



Data Loading

Veeva Professional Services

Module Objectives

- **Download and Install Data Loader**
- **Login and review the Data Loader Settings**
- **Discuss the need for Security Token**
- **List the different types of data loading operations**
- **Review data model for main Veeva objects**
- **Import data using the Upsert function**



Data Loader



Data Loader

- Application for the bulk import and export of data
- Reads and exports CSV files
- Maps CSV file fields to fields in application









- Drag and drop fields or Automap

- **Success Logs**

- Displays all successfully executed records
 - Displays newly assigned SDFC IDs

- **Error Logs**

- Displays all records that were not successfully executed
 - Error type and explanation

Name
 QMT.error100609092518000
 QMT.success100609092518000
 QPT.error100609095223125
 QPT.success100609095223125
 Problematic QPT1.success100709112535234
 Problematic QPT1.error100709112535234
 Problematic QPT2.error100709112830640
 Problematic QPT2.success100709112830640



Success and Error files are very important. Rename the files once they have finished being generated because it is hard to distinguish them from one another.



Downloading and Installing Data Loader

- **To download the Data Loader:**
 - Setup → Data Management → Data Loader
 - Click the Download the Data Loader for (Windows or Mac) link
- **After download is complete, run the installer and complete the installation**

Data Loader

[Help for this page](#)

Data Loader is a client app for the bulk import and export of data.

With data in a comma-separated values (CSV) file, Data Loader can create, edit, or delete Salesforce records for any standard or custom object.

Data Loader exports Salesforce records into CSV files. You can then edit those CSV files or use them as templates for importing data into Salesforce.

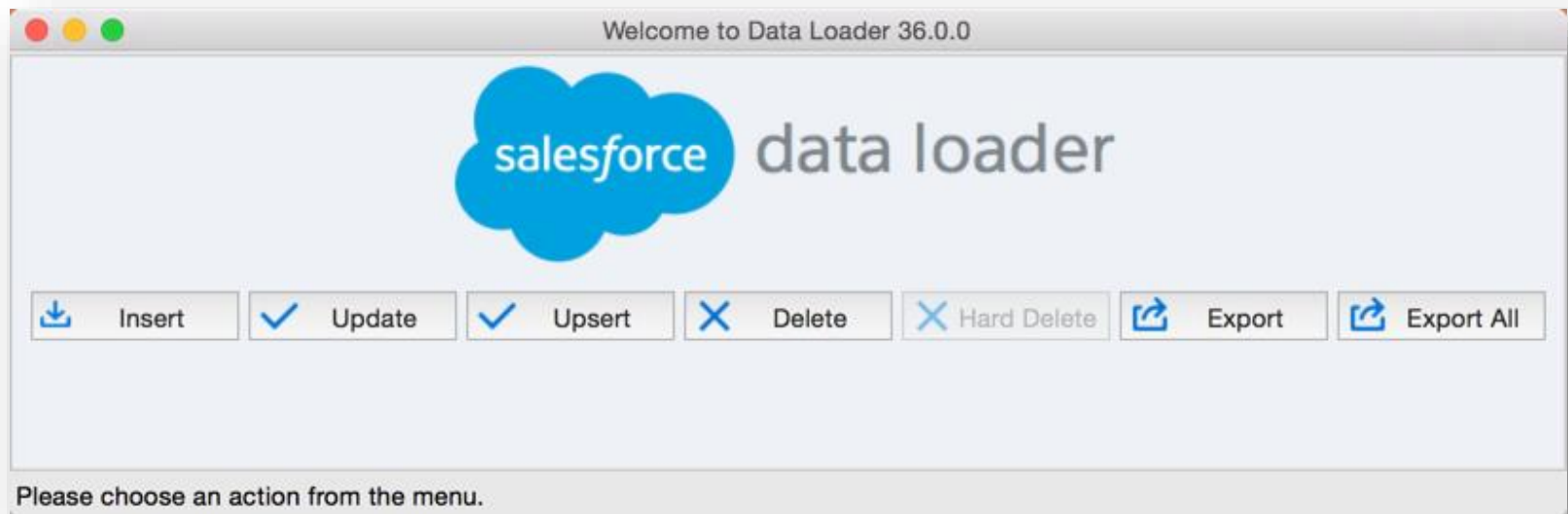
[Download Data Loader for Windows](#)

[Download Data Loader for Mac](#)



Login to Data Loader

- Launch Data Loader
- Pick the operation you want to perform
 - Upsert, Export, Insert, Update, Delete



- Enter your Veeva Username and Password

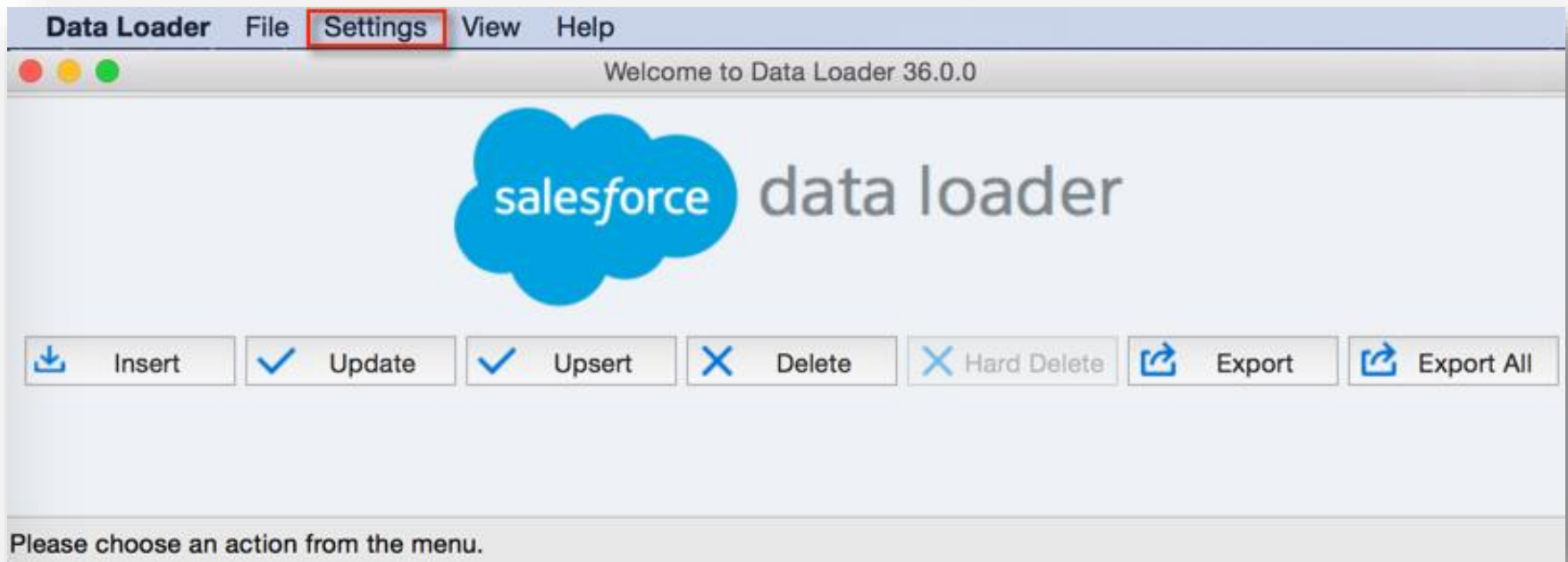
Data Loader Operations

Export	Insert	Update	Upsert	Delete
<ul style="list-style-type: none">• Always start by exporting• Allows you to learn what data is stored in objects and how the data is structured	<ul style="list-style-type: none">• Inserts new records• May create duplicates	<ul style="list-style-type: none">• Updates existing records• Matches on SFDC IDs	<ul style="list-style-type: none">• Inserts and Updates records• Matches on SFDC IDs or External IDs• Preferred method for importing data into Veeva• Inserts if records don't exist• Updates if records do exist	<ul style="list-style-type: none">• Deletes records• Must export records first to get their SFDC IDs• Match on SFDC ID only



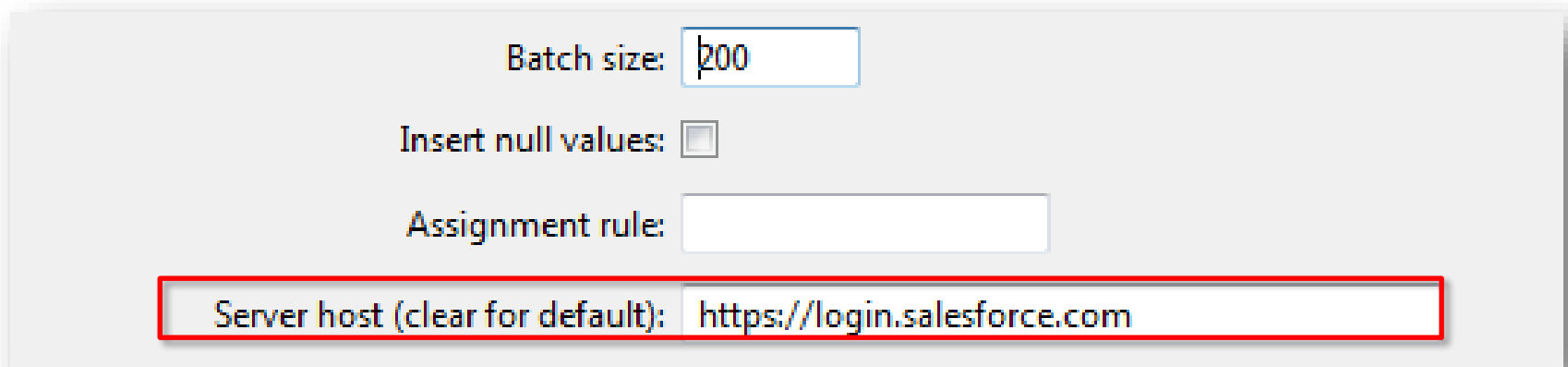
Data Loader Settings

- To Change the settings if connecting to Sandbox vs. Production
 - Then click Settings



Data Loader Settings – Continued

- If connecting to Production, Server host must read:
 - <https://login.salesforce.com>
- If connecting to a Sandbox, Server host must read:
 - <https://test.salesforce.com>

A screenshot of the Data Loader settings interface. It features a light gray background with several input fields. The 'Batch size' field is a text box containing the number '200'. The 'Insert null values' field is a checkbox that is currently unchecked. The 'Assignment rule' field is an empty text box. The 'Server host (clear for default):' field is a text box containing the URL 'https://login.salesforce.com', which is highlighted with a red rectangular border.

Batch size:

Insert null values: ☐

Assignment rule:

Server host (clear for default):

Data Loader Settings - Continued

- You may need to click **Cancel** to access **Settings**:

- Change the **Batch Size** to 50 if you experience network timeouts when loading large amounts of data
- Max Batch Size: 200
- Recommended batch size for loading certain objects

- Select **Bulk API** only if inserting, updating, or upserting a larger number of records
- Use only when necessary as there are 24-hr limits
- Max Batch Size for Bulk API: 10,000

The screenshot shows the 'Settings' window of the Data Loader application. The settings are as follows:

- Batch size: 50
- Insert null values: ☐
- Assignment rule:
- Server host (clear for default): <https://www.salesforce.com>
- Reset URL on Login (clear to turn off): ☒
- Compression (check to turn off): ☐
- Timeout (in seconds): 540
- Query request size: 500
- Generate status files for exports: ☐
- Read all CSVs with UTF-8 encoding: ☐
- Write all CSVs with UTF-8 encoding: ☐
- Use European date format (dd/mm/yyyy): ☐
- Allow field truncation: ☐
- Use Bulk API for Insert, Update, and Upsert: ☐
- Enable serial mode for Bulk API: ☐

Insert Null Values allows you to delete existing data of designated fields in Records if your source fields are blank

Ensure **Allow Field Truncation** is unchecked to not allow values to be truncated

Batch Size

- **Veeva recommends the following batch sizes when loading data:**

Affiliation	Call	Address	Child Account
• 1	• 15	• 50	• 25

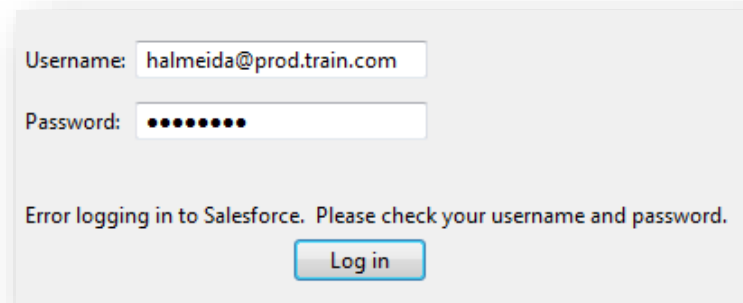
Loading affiliations with a batch size of 1 will ensure the mirror affiliations are created. A batch size higher than 30 will generate errors

Loading affiliations with a batch size of 1 will ensure the mirror affiliations are created. A batch size higher than 30 will generate errors

Row N	Column 1	Column 2	Column 3	Column 4	ERROR
1					
2					
3					
4					
5					
6					
7					
8	14387	23263	11		The Affiliation object requires a batch size of 30 or smaller. Please reset the batch size and try again.
9	14632	18886	679		The Affiliation object requires a batch size of 30 or smaller. Please reset the batch size and try again.
10	14632	18889	680		The Affiliation object requires a batch size of 30 or smaller. Please reset the batch size and try again.

Errors Logging In

- If you enter the correct Username and Password and you get an error:

A screenshot of a Salesforce login interface. It shows a 'Username' field with the value 'halmeida@prod.train.com' and a 'Password' field with masked characters. Below the fields is an error message: 'Error logging in to Salesforce. Please check your username and password.' and a 'Log in' button.

Username: halmeida@prod.train.com

Password: ••••••••

Error logging in to Salesforce. Please check your username and password.

Log in

- Check login history from online application
 - Go to Setup → Manage Users → Login History
- Check the following Apex Data Loader settings:
 - Server host – sandbox vs. production
 - Proxy host – your company may use a proxy server
- Security token – your org may require a security token

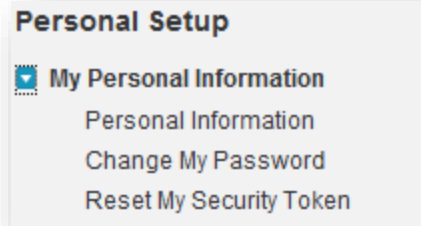
Security Token

- **To add your IP address to the list of trusted IP addresses to avoid having to use a security token**

- Setup → Security Controls → Network Access

- **To request a security token:**

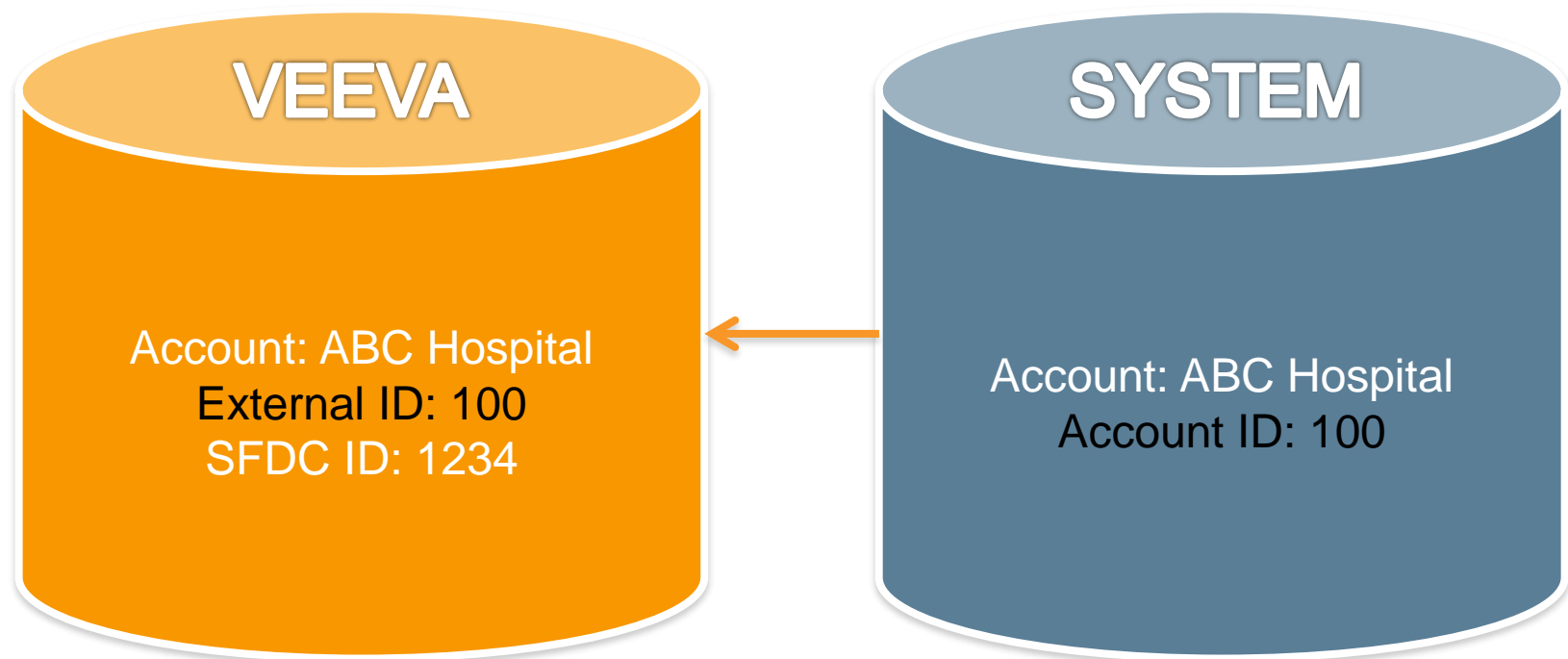
- Setup → My Personal Information → Reset Security Token



- Security Token is sent to the email on the user account
- Security token looks like LcWIZS54eXhki9QaABRkxCKXXB
- Append the Security Token to your password to log in

External ID

- External ID can be used when upserting data from other systems



External ID

- External IDs can be used to resolve relationships between objects
 - Data loader finds the related record via its External ID and then stores the SFDC ID for the account in the Account_vod field

ACCOUNTS

SFDC ID	NAME	FIRST NAME	LAST NAME	EXTERNAL ID
Xyz123dfg456thkAFG	GENERAL HOSPITAL			10
Abd123dfg456t00XYZ		JOHN	KING	20
Cdd123dfg456thIABC		MARY	LEE	30

ADDRESS

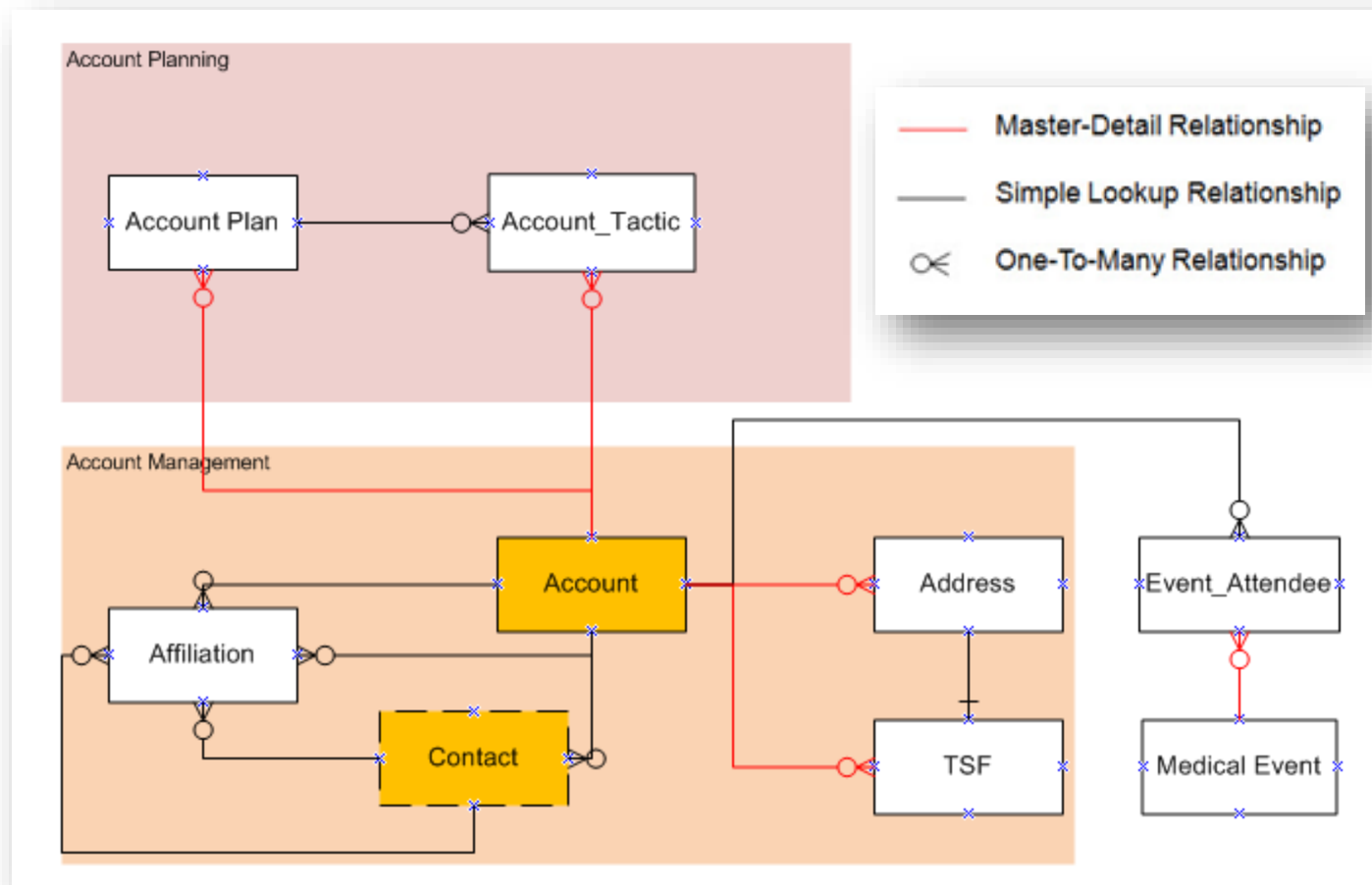
SFDC ID	ACCOUNT_VOD	NAME	CITY	EXTERNAL ID
Xyz123dfg458thkAFG	10	1 MAIN ST	NEW YORK	101
Abd123dfg458t00XYZ	20	50 3 RD AVE	BROOKLYN	202
Cdd123dfg459thIABC	30	600 A ST	NEW YORK	303

Veeva Object Specifics



Veeva Data Model – Accounts and Child Objects

■ Considerations when loading:



Accounts

- **When loading Account data, take note to specify the Record Type ID**
 - In the external data file, create a column to store the Record Type ID for each data record you are upserting
- **To get a list of the Record Type IDs**
 - Export the SFDC Record Type object with data loader to get the SFDC ID for all Record Types in the org

	A	B
1	ID	NAME
2	012U00000000H6silAC	Professional_vod
3	012U00000000H6sglAC	Board_vod
4	012U00000000H6sZIAS	MCO Plan_vod
5	012U00000000H6sdlAC	Hospital_vod
6	012U00000000H6sWIAS	Practice_vod
7	012U00000000H6sXIAS	MCO_vod
8	012U00000000H6sklAC	Hospital Department_vod
9	012U00000000H6selAC	Employer_vod
10	012U00000000H6sflAC	Person Account

Mapping

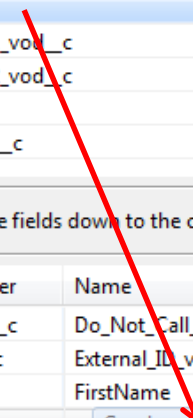
- Create your own mapping by dragging your CSV column header names to match the available Veeva field names
- If the CSV file column header names are similar to the Veeva field names, you can auto-match the fields
 - Always check the mapping

Match the Salesforce fields to your columns.

Name	Label
Exclude_from_Zip_to_Terr_Processing_vod__c	Exclude from Zip to Terr Processing
Fax	Account Fax
Gender_vod__c	Gender
Group_Specialty_1_vod__c	Group Specialty 1
Group_Specialty_2_vod__c	Group Specialty 2
HMO__c	HMO
HMO_Market_Shr__c	HMO Market Shr
HMO_POC__c	HMO/POC

Drag the Salesforce fields down to the column mapping. To remove a mapping, select a

File Column Header	Name	
Do_Not_Call_vod__c	Do_Not_Call_vod__c	
External_ID_vod__c	External_ID_vod__c	
FirstName	FirstName	
Gender_vod__c	Gender_vod__c	Gender
ID_vod__c	ID_vod__c	



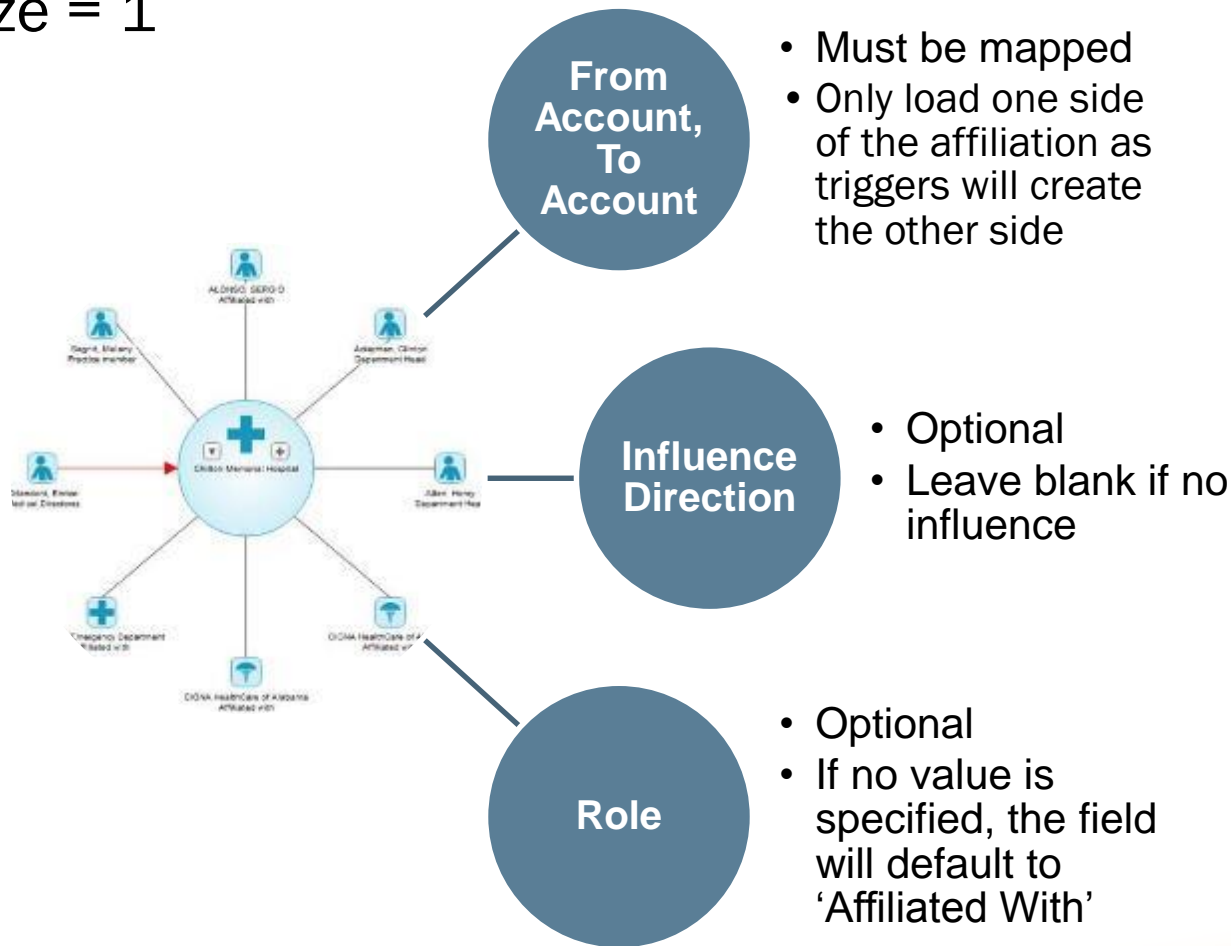
Addresses

Account_vod	<ul style="list-style-type: none">• Field is required, references the Account
Name	<ul style="list-style-type: none">• 'Street Address' (Address Line 1) and is required
Record Type	<ul style="list-style-type: none">• Resolve Rcord Type ID – Rep Maintained or Company Maintained
Best Times	<ul style="list-style-type: none">• A long text area used specifically to support the OfficeBestTimes s-control• Do not map data to this field!
Primary	<ul style="list-style-type: none">• Indicates a primary address and will determine which address will appear on the My Accounts tab
License Expiration Date	<ul style="list-style-type: none">• Field used to calculate Sample validity
License Status	<ul style="list-style-type: none">• Must match picklist values of the system, required for sampling

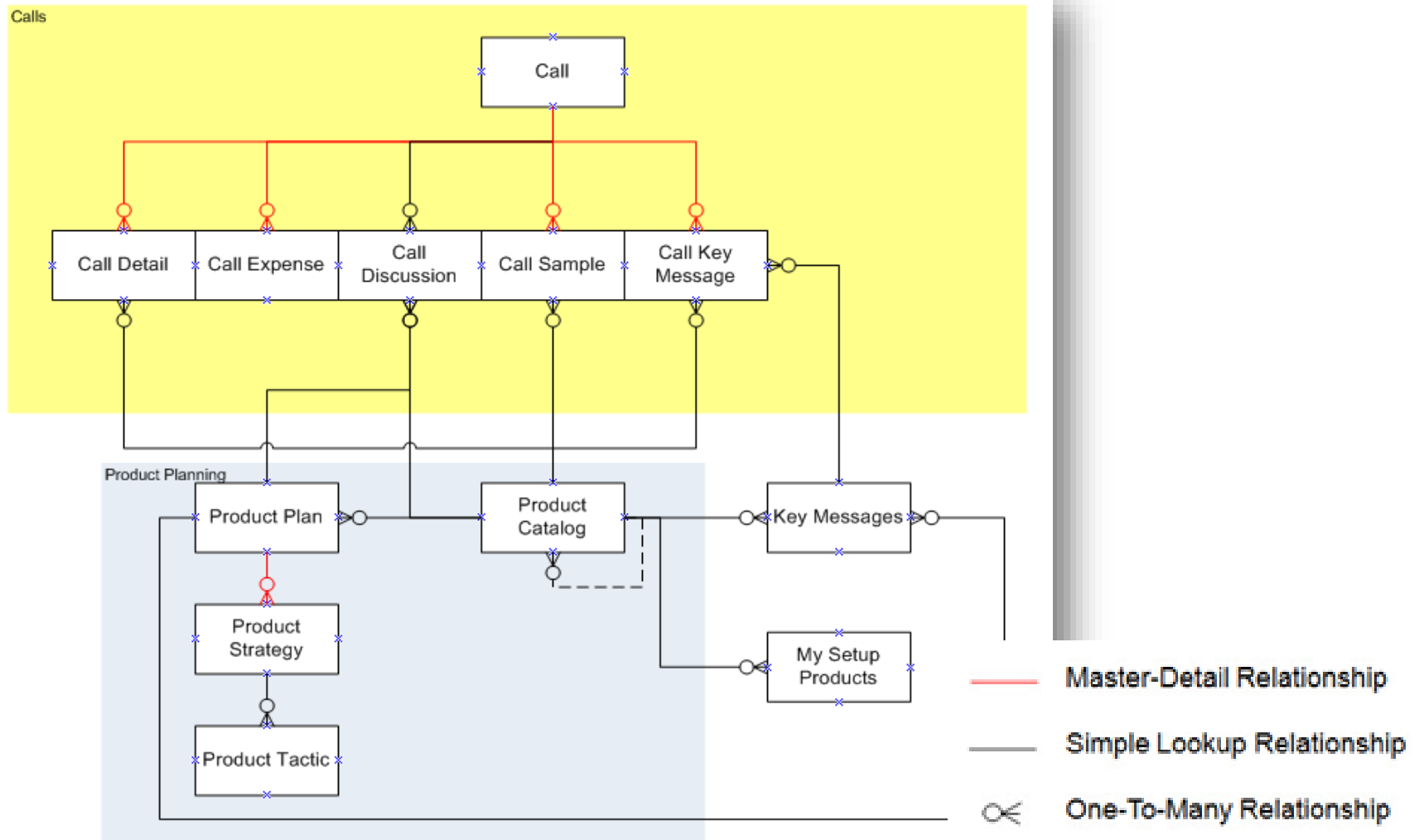


Affiliations

Batch size = 1



Veeva Data Model – Calls & Products

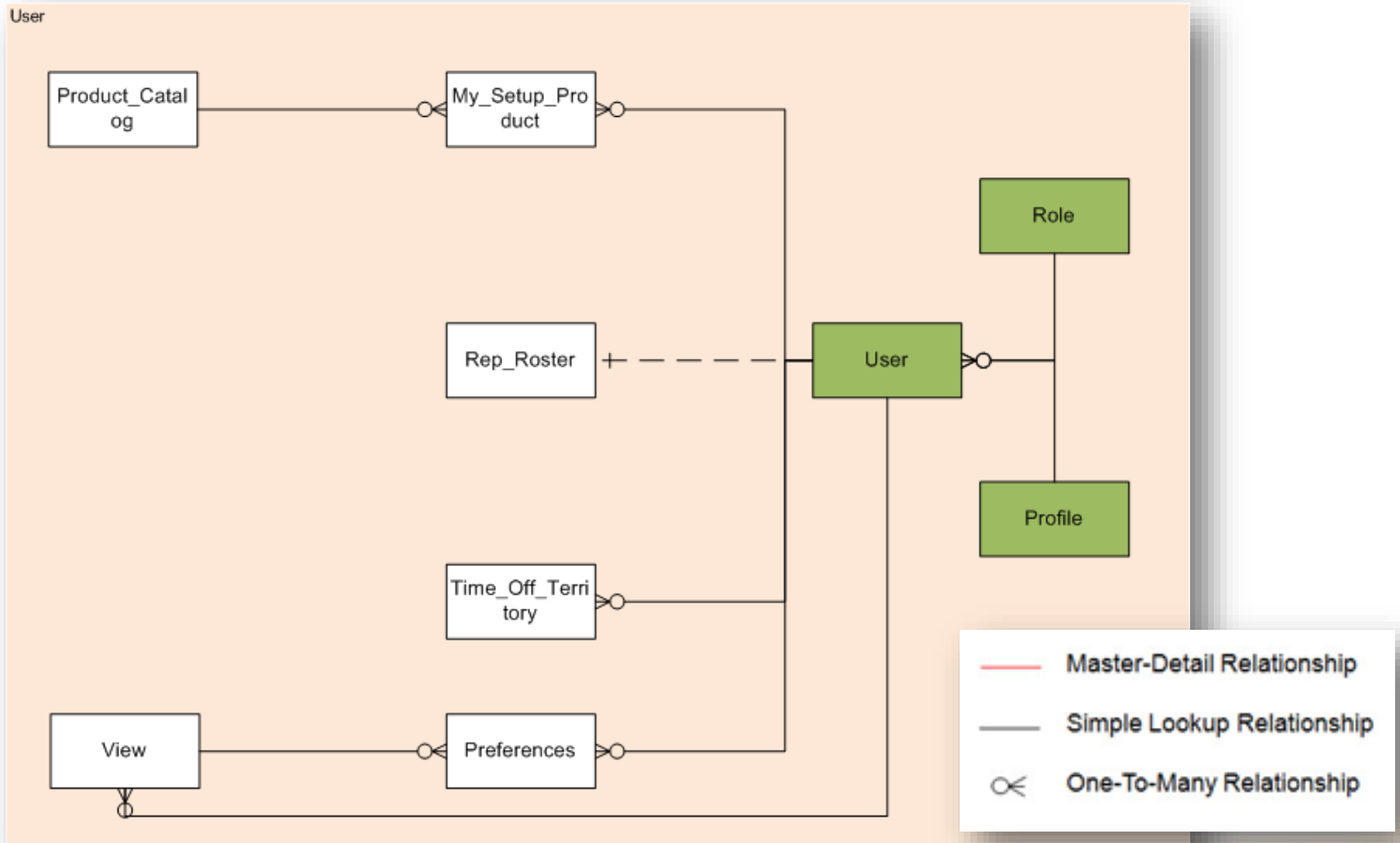


Historical Calls – Load Process

- **Call records can either stand alone or be Parents/Children of other call records**
- **Load Process:**
 - Load the Parent Call records: affiliated directly with an Account
 - Load the Child Call records: one child call record for each attendee
- **See Appendix for more details**



Veeva Data Model – Users



Users

- **Username (and Nickname) must be unique across all force.com users**
 - Suggest using email address as the username, as this is typically unique
- **When loading users**
 - Update the USERROLEID and PROFILEID with the appropriate ID's for the role and profile, respectively
 - Typically, Profiles and Roles are set up prior to loading users
- **Other required system fields include:**
 - TIMEZONESIDKEY
 - LOCALESIDKEY
 - EMAILENCODINGKEY
 - LANGUAGELOCALEKEY
 - USERPERMISSIONSMOBILEUSER



My Setup Products

- **This object is used to keep track of each user's products**
 - One row per product per user
- **Maps users to products from the Product Catalog**
 - Product ID and User ID
- **My Setup Products drives the corresponding Veeva functionality**
 - Product Metrics s-control – only displays products of type Detail
 - Call2_Discussion_vod
 - Call2_Key_Messages_vod
- **Need to load all the products of Type = Detail that each user should have access to**



Module Summary

- **Downloaded and Installed Data Loader**
- **Logged in to Data Loader**
- **Discussed the need for Security Token**
- **Listed the different types of data loading operations**
- **Reviewed data model for main Veeva objects**
- **Imported data using the Upsert function**



Labs

For more information,
see Appendix

Use data loader to import:

- Accounts
- Address
- Affiliations

Appendix

Call Loading Considerations



Field Formats

Manipulate your data – Make sure all the data fields are in the proper formats and they correspond to the field types in Salesforce.com

- **Email – Has to be in the proper email format of aaa@bbb.com**
- **Date – Format MM/dd/yyyy or yyyy-MM-dd**
- **DateTime – Format yyyy-MM-ddTHH:mm:ss.SSS+/-HHmm, where:**
 - yyyy is the four-digit year
 - MM is the two-digit month (01-12)
 - dd is the two-digit day (01-31)
 - HH is the two-digit hour (00-23)
 - mm is the two-digit minute (00-59)
 - ss is the two-digit seconds (00-59)
 - SSS is the three-digit milliseconds (000-999)
 - +/-HHmm is the Zulu (UTC) time zone offset



Field Formats – Continued

Manipulate your data – Make sure all the data fields are in the proper formats and they correspond to the field types in Salesforce.com

- **Phone – Can be in any format, it will import “as is”**
- **Checkbox (Boolean)**
 - True values (case insensitive) = "yes", "y", "true", "on", "1"
 - False values (case insensitive) = "no", "n", "false", "off", "0"
- **Picklist – Should match the picklist values already defined in Salesforce**
- **MultiSelect Picklist – Should match the picklist values and if more than one picklist value, must be delimited by a semicolon “;” For example: “Los Angeles; New York”**



Historical Calls – Load Process

- **Call records can either stand alone or be Parents/Children of other call records**
- **The following example applies to group calls such as a call recorded for a hospital department with many attendees**
- **Load Process – Load the Parent Call records**
 - For calls recorded against Contact records
 - Call_Type_vod = 'Call Only'
 - Contact_vod__c = ContactId
 - For calls recorded against Account records
 - Call_Type_vod = 'Group Detail'
 - Account_vod__c = AccountId
 - Attendee Type = Group_Account_vod
 - Status_vod_c = 'Saved_vod'



Historical Calls – Load Process – Continued

■ Load Process – Load the Child Call records

- There will be one child call record for each attendee in addition to the parent call record in the Call2_vod object
 - Ex: One record for the hospital department (parent) and one for each attendee
- All of the fields on the child records must match those on the Parent Records except for the Attendee Type, depending on what type of attendees you are loading this will change
 - Attendees of type Contact will have the Attendee Type set to Contact_vod
 - Attendees of type Account will have the Attendee Type set to Person_Account_vod
 - Attendees of type User will have the Attendee Type set to User_vod
- Finally, the Parent_Call_vod__c field must be mapped to the parent call records which were loaded as part of the parent call load



Calls – Other Considerations

- **Call_DateTime_vod__c**

- Field is recommended but not required
- Specifying a DateTime will ensure that the Event (for Calendar integration) created (via a Trigger) falls on the correct Date and Time

- **User_vod__c**

- Does NOT hold the SFDC Owner ID. Owner is the correct ownership field

- **Parent_Address_vod__c**

- The lookup to the address of the Account where the Call took place

- **Address_vod__c**

- The text version of the address (for ease of reporting purpose)



Calls – Other Considerations – Continued

- **License_vod__c**

- The license # for the Account for the corresponding state of the address

- **Detailed_Products_vod__c**

- A helper field to display the list of detailed products for a call Product names should be delimited by double-spaces and order in priority from left to right

- **Status_vod**

- Once this status is set to “Submitted”, no changes can be made unless the following procedure is followed:
- To update the Visits, must set the following:
 - STATUS_VOD__C = Saved_vod (!= Submitted)
 - UNLOCK_VOD__C = TRUE



Calls – API Limit Considerations

- **To prevent reaching the future call governor limits when loading addresses**
 - Go to Setup → Create → Custom Label
 - Verify it is or set the Custom Label `ENABLE_REALTIME_ADDRESS_PUSH` to False
- **When loading a large number of calls, use Bulk API and the following sequence of steps to prevent call triggers from firing:**
 - 1. Use Bulk API with a batch size of 2,000 (try 5,000 if you're confident with the way the loads go)
 - 2. Load parent call records with Territory with attendees, attendee_type and call_type, with status = Saved_vod, and NOT using Add_Detail_vod to generate detail records
 - Continue on next page →



Calls – API Limit Considerations – Continued

- 3. Load child call records with Territory, with attendees, attendee_type and call_type, with status = Saved_vod, and NOT Add_Detail_vod to generate detail records (if you can, combine steps 2 and 3)
- 4. Load Call Detail records - One for each call, including child calls, Use an external ID that's a combination of the call external ID and the product ID or Name to make sure you're not loading duplicates
- 5. Load the call samples
- 6. Update all of the calls to Submitted_vod, including child calls

