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EMS Human Resources (HR) Toolkit

Installation & Configuration Guide

V44.1

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CHAPTER 1: Introduction to Human Resources Toolkit

If your organization uses an Human Resources Information System or HRIS, user and group profiles or "accounts" may already be maintained there. This toolkit eliminates the double-entry of this information, by synchronizing between your HRIS and EMS at your chosen frequency. This toolkit enables you to automate the creation, updating, and de-activation of user and group accounts in EMS. You can configure it to automatically transfer selected records to a staging database and then update the appropriate tables in EMS. This tool saves time and enhances security, and enables the creation, maintenance, and inactivation of user and group accounts from an outside data source.

This section provides the following information:

- Integration Diagram
- Steps for Integrating with EMS HR Toolkit

EMS HR toolkit Integration Diagram
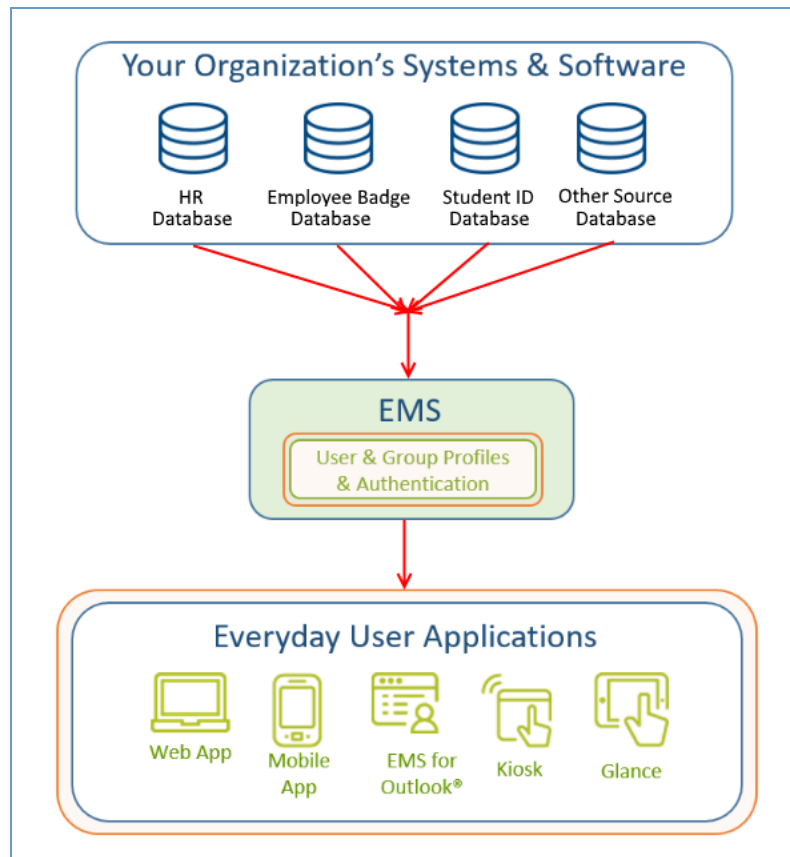
STEPS FOR INTEGRATING WITH EMS HR TOOLKIT

1. Identify the data source(s) in your organization to use as the source for your user records.
2. Determine if user records are organized by groups and group types (Group/Group Type Model) or a combination (Hybrid).
3. Obtain and execute the .sql files for creating the staging database and stored procedures needed to import data into your EMS database.
4. Establish a process for importing records into the staging database.
5. Execute the EMS HR Toolkit stored procedure (using Microsoft SQL Server Management Studio to create an SQL job to run the stored procedure on a schedule).
6. Maintain the source data to ensure continual data flow between your source(s) and EMS.

CHAPTER 2: How EMS HR Toolkit Works

The **EMS_Staging Database** is used to stage User records before they are imported into EMS.

> 💬 **Note:**
>
> Your EMS database may have the *Groups* field renamed to another term, such as *Employees*.

Once you have identified the data source within your organization that will be used to create and maintain your User records, you will then define and create a process to import active User records into the *tblPeople* table within *EMS_Staging.*
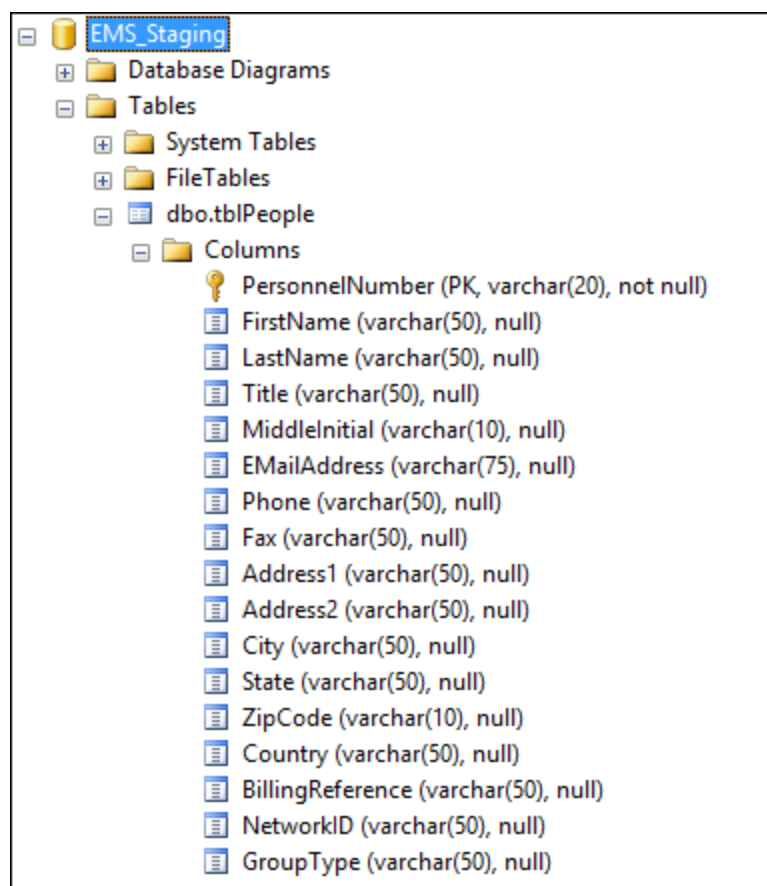
tblPeople Table in the EMS_Staging Database

> 💬 **Note:**
>
> The above is a baseline table. Please note that your table may be customized.

CHAPTER 3: How EMS HR Toolkit Integrates Your User Records

EMS HR Toolkit automates the creation, update, and de-activation of user records as individuals and as groups or contacts. EMS HR Toolkit absorbs user records and any changes to these records from your chosen data source, and then transfers the data to EMS. This allows you to automatically sync EMS with user records held in other systems in your organization.
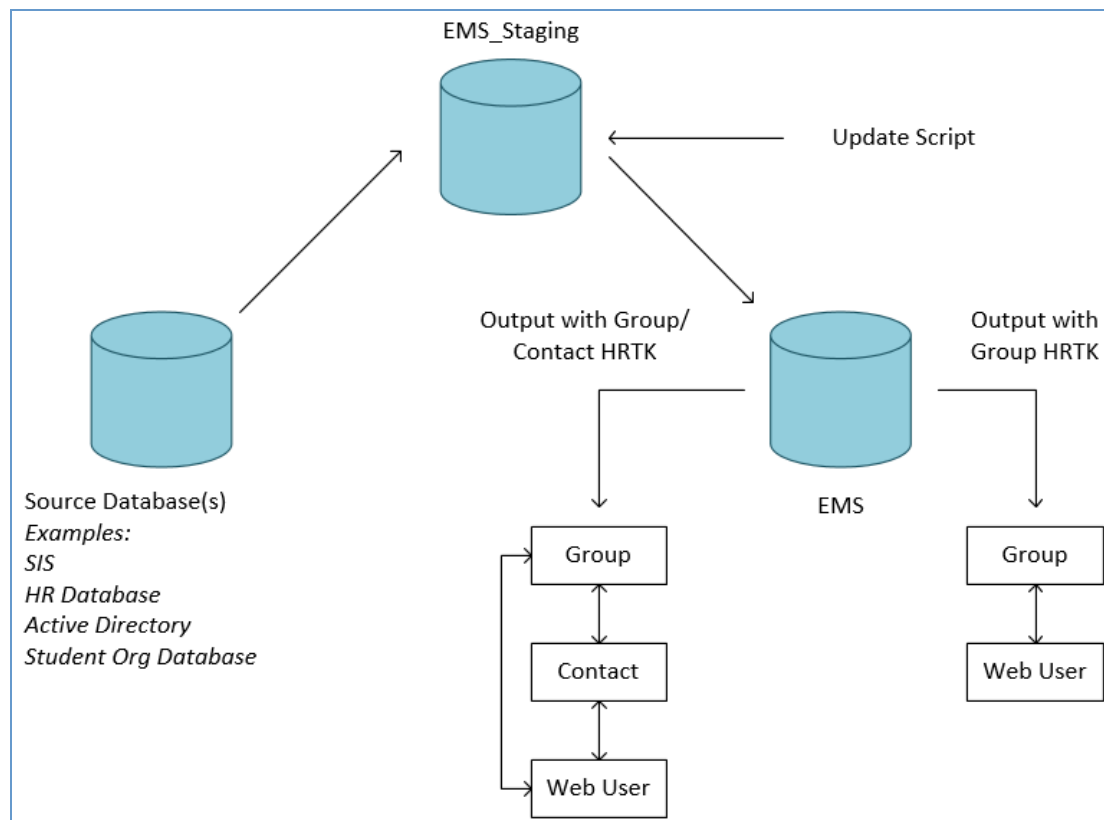
EMS HR Toolkit Integration Diagram

The information from your organization's database(s) is loaded into the *EMS_Staging* database table and then the *HRTK_Update_Group* stored procedure is created on the EMS database, then executed to populate the data from the staging table into EMS. This information populates and updates the information for your EMS Groups, Contacts, and Everyday/Web Users.

CHAPTER 4: Align Your Source Data for HR Toolkit

You can use the specifications below to make sure your source data will import correctly into EMS.

The HRTK_Update_Group stored procedure contains all of the logic to create your EMS Contact, Group and Everyday Applications (web) User data. Records are imported into EMS from the EMS_Staging database according to the specifications below.

This topic provides information on the following:

- Two baseline setups for the staging data:
    - Hybrid Setup
    - Group-Group Type Setup
- Group Type Records
- Group Records
- Contact Records

Below are the baseline staging database fields for both Hybrid and Group-Group Type Setups. Please note that your EMS HR Toolkit staging database may be different. Please contact your Professional Services Consultant if you are unsure of what EMS HR Toolkit setup you are using.

Hybrid Setup

In some instances, it may be necessary to combine elements of the Group/Group Type model into a Hybrid data model. This is typically necessary when you will have some Everyday Application Users belonging to a department while other Everyday Application Users are not part of a department and are simply using EMS Web App on their own.

For example, for study rooms on college campuses, students on campus could have access to EMS Web App to book these study spaces, but they may not all belong to a Group (department), and therefore are created following the Group/Group Type rules. Additionally, it is possible to have users that belong to both individual Groups and organizational Groups. For instance, John Doe could be created as a contact for the History department as well as an individual Group. You should work with your Professional Services Consultant for guidance on whether the Hybrid data model is right for you.

Baseline Stage Database Fields for Hybrid Setup

EMS Staging Field (varchar)	Writes Data to EMS Database Fields	Requirements/Notes
PersonnelNumber (255)	Contact.External Reference WebUser.ExternalReference	**REQUIRED** Part of Primary Key Cluster. Unique identifier (e.g. Employee/Student ID, Personnel Number, etc.) for each web user. Used

EMS Staging Field (varchar)	Writes Data to EMS Database Fields	Requirements/Notes
		for purposes of creating /updating EMS.
FirstName (50)	Contact.Contact WebUser.UserName	Must have at least 1 of 3. Built in EMS as LastName, FirstName Middle Initial.
LastName (50)	Contact.Contact WebUser.UserName	Must have at least 1 of 3. Built in EMS as LastName, FirstName Middle Initial.
Title (50)	Contact.Title	Can be null.
MiddleInitial (10)	Contact .Contact WebUser.UserName	Must have at least 1 of 3. Built in EMS as LastName, FirstName Middle Initial.
EMailAddress (75)	Contact.EmailAddress WebUser.EmailAddress	**REQUIRED** for Web User creation.
Phone (50)	Contact.Phone WebUser.Phone	Can be null.
Fax (50)	Contact.Phone WebUser.Fax	Can be null.
Address1 (50)	Contact.Address1	Can be null.
Address2 (50)	Contact.Address2	Can be null.
City (50)	Contact.City	Can be null.
State (3)	Contact.State	Can be null.
ZipCode (10)	Contact.ZipCode	Can be null.
Country (50)	Contact.Country	Can be null.
NetworkID (50)	WebUser.NetworkID	**REQUIRED** for Integrated Authentication.
GroupID (50)	Group.ExternalReference	**REQUIRED.** Unique identifier for each

EMS Staging Field (varchar)	Writes Data to EMS Database Fields	Requirements/Notes
		group. Along with PersonnelNumber, part of primary key cluster. If (Hybrid) for Group/GroupType functionality must be 0.
GroupName (50)	Group.GroupName	**REQUIRED** only for Everyday Application User associated with Groups. If (Hybrid) and GroupID = 0, this value is ignored.
GroupType (50)	Group.GroupTypeID GroupType.Description if unique	**REQUIRED** only for Everyday Application User associated with Groups. Associates groups with group types. If (Hybrid) and GroupID = 0, this value is ignored.

Group-Group Type setup

The **Group/Group Type** setup categorizes User records by group and group type and does not create Contacts under the Groups imported into the EMS HR Toolkit.

> **Note:**
> Your EMS environment may use different names for Groups and Contacts, such as Employee.

Baseline Stage Database Fields for Group-Group Type Setup

EMS Staging Field (varchar)	Writes Data to EMS Database Fields	Requirements/Notes
PersonnelNumber (20)	Group.ExternalReference	**REQUIRED** Unique identifier (e.g. Employee/Student ID, Personnel Number, etc.) for each web user. Used for purposes of creating /updating EMS.
FirstName (50)	Group.GroupName WebUser.UserName	Must have at least 1 of 3. Built in EMS as LastName, FirstName Middle Initial.
LastName (50)	Group.GroupName	Must have at least 1 of 3. Built in

EMS Staging Field (varchar)	Writes Data to EMS Database Fields	Requirements/Notes
	WebUser.UserName	EMS as LastName, FirstName Middle Initial.
Title (50)	Contact.Title	Can be null.
MiddleInitial (10)	Group.Group Name WebUser.UserName	Must have at least 1 of 3. Built in EMS as LastName, FirstName Middle Initial.
EMailAddress (75)	Group.EmailAddress WebUser.EmailAddress	**REQUIRED** for Web User creation.
Phone (50)	Group.Phone WebUser.Phone	Can be null.
Fax (50)	Group.Fax WebUser.Fax	Can be null.
Address1 (50)	Group.Address1	Can be null.
Address2 (50)	Group.Address2	Can be null.
City (50)	Group.City	Can be null.
State (50)	Group.State	Can be null.
ZipCode (10)	Group.ZipCode	Can be null.
Country (50)	Group.Country	Can be null.
BillingReference (50)	Group.BillingReference	Can be null.
NetworkID (50)	Group.NetworkID WebUser.NetworkID	**REQUIRED** for Integrated Authentication.
GroupType (50)	GroupType.Description if unique Group.GrouptypeID	**REQUIRED** for assignment of Group Type to groups. Will assign GroupType of (None) when left blank or null.

Group Type Records

- Unique GroupTypes in EMS_Staging.tblPeople are added to the Group Types table in EMS (EMS.tblGroupType). Group Types are not updated or de-activated.

Group Records

- Groups that exist in EMS_Staging.tblPeople, but not in EMS.tblGroup (based on EMS_Staging.tblPeople.PersonnelNumber and EMS.tblGroup.ExternalReference) will be created in EMS.
- For Groups that exist in EMS_Staging.tblPeople and in EMS.tblGroup, GroupName (tblPeople.LastName, tblPeople.FirstName) and GroupType changes in EMS_Staging will be updated in EMS.
- Groups that exist in EMS.tblGroup, but not in EMS_Staging.tblPeople will be de-activated in EMS.
- An Everyday User Account will be created for each group.

Contact Records

- Contacts that exist in EMS_Staging.tblPeople, but not in EMS.tblContact (based on EMS_Staging.tblPeople.PersonnelNumber and EMS.tblContact.ExternalReference), will be created in EMS. A Web User account will also be created for the Contact in EMS and the Group record will be automatically assigned to the Contact's Web User record. This allows the Contact to make a reservation on behalf of the Group in EMS Web App.
- For Contacts that exist in EMS_Staging.tblPeople and in EMS.tblContact, any/all changes to the Contact's information (name, address, etc.) in EMS_Staging will be updated in EMS.
- Contacts that exist in EMS.tblContact, but not in EMS_Staging.tblPeople will be de-activated in EMS.

CHAPTER 5: Install HR Toolkit

> ⚠️ **Important!**
>
> **UPGRADE CONSIDERATION**
>
> EMS V44.1 changes how Everyday Web Users are validated. If you have custom HR Toolkit scripts and you are upgrading, these need to tested with the new Install to account for this change.

> 💬 **Note:**
>
> **EMS Cloud Services Customers**
>
> The installation and updating information in this topic does not apply to EMS Cloud Services customers. For more information regarding the installation and updating of EMS software with Cloud Services, please refer to the .

To install HR Toolkit, you must:

1. Obtain the installation files from your Professional Services Consultant.

2. Install the HR Toolkit files.

Obtain the EMS HR Toolkit Installation Files

Please contact your Professional Services Consultant to obtain the following components:

- **HR Toolkit Staging Database** installation file—SQL file creates the Staging Database and associated table(s).

- **HR Toolkit Update Script** installation file—SQL file generates the HRTK_Update_Group stored procedure.

Install EMS HR Toolkit Files

Once you have obtained the installation files, perform the following steps on the MS SQL Server that hosts your EMS database Using Microsoft SQL Server Management Studio.

1. Execute the **HRTK Staging DB Install** script against your master database. This will create the EMS_ Staging database containing one table named tblPeople.

2. Execute the **HRTK Update** script against your EMS database. This will create a stored procedure in your EMS database named HRTK_Update_Group.

CHAPTER 6: Import HR Toolkit Data

> ⚠️ **Important!**
>
> Existing EMS clients must synchronize existing EMS Group, Contact, and Everyday User records before activating the HR Toolkit. **Ignoring this step will result in duplicate records.** Please contact your Professional Services Consultant for more details.

1. Import **ACTIVE** records from your organization's data source into the *tblPeople* table within the *EMS_Staging* database.

2. Execute the *HRTK_Update_Group* stored procedure.

> 💬 **Note:**
>
> These steps (with assistance from your IT Department) can be scheduled to execute automatically using an SQL Job. Please refer to your MS SQL Server documentation for more information on creating and scheduling an SQL Job. This process is not managed by EMS Software.

CHAPTER 7: Configure EMS Web App for HR Toolkit

Various configuration settings are available to automatically assign the appropriate Everyday User Process Template(s) when a user hits your EMS Web App site for the first time. Within the EMS Web App Parameters area of EMS (**System Administration** > **Settings** > **Parameters** > **Everyday User Applications** tab), the following parameters must be set accordingly to activate this feature:

> 💬 **Note:**
>
> Ignore the "Auto Creates…" and "Security Status…" parameters if your HR Toolkit was customized to automatically assign Everyday User Process Templates to Everyday Users.

Area	Description	Value
Account Management	Auto-Creates Everyday Users During Integrated Authentication	NO (Account Management| Auto-Creates Everyday Users During Integrated Authentication)
Account Management	Default Security Template for User	**Must be specified**
Account Management	Security Status for User	Active

> 💬 **Note:**
>
> You can configure booking templates so that they are automatically assigned to all new Everyday Users. Select the Enable for Web App option when configuring the Everyday User Process Template under **Configuration** > **Everyday User Applications** > **Everyday User Process Templates**). For instructions in configuring Everyday User Process templates, see Configure Everyday User Process Templates.

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