# Sandbox Management

Veeva Professional Services

Module Objectives

- **Describe the need for sandboxes**

- **Define the different types of sandboxes**

- **Veeva-tize a Developer Pro or Developer sandbox**

Sandbox

- **Salesforce.com gives you the ability to create multiple copies of your organization in separate environments without compromising your production organization**

- **Serves a variety of purposes**

  - Development

  - User Acceptance Testing (UAT)

  - Training

Sandbox

- **3 sandbox types: Full, Developer Pro, and Developer**
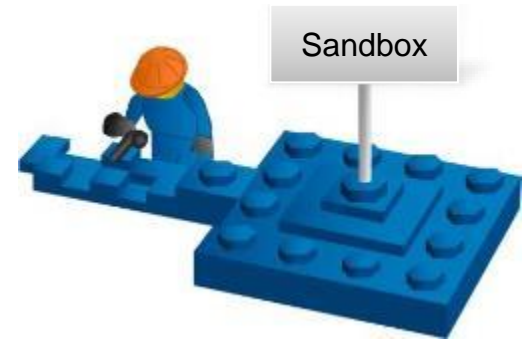
All configuration should be executed, reviewed, and fully tested in Sandbox before migrating to Production!

Sandbox Comparison

	Full	Developer Pro	Developer
# per org	1	5	15
Size of data	Same as Production	1GB (Winter 14)	200MB (Winter 14)
Purpose	UAT & training	Configuration & customization	Coding by single developer
Copies from Production	Everything – including data, standard and custom object records, documents, and attachments	**Includes:** All metadata, reports, dashboards, apps, and customizations under Setup menu **Excludes:** All standard and custom object records, business data, documents, and attachments e.g., Veeva Messages, Products, Account Plans	
SFDC IDs	Same as Production	New ID generated when creating new records	
Can be refreshed	Every 29 days from previous refresh	Once a day	

Creating a Sandbox

- **To create a sandbox:**

    - Setup → Data Management → Sandbox

- **Full sandboxes creation may take up to 3 days**

Sandbox Information

		▌ = Required
Name	Config	
Description	Use for configuring new functionality.	

Sandbox License

Developer	Developer Pro	Partial Copy	Full
Refresh Interval: **1 Day**	Refresh Interval: **1 Day**	Refresh Interval: **5 Days**	Refresh Interval: **29 Days**
Capacity: **200 MB**	Capacity: **1 GB**	Capacity: **5 GB**	Capacity: **Same as Sour**
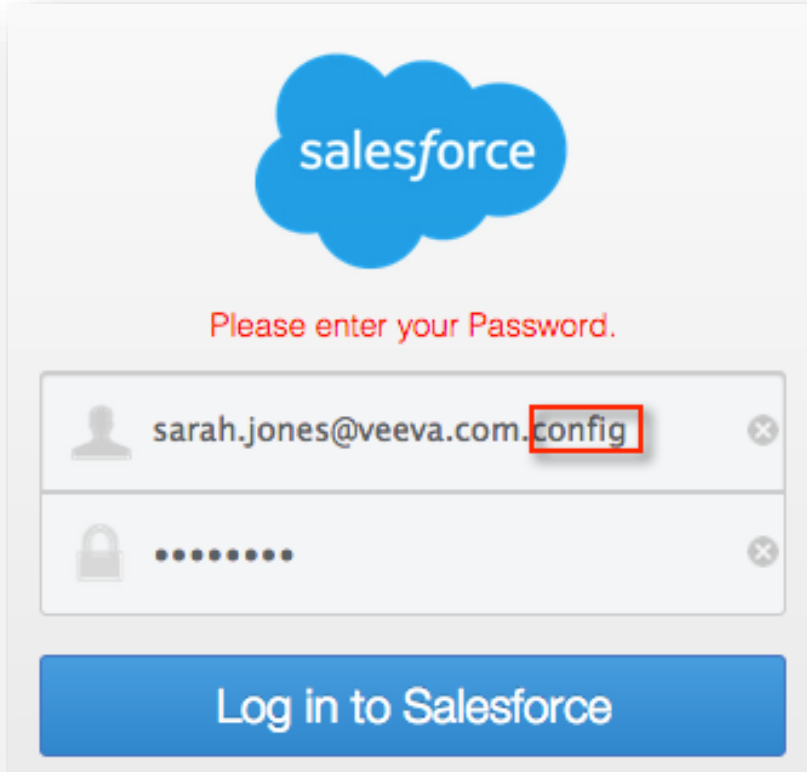
Sandbox Login

- **To login to a sandbox from the Configuration Console:**

  - Setup→ Data Management → Sandbox

  - Click the Login link next to the sandbox name

| Sandboxes | Sandbox Templates | Sandbox History |

Action	Name	Type	Status	Location	Current Org Id
Edit | Del | Refresh | Login	Config	Developer Pro	Completed	CS17	00Dg0000006RhJb
Edit | Login	Full	Full	Completed	CS17	00Dg0000006RhKu

New Sandbox

Sandbox Login

- **To login from the standard login page:**
  - https://test.salesforce.com
  - Append user name with the name of the sandbox
  - Password is the same as in production org
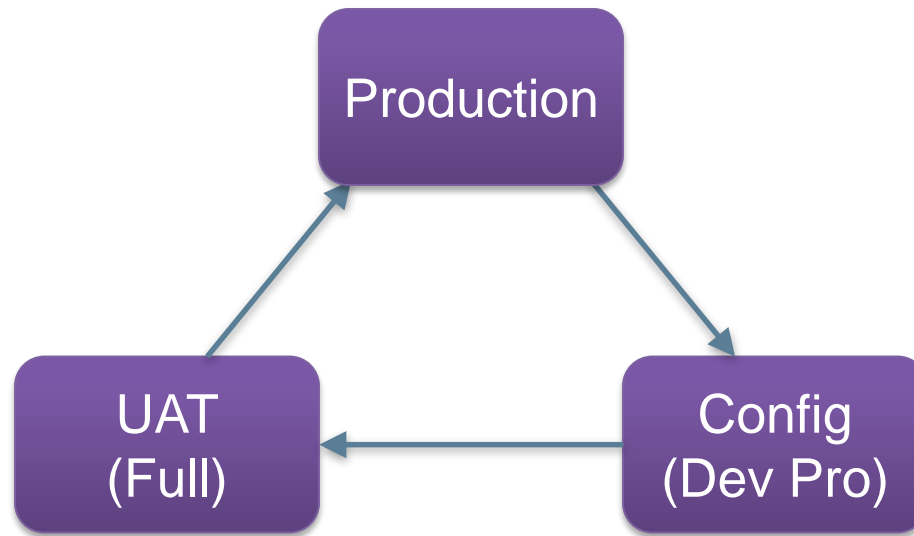
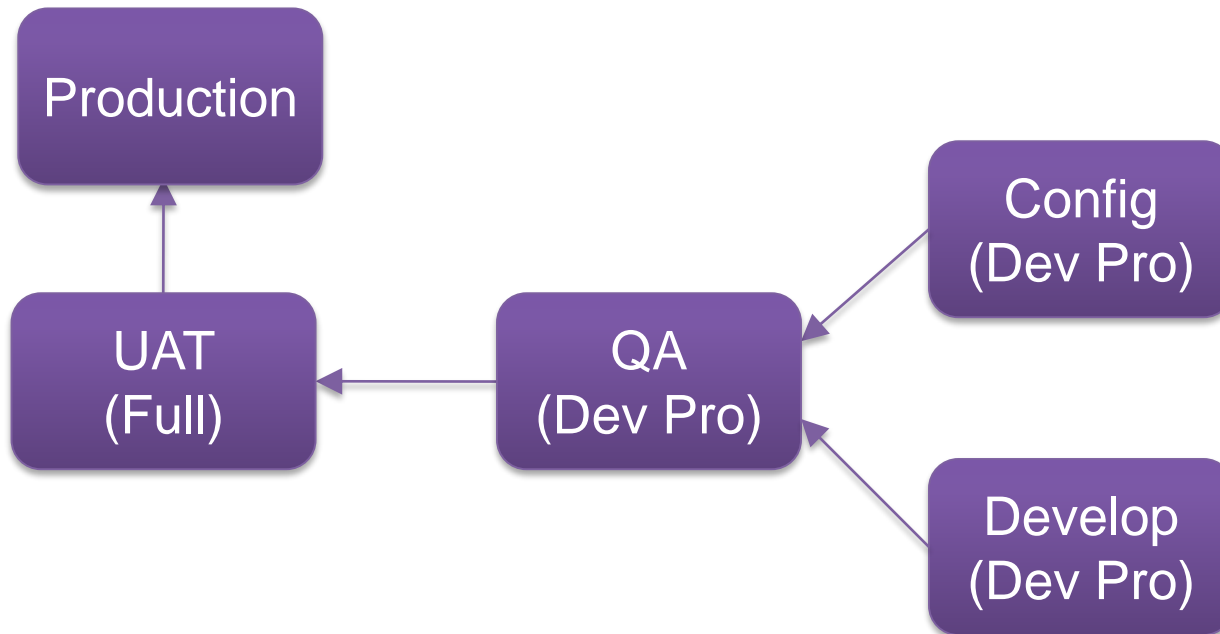# Environment Management

One size does not fit all

Environment Management

One size does not fit all

Environment Management

One size does not fit all

Define Environment Strategy (Example)

Production
- Perform application configuration in production org until testing begins
- Once testing begins, production must be "sterilized"

Full Sandbox
- Integration development
- Use for data included in UAT
- Validation
- End user training

Developer Pro and Developer Sandboxes
- Q/A and Testing
- Prototyping
- New Enhancements

Sandbox – Configuration Migration

Tools to migrate configuration between environments

Eclipse with Force.com IDE plug-in

- Migrates metadata between environments
- Fields, page layouts, record types, user profiles, etc.
- Can migrate from an org to any other org
- **Details will be discussed later in the training**

Change Sets

- Migrates metadata between environment
- Fields, page layouts, record types, user profiles, ect…
- Can only be migrated between "related" orgs
- **Details will be discussed later in the training**

Apex Data Loader

- Migrates data between environments
  - Business data (Accounts, Addresses, and Affiliations)
  - Application setup data (Custom Settings, Veeva Messages, and Product Catalog)

"Veeva-tizing" a Sandbox

Developer Pro and Developer Sandboxes

Sandboxes - No Veeva Messages

- **Absence of Veeva Messages will result in null values where Veeva Messages are used**
  - My Accounts
 - My Schedule
  - My Samples
  - My Setup

Sandbox - No Custom Settings

- **Absence of Custom Settings causes Veeva functionality to be unavailable both online and offline**

  - My Schedule

  - New Account Wizard

"Veeva-tizing" a Sandbox

- **Veeva-tizing is the process of data loading the out-of-box and custom Veeva application data into a Developer Pro or Developer sandbox to support Veeva specific functionality**

- **Export application data from a source org such as the production org and load it into a target sandbox**
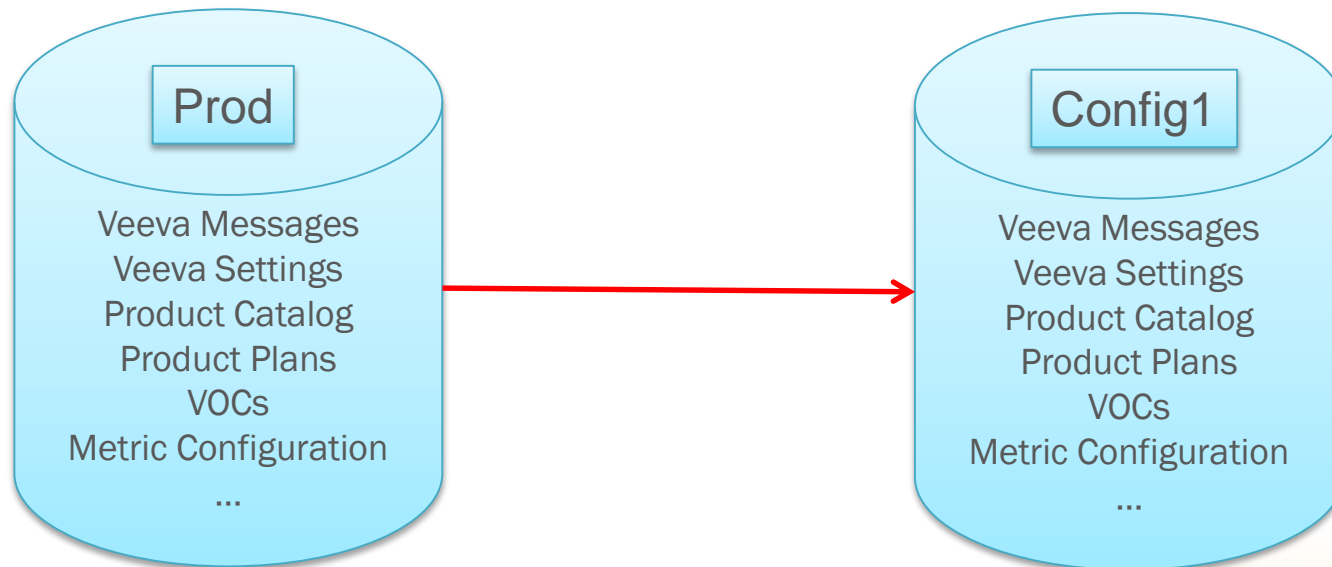
Objects to Data Load

- **Load the following objects to enable Veeva application functionality in a Developer Pro or Developer sandbox**

Must:

Veeva Messages

Custom Settings (Veeva, Common, Concur, GAS)

Product Catalog

My Setup

Views

Preferences

VMobile Object Configurations

If Using:

Product Metrics

Metric Configurations

Key Messages

Product Plans

Product Strategies

Product Tactics

VInsights (only for Full Copy Sandboxes, if any)

Use External IDs

- **Use External ID whenever possible**

  - Populate External ID values in the source and target orgs for all objects

- **Makes moving application data to various environments less laborious**

  - A .csv file containing products with External IDs of parent products' relationships can be used to upsert the products into various target environments

  - No need to change referenced IDs to resolve relationships
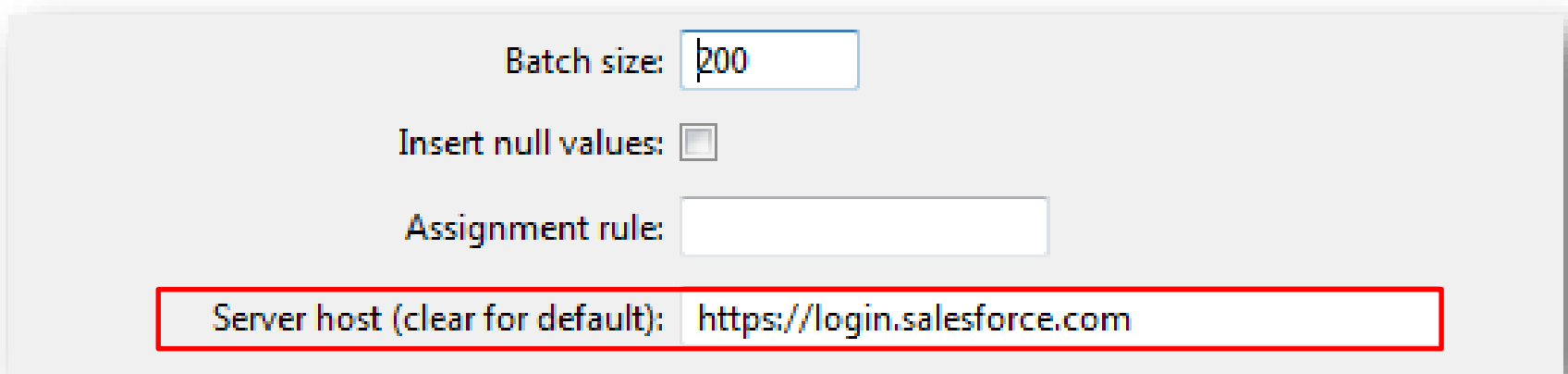
Extract Related Data with External IDs

- **When exporting data containing parent or lookup relationships:**

    - Replace SFDC IDs with External IDs

    - Export the External IDs of the referenced records and not the SFDC IDs

- **For example, when exporting products from the Product Catalog:**

    - Replace Parent_Product_vod__c with Parent_Product_vod__r.External_ID_vod__c

- **Do the same when exporting Preferences and make sure Views have External ID values**

Apex Data Loader

- **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

Batch size:	200
Insert null values:	☐
Assignment rule:	
Server host (clear for default):	https://login.salesforce.com

- **When upserting data, never map the Id and Owner Id fields**

Module Summary

- **Described the need for sandboxes**

- **Defined the different types of sandboxes**

- **Veeva-tized a Developer Pro / Developer sandbox**

Lab – Setup a Developer Pro Sandbox

Create a Developer Pro Sandbox

Export Admin Data from Production Environment

Upsert Admin Data into a Developer Pro Sandbox

Appendix

Best Practices

Sandbox and Environment Best Practices

- **Provision only as many as needed**

- **Set Process for "Expiration" of environment to recycle it**

- **Develop Regular Refresh and Retirement Process**

- **Do not refresh a sandbox that has been updated by Veeva prior to production being updated**

  - Refreshing a Sandbox that has been updated to a new release before Production has been updated will cause the Sandbox to revert to the old Veeva version

Sandbox and Environment Best Practices

- **Match Environment Type to best use of that Environment**

- **Build in sandbox first, not in production**

- **De-activate non-essential users, monitor login history and set-up audit trail**

- **Other items to know**

  - Email items like reports, dashboards etc…

  - Creating full Sandbox can take several days

  - Separate patch and release structure from SFDC production environments

Appendix

Force.com API: Advanced Topics

API

- **Salesforce.com provides programmatic access to your organization's information using a simple, powerful, and secure Application Programming Interface (API), the force.com Web Services API**

- **Force.com API has more than 20 pre-defined calls/methods**

- **The SOAP-based API is used to create, retrieve, update or delete records, such as accounts, calls, and custom objects for real time client applications that update small amounts of information**

- **The Rest Based Bulk API is optimized for loading large sets of data. It allows you to insert, update, or upsert a large number of records asynchronously by submitting a number of batches which are processed in the background by Salesforce.com**

API

- **Customers looking to build integrations with external applications should leverage the Enterprise WSDL**

- **The force.com Web Service Description Language (WSDL) can be accessed from:**

    - Setup → Develop → API