updated w/ bio demo data, original doc pushed forward to next queue in LC** → **Next Queue in Original Life Cycle**

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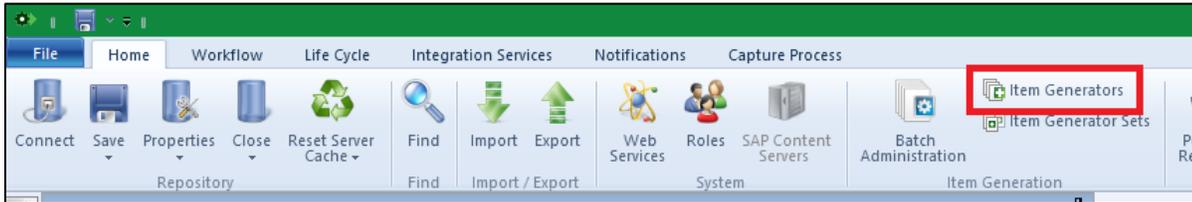
Feel free to modify this or create your own Item Generators to suit your needs with your own document types, life cycles, queues and values.