Creating Custom Objects

Veeva Professional Services

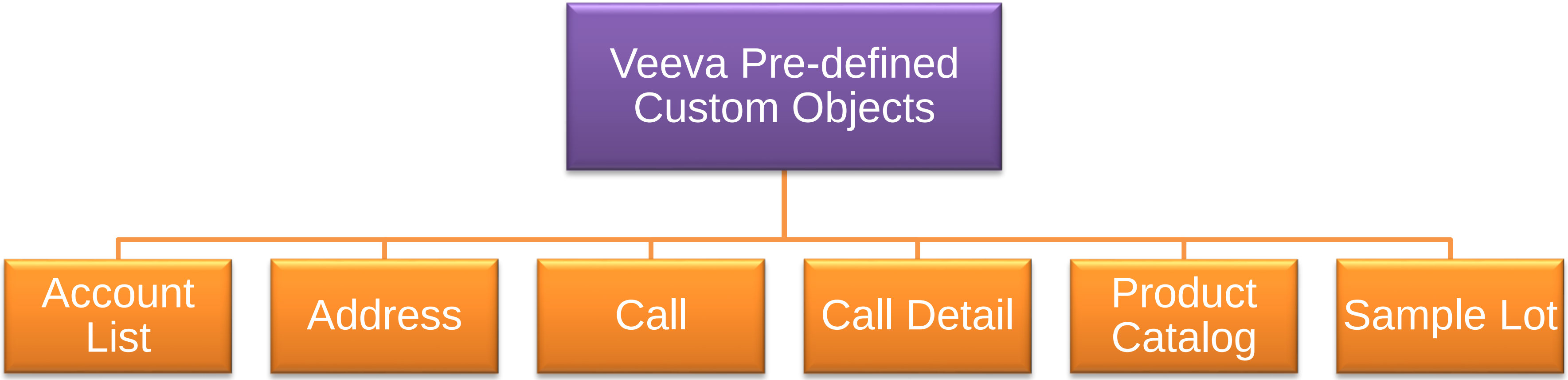
Module Objectives

- **Create a custom object**
- **Add custom fields to a custom object:**
    - Lookup
    - Master-Detail
    - Picklist
- **Configure field dependency**
- **Modify columns displayed in tabs, related lists, and search layouts**
- **Review Salesforce.com Platform Limits**

Custom Objects

What is a Custom Object?

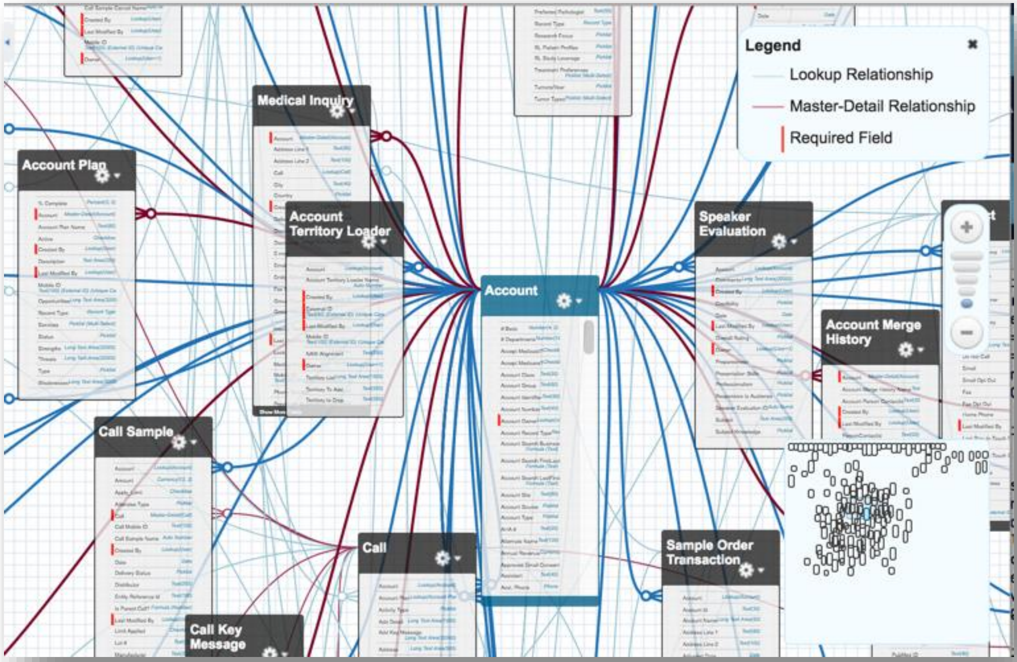
- **Custom objects are custom database tables that allow you to store information unique to your organization**



- **Your organization may need to define custom objects**
  - For example: Training custom object to store information about training classes a Professional has attended

Schema Builder

- **Dynamic environment for viewing and modifying the objects and relationships in the Veeva app**
- **Good way to visualize the objects in the Veeva application**
    - Go to Setup → Schema Builder
- **Almost all objects are related to Account**



Custom Object Components

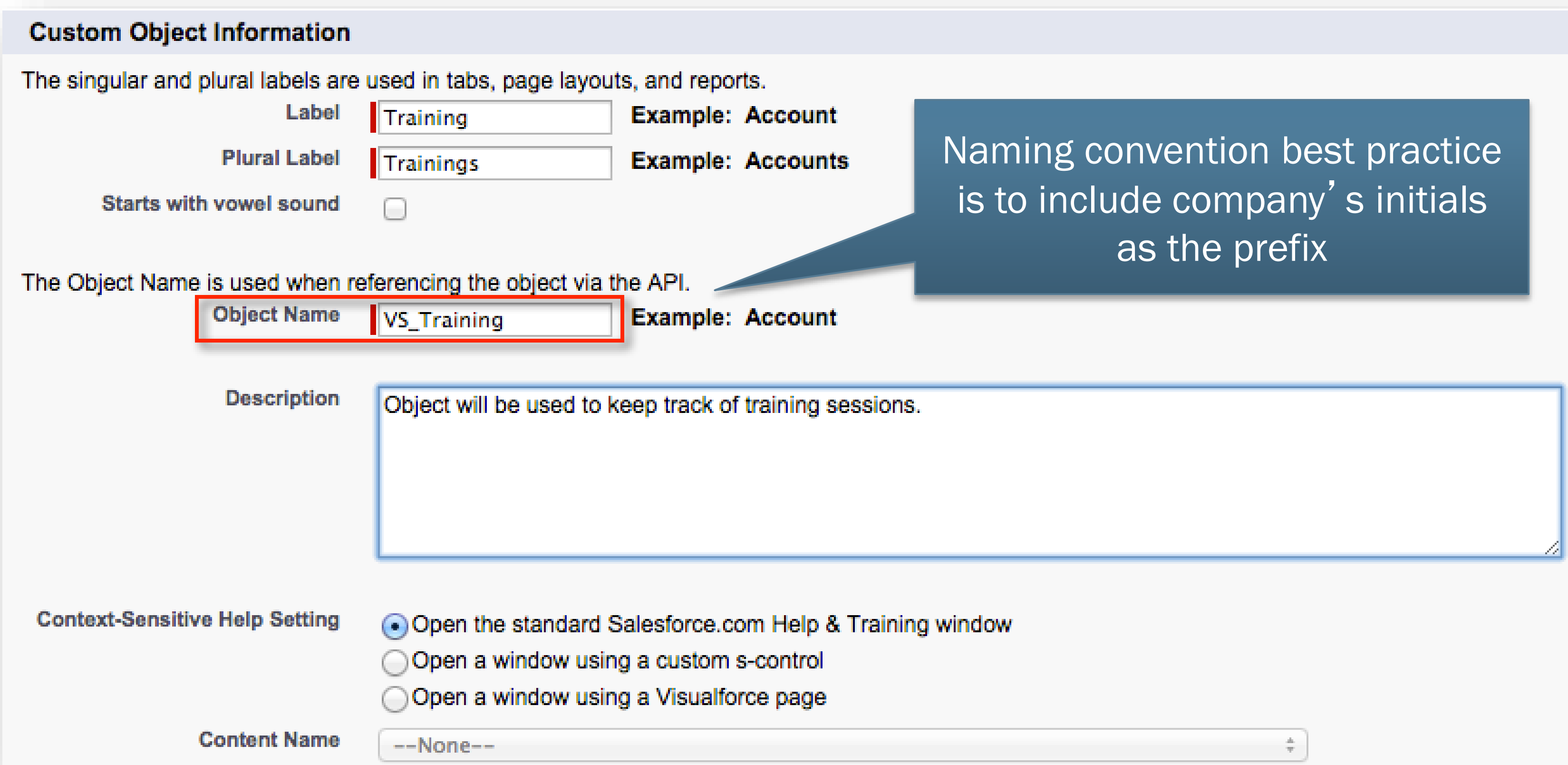
Steps to Create a Custom Object

- **Create custom object**
- **Create custom fields and relationships**
- **Configure page layout(s)**
- **Configure fields to display in**
    - List view
    - Search layouts
- **Configure record types**
- **Assign page layouts per profile**
- **Create a custom object tab**

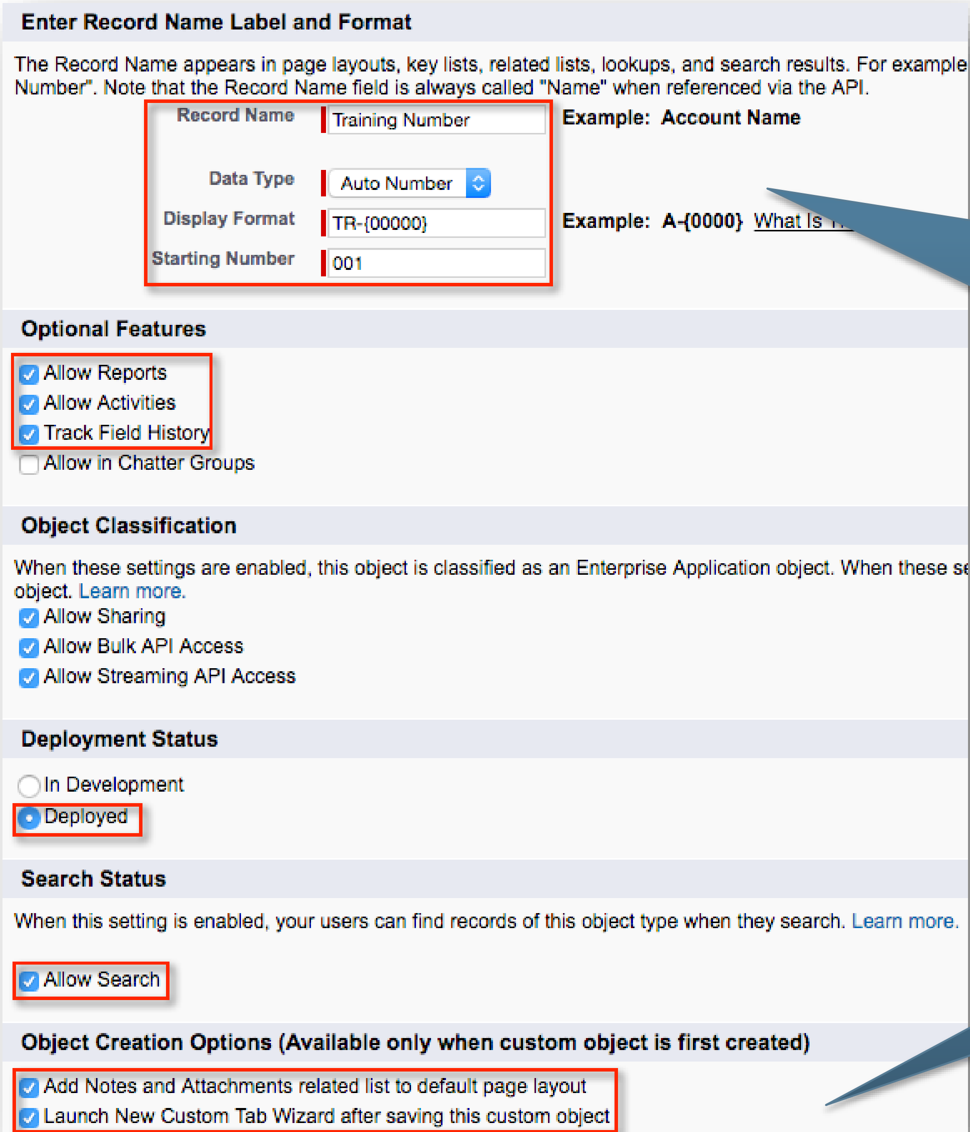
[Cheat Sheet for Creating Custom Objects]

Create Custom Object

- **Setup → Create → Objects → click the New Custom Object button**



Create Custom Object

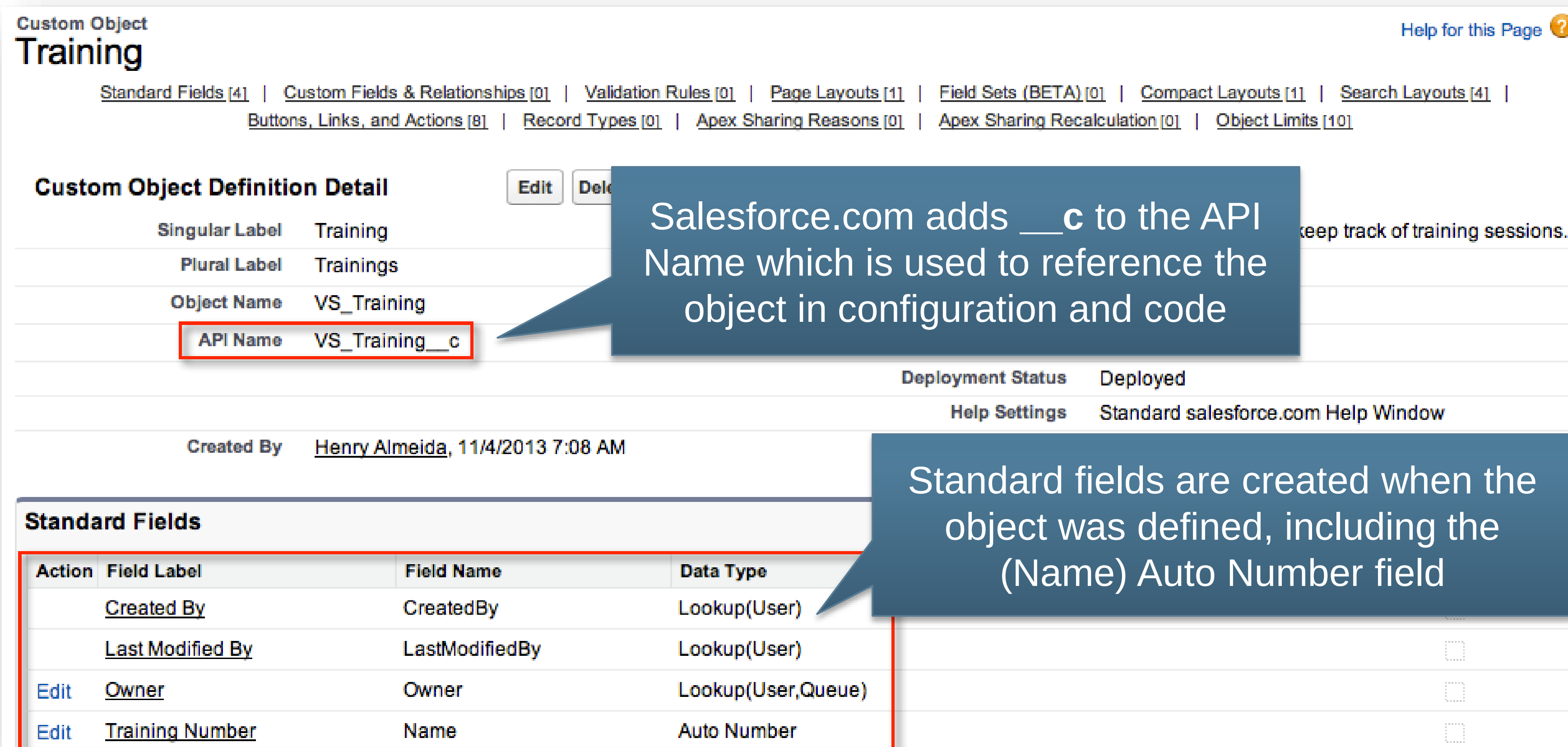


Auto Number creates an auto number standard field.
Every record will have a value automatically generated starting with 001 and up to 10 digits long.

Create the custom object tab as part of the wizard or add it later manually

Standard Fields

- **All objects have standard fields**
  - Standard fields cannot be deleted



Create Custom Fields

Custom Object Definition Detail [Edit] [Delete]

Singular Label	Training	Description	Object will be used to keep track of training sessions.
Plural Label	Trainings	Enable Reports	✓
Object Name	VS_Training	Track Activities	✓
API Name	VS_Training__c	Allow in Chatter Groups	
		Allow Sharing	✓
		Allow Bulk API Access	✓
		Allow Streaming API Access	✓
		Track Field History	✓
		Deployment Status	Deployed
		Help Settings	Standard salesforce.com Help Window
Created By	Training Attendee 1, 7/13/2015 10:59 AM	Modified By	Training Attendee 1, 7/13/2015 10:59 AM

Standard Fields — Standard Fields Help ?

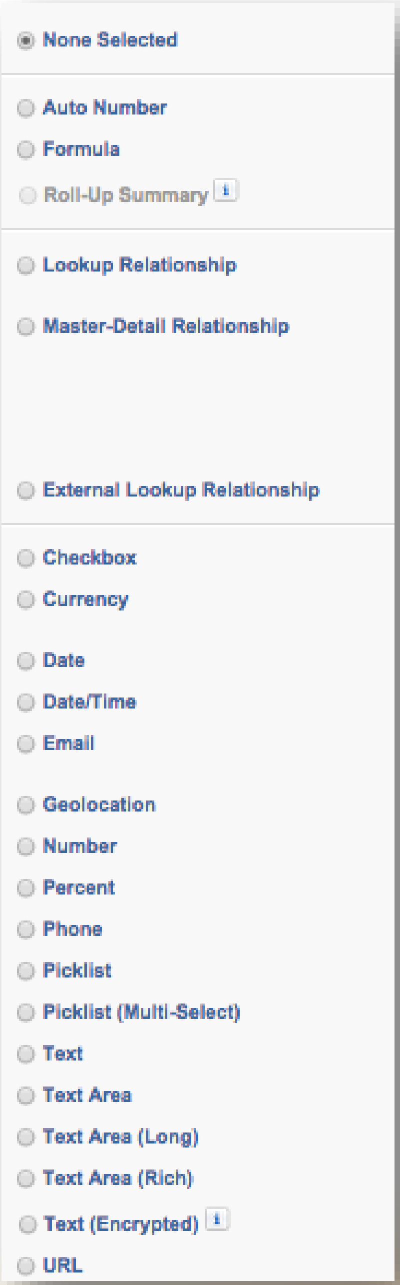
Action	Field Label	Field Name	Data Type	Controlling Field	Indexed	Track History
	Created By	CreatedBy	Lookup(User)			
	Last Modified By	LastModifiedBy	Lookup(User)			
Edit	Owner	Owner	Lookup(User,Queue)		✓	
Edit	Training Number	Name	Auto Number		✓	

Custom Fields & Relationships [New] [Field Dependencies] [Set History Tracking] — Custom Fields & Relationships Help ?

No custom fields defined

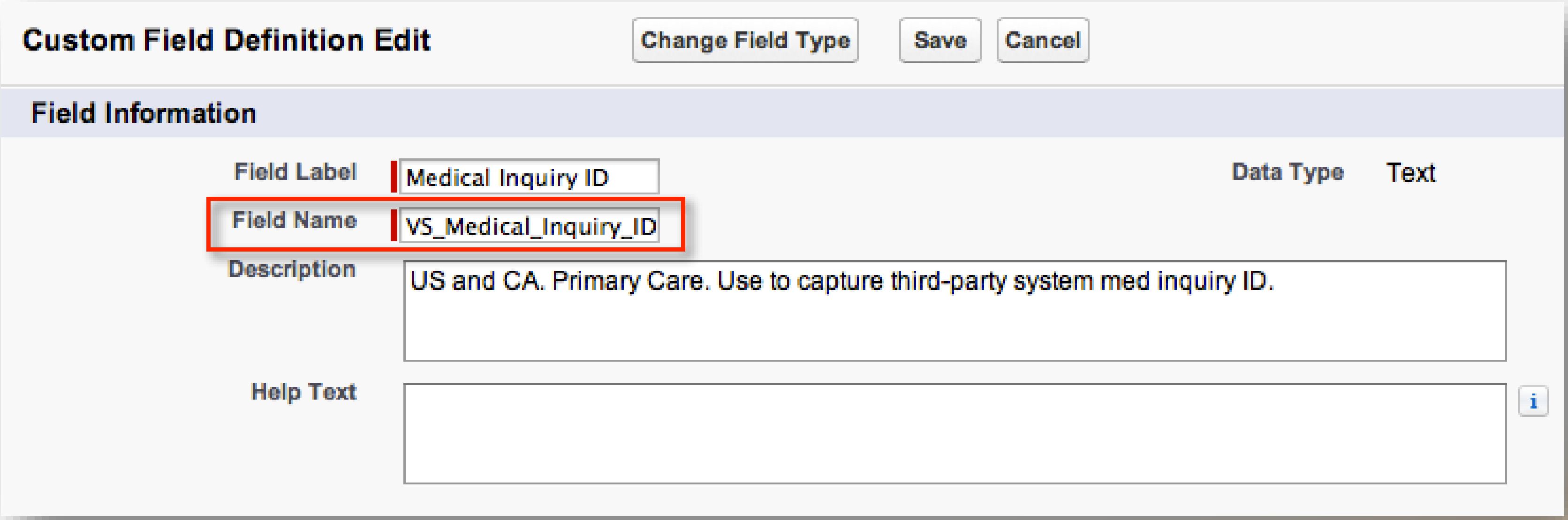
Create Custom Fields

- Field types are explained in the wizard and in the SFDC [Custom Field Types Definition](#) help page
- Select the desired field type and click Next



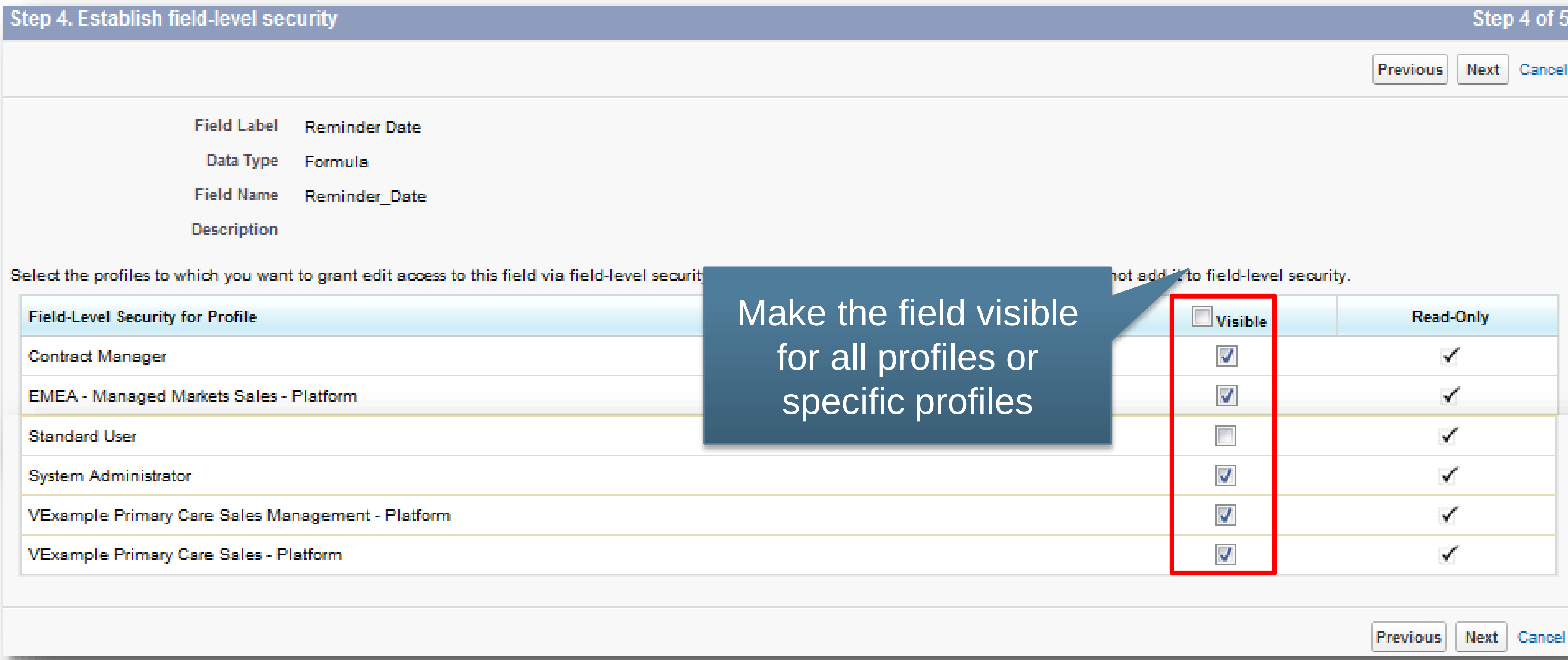
Create Custom Fields – Naming Convention

- **Field label should be self explanatory**
- **Add company initials as a prefix to custom object/field names**
  - Ex: VS_Medical_Inquiry_ID (where VS is the company name)
  - Don't restrict it by adding country or business unit codes as they will become useless when expanding down the road



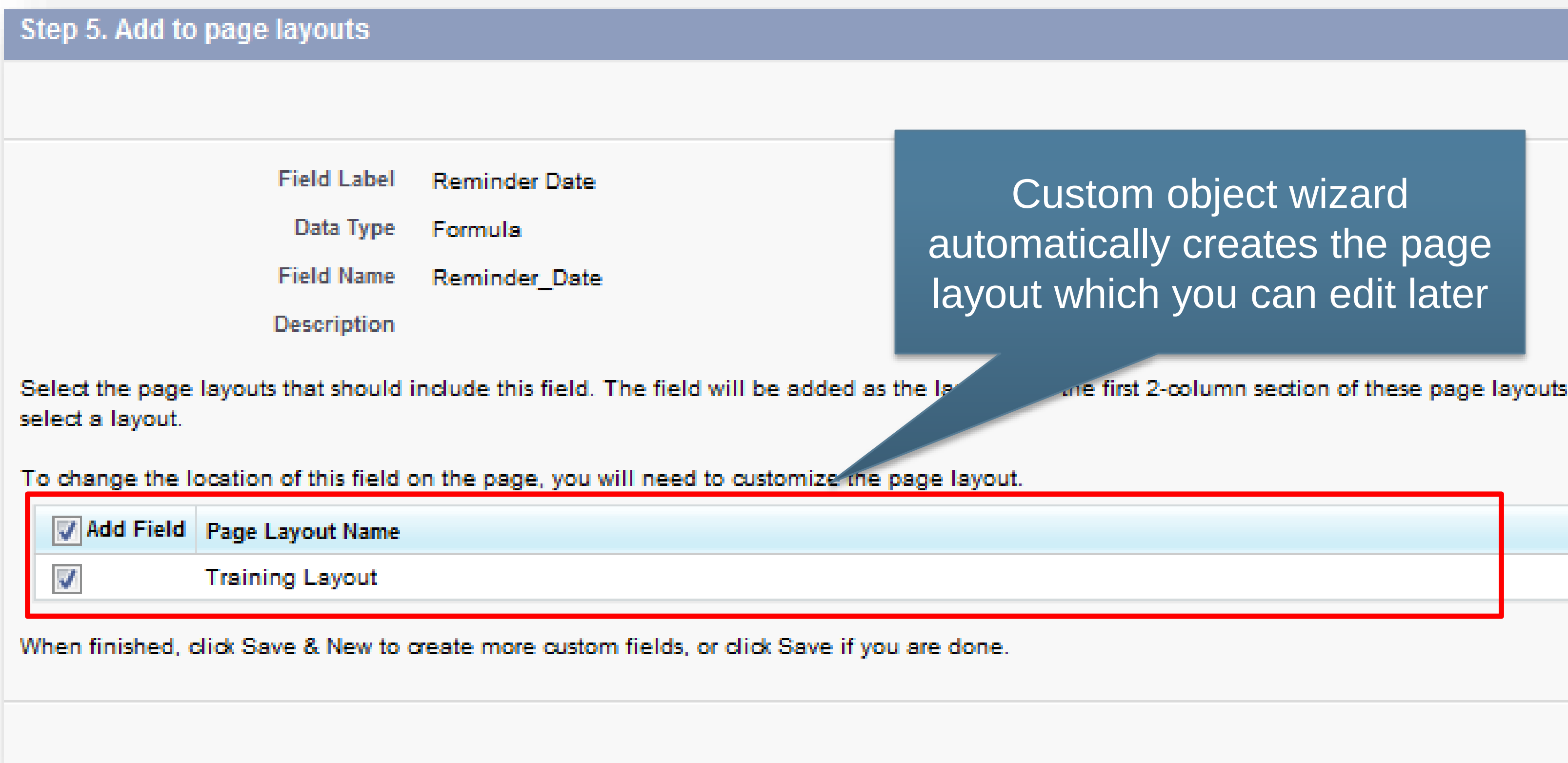
Create Custom Fields – Establish FLS

- **For every custom field you create, the wizard allows you to establish the Field Level Security**



Create Custom Fields – Add to Page Layout

- **For every custom field you create, the wizard allows you to add the field to a page layout**



Object Relationships

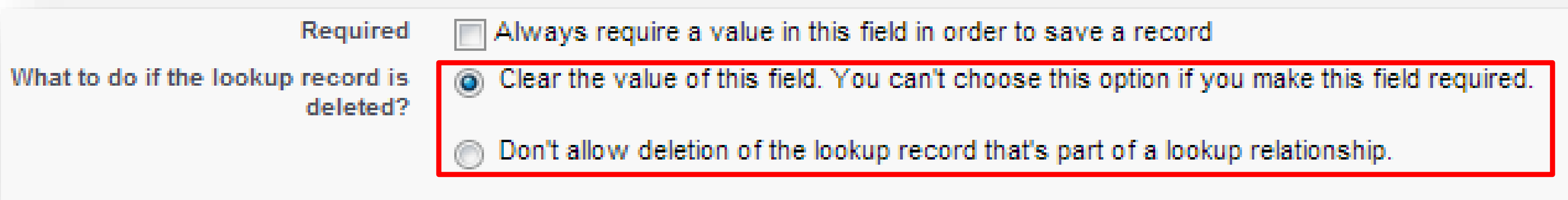
- **In order to view data for custom objects offline from Veeva CRM on the iPad or Windows devices**
    - Relate the custom object to the Account object
    - Custom object data will be visible from a related list on the Account page layout(s)
- **Salesforce.com supports two types of relationships**
    - Lookup Relationship
    - Master-Detail Relationship

Field Type – Lookup Relationship

- **Creates a relationship that links this object to another object**
  - Example: Associate a particular Account with a Training record
- **Allows users to click a lookup icon**  **and select a record (Account) from a popup list**
- **On the associated record (Accounts), you can display a related list to show the records (Training) that are related to it**

Field Type – Lookup Relationship

- **When defining the lookup field you can decide what to do if the associated record is deleted**
  - Clear the value of the lookup field
  - Prevent the associated record from being deleted if is referenced in the system

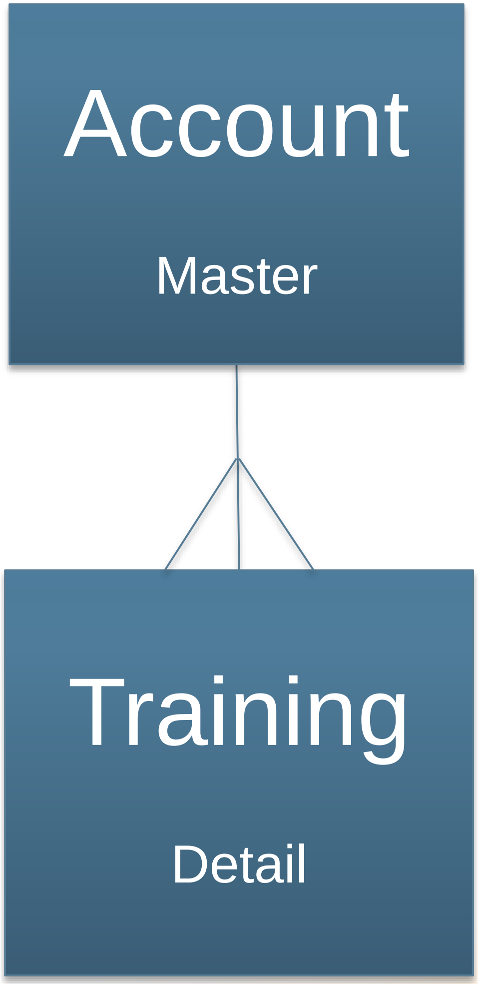


Field Type – Master-Detail Relationship

- **Creates a special type of parent-child relationship between this object (the child, or detail) and another object (the parent, or master) where:**
  - The relationship field is required on all detail records
  - The ownership and sharing of a detail record are determined by the master record
  - When a user deletes the master record, all detail records are deleted
- **Available for custom objects only**
  - You can create a master-detail relationship field on a custom object that links to a standard object
  - Standard objects (Accounts) can only be the “master” and not the “detail”

Create Relationship Fields

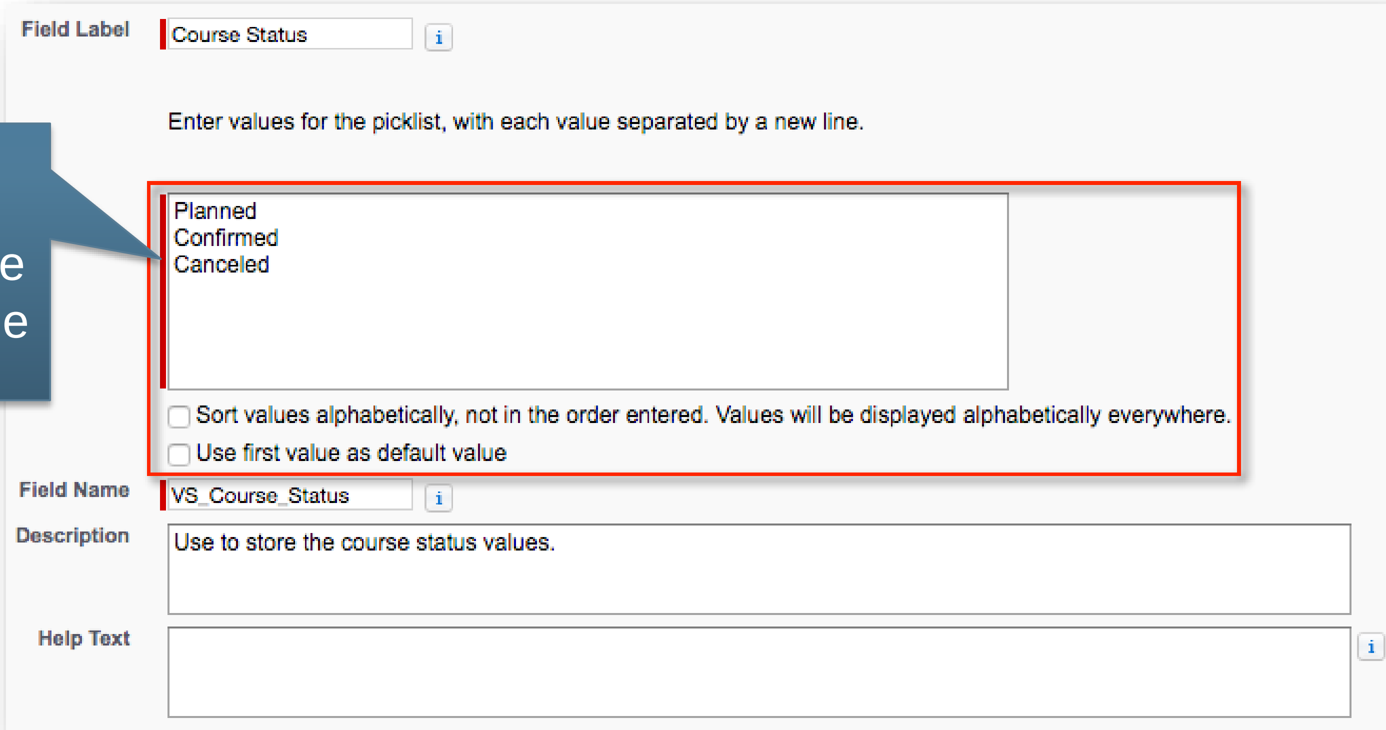
- **Once you decide which object is the master and which is the detail, go to the detail object and create a Master-Detail Relationship or Lookup Relationship field(s)**



Field Type – Picklist

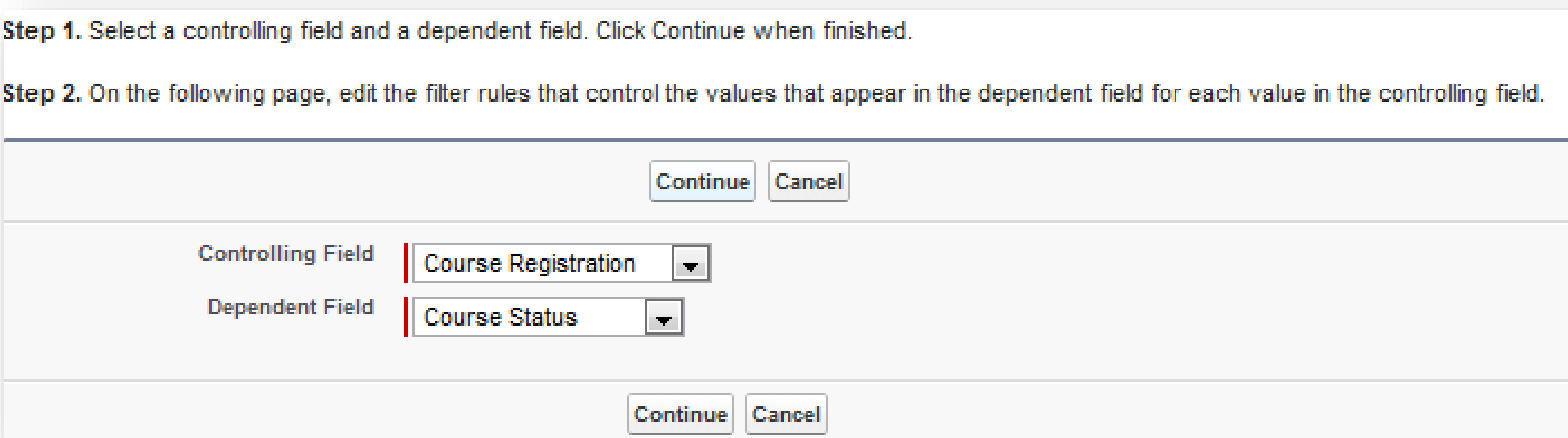
- **Allows users to select a value from a pre-defined list of values**
  - For example, Course Status picklist should have values "Planned," "Confirmed," and "Canceled"

Enter each picklist field value on a separate line



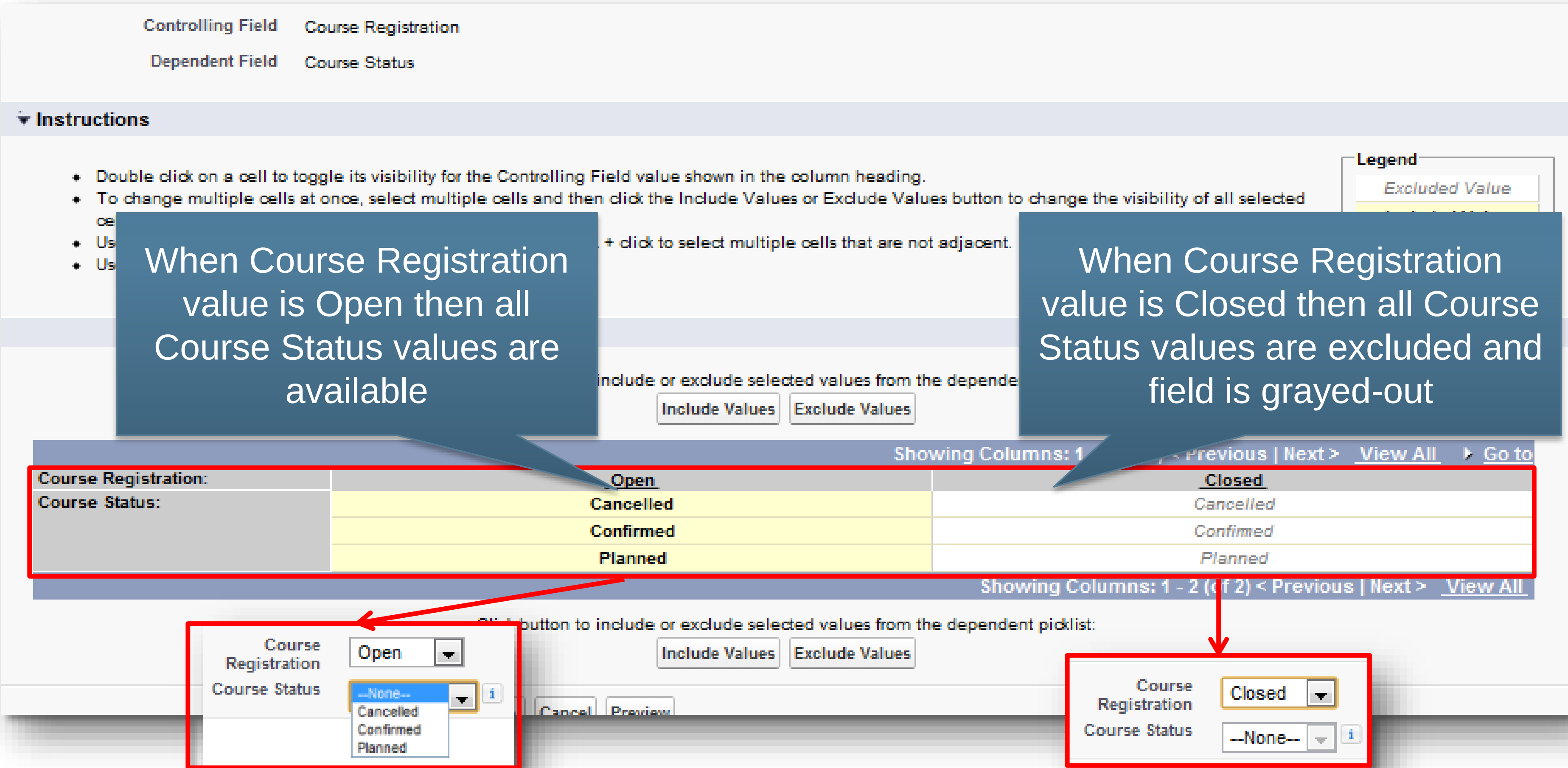
Field Dependencies

- **Make values in one field dependent on values of another field**
- **To create a new field dependency:**
  - Setup → Create→ Objects → [Object] and click the Field Dependencies button
  - Click the New button to create a new dependency
  - Select the Controlling Field and the Dependent Field



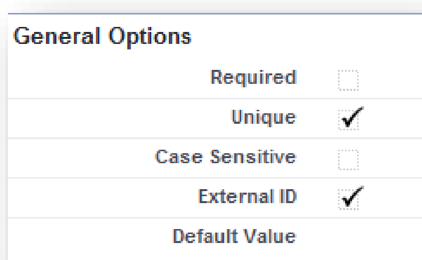
Dependent Picklists

- **Configure the dependent picklist field value(s) for each controlling picklist field value**



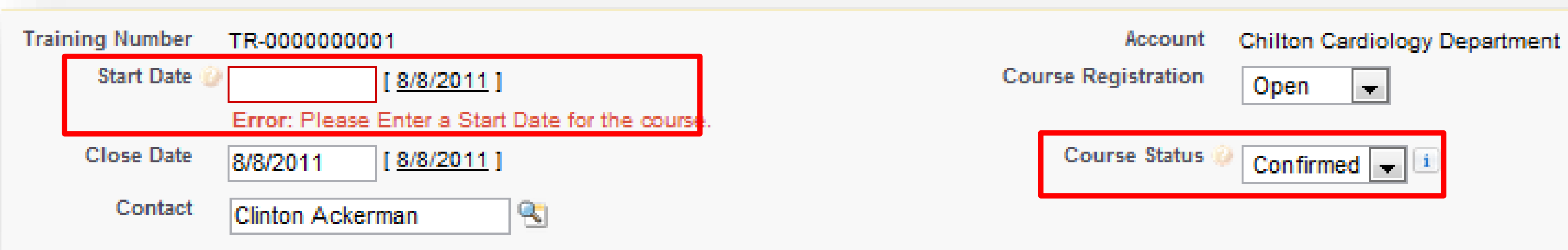
Creating Records Offline on iPad or Windows

- **Ability to create records offline is driven by two things:**
  - User has create permission on the object
  - Object has the field Mobile_ID_vod and users have FLS access to it
- **Veeva objects already have the Mobile ID field**
  - Define it for the custom objects only
- **Mobile ID must have the following configuration**
  - Text (100) (External ID) (Unique, Case Insensitive)



Object Validation Rules

- **Validation rules verify that the data a user enters in a record meets the standards you specify before the user can save the record**
  - Display an error message to the user when the rule returns a value of “True” due to an invalid value
  - For example, you may require users to enter a Start Date for a training course when the Course Status value is “Confirmed”



- **Validation rules can be configured to be enforce offline**

Object Validation Rules – Continued

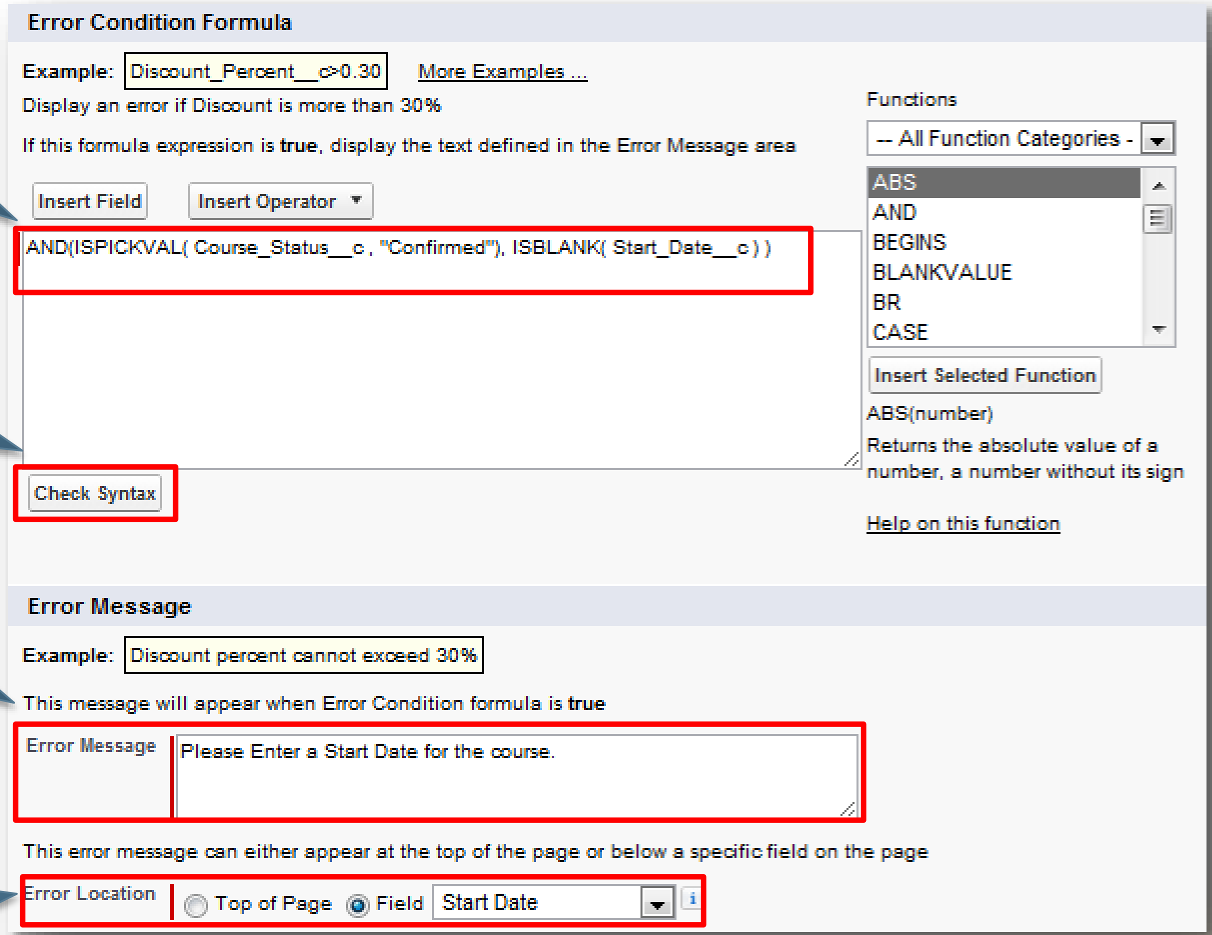
- **Enter the error condition formula using the wizard**

1. Build the error condition formula

2. Check Syntax to detect errors in the formula

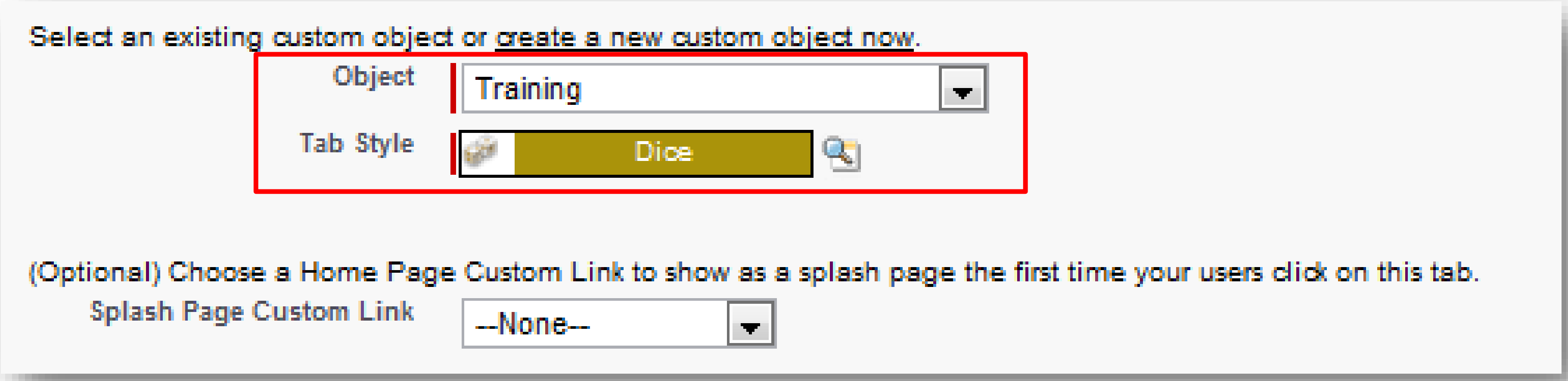
3. Specify the error message users will see

4. Indicate where the error message should be displayed



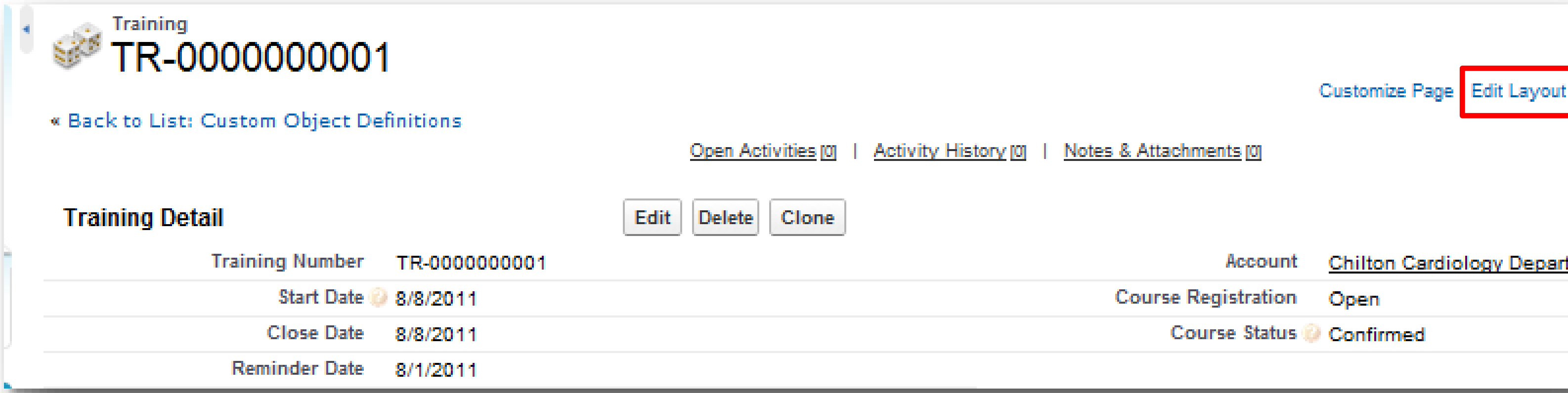
Create a Custom Tab for the Object

- **If users will need to access the custom object from its own tab then define a custom tab for the object:**
  - Setup → Create → Tabs and click the New button
  - Select the Object and Tab Style
  - Tabs for custom objects only appear online



Configure Page Layouts

- **To modify a page layout for a custom object:**
  - Setup → Create → Objects → [Object] → Page Layout section and click the Edit button
  - Administrator can also access the page layout configuration page by clicking the Edit Layout link when viewing the detail page of an object



Configure Search Layouts

- **To modify search layouts for a custom object:**
  - Setup → Create → Objects → [Object] → Search Layouts section and click the Edit button next to one of the search layouts

Search Layouts

Action	Layout	Columns Displayed	Buttons Displayed
Edit	Search Results	Training Number	
Edit	Lookup Dialogs	Training Number	N/A
Edit	Lookup Phone Dialogs	Training Number	N/A
Edit	Training Tab	Training Number, Account, Contact, Start Date, Close Date, Reminder Date, Course Status, Course Registration	N/A
Edit	Training List View	N/A	New,Accept,Change Owner
Edit	Search Filter Fields		N/A

SFDC / Veeva Platform Limits

SFDC / Veeva Platform Limits

Key System Limits	
Custom Objects	2,000 per org
Custom Fields	800 per object
Custom Picklist	Up to 1,000 entries Up to 255 characters per entry
Field History Tracking (audit trail)	20 per object
Master-Detail Relationship	2 per object
Lookup Relationship	25 per object
External IDs	7 per object

SFDC / Veeva Platform Limits – Continued

- **Requests can be made to SFDC to increase limits**
- **SFDC considers business case, performance implications, and other factors when deciding whether to increase a limit**
- **Limits are subject to change in future SFDC releases**
- **[Salesforce.com Features and Edition Limits](#) help page**
  - Look in the Unlimited and Performance Edition column

Salesforce Features and Edition Limits

Limits for Salesforce features by edition.

Feature	Personal Edition	Contact Manager	Group Edition	Professional Edition	Enterprise Edition	Unlimited and Performance Edition	Developer Edition
Action Plans: Maximum Number of Tasks	N/A	N/A	N/A	N/A	75	75	75
Active Lookup Filters	5 per object	5 per object	5 per object	5 per object	5 per object	5 per object	5 per object
Active Validation Rules	N/A	20 per object	20 per object	20 per object	100 per object	500 per object	100 per object

Module Summary

- **Created a custom object**
- **Added custom fields to a custom object:**
  - Lookup
  - Master-Detail
  - Picklist
- **Configured field level dependency**
- **Modified columns displayed in tabs, related lists, and search layouts**
- **Reviewed Salesforce.com Platform Limits**

Labs

Create a custom object