

# Development: Design Apps for Multiple Users

## Lesson 10: Managing Your Users' Experience

salesforce

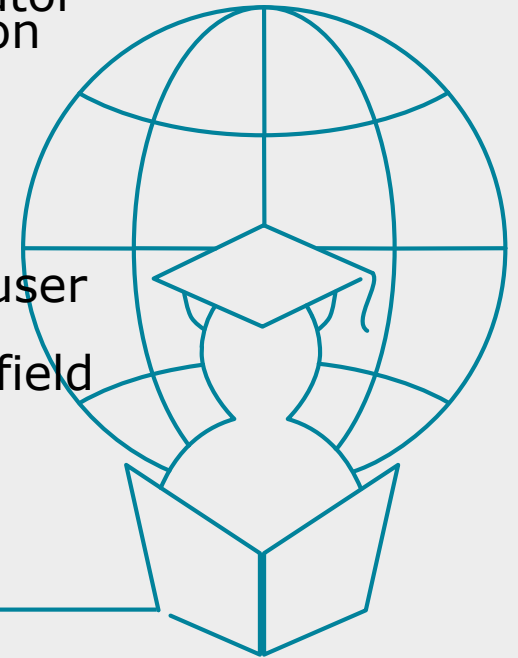
global strategic  
consulting partner



# Lesson Objectives

By the end of this lesson, you will be able to :

- List the different types and characteristics of licenses the Force.com platform supports
- List the things a profile controls in the application
- List the aspects of the profile that control access to data
- List the permissions that give a System Administrator the permissions he needs to manage the application
- State the types of profile that can be customized
- Create a profile
- Describe how to use permission sets with profiles
- Create a record type to filter picklist values
- Create a record type and page layout to alter the user experience
- Employ field-level security to lock down access to field data



## 10.1: Licenses License Types

Each user must have a user license  
Different types of user licenses allow different levels of access

Feat feati	User License Type	CRM Access	Platform Access	ditional
	Salesforce	✓	✓	
	Salesforce Platform		✓	

## 10.2: Overview of Profiles

### What is a profile?

Defines a user's permissions to perform different functions

Determine how a user sees records to which s/he has access

Every user has a profile (ONLY 1 profile)

We can group the things that profiles control into three categories:

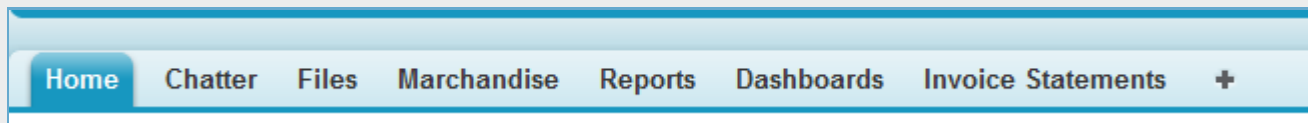
- Permissions, Access to Data, and User Interface

Permissions	Access to Data	User Interface
General User Permissions	Field Level Security	Page Layouts
Administrative Permissions	Object CRUD	Record Types
Standard/Custom Object CRUD	Login Hours and IP Ranges	Tabs
		Applications

## 10.2: Overview of Profiles

### What do profiles control?

Tab settings determine which tabs users see when they log in



Permissions determine what users can do to records to which they have access

Standard Object Permissions						
	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Accounts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Campaigns	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cases	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contacts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contracts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Documents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Custom Object Permissions						
	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Invoice Statements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## 10.2: Overview of Profiles

### What do profiles control?(cont.)

#### Login Hours and Login IP Ranges

Sets the hours when users with a particular profile can use the system

Sets the IP addresses from which users with a particular profile can log in

<b>Login Hours</b>	<a href="#">Edit</a>
No login hours specified	
<hr/>	
<b>Login IP Ranges</b>	<a href="#">New</a>
No login IP ranges specified. Users from any IP address are allowed to log in.	

## 10.2: Overview of Profiles

### Additional Information about Profiles

Standard profiles are available

- Permissions on standard profiles cannot be customized

Developers can create custom profiles

- When creating a new custom profile, developers need to select a profile from which to copy over permissions and settings

Each profile is associated with a license type

Typically, organizations will have one profile for each actor

## 10.2: Overview of Profiles

### Optional Enhanced Profile User Interface

Enhanced Profile User Interface provides stream-lined experience for managing profiles

Enable under *Your Name* | Setup | Customize | User Interface

Profile

Force.com - Free User

Help for this Page ?

[« Back to List: Profiles](#)

Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information.

If your organization uses Record Types, use the Edit links in the Record Type Settings section below to make one or more record types available to users with this profile.

[Login IP Ranges \[0\]](#) | 
 [Enabled Apex Class Access \[0\]](#) | 
 [Enabled Visualforce Page Access \[0\]](#) | 
 [Enabled External Data Source Access \[0\]](#)

Profile Detail

[Edit](#)
[Clone](#)
[View Users](#)

Name	Force.com - Free User		
User License	Force.com - Free	Custom Profile	<input type="checkbox"/>
Created By	<a href="#">vaishali kunchur</a> , 10/29/2012 10:42 PM	Modified By	<a href="#">vaishali kunchur</a> , 11/1/2012 3:51 AM



## 10.3: Permission Sets

### What are permission sets?

Permission Set Help for this Page ?

### Warehouse Developer

Find Settings... Clone Edit Properties

**Permission Set Overview** **Assigned Users**

Description	Permission Set generated for access to custom object Merchandise for the app Warehouse	API Name	Warehouse_Developer
User License	Salesforce	Namespace Prefix	
Created By	vaishali kunchur, 10/29/2012 11:07 PM	Last Modified By	vaishali kunchur, 10/29/2012 11:07 PM

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**Apps**

Settings that apply to Salesforce apps, such as Sales, and custom apps built on Force.com  
[Learn More](#)

**Assigned Apps**  
 Settings that specify which apps are visible in the app menu

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**Assigned Connected Apps**  
 Settings that specify which connected apps are visible in the app menu

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**Object Settings**  
 Permissions to access objects and fields, and settings such as tab availability

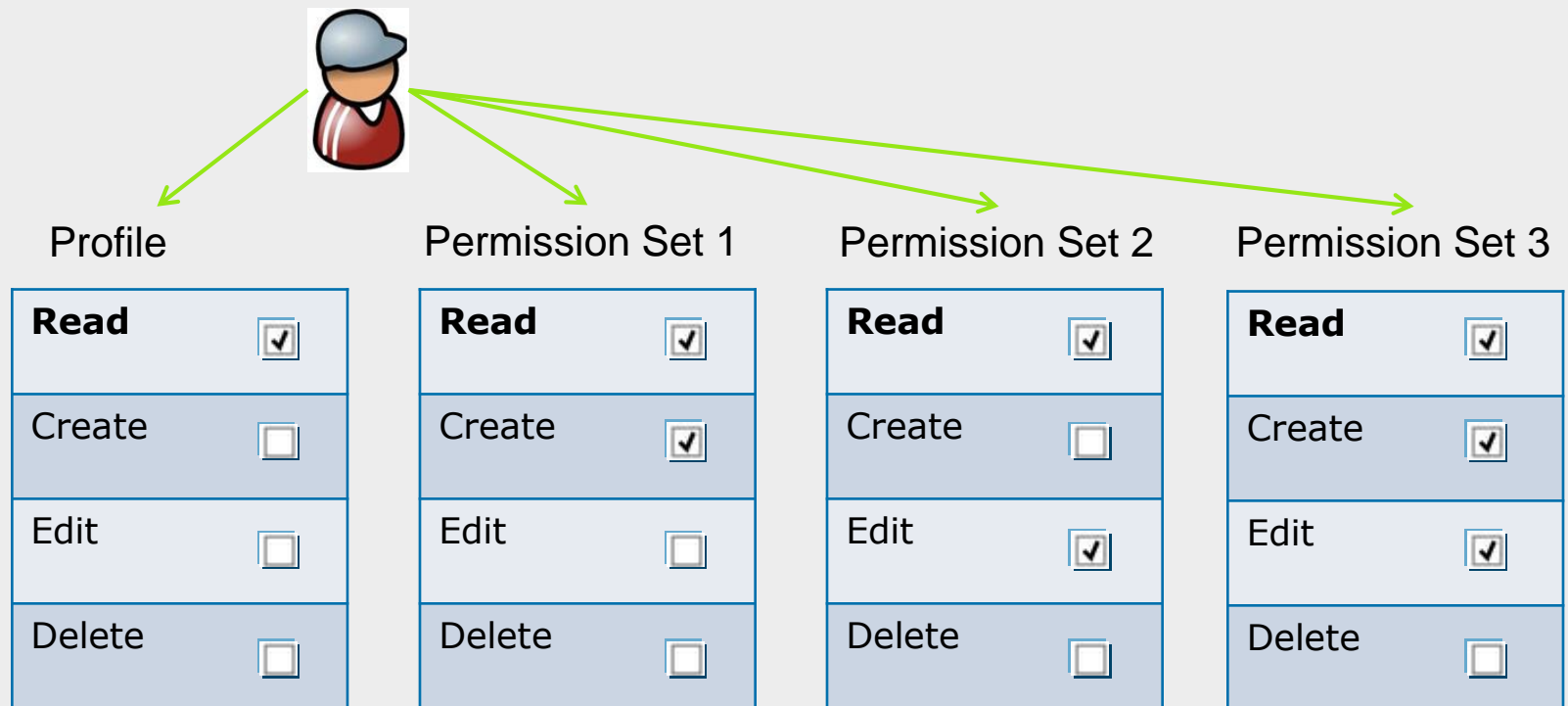
Permission sets are groups of permissions that can be assigned to specific users in addition to their existing profile permissions

## 10.3: Permission Sets

# How do permission sets work with profiles?

Users can have one profile

Users can have multiple permission sets



**NOTE: Your Organization can have upto 1000 permission sets**

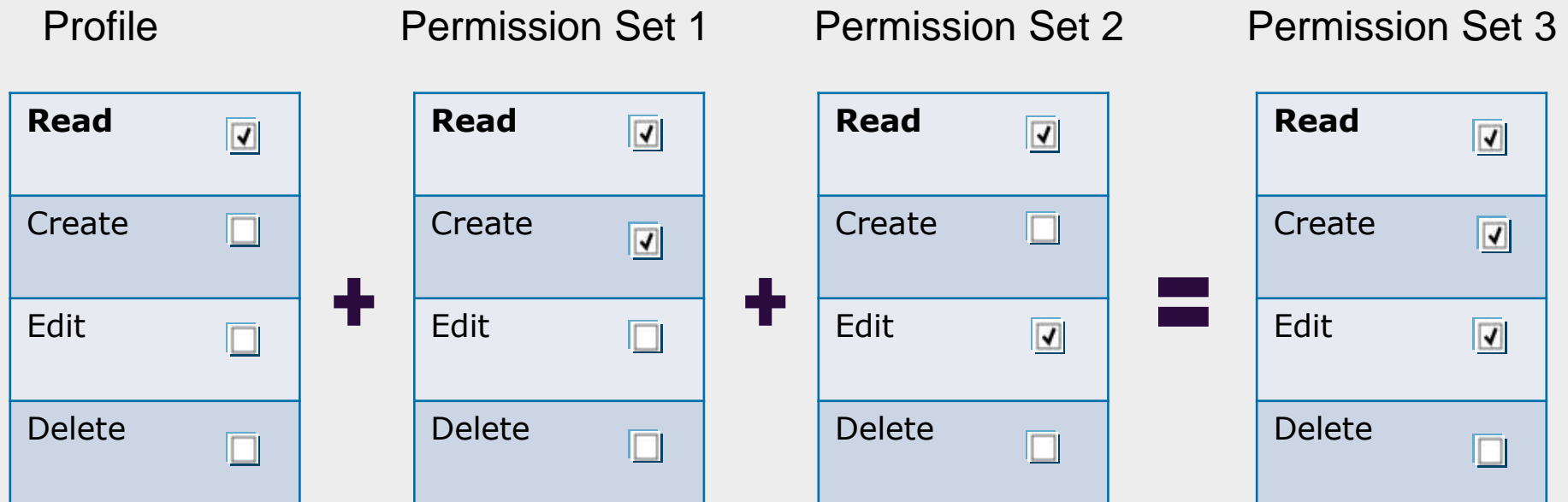
## 10.3: Permission Sets

### How do permission sets work with profiles?

#### Permission Sets:

Grant additional permissions beyond the permissions on a user's profile

Never deny permissions



## 10.3: Permission Sets

### How to Use Permission Sets with Profiles

Use profiles to assign the most restrictive permissions and access settings  
Use Permission sets to grant additional permissions

Consider Using permission sets to:

Represent a concept, like a user's job title

Allow a subset of users to perform a certain set of tasks, such as deleting or transferring records

**ALERT:** If you are using one-off profiles, consider using permission sets instead

## 10.3: Permission Sets

### Which permissions can be set using Permission sets?

<b><u>Assigned Apps</u></b>
Settings that specify which apps are visible in the
<b><u>Assigned Connected Apps</u></b>
Settings that specify which connected apps are vis
<b><u>Object Settings</u></b>
Permissions to access objects and fields, and se
<b><u>App Permissions</u></b>
Permissions to perform app-specific actions, suc
<b><u>Apex Class Access</u></b>
Permissions to execute Apex classes
<b><u>Visualforce Page Access</u></b>
Permissions to execute Visualforce pages
<b><u>System Permissions</u></b>
Permissions to perform actions that apply across

Use permission sets to specify permissions for

- Applications
- Objects
- Tabs
- Fields
- Service provider
- Apex classes
- Visualforce pages

**ALERT:** Permissions not available in permission sets must still be set through Profiles

## 10.3: Permission Sets

### Profiles Have a Set of Permissions

#### Profiles control Administrative Permissions

Administrative Permissions	
API Enabled	<input checked="" type="checkbox"/>
Author Apex	<input type="checkbox"/>
Bulk API Hard Delete	<input type="checkbox"/>
Chatter Internal User	<input checked="" type="checkbox"/>
Manage Knowledge Article Import/Export	<input type="checkbox"/>
Manage Letterheads	<input type="checkbox"/>
Manage Mobile Configurations	<input type="checkbox"/>
Manage Package Licenses	<input type="checkbox"/>

#### Profiles control General user Permissions

General User Permissions	
Activate Contracts	<input type="checkbox"/>
Approve Contracts	<input type="checkbox"/>
Convert Leads	<input checked="" type="checkbox"/>
Create and Customize Reports	<input checked="" type="checkbox"/>
Manage Cases	<input type="checkbox"/>
Manage Content Permissions	<input type="checkbox"/>
Manage Content Properties	<input type="checkbox"/>
Manage Content Types	<input type="checkbox"/>



## 10.4: Profiles and Permissions

### A Few Permissions to Note

Administrative Permissions	
API Enabled	<input checked="" type="checkbox"/>
Author Apex	<input type="checkbox"/>
Bulk API Hard Delete	<input type="checkbox"/>
Chatter Internal User	<input checked="" type="checkbox"/>
Create and Own New Chatter Groups	<input checked="" type="checkbox"/>
Customize Application	<input type="checkbox"/>
Edit HTML Templates	<input type="checkbox"/>
Edit Read Only Fields	<input type="checkbox"/>
Invite Customers To Chatter	<input checked="" type="checkbox"/>
IP Restrict Requests	<input type="checkbox"/>
Manage Analytic Snapshots	<input type="checkbox"/>
Manage Auth. Providers	<input type="checkbox"/>
Manage Billing	<input type="checkbox"/>
Manage Business Hours Holidays	<input type="checkbox"/>
Manage Call Centers	<input type="checkbox"/>
Manage Categories	<input type="checkbox"/>
Manage Chatter Messages	<input type="checkbox"/>
Manage Custom Report Types	<input type="checkbox"/>
Manage Dashboards	<input type="checkbox"/>
Manage Data Categories	<input type="checkbox"/>
Manage Data Integrations	<input type="checkbox"/>
Manage Dynamic Dashboards	<input type="checkbox"/>
Manage Email Client Configurations	<input type="checkbox"/>
Manage Knowledge Article Import/Export	<input type="checkbox"/>
Manage Letterheads	<input type="checkbox"/>
Manage Mobile Configurations	<input type="checkbox"/>
Manage Package Licenses	<input type="checkbox"/>
Manage Public Documents	<input type="checkbox"/>
Manage Public List Views	<input type="checkbox"/>
Manage Public Reports	<input type="checkbox"/>
Manage Public Templates	<input type="checkbox"/>
Manage Salesforce CRM Content	<input type="checkbox"/>
Manage Salesforce Knowledge	<input type="checkbox"/>
Manage Synonyms	<input type="checkbox"/>
Manage Users	<input type="checkbox"/>
Moderate Chatter	<input type="checkbox"/>
Modify All Data	<input type="checkbox"/>
Password Never Expires	<input type="checkbox"/>
Reset User Passwords and Unlock Users	<input type="checkbox"/>
Schedule Reports	<input type="checkbox"/>
Send Outbound Messages	<input checked="" type="checkbox"/>
Transfer Record	<input type="checkbox"/>
Use Team Reassignment Wizards	<input type="checkbox"/>
View All Data	<input type="checkbox"/>
View Data Categories	<input type="checkbox"/>
View Setup and Configuration	<input checked="" type="checkbox"/>

## 10.4: Profiles and Permissions Object Permissions

Permissions determine what users can do to records to which they have access

Custom Object Permissions													
	Basic Access				Data Administration			Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All		Read	Create	Edit	Delete	View All	Modify All
Invoice Statements	✓	✓	✓	✓	✓	✓	Marchandise	✓	✓	✓	✓	✓	✓
Line Items	✓	✓	✓	✓	✓	✓							

Lacking the “Read” permission for an object means that users will not be able to access it at all

- No Access in the application API
- No access on reports
- No access through search

Create a new profile  
Create new custom profiles



## 10.5: Profiles and Access to Data

### What is Field-Level Security?

Restricts users access to view and edit fields

Overrides any less-restrictive field access settings in page layouts and search layouts

Controls which fields users can access in related lists, list views, reports, Force.com Connect Offline, email and mail merge templates, custom links, and when synchronizing data or importing personal data

## Restricting access using field level security



## 10.5: Profiles and User Interface Record Types

Record types are used to tailor user interaction experience to specific business needs

- Note: Record types only affect the way that data is displayed in the UI, It is not a form of sub-classing

Record types can determine page layouts, in conjunction with profiles

Hiring Manager	Page Layout A	Page Layout B
Recruiter	Page Layout C	Page Layout C

Or limit picklist options.



## 10.5: Profiles and User Interface Record Types (cont.)

Record types can be set by users

- Existing records: **[Change]** link next to **Record Type** field
- New Records: Initial step before new record edit window
  - Ability to set default record type

The record types available in the picklist are determined by the user profile

- Edit Profile | Record Type Settings

## Creating Record Types



## 10.5: Profiles and User Interface

### What Does a Page Layout Control

How detail and edit pages are organized

Page section customization

Which fields, related lists, and Custom Links a user sees

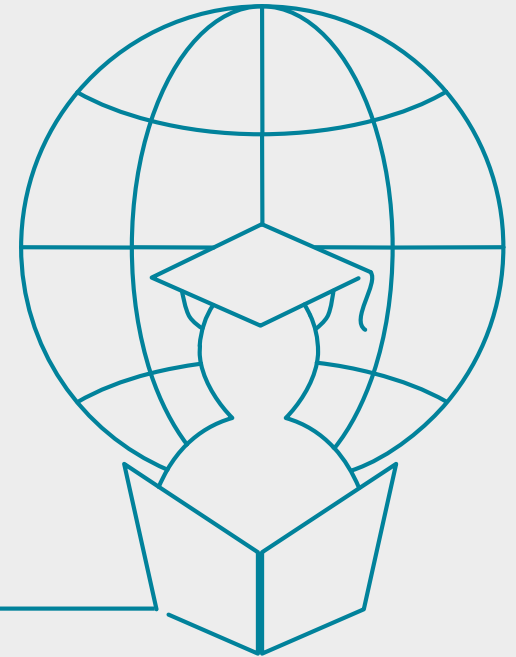
Field Properties – visible, read-only and required.

- Note: May establish unique layouts for different business scenarios

## Creating Page Layouts Creating Page Layouts and Record Types



Profiles  
Permission sets  
Field-Level Security  
Record Types



What are the different types of licenses that are available?

What do profiles control?

What are the permissions that allow a System Administrator to manage the application?

System Administrators can customize the permissions of both standard and custom profiles.

True or False

When creating a new profile, its possible to copy over settings from an existing profile

True or False