HR Management for Microsoft Dynamics 365

To

Microsoft Human Resources

(CoreHR) Integration

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Version history

|  |  |  |  |
| --- | --- | --- | --- |
| 0.01 | 26.02.2019 | Document created | TFA |
|  |  |  |  |

# Global Definitions

|  |  |
| --- | --- |
| Name | Description |
| MSFT HR | Microsoft Dynamics 365 Human Resources |
| HR for Dynamics | HR Management for Microsoft Dynamics 365 |
| Customer/User | Hubdrive HR or MSFT HR users |

# Introduction

The goal of this feature is to integrate the Hubdrive HR Management solution with Microsoft Dynamics 365 Human Resources.

While Microsoft has moved HR data to CDM via CDS, we were able to synchronize HR data between the Hubdrive HR solution and Microsoft D365HR (formerly Talent) via CDS.

This feature has been introduced on Rollup 26 and on Rollup 27; we deliver more integration stability, enhancements and extensibility to the integration, as more entities will be promoted by Microsoft to the CDS as well as more business-oriented design.

For the already deprecated Microsoft Modules “Attract” and “Onboard” applications, we also added some performance and extensibility enhancements on Rollup 27.

Users of HR for Dynamics and MSFT HR should be able to use both systems smoothly and take benefits of both systems with minimum user input possible.

As an output of this project, the MSFT HR Users should be able to use the HR for Dynamics base entities and utilize them to use extra features from Microsoft Dynamics 365 Human Resources and vice-versa from MSFT HR to HR for Dynamics.

For customers to be able to use this integration project with MSFT Human Resources , they require to have Hubdrives HR solution RU 26 at least and the extension solution for MSFT HR integration.

# Requirements

## Functional Requirements

All data synchronization run as background processes, by utilization the CDM information available via CDS.

Our integration scope is to synchronize the data from and to HR for Dynamics and CDS within the integration direction mentioned below for each entity.

As soon as MSFT HR app logic is in the cloud, it is responsible to fetch the data from CDS via background jobs.

Integration is handling Record creation and update. Record deletion is not tracked by this integration project.

### Entities mapping

|  |  |  |
| --- | --- | --- |
| Entity Mapping (CoreHR) | | |
| Hubdrive HR Solution | Integration Direction | Microsoft Dynamics 365 Human Resources (CDS) |
| Department | <-> | Department |
| Job Profile | <-> | Job |
| Position | <-> | Job Position |
| Employee | -> | Worker |
| Worker Personal Details |
| Onboarding guide |
| Employment Contract | -> | Employment |

### Hubdrive Department – MSFT HR Department

1. Mapping Hubdrive department to MSFT HR Department is bi-directional.
2. Users must be able to add new department either on HR for Dynamics or MSFT HR and the same department information should be synchronized on bi-directional.
3. MSFT HR has a different logic for hierarchy then what is defined on HR for Dynamics. The department hierarchy is not mapped yet while the MSFT HR hierarchy information is not available yet on CDS, The only available field on CDS from MSFT HR is “Parent Department” but it is not reflecting with the correct information on MSFT HR UI, however this information is filled out and tracked by the this integration project. Please read more on the “Future work” document.
4. Fields which needs to be maintained:

|  |  |  |
| --- | --- | --- |
| Field Mapping | | |
| HR for Dynamics - Department | MSFT HR - Department | Default Value |
| Name | Name | - |
| Parent Department | Parent Department | - |

### Hubdrive Job Profile – MSFT HR Job

1. Mapping Hubdrives job profile to MSFT HR Job is bi-directional integration.
2. Job Titles, Job functions and job types are managed only on MSFT HR.
3. Hubdrives HR for Dynamics Job profile is now connected to these three new entities and global OptionSet.
4. Default FTE for a job profile is set to 1.0 for MSFT HR Job.

|  |  |  |
| --- | --- | --- |
| Field Mapping | | |
| Hubdrive – Job Profile | MSFT HR - Job | Default Value |
| Name | Name | - |
| Description | Description (short) | - |
| Job Definition - Text only | Description | - |
| - | Full-time equivalent | 1 |
| Job Title | Title | - |
| Job Function | Function | - |
| Job Type | Job Type | - |

### Hubdrive Position – MSFT HR Job Position

1. Mapping Hubdrive position to MSFT HR Job position is bi-directional integration.
2. Fields which will be mapped are:

|  |  |  |
| --- | --- | --- |
| Field Mapping | | |
| Hubdrive HR - Position | MSFT HR – Job Position | Default Value |
| Position | Description | - |
| Start Date | Valid from | - |
| Activation | - |
| End Date | Valid to | - |
| Retirement | - |
| Department | Department | - |
| Parent Position | Parent Job Position | - |
|  | Full Time Equivalent | 1 |

### Hubdrive Employee – MSFT HR Worker, Worker Personal Details, Onboarding Guide

1. Mapping Hubdrive position to MSFT HR Job position is unidirectional integration from HR for Dynamics to MSFT HR only.
2. Fields which will be mapped are:

|  |  |  |
| --- | --- | --- |
| Field Mapping | | |
| Hubdrive HR - Employee | MSFT HR – Worker | Default Value |
| First Name | First name |  |
| Middle Name | Middle name |  |
| Last Name | Last name | - |
| Full Name | Full name | - |
| Birthday | Birth date | - |
| System User (Employee) | User | - |
| Facebook Profile URL | Contact information - Grid -> Facebook | - |
| LinkedIn Profile URL | Contact information - Grid -> LinkedIn | - |
| Gender | Gender | - |
| Mobile Phone | Phone | - |
| Email Address | Contact information - Grid -> Email address | - |
| Private E-mail | Contact information - Grid -> Email address | - |
| Job Title | Title | - |
| - | cdm\_source | 754400000 |
| - | cdm\_type | 754400000 |

|  |  |  |
| --- | --- | --- |
| Field Mapping | | |
| Hubdrive HR - Employee | MSFT HR – Worker Personal Details | Default Value |
| Birthplace | Birth city | - |
| Birthday | Birth date | - |
| Gender | Gender | - |
| Marital Status | Marital Status | - |

|  |  |  |
| --- | --- | --- |
| Field Mapping | | |
| Hubdrive HR – Employee | MSFT HR – Onboarding Guide | Default Value |
| Start Date | Recipient Start Date | - |
| - | Status | 0 |
| - | Source | 0 |
| - | msdyn\_isautosendenabled | false |
| - | msdyn\_istemplate | false |
| ownerid | ownerid | - |
| Employee -> Worker | msdyn\_recipientid | - |
| Employee -> HR Manager -> Worker | msdyn\_projectownerid | - |

### Hubdrive Employment Contract – MSFT HR Employment

1. Mapping Hubdrive employment contract to MSFT HR employment is unidirectional integration.
2. Fields which will be mapped are:

|  |  |  |
| --- | --- | --- |
| Field Mapping | | |
| Hubdrive HR – Employment Contract | MSFT HR – Employment | Default Value |
| Start Date | Valid from | - |
| Start Date | - |
| End Date | End Date | - |
| Transition Date | - |
| Last date worked | - |
| - | Valid to | 12/31/2154 |
| - | Work Start Date | 1/1/1900 |
| - | cdm\_adjustedworkerstartdate | 1/1/1900 |
| - | cdm\_workernoticeamount | 0 |
| - | cdm\_workertype | 754400000 |
| Company | Company |  |

### Entity Mapping Mechanism

Entity mappings are done by a generic module shipped with the out the box Hubdrive HR solution. It depends on integration mappings which is also shipped as base data with the Hubdrive extension solution for MSFT HR integration.

These integrations mapping the input source for the mapping mechanism to map source and target entities, define the fields and the conversion types if needed.

The entry point for this mapping mechanism is background workflows, which triggers on create and update of the mapped entities. This is applied on Hubdrive HR Management entities as well as MSFT HR CDS entities.

Advanced users can, add, update, remove any of existing entity mappings as well as fields mapping also by editing XML mapping configuration record in integration mapping entity.

#### Mapping XML configuration

The xml configuration allows advanced users to define the mapping entities, fields with the required supported conversion methods shipped by Hubdrives HR solution.

##### Sample XML Configuration And How to use

<?xml version="1.0" encoding="utf-8" ?>

<EntityMapping Selector="">

<!--Used to select the source and target entity logical name-->

<SourceEntity LogicalName="xrm1\_department" />

<TargetEntity LogicalName="cdm\_department" />

<!--Used to select the reference fields connecting booth source and target entity records-->

<EntityReferenceMappings>

<EntityReferenceMapping EntityLogicalName="xrm1\_department" ReferenceAttributeLogicalName="xrm1\_talent\_department\_guid"></EntityReferenceMapping>

</EntityReferenceMappings>

<AttributeMappings>

<!—Conversion method can be None, LookupConversion, DataTypeConversion, ValueConversion-->

<!—Source or Target field logical name can be “NONE” which means that this field is one direction mapping and

always should has a default value-->

<AttributeMapping ConversionMethod="None">

<SourceAttribute LogicalName="xrm1\_name" MinValue="" MaxValue="" DefaultValue="" />

<TargetAttribute LogicalName="cdm\_name" MinValue="" MaxValue="" DefaultValue="" />

</AttributeMapping>

<AttributeMapping ConversionMethod="LookupConversion">

<SourceAttribute LogicalName="xrm1\_department\_parent\_department\_id" EntityLogicalName="xrm1\_department" />

<TargetAttribute LogicalName="cdm\_parentdepartmentid" EntityLogicalName="cdm\_department" />

<LookupMapping>

<SourceLookup LinkEntityLogicalName="xrm1\_department" LinkAttributeName="xrm1\_departmentid" AttributeLogicalName="xrm1\_talent\_department\_guid" />

<TargetLookup LinkEntityLogicalName="xrm1\_department" LinkAttributeName="xrm1\_talent\_department\_guid" AttributeLogicalName="xrm1\_departmentid" />

</LookupMapping>

</AttributeMapping>

</AttributeMappings>

</EntityMapping>

## Technical Requirements

### ER Model



MSFT HR (CoreHR)

Hubdrive HR Solution

Hubdrive HR – CoreHR MSFT HR Integration – RU 27

# Custom Actions

## GenericRequest

Assembly Name: xRM1BS.Goldbright.CustomAction

Custom Action Name: GenericRequest

Input parameters: RequestContent => "EntityLogicalName","DynamicUrl"

Description: Reflect the changes from source to target entity as defined on the XML configuration.

# License

Product Feature Id: PF0000000068

# Security and user Roles

HR manager security role granted with Append-To on CDS MSFT HR (Company, Job Function and Job Type).

All integration process runs as elevated user.

# Use Cases

## Guidelines and expectations

## Use Case Diagram

## Use Case Description

# User Interface Specification