ServiceNow Application Developer

Importing Data > Exercise: Import Date, Enforce Mandatory, and Coalesce

In this module, you will modify the Transform Map for the *NeedItImportData.csv* file:

- Map the *Must have by* source column to the *When needed* target table field

- Coalesce on all Field Map fields

- Enforce Mandatory for all fields

- Set the target table *Requested for email* value using a script

Map the Must have by Column

1. Edit the *Import Historic NeedIt Data* Transform Map.

   a. In the main ServiceNow browser window, use the Application Navigator to open **System Import Sets > Administration > Transform Maps**.

   b. Click the **Import Historic NeedIt Data** link to open the Transform Map for editing.

2. Scroll to the Related Links and click the **Mapping Assist** link.
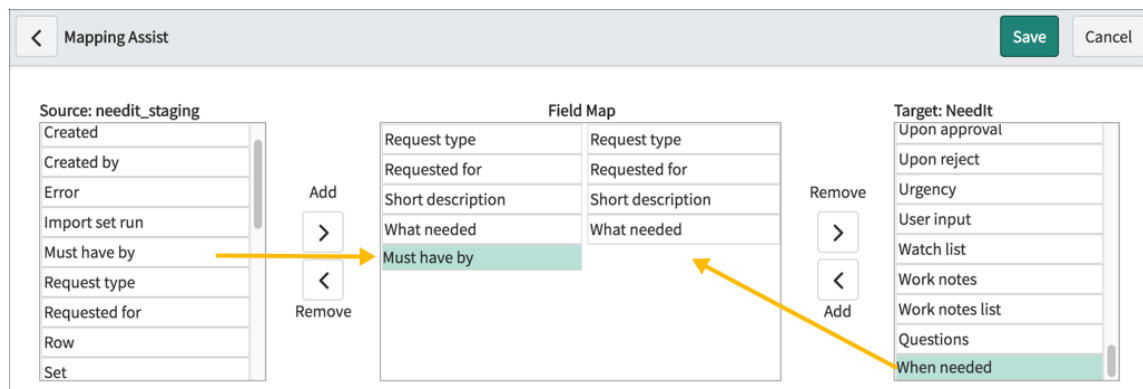
3. Add the *Must have by* column to the Field Map.

   a. In the *Source: Historic NeedIt Data* list, click the **Must have by** column to select it.

   b. Click the **Add** button (>) to move the column to the Field Map.

4. Add the *When needed* field to the Field Map.

   a. In the *Target: NeedIt* list, click the **When needed** field to select it.

   b. Click the **Add** button (<) to move the field to the Field Map.

5. Click the **Save** button to save the Field Map changes.

6. Set the date format for the *u_must_have_by* Field Map.

   a. In the Transform Map, scroll to the **Field Maps** related list.

   b. Click the **u_must_have_by** link in the *Source field* column of the Field Map.

   c. Change the *Date* format to **MM/dd/yy**.

   d. Click the **Update** button.

Enforce Mandatory for All Fields

1. Use the Application Navigator in the main ServiceNow browser window to open **NeedIt > All**.

2. Open any **NeedIt** record for editing.

3. Examine the *NeedIt* form to see which fields are mandatory (Hint: Look for the *.). Are there any mandatory *NeedIt* form fields that are not mapped in the Transform Map?

4. Edit the Transform Map.

   a. In the main ServiceNow browser window, use the Application Navigator to open **System Import Sets > Administration > Transform Maps**.

   b. Click the **Import Historic NeedIt Data** link to open the Transform Map for editing.

   c. Set the *Enforce mandatory fields* value to **All Fields**.

5. Write a script to populate the *Requested for email* field on the target record.

   a. Select (check) the **Run script** option.

   b. Copy this script:

```
// If the source data does not have a u_requested_for_email field,
  // create the target email address from the Requested for value.  Email
addresses
  // have the format firstname.lastname@example.com.  Convert the
u_requested_for
  // value to lowercase.  Replace the space with a . and concatenate with
  // @example.com
  if(!("u_requested_for_email" in source)){
    var name = source.u_requested_for.toLowerCase();
    target.u_requested_for_email = name.replace(" ", ".") + "@example.com";
  }
```

   c. Paste the script into the *transformRow* function in the *Script* field.

6. Click the **Update** button.

Test the Date Field and Enforce Mandatory

1. Delete the *NeedIt* records you imported in the last exercise.

    a. Use the Application Navigator in the main ServiceNow browser window to open **NeedIt > All**.

    b. Click the **select box** in the leftmost column to select each of the imported records. Your record *Numbers* may be different than the *Numbers* in the screenshot. Use the *Short description* field to determine which records were imported.

⚙	🔍	≡ Number	≡ Priority	≡ State	≡ Assigned to	≡ Short description ▲	≡ Task type
✔	ⓘ	NI002001	4 - Low	Requested	(empty)	Imported record 1	NeedIt
✔	ⓘ	NI002002	4 - Low	Requested	(empty)	Imported record 2	NeedIt
✔	ⓘ	NI002003	4 - Low	Requested	(empty)	Imported record 3	NeedIt
✔	ⓘ	NI002004	4 - Low	Requested	(empty)	Imported record 4	NeedIt
✔	ⓘ	NI002005	4 - Low	Requested	(empty)	Imported record 5	NeedIt

    c. Click the **List choice** action menu (Actions on selected rows... ⬍) and select the **Delete** menu item.

    d. In the *Confirmation* dialog click the **Delete** button.

2. Load the *needitimportdata.csv* file data into the staging table.

    a. In the main ServiceNow browser window, use the Application Navigator to open **System Import Sets > Administration > Data Sources**.

    b. Open the **needitimportdata.csv (Uploaded)** record for editing.

    c. Scroll to the Related Links and click the **Load All Records** link.

3. In the *Next steps...* section on the *Progress* page, click the **Run Transform** link.

4. On the *Specify Import set and Transform map* page, make sure the *Import Historic NeedIt Data map* is in the *Selected maps, run in order* slushbucket.

5. Click the **Transform** button.

6. On the *Progress* page, verify the transform was successful:

7. In the *Next steps...* section, click the **Transform history** link.

8. Verify the Transform History status is *Complete*.

9. In the Application Navigator, open **NeedIt > All**. You should see the five imported records. The record *Numbers* might be different in your table than the *Numbers* in the screenshot.

☐	ⓘ	NI002001	4 - Low	Requested	(empty)	Imported record 1	NeedIt
☐	ⓘ	NI002002	4 - Low	Requested	(empty)	Imported record 2	NeedIt
☐	ⓘ	NI002003	4 - Low	Requested	(empty)	Imported record 3	NeedIt
☐	ⓘ	NI002004	4 - Low	Requested	(empty)	Imported record 4	NeedIt
☐	ⓘ	NI002005	4 - Low	Requested	(empty)	Imported record 5	NeedIt

10. Open an imported record for editing.

11. Verify that the *Requested for email* field has a value. Is the value what you expected? If not, debug and re-test.

12. Verify that the *When needed* field has a value. Is the value in the correct format? If not, debug and re-test.

▶ **QUESTION**: Why is the timestamp in the *When needed* field *00:00:00*?
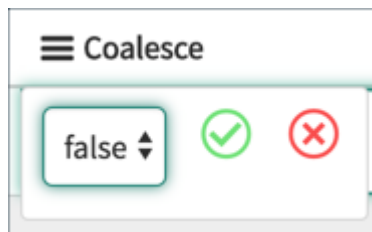
Coalesce

1. Edit the Transform Map to coalesce on all mapped fields *except Short description*.

2. In the main ServiceNow browser window, use the Application Navigator to open **System Import Sets > Administration > Transform Maps**.

3. Click the **Import Historic NeedIt Data** link to open the Transform Map for editing.

4. Scroll to the **Field Maps** related list).

5. Set the *Coalesce* value to **true** for four of the Field Maps.

   a. For each row in the Field Map *except u_short_description*, double-click the value in the *Coalesce* column.

   b. Change the *Coalesce* value from the default value of *false* to **true**.

   c. Click the **Save value** button ( ).

   d. If you see a message about the coalesce index, follow the instructions in the message to see if a new index must be created. You should not need a new index.

6. Write a Transform Script to update existing records but **not** insert new records.

   a. Switch to the **Transform Scripts** related list.

   b. Click the **New** button.

   c. Set the *When* value to **onBefore**.

   d. Copy this script and paste it into the *runTransformScript* function.

```
// If the coalesce field(s) determine there is no match between the
  // source data row and the target table, do not create a new record in
  // the target table.

if (action == 'insert') {
      ignore = true;
   }
```

7. Click the **Submit** button to save the onBefore Transform Script.

Test Coalescing and the Transform Script

1. Delete any **three** *NeedIt* records you imported in the last test.

   a. Use the Application Navigator in the main ServiceNow browser window to open **NeedIt > All**.

   b. Click the **select box** in the leftmost column to select three of the imported records.

   c. Click the **Context** menu (Actions on selected rows... ⬍) and select the **Delete** menu item.

   d. In the *Confirmation* dialog click the **Delete** button.

2. Change the value in the *Short description* field of the two remaining imported records to **This record was inserted by the import**.

NI002073	4 - Low	Requested	This record was inserted by the import.	NeedIt
NI002074	4 - Low	Requested	This record was inserted by the import.	NeedIt

3. Load the *needitimportdata.csv* file data into the staging table.

   a. In the main ServiceNow browser window, use the Application Navigator to open **System Import Sets > Administration > Data Sources**.

   b. Open the **needitimportdata.csv (Uploaded)** record for editing.

   c. Scroll to the Related Links and click the **Load All Records** link.

4. In the *Next steps...* section on the *Progress* page, click the **Run Transform** link.

5. On the *Specify Import set and Transform map* page, make sure the *Import Historic NeedIt Data* map is in the *Selected maps, run in order* slushbucket.

6. Click the **Transform** button.

7. On the *Progress* page, verify the transform was successful:

Progress	
Name	Transforming: ISET0010002
State	Complete
Completion code	Success
Message	Transformation complete

8. In the *Next steps...* section, click the **Transform history** link.

9. The *Transform History status* should be *Complete*.

10. In the Application Navigator, open **NeedIt > All**. No records should have been inserted. Two records should have updated *Short description* values. Your updated records may be different than the two records shown in the screenshot. The records you see are whichever two records you did not delete.

NI002073	4 - Low	Requested	Imported record 1	NeedIt
NI002074	4 - Low	Requested	Imported record 2	NeedIt

▶ **QUESTION**: Why was the *Short description* field value changed for the two records?