EMS Human Resources (HR) Toolkit Installation & Configuration Guides

V44.1

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CHAPTER 1: EMS 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 HR Toolkit Guide provides information on the following topics:

- Introduction to Human Resources Toolkit
- Installation Overview
- Obtain the Installation Files
- How It Works
  - How HR Toolkit Integrates Your User Records
  - Align Your Source Data for HR Toolkit

» Configure EMS Web App for HR Toolkit
» Upgrade Considerations

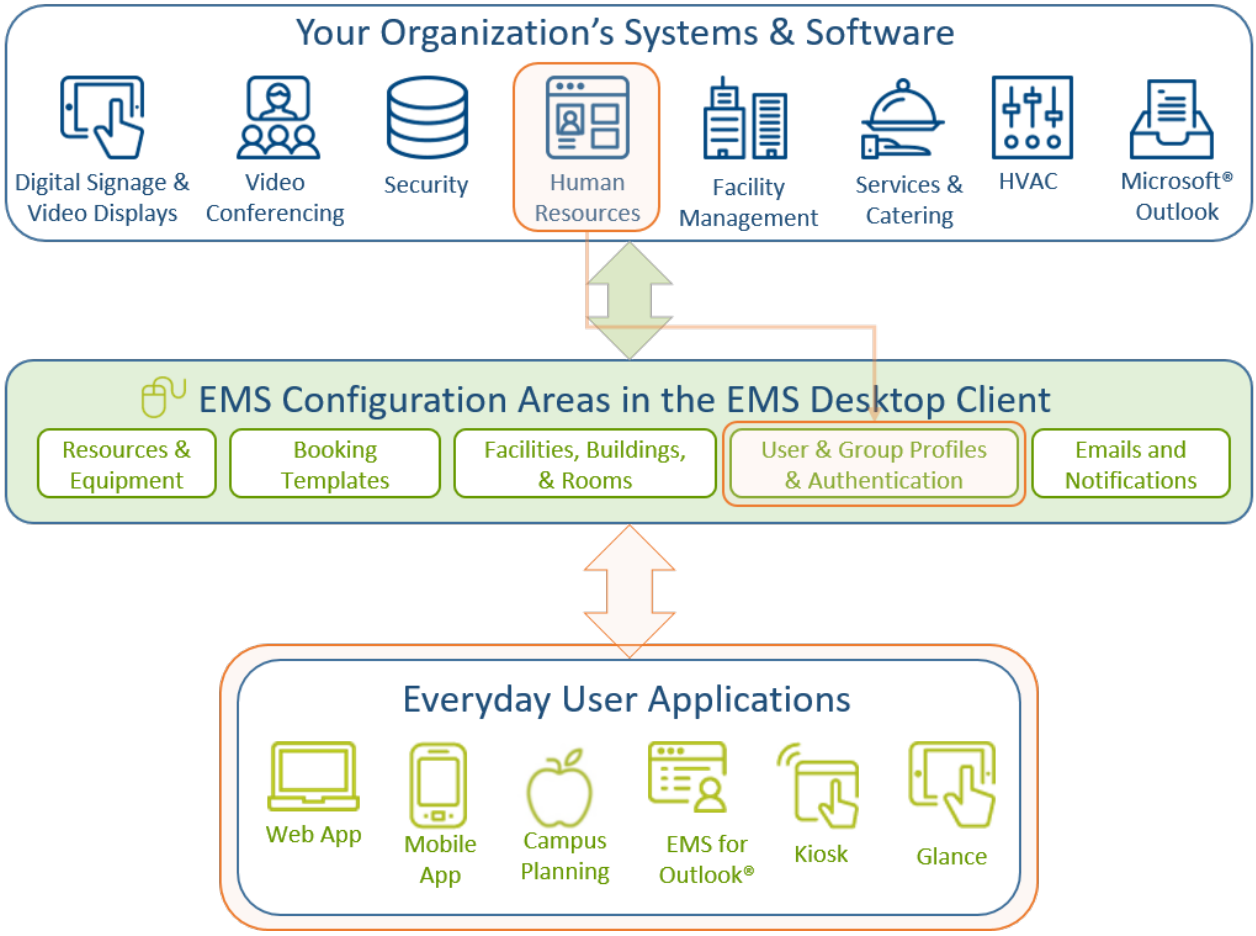
» Install HR Toolkit for the Group/Group Type Model
» Import Group/Group Type Data

» Install HR Toolkit for the Groups/Contacts or Hybrid Model
» Import Group/Contact or Hybrid Data

CHAPTER 2: 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.

Integration Diagram



CHAPTER 3: Installation Overview

Note for 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 EMS Cloud Services documentation.

If you are unsure whether your organization is licensed for EMS Human Resources Toolkit or if you would like to learn more about it, please contact your Account Executive.

To integrate the EMS Human Resources Toolkit, you will:

- Identify the data source(s) in your organization to use as the source for your user records.
- Determine if user records are organized by groups and contacts (Group/Contact Model), by groups and group types (Group/Group Type Model), or all of these (Hybrid).

- Obtain and execute the .sql files for creating the staging database and stored procedures needed to import data into your EMS database.
- Establish a process for importing records into the staging database.
- 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).
- Maintain the source data to ensure continual data flow between your source(s) and EMS.

EMS Human Resources Toolkit can be configured in three ways: **Group/Group Type, Group/Contact**, and **Hybrid**.

Your Implementation Consultant will work with you to determine which variant will be best for your organization. The **Group/Contact** model is structured around having your Groups populated with Contacts beneath them. The **Group/Group Type** model categorizes User records by group and group type and does not create Contacts under the Groups imported into the HRTK. The **Hybrid** model will adjust the functionality based upon the *GroupID* criteria in the *EMS_Staging.dbo.tblPeople* table. Note that your EMS environment may use different names for Groups and Contacts, such as Employee.

CONSIDERATIONS FOR THE HR TOOLKIT HYBRID DATA MODEL

In some instances, it may be necessary to combine elements of the Group/Group Type and Group/Contact model HR Toolkits 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.

CONTACT CUSTOMER SUPPORT

- **Option 1 (Recommended):** Search the Knowledge Base available in the EMS Customer Portal.
- **Option 2:** Submit a Case directly via the EMS Customer Portal.

- **Option 3:** Email support@emssoftware.com.
- **Option 4 (Recommended for critical issues only):** Phone **(800) 288-4565.**

> **IMPORTANT:** If you do not have a customer login, register here.

CHAPTER 4: Obtain the Installation Files

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

- **HRTK Staging DB Install G_GT_WU.sql** – SQL file required to create the staging database - *EMS_Staging*.
- **HRTK Update Script G_GT_WU.sql** – SQL file required to create the stored procedure *HRTK_ Update_Group* within your EMS database.

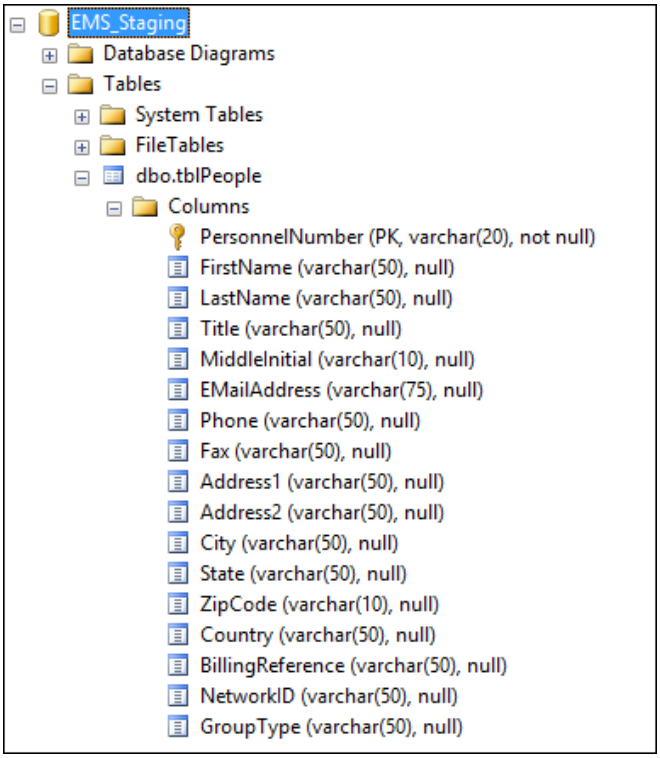
CHAPTER 5: How It Works

The *EMS_Staging* database (created **by HRTK Staging DB Install G_GT_WU.sql**) 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* (shown below).

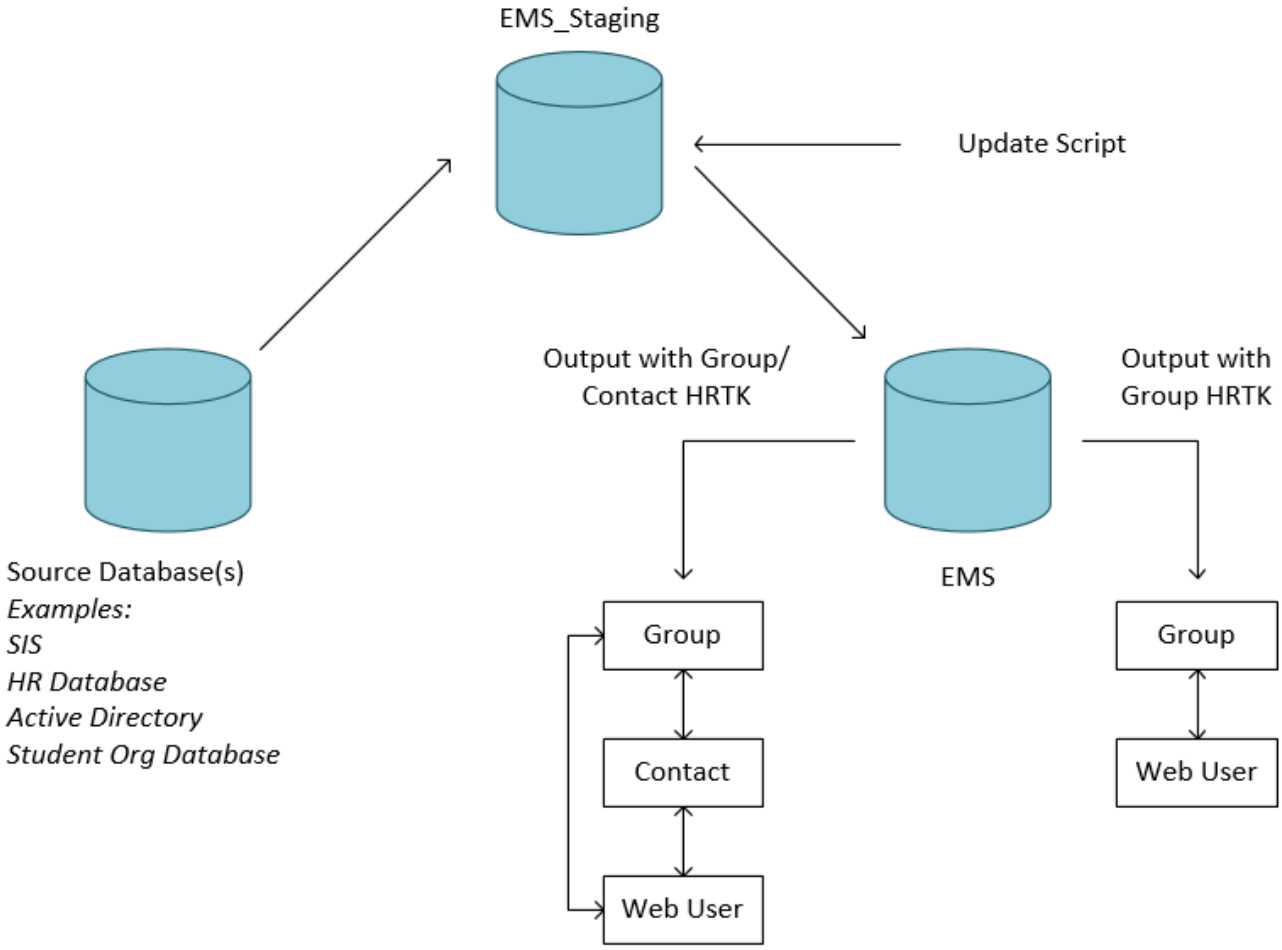
tblPeople Table in the EMS_Staging Database



CHAPTER 6: How HR Toolkit Integrates Your User Records

EMS Human Resources Toolkit automates the creation, update, and de-activation of user records as individuals and as groups or contacts. EMS Human Resources 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.

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 sta-

ging table into EMS. This information populates and updates the information for your EMS Groups, Contacts, and Everyday/Web Users.

CHAPTER 7: 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 (created by **HRTK Update Script G_C_GT_WU.sql**) 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.

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 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	Must have at least 1 of 3. Built in EMS as LastName, FirstName

EMS STAGING FIELD (VARCHAR)	WRITES DATA TO EMS DATABASE FIELDS	REQUIREMENTS/NOTES
	WebUser.UserName	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

EMS STAGING FIELD (VARCHAR)	WRITES DATA TO EMS DATABASE FIELDS	REQUIREMENTS/NOTES
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 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 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.GroupID and EMS.tblGroup.ExternalReference) will be created in EMS.
- For Groups that exist in EMS_Staging.tblPeople and in EMS.tblGroup, GroupName 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 (includes all of the Contacts associated with the 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 for the associated Group (see section above for Group maintenance logic). 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 Virtual EMS.

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. If the Group that a Contact is assigned to changes, the Contact record under the original Group will be de-activated and a new Contact record will be added under the new Group. This process also automatically assigns the Group record to the Contact's Web User record.

Contacts that exist in EMS.tblContact, but not in EMS_Staging.tblPeople will be de-activated in EMS.

CHAPTER 8: 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	Yes
Account Management	Default Security Template for User	**Must be specified**
Account Management	Security Status for User	Active

TIP: 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.

CHAPTER 9: Upgrade Considerations

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.

CHAPTER 10: Install HR Toolkit for the Group/Group Type Model

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 G_GT_WU.sql** script against your **master** database. This will create the *EMS_Staging* database containing one table named *tblPeople*.
2. Execute the **HRTK Update Script G_GT_WU.sql** script against your EMS database. This will create a stored procedure in your EMS database named *HRTK_Update_Group*.

CHAPTER 11: Import Group/Group Type 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 tasks (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 a SQL Job. This is process is not managed by EMS Software.

CHAPTER 12: Install HR Toolkit for the Groups/Contacts or Hybrid Model

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

1. Execute the **(G_C_GT_WU.sql)/(G_GT_WU.sql)/(Hybrid.sql)** script against your master database. This will create the *EMS_Staging* database containing one table named *tblPeople*.
2. Execute **the HRTK Update Script (G_C_GT_WU.sql)/(G_GT_WU.sql)/(Hybrid.sql)** script against your EMS database. This will create a stored procedure in your EMS database named *HRTK_Update_Group*.

CHAPTER 13: Import Group/Contact or Hybrid 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.