



## UtilityPak: Dynamics CRM Record Merge

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# Dynamics CRM Record Merge

Welcome to the Dynamics CRM Record Merge. This UtilityPak contains Maps that can be used in TIBCO Scribe® Online to merge accounts, contacts, leads, or incidents in Dynamics CRM. This document includes some information on the Merge functionality of the [TIBCO Connector for Dynamics CRM](#), the related use case and Map design, and steps to implement them.

## Merge Overview

The Dynamics CRM Connector includes a **Merge** Block, which enables basic merging of accounts, contacts, leads, or incidents.

The **Merge** identifies one record as the master, or surviving, record. Based on logic you define, duplicate or subordinate records can be merged into the master record. When you merge these records into the master record, all children of the subordinate records become children of the master record and the subordinate records are set to inactive. Individual fields of the subordinate records remain intact with the inactive account, contact, lead, or incident, but are not merged into the master record.

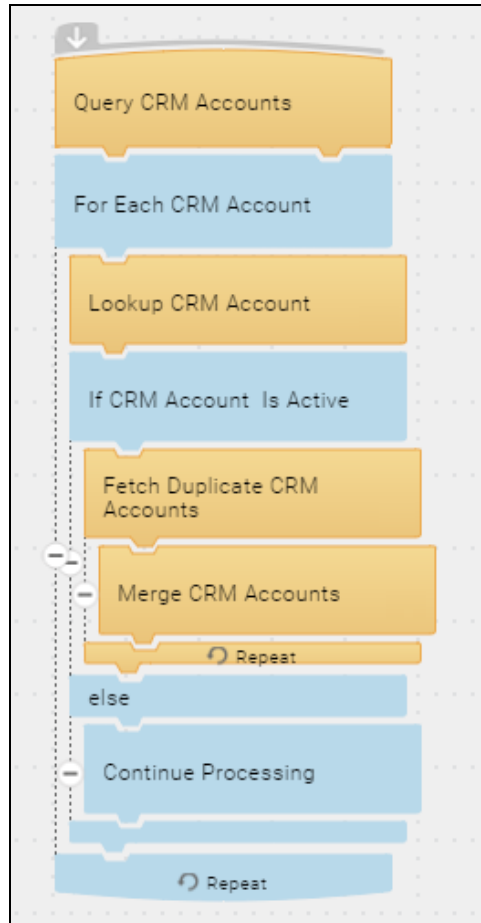
## Use Case and Design

The Maps support a simple use case in which any record in the set of duplicates can be the master record, as long as all duplicates based on the defined duplicate logic are merged.

In the provided Maps, the source query record is always the master record. The duplicate logic is based on finding another record of the same entity where the name matches but the id does not.

When the master record has a parent:

- If the subordinate record has the same parent, the records are merged.
- If the subordinate record has a different parent, the records are not merged and an error is written to the execution history.



For example, the figure above shows how Accounts are merged:

1. The **Query** Block returns all active records in random order. The record set is stored in memory and each record is processed individually.
2. The **Lookup** Block verifies the state of the source query record, which may have changed since the record set was originally returned in the query Block:
  - **If** the Lookup Block shows the source query record is still Active:
    - a. The **Fetch** Block defines the criteria for identifying duplicate records.
    - b. The **Merge** Block either performs the merge, or raises the parent-related error.
  - **Else** the Lookup Block shows the source query record is Inactive and no further processing is required.

When the **performParentingChecks** field is set to True in the **Merge Block**, if the **Merge Block** results in an error, any records that meet the **Fetch Block** criteria that have not yet been compared to the source query record are skipped. The process exits out of the **Fetch Block** and returns to the next Source Query record. If there is more than one matching record, you may end up with a different record than expected as the surviving master record

Options to consider:

- **Enable Most Recent Record Processed Functionality in the Query Block** – Ensures the records returned in the **Query Block** are in descending order, based on the DateTime you select, and the most recent record is the master record.
- **Update the logic in the Fetch Block** – The existing logic is very basic and may result in undesired merges. Add logic or enhance existing logic by adding nested **If/Else** Blocks for additional comparisons before performing the merge.
- **Update parent information in your Dynamics CRM system** – For increased merge success, update duplicate records to have the same parent before running the merge.
- **Modify the performParentingChecks field setting in the Merge Block** – To ignore the parent checks and merge all duplicate records, whether the parents match or not, set this field to **False**.
- **Review the data in the Dynamics CRM system** – Identify and flag the master and subordinate records and use these flags, instead of the source query and fetch results, to set the master and subordinate records in the **Merge Block**.

## About The UtilityPak

This UtilityPak is available as a downloadable ZIP file, **ScribeUtilityPakforDynamicsCRMRecordMerge\_v1.0.zip**. You can download this file from the [TIBCO Scribe® Online UtilityPaks](#) page.

## UtilityPak Contents

The UtilityPak includes the following TIBCO Scribe® Online XML files that contain the Maps to merge records in some entities in Dynamics CRM:

- **Merge Accounts.xml** – Returns all active accounts from Dynamics CRM, fetches all active accounts with the same name as the original record but a different **accountid**, and merges those records if they have the same parent information.
- **Merge Contacts.xml** – Returns all active contacts from Dynamics CRM, fetches all active contacts with the same full name as the original record but a different **contactid**, and merges those records if they have the same parent information.
- **Merge Leads.xml** – Returns all open leads from Dynamics CRM, fetches all open leads with the same full name as the original record but a different **leadid** and merges those records if they have the same parent information.

- **Merge Incidents.xml** – Returns all active incidents from Dynamics CRM, fetches all active incidents with the same title as the original record but a different **incidentid** and merges those records if they have the same parent information.

## Requirements

In addition to the UtilityPak, your site needs:

- A trial or paid subscription to the TIBCO Scribe® Online Integration Services (IS).
- Access to a Dynamics CRM On-Premise or Online Organization.

## Preparing The UtilityPak

This section describes the steps required to extract files from the .zip file and configure the TIBCO Scribe® Online Connection.

For information on TIBCO Scribe® Online tasks, such as configuring Connections and using TIBCO Scribe® Online, see the [TIBCO Scribe® Online Help Center](#).

### Extract The Files From The Zip File

1. Download the **ScribeUtilityPakforDynamicsCRMRecordMerge\_v1.0.zip** file.
2. Extract the files to a location that can be accessed by TIBCO Scribe® Online.

### Configuring The TIBCO Scribe® Online Connection

This section describes the steps required to configure the TIBCO Scribe® Online Connection.

Connections are used in multiple Maps, therefore, Scribe recommends creating Connections from the Connections page and adding them to the Maps as needed. For information, see [Adding Connections](#).

#### Configure The Dynamics CRM Connection

Configure the Dynamics CRM Connection, as described in [TIBCO Scribe® Online Connector For Microsoft Dynamics CRM](#).

If you are using an existing Dynamics CRM Connection, refresh the metadata as described in [Resetting Metadata](#).



## Configuring The TIBCO Scribe® Online Solution

After you create the TIBCO Scribe® Online Connection, configure the Solution.

### Create A TIBCO Scribe® Online IS Solution

1. Configure a new Solution. See [Adding Or Editing An Integration Solution](#).
2. In the Maps section of the Solution, select **Import** from the Menu ☰.
3. Browse to the desired XML file included in this UtilityPak, and import that file. See [Exporting And Importing Maps](#).

The imported Maps show as Incomplete.

4. Open each Map and configure the Connections. See [Defining An Integration Map](#).

## Error Examples

As noted above, the **PerformParentingChecks** field is set to true in the Maps provided. This section includes examples of the errors you may receive.

### Master Record Has No Parent

If the master record does not have a parent but a subordinate record does, an error similar to the following may occur:

```
Map Name: Merge Contacts
Source Entity: contact
Error title: Error in calling Operation Merge
```

```
Error description: Operation failed. Label: Merge CRM Contacts, Name:
mergeMerge, Message: Unable to update data into the merge entity.
Merge warning: sub-entity might lose parenting
```

### Different Parents For Master And Subordinate Records

If the master record has one parent and a subordinate record has a different parent, an error similar to the following may occur:

```
Source Entity: contact
Error title: Error in calling Operation Merge
```

```
Error description: Operation failed. Label: Merge CRM Contacts, Name:
mergeMerge, Message: Unable to update data into the merge entity.
Merge warning: sub-entity will be differently parented.
```