



public sector
DEVELOPER WORKSHOP

Salesforce App Cloud Workbook

Public Sector Developer Workshop, Spring '16



@SalesforceGov

Child Welfare Central Intake Management: From Idea to Application in 1 day

Introduction

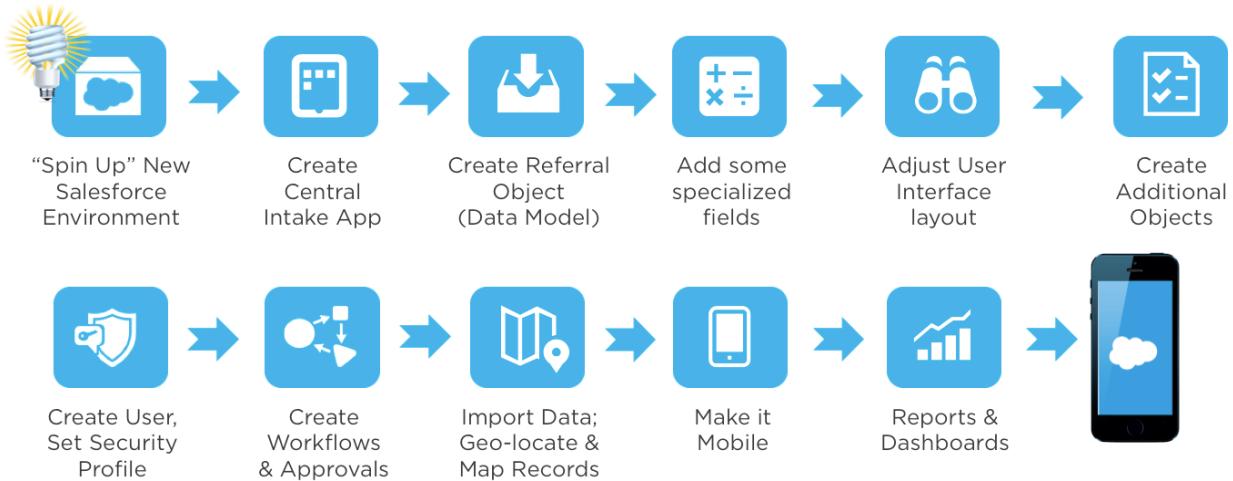
The Department of Child Services (DCS) needs to implement a new Statewide Automated Child Welfare Information System (SACWIS) Central Intake Management contact center and hotline where agency intake workers and investigators will log and track all reported and alleged incidents of abuse, neglect and maltreatment.

The agency needs to create an application where they: log all referral information; document allegations, victims and offenders; conduct safety and risk assessments to determine response priority decisions; initiate and conduct investigations; generate alerts, notifications, approvals and other workflow tasks; and report on key performance indicators complete with executive dashboards.

In addition, caseworkers and investigators must be able to access these referral records, allegations, assessments and investigations via their tablet or smart phone while out of the office.

Lastly, DCS would like to use modern mapping tools to help them geo-locate all referral records so agency leadership can spot trends of where incidents are occurring and so they can perform preventative community outreach activities that guide mandated reporters in recognizing the warning signs of abuse.

By the end of the workshop, you will have a working prototype of the new central intake app.



1.0 Sign up for a new Salesforce Developer Edition (DE) Org and Login

Duration: 15 Minutes

In this exercise, you will sign up for your own personal Salesforce Organization (Org) called a Developer Edition or “DE Org” and login with your credentials. Salesforce DE Orgs are fully featured Salesforce environments. They never expire and are free to use.

A DE Org lets you instantly start developing, testing and deploying your software-as-a-service application, and you don't need to touch a single server, as they're provisioned in the cloud. The Developer Edition comes with a number of applications pre-installed, including Salesforce CRM applications like Sales, Call Center, Marketing, and Content.

Limits for Developer Edition:

- 5.0 MB of Data Storage
- 20.0 MB of File Storage (attachments)
- 5000 API requests per 24 hours

1. Open a web browser and go to <https://developer.salesforce.com/signup>

Explore Force.com, the fastest way to create enterprise cloud apps

Build apps Lightning fast with drag and drop tools
Customize your data model with clicks
Go further with Apex code
Integrate with anything using powerful APIs
Stay protected with enterprise-grade security
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Get your very own Developer Edition
A full-featured copy of Force.com, for FREE.

Name
Brian Murphy

Email
bmurph@gmail.com

Role
Developer

Company
BTM Central Intake Agency

Country
United States

Postal Code
97223

Username
b.murphy@centralintake.demo

I'm not a robot

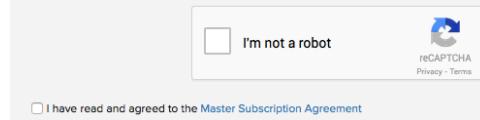
I have read and agreed to the [Master Subscription Agreement](#)

[Sign me up >](#)

2. Enter the following details in the “Get your very own Developer Environment” signup form

- a. First Name
- b. Last Name

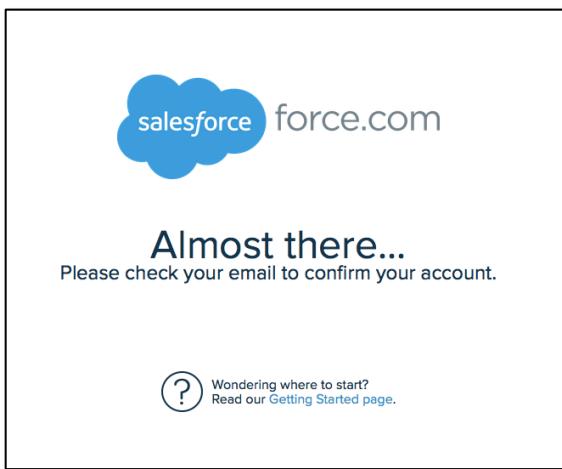
- c. Email Address (**Note:** this should be an email address where you can log into during the workshop in order to view your welcome email and link to setup a password.)
- d. Company
- e. Location
- f. Postal Code
- g. Write down your user name: _____ (example: **first.last@de.demo**)
Note: This will be your user name for the DE Org. It needs to be in the “form of an email address.” We highly suggest that you **DO NOT USE YOUR REAL WORK EMAIL ADDRESS AS YOUR DE ORG USER NAME.**
- h. Click the “I’m not a robot” CAPTCHA check box
- i. Check the box to agree to the terms of the Master Subscription Agreement



- j. Click the **Sign me up >** button

Sign me up >

- 3. Next, you should see a screen indicating that you are Almost There!



- 4. Log into your email account that you used above in **step c.**

- a. You should have received an email that resembles the following:

Salesforce Developers Your Developer Edition Login Information - Dear Brian Murphy, Welcome to Your Developer Edition! Your user name is l

Your Developer Edition Login Information Inbox

Salesforce Developers via mto1q1m3bnje.15-gdsxeaw.na22.bnc.salesforce.c 11:22 AM (25 minutes ago)

to me

Dear Brian Murphy,

Welcome to Your Developer Edition! Your user name is below.

User Name: b.murphy@centralintake.demo

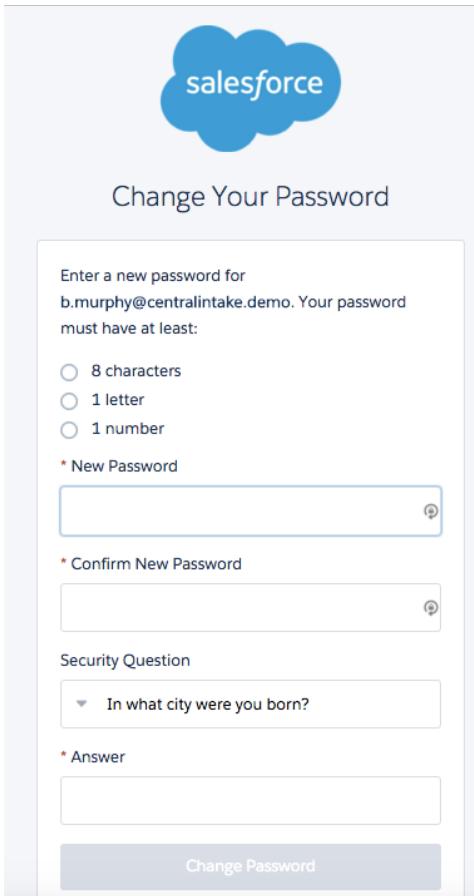
You'll be asked to set a password when you first log in. Passwords are case sensitive. You'll also be asked to set a password question and answer that will be used if you forget your password.

To log in now, click: <https://login.salesforce.com/?c=dd0e2BRUXV40sz4n9vO3RTUv2citWk6hN5YwRXhwEzIECh24gYTtLR2i28VYdshowukP921%2Bqtrv%2FgpXn4Vwv2AbdkierkgblDpRizhnfOV0BZzPXP5N%2BM7nhoc2BNB8nJZsg0UEEfFvgihbFDAz20xjS3Di2KSk95mk9%2F76SGoJUG/GUM%2FQQ7c9idc46dBjVYEablWxwnRyWBpQch69Me5wvLHPVY5EAxA%3D%3D>

For assistance, contact us at info@salesforcedevs.com. Once again, welcome to Your Developer Edition.

Note: If you don't see the email, please check your email spam folder.

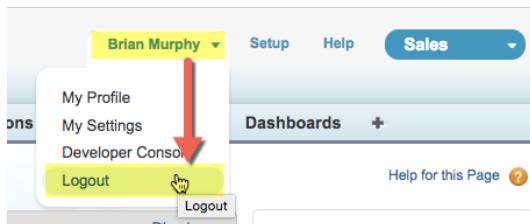
- b. Click on the hyperlink in the email in order to create your password. If successful, you should see a screen that looks like the following:



The screenshot shows the 'Change Your Password' page from Salesforce. At the top is the classic blue cloud logo with the word 'salesforce'. Below it is the title 'Change Your Password'. The form asks for a new password, specifying it must be at least 8 characters long, containing 1 letter and 1 number. It includes fields for 'New Password' and 'Confirm New Password', both with password strength indicators. A 'Security Question' section is present with the question 'In what city were you born?' and an 'Answer' field. A large 'Change Password' button is at the bottom.

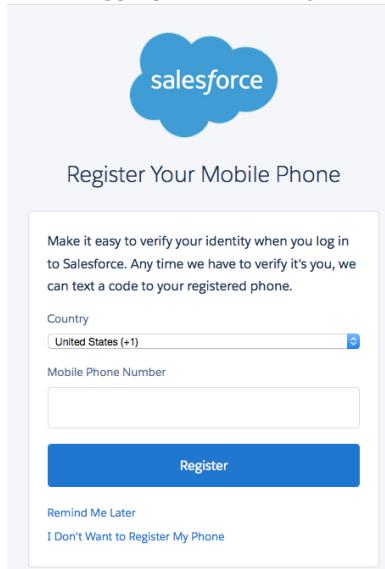
- c. Enter the form details and click **Change Password**
d. This should automatically log you into your Salesforce DE Org. Congratulations!

5. Now, we want to show you how to access and log into your DE Org in the future. In the upper right-hand corner, select [**YOUR NAME**] > **Logout**



- a. After logging out, you should already be at the Salesforce Login Page where you can re-enter your DE Org credentials. If you did not get directed back to the login page, don't worry. Just open a browser and go to the following URL: <https://login.salesforce.com>
6. Re-login to Salesforce using your DE Org credentials.
a. Enter your [**User Name**] & [**Password**] and click **Log In**

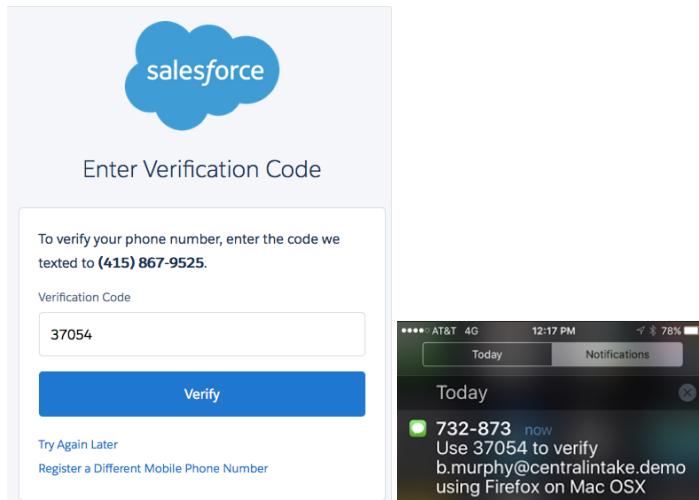
- b. When logging in this time, you may see this screen:



The screenshot shows a "Register Your Mobile Phone" page. At the top is the Salesforce logo. Below it, the page title is "Register Your Mobile Phone". A descriptive text box says: "Make it easy to verify your identity when you log in to Salesforce. Any time we have to verify it's you, we can text a code to your registered phone." There is a "Country" dropdown set to "United States (+1)". A "Mobile Phone Number" input field is empty. A large blue "Register" button is at the bottom. Below the button are two links: "Remind Me Later" and "I Don't Want to Register My Phone".

This is an example of Salesforce security controls asking you to register for an additional layer of authentication. Since Salesforce is a public cloud you can access our login page from any web browser or mobile device. If you log into Salesforce in the future from an IP address that we have not recognized since the last time you accessed your account, Salesforce will ask you to authenticate with a verification code that will be sent to your mobile phone. Pretty cool, eh? (By the way Salesforce will even let you specify an IP range for your organization so that you will only accept people logging in from an IP that falls within the range you specify.)

- c. Enter your mobile phone number and click **Register**
d. You should see another screen asking you to enter your verification code as follows:

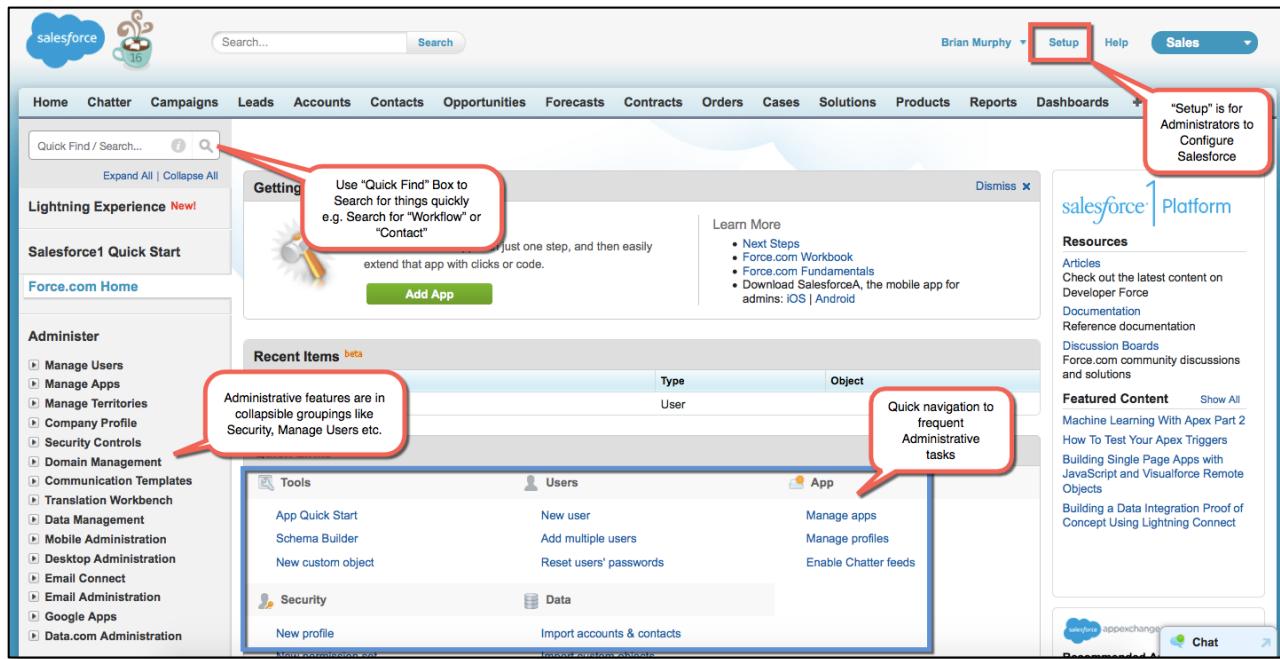


The screenshot shows a "Enter Verification Code" page. At the top is the Salesforce logo. Below it, the page title is "Enter Verification Code". A text box says: "To verify your phone number, enter the code we texted to **(415) 867-9525**". An input field contains the code "37054". A large blue "Verify" button is at the bottom. Below the button are two links: "Try Again Later" and "Register a Different Mobile Phone Number". To the right, a mobile phone notification is shown: "732-873 now Use 37054 to verify b.murphy@centralintake.demo using Firefox on Mac OSX". The notification includes standard iOS-style icons for signal strength, battery level, and time.

The verification code will be sent to your mobile phone. Enter the verification code and click **Verify**.

7. Congratulations once again! You should now be logged into Salesforce and situated on the **Setup** Screen, which is accessed from the **Setup hyperlink** in the upper-right corner. Take a second to

familiarize yourself with the layout of the Setup screen below.



Setup is where Administrators configure Salesforce Objects by declaring name/value pair properties, which is a declarative metadata-driven (clicks not code) application development paradigm. Admins can do things such as add new data objects to the database schema, create new fields, define workflows, approval processes, validation rules, record types, UI layouts, reports, dashboards and more without having to write traditional procedural source code.

2.0 Salesforce Terminology & Navigation: Orientation to the User Interface

Duration: 20 Minutes

When learning a new application, platform or development paradigm for the first time, two of the most challenging things to learn are (1) Terminology and (2) Navigation. This following section will give you the tools you need to understand Salesforce terminology so you will be able to navigate and complete the subsequent exercises.

Tabs – A Salesforce application is made up of one or more Tabs. Each Tab can be thought of as a logical business entity like an Account (Business), Contact (Person), Case, Report and so on. The Tabs represent “data objects” or things you track in your business. Some data objects are delivered out-of-the-box in Salesforce and some will be “custom objects” that you create.

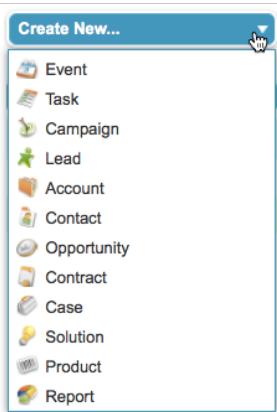


1. Click on the **Home** tab

2. Do you see any data on the home page? () Yes () No
(Note: The home page is empty because you have not entered any of this data in your DE Org yet)

3. What are the Names of the 3 sections on the home page? _____

4. Click the **Create New** drop-down menu on the left-hand side of the Home Page



5. Select **Contact** to enter a new contact into the system
 - a. Fill in all fields except for the **Reports to** field
 - b. Note: The **Account Name** field is a “lookup” to the Account object. See if you can figure out how to create an Account to associate with the contact from the lookup dialog. A lookup field is identified by the magnifying glass icon in Salesforce (🔍)
 - c. After filling in all the fields, click **SAVE**

- d. What Buttons do you see on your Contact's Detail Page header?

- e. What popular Social Networks are available to link to the contact?

Chatter – Chatter is Salesforce’s social collaboration tool that is native to the platform. With Chatter, you can collaborate with people both inside and outside your organization on individual records of data (e.g. Cases, Contacts, Referrals) and on common topics of interest using Chatter Groups. The Chatter “feed” allows a user to post comments, @Mention co-workers, add files, initiate polls, and perform “actions” such as creating a note, adding a task, updating a field, or sending an email. In addition, you can “follow” a record of data much the same way you can follow your favorite sports team on Facebook. When you follow a record in Chatter, anytime the record is updated, an entry is made on the Chatter “feed” so followers are instantly aware of the updates related to that particular record.

- 6. What “actions” are available in the Chatter Feed on your contact record? (Hint: Click the Show Feed hyperlink )

- 7. Click **Follow** in order to follow the Contact



- 8. **Challenge:** Add a file from your desktop or hard drive to the contact record using the appropriate chatter feed action.
- 9. **Challenge:** From the **Home** page click the smiley face icon and add a photo to your Chatter profile



Brian Murphy

Thursday December 10, 2015

Related Lists – Related lists are a set of (child) related records associated, in this example, to the contact record you created. The Related List objects like (activities, cases, notes, opportunities) have a relationship in the data model (schema) to the Contact object. Related lists of records usually have either a 1:M, M:1 or M:M relationship with the parent object.

- 10. What “related lists” are on the Contact Detail Page?

- 11. Create a New Note and Attach a File to the Contact record using the appropriate related list

- 12. Create a New Task on the contact record that is due 1 week from today using the appropriate related list

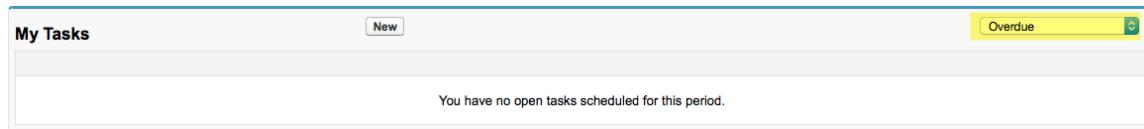
- 13. **Challenge:** Create another new note via Chatter actions

- 14. Click the **Home** Tab to return to the home page

- 15. Does the Task you created on the Contact show up in the Tasks list on your home page?

() Yes () No

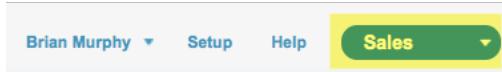
16. Change the filter on the Task section of the home page from **Overdue** to **All Open**



17. Does the Task you created on the Contact show up now?

() Yes () No Why or why not? _____

App Picker - The drop-down menu in the top-right corner of the application shows you a list of the applications that your security profile(s) give you access to. In the workshop we will be creating a new application that will be available in this menu.



18. Click on the **App Picker** drop-down menu

19. How many Apps do you see? _____

20. What are they? _____

21. How many links to External Websites? _____

22. What are they? _____

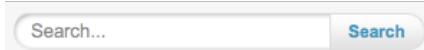
23. Select **Call Center** from the App Picker

24. What changes in the UI? _____

25. What Tabs are in both the Sales and Call Center Applications?
-

Global Search - Salesforce has a rich Google-like search engine for easily finding information throughout the system.

26. In the Global Search box, enter the contact you created in step 5 and click **search**



27. What happens when you start typing and before you click search? _____

28. **Challenge:** Search for the name of the file you attached in step 10 and click **search**

29. On the search results do you see the contact it's related to? () Yes () No

Views - A view is a set of search conditions that display records that match the search conditions. For example, a view of contacts that have "Birthdays This Month" would filter your list of contacts based on a

search for birthdays falling on a day in the current month. By default, Salesforce.com includes a number of views for each screen Tab/Object.

The screenshot shows the Salesforce Home page with the Contacts tab selected. A dropdown menu titled 'View:' is open, showing options like 'All Contacts' (which is highlighted), 'Birthdays This Month', 'My Contacts', 'New Last Week', 'New This Week', and 'Recently Viewed Contacts'. To the right of the dropdown, there are buttons for 'Edit | Create New View' and 'New'. Below the dropdown, there's a table with columns for Name and Account Name, showing entries like 'Ivaldi, James' and 'Jivaldi Inc'. On the left, there's a sidebar with 'Recent Items' listing 'James Ivaldi', 'Jivaldi Inc', and 'Brian Murphy', and a 'Recycle Bin' section.

30. Click on the **Contacts** Tab
31. In the View drop-down list, select **All Contacts** and click **Go**
32. How many contacts have the Last Name starting with the letter "R"? _____
(Hint: Use the Alphabet Bar)
33. Next, we will create a custom view of contacts that have a title of VP or CxO
 - a. Click on the **Create New View** hyperlink
 - b. Enter: **Very Important Contacts** as the View Name
 - c. Scroll down to the **Filter by Additional Fields (Optional)** section and enter the following to filter the contents of your custom view
 - i. Field = **Title**
 - ii. Operator = **Starts with**
 - iii. Value = **C, VP** (note: the comma is a logical "OR" operator)

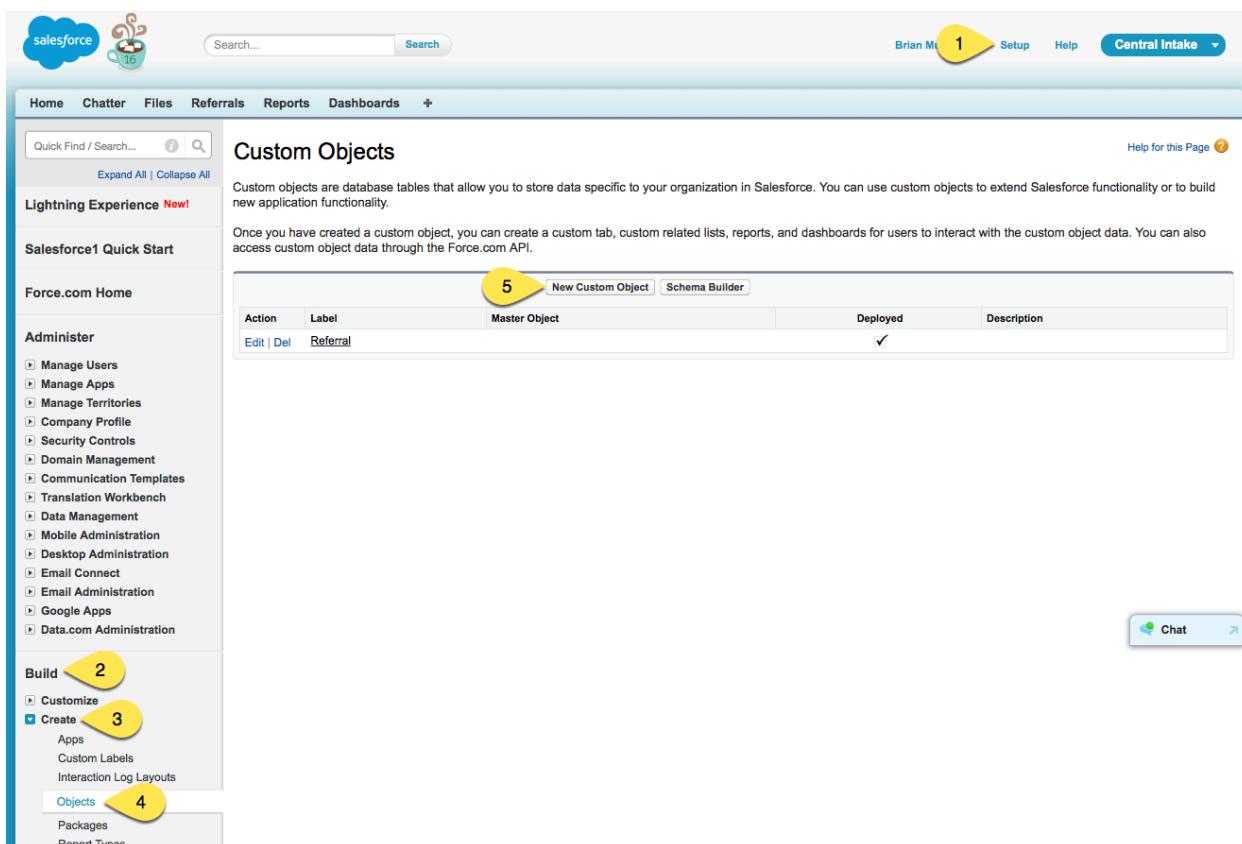
Filter By Additional Fields (Optional):		
Field	Operator	Value
Title	starts with	C, VP

AND
 - d. Scroll down to the **Step 3. Select Fields to Display** section and add any additional columns you wish (there's a limit of 15 fields you can display in a view)
 - e. Scroll down to the **Step 4. Restrict Visibility** section and verify the **Visible only to me** option is selected
 - f. Click **Save**
 - g. Notice that your new Custom View executes and is added to the list of views on the Contact screen
 - h. **Challenge:** Create another View of Contacts that are either with the Grand Hotels Account or any of the United Oil Accounts (100 extra points for using Filter Logic!)

Review the Lab Exercise Navigation Syntax

Setup – Once again, **Setup** is the place where Administrators will spend lots of their time when configuring Salesforce to meet their business needs. In this workshop, we will use the following syntax for telling you where to navigate in the Setup screens when describing what configurations to make in the lab exercises. When you see a navigation path that looks like this: **Setup > Build > Create > Objects > New Custom Object**, it translates to the following navigational steps:

1. Click **Setup**
2. In the left-hand Setup navigation, scroll down to the **Build** section
3. Expand the **Create** section by clicking the “>” icon 
4. Click on the **Objects** hyperlink
5. Click the **New Custom Object** button



3.0 Create an Application, Object & Fields

Duration: 20 Minutes

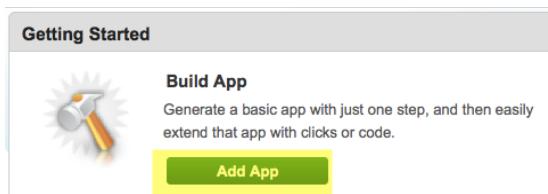
The Salesforce App Cloud makes it easy to build custom apps and databases in the cloud. In this lesson, you learn how to build a basic app with just a few clicks and then enhance the underlying database as you go along. You also learn how to validate data entry, create different field types and load data.

At the heart of this Central Intake app is what you want to manage and track: Referrals for alleged abuse and neglect. When you create an app, you automatically create a data object that keeps track of all the elements of a particular referral record you might require such as its name, Id, summary, allegation category and date reported. On Salesforce App Cloud, these data objects are called “custom objects.” If you’re familiar with databases, you can think of them as a table.

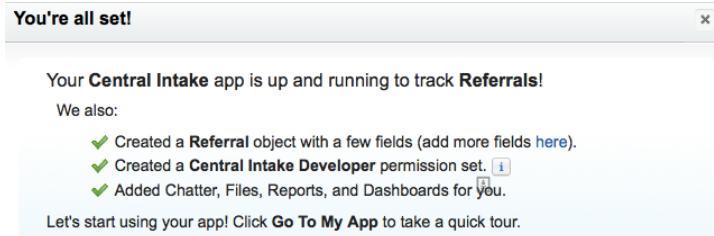
An object comes with standard fields and screens that allow you to list, view, and edit information about the object. But you can also add your own fields to track or list just about anything you can think of. When you complete this tutorial, you’ll have a working app with its own menu, a tab, and a custom object that tracks Referrals, as well as screens that allow you to view and edit all of this information.

Build the Central Intake App and Referral Object

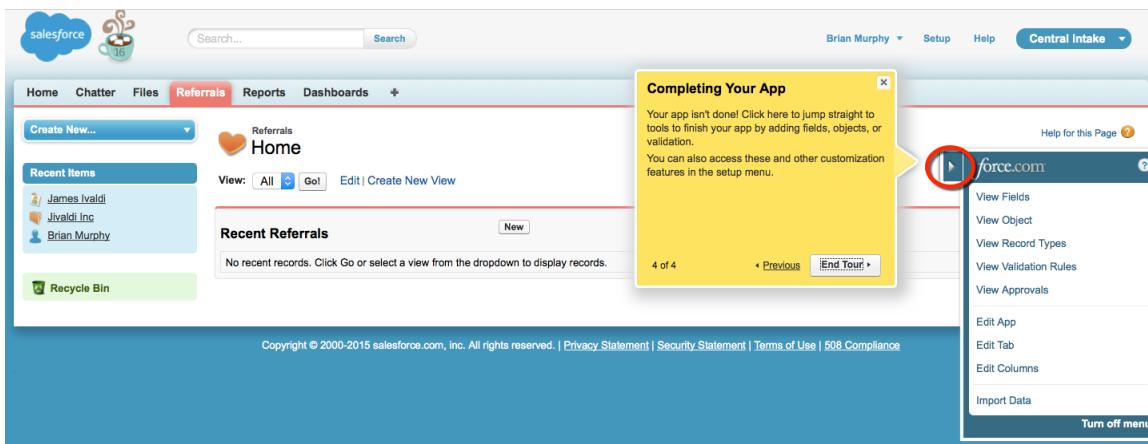
1. Launch your browser and go to <https://login.salesforce.com>
2. Enter your user name and password and click **Log In**
3. Click the **Setup** hyperlink
4. We will use a quick start wizard to create your application. In the getting started section, click on the **Add App** button



5. In the “What’s the name of your app” field, type: **Central Intake**
6. In the “What’s the main type of data you need to track” section, type the following:
 - a. Label: **Referral**
 - b. Plural Label: **Referrals**
7. Click **Create** and you see right away some of the functionality that’s automatically added



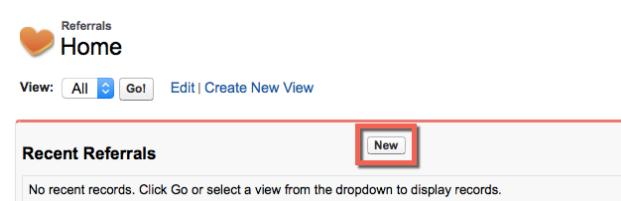
8. Click the **Go To My App** button
9. You should now be situated on the **Referrals Tab**. If not, click the Referrals tab.
10. Click **Start Tour** of your new application
11. **Read each of the 4 tour panels** and click **continue** until you read through all items. Note that panel #4 shows you a quick access menu - called the Force.com menu - which gives system administrators and application developers a quick way to access the objects and fields instead of having to navigate to the same spot via the Setup menu structure.



12. Click the **End Tour** button, then click the **Close** button

Try out the application

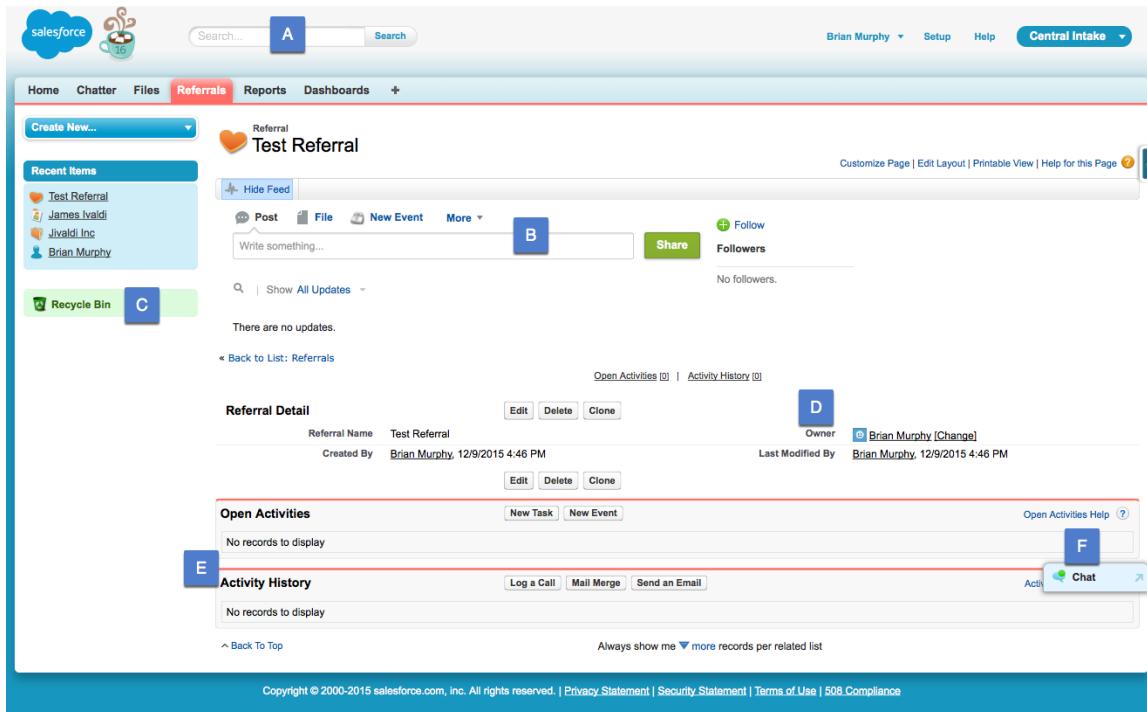
13. Your app doesn't do much yet, but you can start using it right away. Click the **New** button to enter your first Referral record



14. In the New Referral form, enter **Test Referral** for the name and click **Save**

You should now be situated on the Referral detail page for the Test Referral record you just created. Take a look around at the page. Building a simple app is really fast! But don't let this basic app fool you. Salesforce is

a powerful platform that lets you build much more sophisticated apps just as easily, and without code. Look closely around the screen to see all of the functionality included by default.



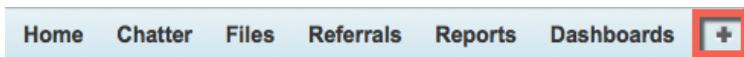
Review the functionality (A-F) called out in the graphic above

- Every app has full-text search functionality for all text fields of an object and Chatter feeds.
 - Every object in Salesforce automatically has an attached "feed," called Chatter, which allows authorized app users socialize and collaborate on the object. Using Chatter, users can post updates in an object's feed, comment on posts, and follow (subscribe to) the feed to get pushed updates when they happen. For example, on a Merchandise record, one user might post a question about the record, to which followers and other users can comment in reply.
 - Every Salesforce Org has a recycle bin that you can use to view and restore deleted records.
 - Every record in Salesforce has an "owner," which serves as the basis for a powerful security system that supports ownership-based record sharing.
 - You can also manage activities related to a record from the Open Activities and Activity History related lists. Activities include tasks to perform (making phone calls or sending email), calendar events, and requested meetings.
 - Every Salesforce Org has a Chat window that lets users interact with one another.
15. How many fields do you see on the Referral record detail? _____
16. What are the field names? _____
17. How many related lists do you see? _____

18. What are the names of the related lists? _____
19. Next, create a “post” in the Chatter feed:
- If the Chatter Feed is not open (expanded), click the **Show Feed** hyperlink
 - Click the Post “action” ( **Post**)
 - Type the following post: **I just created my first Referral record in the central intake application and I didn't use email!** and then @Mention yourself by typing **<@Your Name>** (you @Mention yourself because you are the only user so far in the Salesforce Org)

Add a Logo and the Contacts Tab to your Application

20. First we will download a logo to replace the default Salesforce Logo. Open another browser window/tab and enter the following URL: <http://sfdc.co/jMUoc>
21. Click the **Download** button in the lower-left corner and save the logo to your desktop or somewhere on your hard drive that you will remember
22. Next, we will add the logo to Salesforce Documents so it can be selected in a subsequent step. Click the **Plus Sign (+) in your Tab Bar** (hint: it's next to the Dashboards Tab)



23. Scroll down and click the **Documents** hyperlink
24. Click the **New button** to add a document and set the following properties:
- Document Name: **Central Intake App Logo**
 - Externally Available Image: **True** (click the **checkbox**)
 - Click the **Browse Button**
 - Navigate to your desktop and select the Logo you downloaded - **CentralIntakeAppLogo.png**
 - Click **Save**

25. Next, from **Setup**, scroll down to the **Quick Links Section** and click **Manage apps**

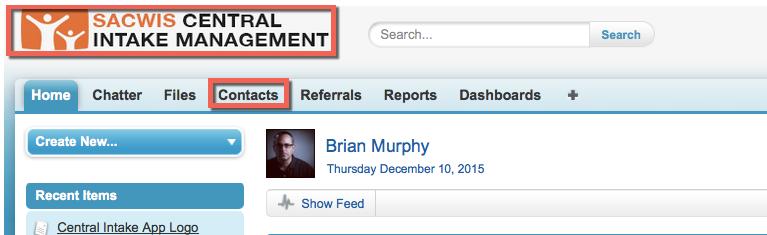
Quick Links		
 Tools	 Users	 App
App Quick Start Schema Builder New custom object	New user Add multiple users Reset users' passwords	Manage apps Manage profiles Enable Chatter feeds

26. Click the **Central Intake** app hyperlink
27. Click **Edit**
28. Click the **Insert an Image** button
29. Select your logo

30. Next, in the Available Tabs list, move **Contacts** to the **Selected Tabs** column and place it after **Files**

31. Scroll to the bottom of the page and click **Save**

32. Click the **Home** Tab and review your changes



3.1 Access the App from a Mobile Device

Duration: 20 Minutes

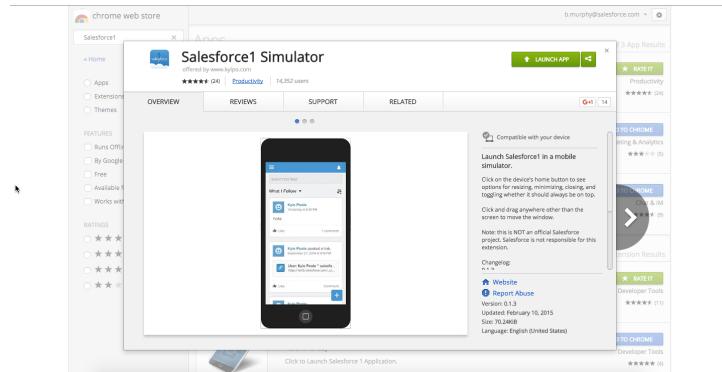
The simple app you created is already accessible as a mobile app. What? That's right! Most things you create in Salesforce are available via a mobile device, giving your users full access to the information they need, no matter where they are. As you continue to develop this app, everything you do in the full site is reflected in the **Salesforce1 mobile app**.

For the Central Intake use case, you can imagine caseworkers and investigators in the field using the Salesforce1 mobile app to perform field investigations, conduct risk and safety assessments, take photos for evidence, receive alerts and notifications, collaborate using Chatter and have total access to the right information at the right time in realtime!

You can access the Salesforce1 app in two ways by either downloading the app from the Apple App Store or from the Android Marketplace; or you can use the Salesforce1 Mobile App simulator found in the Chrome Web Store.

Download & install the native app for your phone or the simulator for Google Chrome:

- App Store for iOS: <http://apple.co/1bJ6B1C>
- Google Play for Android: <http://bit.ly/18QsTGG>
- Chrome Web Store Salesforce1 Simulator: <http://bit.ly/1Fr2b3d>



Access the Salesforce1 Mobile App using the Salesforce1 Simulator

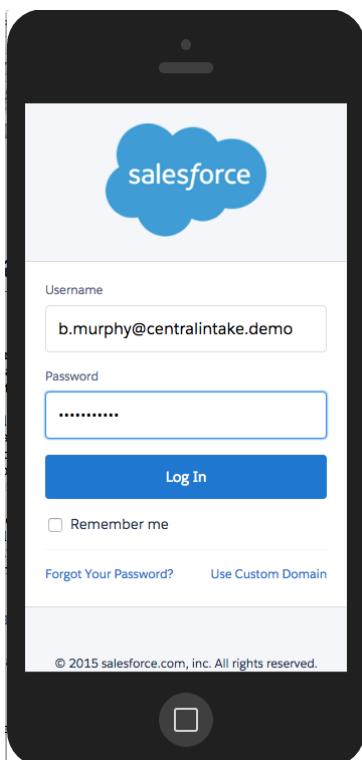
1. Open a new **Google Chrome browser Tab**
2. Access **Google Apps** in your Chrome Browser



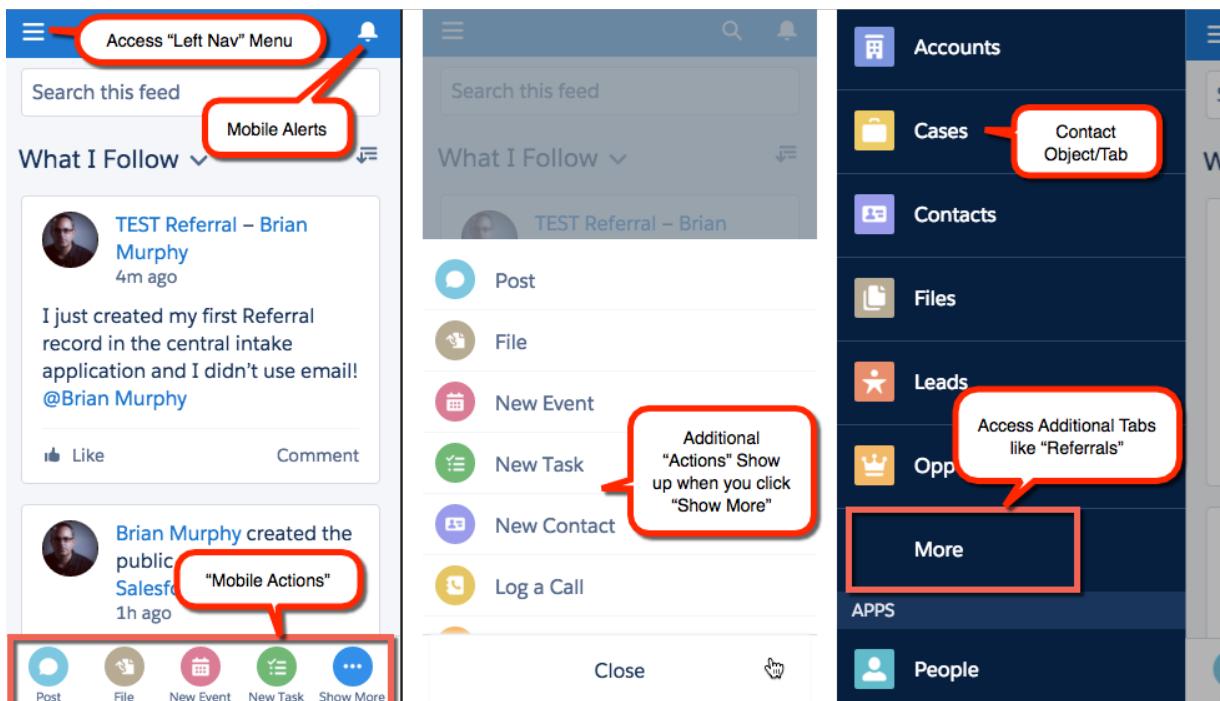
3. Click on the **Salesforce1 Simulator** icon



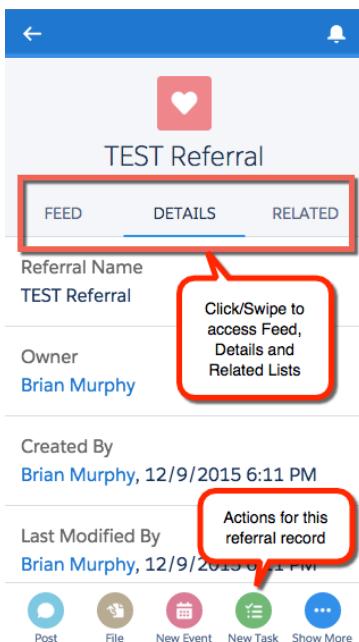
4. Enter your same User Name and Password for your DE Org and click **Log In**. You might be asked to verify your mobile device.



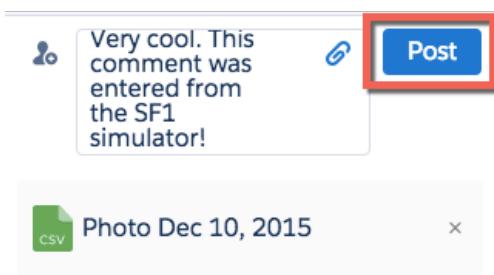
Upon logging in, you will be on the Chatter Feed screen. Scroll up and down to see the activity that you have already generated based on the information you have entered. You should see your first chatter post and a task or two that you created in the navigation exercise. Take a few moments to review the graphic below for mobile app functions and terminology.



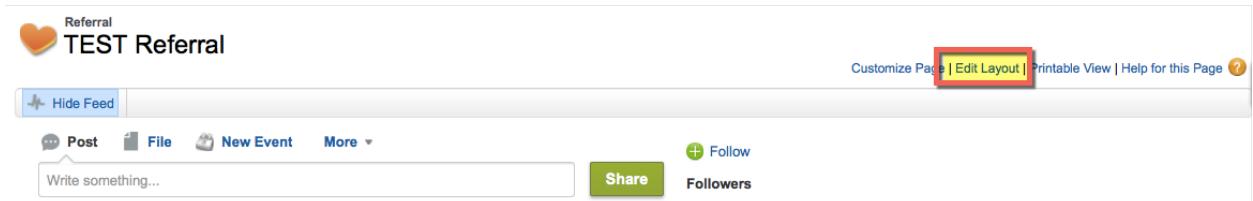
5. Click  in the top left corner to open the navigation menu (or Tap if using the Apple or Android version of the app)
6. Scroll down and click **More**
7. Click **Referrals**. You should see your Test Referral record in the recent referrals list
8. Click on the **Test Referral** record to access its details



9. Click on the **Feed**
10. Do you see the Chatter post you created earlier from the browser? () Yes () No
11. Click **Like**
12. Click on the **Comment** hyperlink
13. Enter a comment: "Very cool. This comment was entered from the SF1 simulator!"
14. Click the **paper clip icon** and click **Upload a File** button
15. Select a file from your desktop or hard drive and add it
16. Click the **Post** button

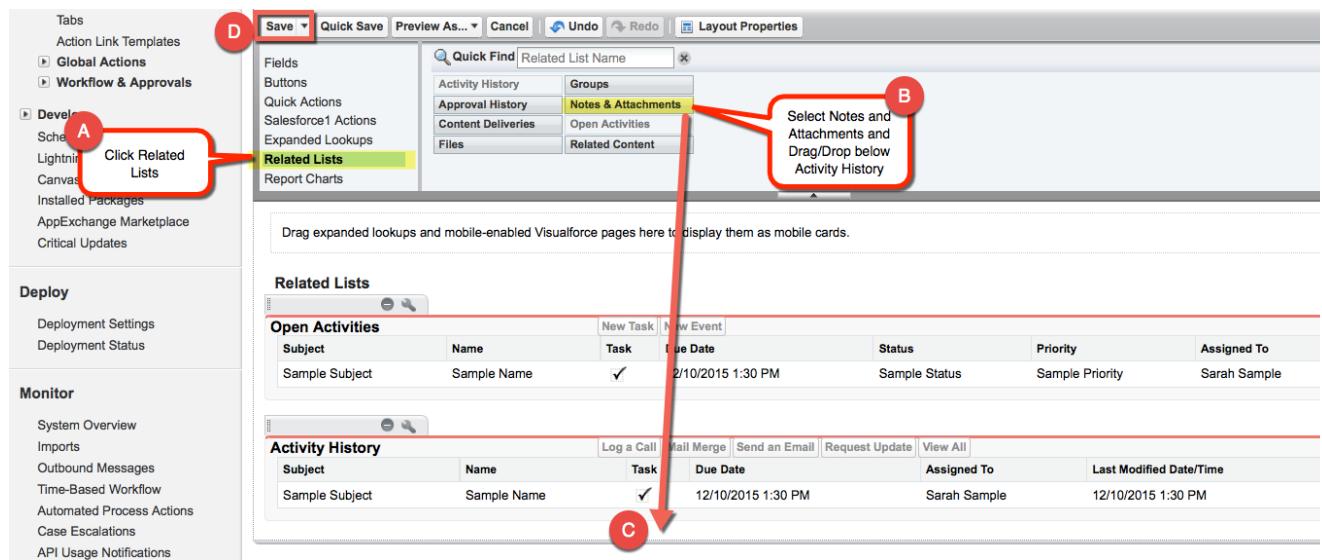


17. Switch back to Salesforce on your web browser and **navigate back to the Test Referral record** to view the updates in the Chatter feed. You should see the comment and the file attached in the Chatter feed. Is it there?
(
) Yes () No
18. Next, we are going to quickly preview another feature that we will describe more in detail during a subsequent lab exercise. When you added the file via the mobile app it appeared in the Chatter feed. The file, however, also exists in a related list for Notes & Attachments, but that related list is not currently exposed on the page layout. On your Test Referral record detail page, click the **Edit Layout** hyperlink.



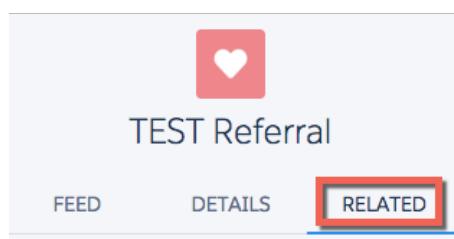
19. You should now be situated in the “page layout editor” which allows administrators to add/subtract elements from the page layout/UI through a drag-and-drop metaphor. In the page layout editor, do the following: (see graphic below)

- Click **Related Lists**
- Select the **Notes and Attachments** related list and then **drag/drop** the related list to a
- place **below the Activity History** related list on the layout
- Click the **Save** button



20. Your Test Referral record detail page should now be updated with a third related list. Do you see the attachment you added in step 16? () Yes () No

- Now, navigate back to the **Salesforce1 Simulator**
- Click **≡** in the top left corner to open the navigation menu
- Scroll down and click **More**
- Click **Referrals**
- Click **Related**



26. Does the mobile app show the **Notes and Attachments** related list? () Yes () No
(Hint: You may have to refresh the page in the simulator)

27. Now, click on the **Notes and Attachments** related list
28. Do you see the attachment that you added originally to the Chatter feed? () Yes () No
29. Click the **Back** button to return to the Test Referral record detail page
30. Tap  from the action bar at the bottom of the page, and then notice the list of icons that represent actions. This area is called the *action menu*.
31. Try out an action by clicking **New Task** and fill in the following fields:
 - a. Subject: **Investigate Referral within a week**
 - b. Name: Select the contact you created in the navigation exercise
 - c. Due Date: pick a date 1 week from today
 - d. Click **more**
 - e. Assigned to: <your name> (**accept the default**)
 - f. Status: **In Progress**
 - g. Click **Save**
32. Now, navigate to **Related > Open Activities**
33. Do you see the activity you assigned to yourself? () Yes () No
(Hint: you may have to refresh the page in the simulator)
34. **Challenge:** Mark your activity as **Complete**
35. Now, navigate to **Related > Activity History**
36. Do you see the completed activity in history? () Yes () No
(Hint: you may have to refresh the page in the simulator)
37. **Challenge:** Log a Call and Initiate a Poll on your Test Referral Record

Tell Me More...

You probably noticed that unlike the full Salesforce site, there isn't a Home tab, and there doesn't appear to be a Central Intake/Referral app. Additionally, it took some effort to find the Referrals tab. Why is that?

- Each tab is represented through a menu item in the Recent section of the Salesforce1 navigation menu. Since your app's Referrals tab is new, it doesn't appear on the Recent section yet until you start using it. After you've used the app a bit, the default tabs (account, case, etc.) are replaced by the tabs you use most frequently.
- Salesforce apps, such as the Sales app or your custom Central Intake app, don't appear in Salesforce1, because the mobile app figures out which records you look at most often. Rather than using the Force.com app menu to customize the tabs a user sees regularly, the smart search items under the Recent section reorder based on the user's history of recent objects.

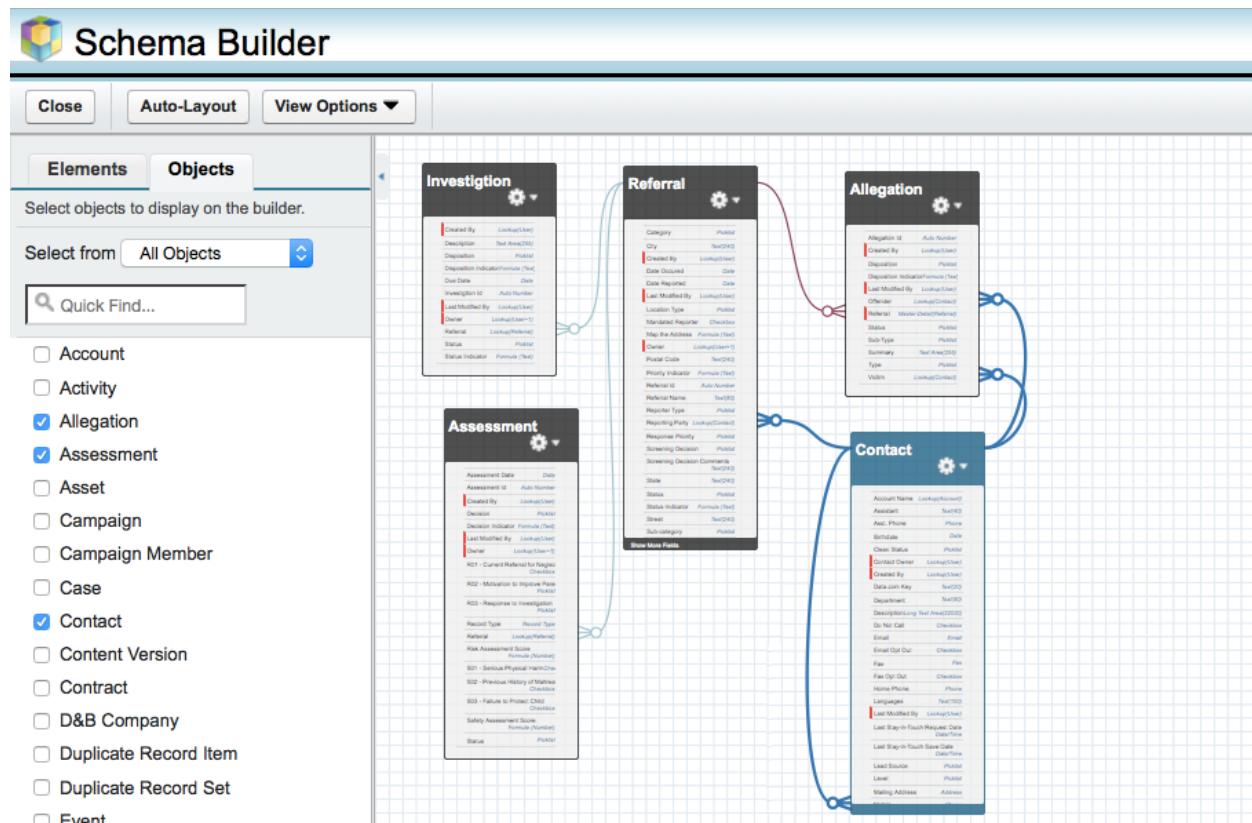
3.2 Add More Fields to the Referral Object

Duration: 30-45 Minutes

In the first tutorial, you created a cloud app for managing Referrals for the Central Intake department of the Child Welfare agency. Behind the scenes, the platform created a database for the app. This tutorial is the first of many that teach you how to continue building the database for your app. A **database** organizes and manages data so that users can work with it efficiently. Traditional relational databases use tables to manage discrete, possibly related, collections of information, organized further into datatype-specific columns (attributes) and rows (records). In Salesforce, you refer to these as **objects**.

Your DE Org comes with many **standard objects** (for example, Accounts, Contacts, Tasks) that support pre-built apps. Any new objects you create are called **custom objects**. The Referrals object is one such custom object. In this tutorial you add new **custom fields** to supplement the standard fields the object already has such as **Name**, **Owner**, **CreatedBy**, **LastModifiedBy**.

The following image is a sneak peek of the data model you will be building, which allows you to view your objects, fields, and relationships.



Navigate to the Referral Object and Create Custom Fields

The Referral object should have fields that are used for tracking various pieces of information regarding the incident of alleged abuse/neglect that the agency needs to investigate, such as what happened, when it happened, who is reporting the issue, if the reporting party is a mandated reporter by law, and what the response priority of the referral is. You can add custom fields to list or track just about anything you can think of. In this exercise we will be creating a bunch of new fields to fill out our Referral object. We will guide you click-by-click for the first couple of fields, then will leave it to you to begin navigating on your own.

1. Navigate to **Setup > Create > Objects**
2. Click the **Referral** object hyperlink to review the object details and its “metadata”. All of this information is metadata about the Referral Object. Instead of writing complex procedural source code to build an application, you simply define Name/Value pairs in Salesforce in order to make configurations to the Object’s properties.

The screenshot shows the 'Custom Object Definition Detail' page for the 'Referral' object. The left sidebar includes links for 'Salesforce1 Quick Start', 'Force.com Home', 'Administer' (with options like Manage Users, Manage Apps, etc.), and 'Build' (with options like Customize, Create, Apps). The main content area has tabs for 'Custom Object Definition Detail' (selected), 'Standard Fields', and 'Custom Fields & Relationships'. The 'Custom Object Definition Detail' tab shows fields like Singular Label (Referral), Plural Label (Referrals), Object Name (Referral), and API Name (Referral__c). A note in a red box states: 'All of this information is "metadata" about the Referral Object. Instead of writing complex procedural source code to build an application, you simply define Keyword-Value pairs in Salesforce in order to make configurations to the Object's properties'. The 'Standard Fields' tab lists fields like Created By, Last Modified By, Owner, and Referral Name. The 'Custom Fields & Relationships' tab shows a note: 'No custom fields defined'. Buttons for 'Edit' and 'Delete' are at the top right of the main content area.

Now we will be entering several new custom fields. The New Custom Field Wizard helps you quickly specify everything about a new field, including its name, labels to use for app pages, help information, and visibility and security settings.

3. Scroll down to the **Custom Fields and Relationships section** and click **New**



The new field wizard appears and directs you to select the type of field you would like to create. Salesforce gives you a number of field types to choose from. Take some time to review the field types and descriptions.

Step 1. Choose the field type

Step 1

Next **Cancel**

Specify the type of information that the custom field will contain.

Data Type	Take some time to read the types of fields and their descriptions
<input checked="" type="radio"/> None Selected	Select one of the data types below.
<input type="radio"/> Auto Number	A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.
<input type="radio"/> Formula	A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.
<input type="radio"/> Roll-Up Summary <small>[?]</small>	A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.
<input type="radio"/> Lookup Relationship	Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.
<input type="radio"/> 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: <ul style="list-style-type: none"> 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. You can create rollup summary fields on the master record to summarize the detail records. The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
<input type="radio"/> External Lookup Relationship	Creates a relationship that links this object to an external object whose data is stored in an external data source.
<input type="radio"/> Checkbox	Allows users to select a True (checked) or False (unchecked) value.
<input type="radio"/> Currency	Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.

4. For this first field, select **Text Area** as the data type and then **click Next**
5. In step 2 of the new field wizard enter the following:
 - a. Field Label: **Summary**
 - b. Field Name: **Summary** (notice when you tab to this field it already defaults a name based on the label)
 - c. Description: **This field will contain a high level summary for the caseworker to enter on a referral record**
 - d. Help Text: **Please enter a brief summary of the alleged incident of abuse/neglect**
 - e. Required: **False (not checked)**
 - f. Default Value: **none (leave blank)**
 - g. Click **Next**
6. In step 3 of the new field wizard, you are asked to establish field-level security. Salesforce allows you to set field-level security by "profiles" that are assigned to users of the system. **Accept the defaults and click Next**.
7. In step 4 of the new field wizard, you are asked about which page layout you want to display this field on. Currently there is only 1 page layout on the Referral object so **accept the default and click Save**

Review some of the properties of your Referral Object and first custom field:

- **API name** — When you created the Referral object, you didn't specify an API name, but one was generated for you `Referral__c`. This name is how the object is referenced programmatically. All custom objects end in `_c`, which differentiates them from standard objects.
- **Standard fields** — Some fields are generated automatically; these are standard fields. For example, the Merchandise object has a standard field for Owner, which means it automatically tracks who created each record.
- **Custom fields** — Includes the fields you just created in this step. Like custom objects, custom fields have API names that end in `_c`.

Custom Object Definition Detail							
		Edit	Delete				
Singular Label	Referral						
Plural Label	Referrals						
Object Name	Referral						
API Name	Referral__c						
Custom Fields & Relationships							
		New	Field Dependencies	Custom Fields & Relationships Help ?			
Action	Field Label	API Name	Data Type	Indexed	Controlling Field	Modified By	
Edit Del	Summary	Summary__c	Text Area(255)			Brian Murphy, 12/10/2015 3:20 PM	

- The custom fields you created so far are nothing fancy, but you can create cool stuff! The platform has support for nearly any type of data you want to track, such as currency, formula, email, geolocation, URLs, date/time, and so on. Fields don't just contain static values, they can be derived from formulas, or take their values from other objects.
- Why do you need an API name as well as the object and field label? A label is what the user sees, so it should be easy to read and may contain spaces. The API name is used internally in code, and can't contain spaces or illegal characters. For example, a field labeled "Customer ph#" would be named `Customer_ph_c` in the code (the system replaces spaces with underscores and removes the # and : characters).

8. Lets create another field. In the **Custom Fields and Relationships section** and click **New**

9. Set the following properties: (skip entering any properties not listed below)

- a. Data Type: **Auto Number**
- b. Click **Next**
- c. Field Label: **Referral Id**
- d. Display Format: **REF-{000000}** *Note: these are "curly braces" {} not brackets []*
- e. Starting Number: **1**
- f. Help text: **The Referral Id is a system generated, unique Id**
- g. Click **Next**
- h. Accept default field-level security and click **Next**
- i. Accept default layout and click **Save**

10. Lets create another field. In the **Custom Fields and Relationships section** and click **New**

11. Set the following properties: (skip entering any properties not listed below)

- a. Data Type: **Date**
- b. Click **Next**

- c. Field Label: **Date Reported**
 - d. Help text: **This is the date the alleged incident was reported**
 - e. Click **Next**
 - f. Accept default field-level security and click **Next**
 - g. Accept default layout and click **Save**
12. Create another new field with the following properties:
- a. Data Type: **Date**
 - b. Click **Next**
 - c. Field Label: **Date Occurred**
 - d. Help text: **This is the date the alleged incident was reported to have actually occurred**
 - e. Click **Next**
 - f. Accept default field-level security and click **Next**
 - g. Accept default layout and click **Save**
13. Create another new field with the following properties:
- a. Data Type: **Lookup Relationship**
 - b. Click **Next**
 - c. Related to: **Contact**

Note: a “Lookup” creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list. In this example on the Referral we will do a lookup to select a contact we are going to call the “Reporting Party”
 - d. Click **Next**
 - e. Change the Field Label to: **Reporting Party**
 - f. Help text: **This is the contact person reporting the incident**
 - g. Click **Next**
 - h. Accept default field-level security and click **Next**
 - i. Accept default layout and click **Next**
 - j. Accept the defaults and click **Save**
- Quick Tip:** For some of the Picklist and Formula fields we will be creating, you will be asked to type in multiple picklist values or fairly long formulas. So to make it easy on you, we created a .txt file that you can download from: <https://www.sfdc.co/gzUih> and then simply copy/paste the relevant values and formula syntax when indicated to do so in the lab exercises. We will be referencing this .txt file throughout the remaining exercises so keep it open or on your desktop so it’s easily accessible.
14. Create another new field with the following properties:
- a. Data Type: **Picklist**
 - b. Click **Next**
 - c. Field Label: **Reporter Type**
 - d. Enter Picklist Values - (or copy/paste from the .txt file): **Anonymous, Athletic Coach, Citizen, Clergy, Day Care Provider, Legal Personnel, Medical**

Personnel, Other, Police/Law Enforcement, School Official

Field Label Reporter Type

Enter values for the picklist, with each value separated by a new line.

Anonymous
Athletic Coach
Citizen
Clergy
Day Care Provider
Legal Personnel
Medical Personnel

Enter 1 Value per line, no commas

- a. Help text: **Select a type that best represents the reporting party's role**
 - b. Click **Next**
 - c. Accept default field-level security and click **Next**
 - d. Accept default layout and click **Save**
15. Create another new field with the following properties:
- a. Data Type: **Checkbox**
 - b. Default Value: **Unchecked**
 - c. Field Label: **Mandated Reporter**
 - d. Help text: **This identifies the reporting party as a lawfully mandated reporter**
 - e. Click **Next, Next, Save**
16. Create another new field with the following properties:
- a. Data Type: **Picklist**
 - b. Field Label: **Category**
 - c. Enter Picklist Values (or copy/paste from the .txt file): **Child Abuse / Neglect, Dependency Report, Family in Need of Services, Information and/or Referral**
 - d. Help text: **Select a category for the Referral**
 - e. Click **Next, Next, Save**
17. Create another new field with the following properties:
- a. Data Type: **Picklist**
 - b. Field Label: **Sub-Category**
 - c. Enter Picklist Values (or copy/paste from the .txt file): **Baby Doe/Disabled Infant, Emotional Maltreatment, Medical Neglect, Neglect, Physical Abuse, Physical Abuse Shaken Baby, Dependent Child, Adoption Subsidy Only, Child Fatality, Courtesy Supervision - ICPC, Courtesy Supervision - ICJ, Emancipated Youth, Permanent Surrender, Post-Finalization Adoption Services, Specialized Assessment/Investigation, Safe Haven/Deserted Child, Information Only**
 - d. Help text: **Sub-category options are dependent on the value in the (controlling) category picklist**
 - e. Click **Next, Next, Save**

The last two fields you created for Category and Sub-category are picklists that are meant to have a relationship. When a user picks a value in the parent (controlling) picklist then only a subset of the values in the child (dependent) picklist will be available to the user. Lets pause for a second and configure the

relationship between these picklists.

18. In the **Custom Fields and Relationships** section and click the **Field Dependencies** button
19. Click **New** to define a new dependency
20. Controlling Field: **Category**
21. Dependent Field: **Sub-category**
22. Click **Continue**
23. You will now be taken to a screen specify which Sub-category values go with each Category. Read the directions in the Instructions section to set the values according to the graphic below:

Showing Columns: 1 - 4 (of 4) View sets of 5					
Category:	<u>Child Abuse / Neglect</u>	<u>Dependency Report</u>	<u>Family in Need of Services</u>	<u>Information and/or Referral</u>	
Sub-category:	Baby Doe/Disabled Infant				
	Emotional Maltreatment				
	Medical Neglect				
	Neglect	Neglect	Neglect	Neglect	Neglect
	Physical Abuse				
	Physical Abuse Shaken Baby				
	Dependent Child				
	Adoption Subsidy Only				
	Child Fatality				
	Courtesy Supervision - ICPC				
	Courtesy Supervision - ICJ				
	Emancipated Youth				
	Permanent Surrender				
	Post-Finalization Adoption Services				
	Specialized Assessment/Investigation				
	Safe Haven/Deserted Child				
	Information Only				

24. Click **Preview** to test the controlling/dependent picklists, then **Close** the window
25. Click **Save**

26. Click the **Back to Custom Object: Referral** hyperlink

Referral Field Dependencies

[« Back to Custom Object: Referral](#)

This page allows you to define dependencies between fields (e.g., dependent picklists).

Field Dependencies				New
Action	Controlling Field	Dependent Field	Modified By	
Edit Del	Category	Sub-category	Brian Murphy, 12/10/2015 5:34 PM	

27. Create another new field with the following properties:

- a. Data Type: **Picklist**
- b. Field Label: **Status**
- c. Enter Picklist Values (or copy/paste from the .txt file): **New, Screening, Assessment, Investigation, Disposition, Approval Requested**
- d. Help text: **The current status of the Referral**
- e. Click **Next, Next, Save**

The child welfare agency business analyst wants an icon to dynamically show on the Referral record so that when the status is updated there will be a corresponding visual queue for the user. This can be accomplished using a formula field. A formula is a read-only field that derives its value from a logical formula expression you define. The formula field is updated when any of the source fields change. In this example we will create a graphical icon that changes for each status value in the Status picklist.

28. Create another new field with the following properties:

- a. Data Type: **Formula**
- b. Field Label: **Status Indicator**
- c. Formula Return Type: **Text**
- d. Click **Next**
- e. Enter the following syntax for the formula (copy/paste from the .txt file):

```
IF(ISPICKVAL(Status__c , "New") , IMAGE("http://icons.iconarchive.com/icons/custom-icon-design/flatastic-4/32/New-icon.png", "New"),

IF(ISPICKVAL(Status__c , "Screening") ,
IMAGE("http://icons.iconarchive.com/icons/treetog/junior/32/monitor-ok-icon.png",
"Screening"),

IF(ISPICKVAL(Status__c , "Assessment") ,
IMAGE("http://icons.iconarchive.com/icons/icojam/blue-bits/32/document-check-icon.png", "Assessment"),

IF(ISPICKVAL(Status__c , "Investigation") ,
IMAGE("http://icons.iconarchive.com/icons/hopstarter/malware/32/Search-icon.png",
"Investigation"),

IF(ISPICKVAL(Status__c , "Disposition") ,
IMAGE("http://icons.iconarchive.com/icons/icojam/onebit/32/exclamation-mark-green-icon.png", "Disposition"),

IF(ISPICKVAL(Status__c , "Null"), null,null))))))
```

- f. Click **Check Syntax** and see that there are no errors
- g. Help text: **This field will display an icon based on the value in the status field**
- h. Click **Next, Next, Save**

29. Create another new field with the following properties:

- a. Data Type: **Picklist**
- b. Field Label: **Response Priority**
- c. Enter Picklist Values (or copy/paste from the .txt file): **P1, P2, P3**

- d. Help text: **The response priority determines how quickly Referrals need to be investigated**
 - e. Click **Next, Next, Save**
30. Create another new field with the following properties:
- a. Data Type: **Formula**
 - b. Field Label: **Response Priority Indicator**
 - c. Formula Return Type: **Text**
 - d. Click **Next**
 - e. Enter the following syntax for the formula (copy/paste from the .txt file):
- ```

IF(ISPICKVAL(Response_Priority__c, "P1") ,
IMAGE("http://icons.iconarchive.com/icons/sekkymu/developpers/32/Red-Ball-icon.png ",
"P1"),

IF(ISPICKVAL(Response_Priority__c, "P2") ,
IMAGE("http://icons.iconarchive.com/icons/sekkymu/developpers/32/Yellow-Ball-
icon.png", "P2"),

IF(ISPICKVAL(Response_Priority__c, "P3") , null,null)))

```
- f. Click **Check Syntax** and see that there are no errors
  - g. Help text: **This field shows a response priority icon for P1, P2 Referrals only**
  - h. Click **Next, Next, Save**
31. Create another new field with the following properties:
- a. Data Type: **Picklist**
  - b. Field Label: **Screening Decision**
  - c. Enter Picklist Values (or copy/paste from the .txt file): **Screened In, Screened Out**
  - d. Help text: **This is the screening decision made by management for this Referral**
  - e. Click **Next, Next, Save**
32. Create another new field with the following properties:
- a. Data Type: **Text**
  - b. Field Label: **Screening Decision Comments**
  - c. Length: **240**
  - d. Help text: **Enter any comments for the screening decision**
  - e. Click **Next, Next, Save**
33. Create another new field with the following properties:
- a. Data Type: **Text**
  - b. Field Label: **Street**
  - c. Length: **240**
  - d. Help text: **Street Address**
  - e. Click **Next, Next, Save**

34. Create another new field with the following properties:
- Data Type: **Text**
  - Field Label: **City**
  - Length: **240**
  - Help text: **Enter the city where the incident occurred**
  - Click **Next, Next, Save**
35. Create another new field with the following properties:
- Data Type: **Text**
  - Field Label: **State**
  - Length: **240**
  - Help text: **Enter the State where the incident occurred**
  - Click **Next, Next, Save**
36. Create another new field with the following properties:
- Data Type: **Text**
  - Field Label: **Postal Code**
  - Length: **240**
  - Help text: **Enter the postal code where the incident occurred**
  - Click **Next, Next, Save**
37. Create another new field with the following properties:
- Data Type: **Picklist**
  - Field Label: **Location Type**
  - Enter Picklist Values (or copy/paste from the .txt file): **Home/Residence, Child Care, School, Church, Social Setting, Other**
  - Help text: **Type of setting where the incident occurred**
  - Click **Next, Next, Save**
38. Create another new field with the following properties:
- Data Type: **Formula**
  - Field Label: **Map the Address**
  - Formula Return Type: **Text**
  - Click **Next**
  - Enter the following syntax for the formula (copy/paste from the .txt file):

```
HYPERNLINK("http://maps.google.com?q=" & Street__c & "%20" & City__c & "%20" & State__c & "%20" & Postal_Code__c , IMAGE("http://icons.iconarchive.com/icons/webiconset/mobile/128/maps-icon.png", "Map Address in Google"))
```
  - Click **Check Syntax** and see that there are no errors
  - Help text: **This field shows a Google map of the address specified on the Referral**
  - Click **Next, Next, Save**

## Try out the App

Now that you have created twenty custom fields with a variety of data types, it's time to try out the application and enter an additional referral record to test some of the functionality you configured.

39. Click the **Referrals** tab

40. Click **New**

41. Enter a value in each field on the new Referral form and click **Save**

42. Review the new Referral record.

- a. Note the different indicator icons for **Status** and **Response Priority** that you created by adding formula fields
- b. Edit the values for **Status** and **Response Priority** and click **Save** to see the icons change
- c. Note the icon for Mapping the Address
- d. Click on the **map icon**. What does it do? \_\_\_\_\_
- e. Roll your cursor over some of the help text bubbles to review the guidance

The screenshot shows the SACWIS Central Intake Management application interface. The top navigation bar includes links for Home, Chatter, Files, Contacts, Referrals (which is highlighted in red), Reports, Dashboards, and a search bar. The user is logged in as Brian Murphy. The main content area displays a 'Referral' record for 'Alleged Neglect - Danny Leder'. The record details include:

- Referral Name: Alleged Neglect - Danny Leder
- Summary: Alleged neglect of a minor child
- Referral Id: REF-000001
- Date Reported: 12/11/2015
- Date Occurred: 12/1/2015
- Reporting Party: James Ivaldi
- Reporter Type: Day Care Provider
- Mandated Reporter: ✓
- Category: Child Abuse / Neglect
- Sub-category: Neglect
- Status: New
- Status Indicator: NEW (yellow starburst icon)
- Response Priority: P1
- Priority Indicator: (red circle icon)
- Screening Decision: (empty field)
- Screening Decision Comments: (empty field)
- Address: Street: 1690 Bay Street, City: San Francisco, State: CA, Postal Code: 94123, Location Type: Child Care
- A large green map pin icon is displayed below the address fields.

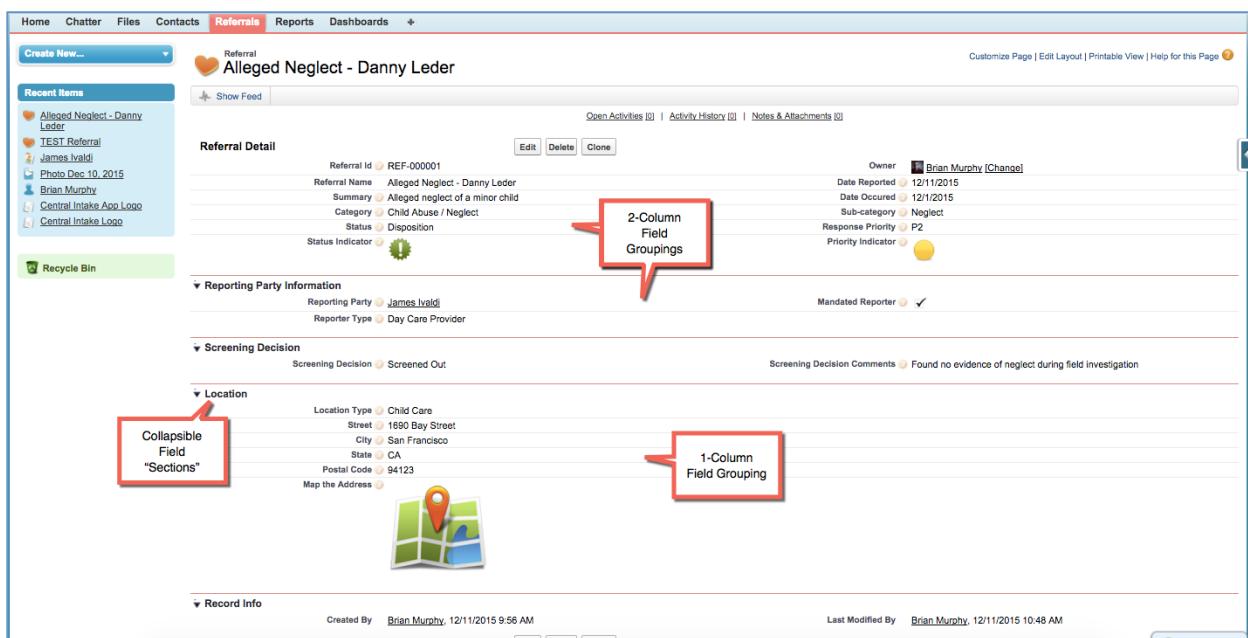
At the bottom of the page, it shows 'Created By: Brian Murphy, 12/11/2015 9:56 AM' and 'Last Modified By: Brian Murphy, 12/11/2015 10:32 AM'.

## 3.3 Modify the Referral Page Layout

**Duration: 5-10 Minutes**

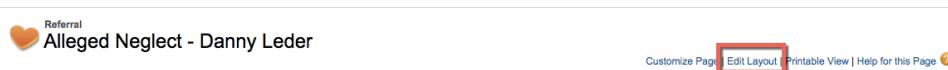
You may have noticed from trying out the app, that all of the fields on your Referral record are aligned in a single column and are slotted in the order in which they were created. This is the default behavior of the new field wizard, but it's not practical for how your caseworkers will want to use the system. As a result, the child welfare business analyst has asked that you group fields together logically in order to assist caseworkers better with data entry.

The following graphic show how the business analyst would like the fields and field groupings to appear:

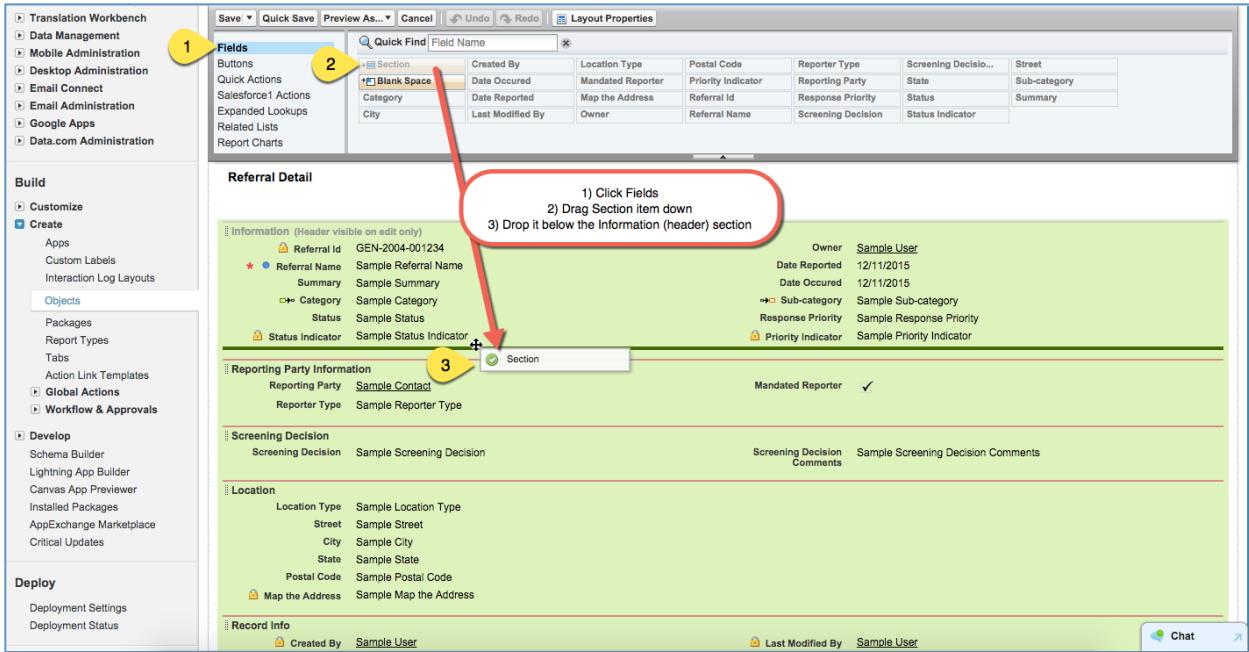


### Edit the Referral Object's Default Page Layout Using the Layout Editor

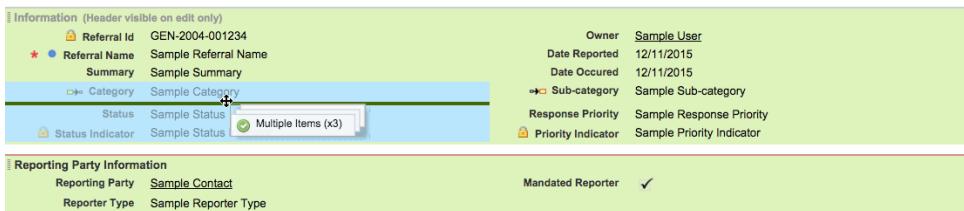
1. Click the **Referrals** tab
2. Drill down on a recent **Referral record** so you are on the record detail page
3. Click the **Edit Layout** hyperlink



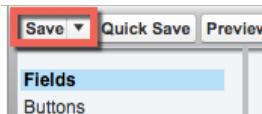
4. You already have some experience in dragging/dropping elements to the page layout from a previous exercise where you added the Notes & Attachments related list to the Referral layout. From the **palette > fields**, drag a **Section** and **drop it below the existing "Information" section** (see graphic below)



5. After dropping the section, then fill in the section properties:
  - a. Sections Name: **Reporting Party Information**
  - b. Layout: **2-column**
  - c. Tab-key Order: **Left-Right**
  - d. Click **Ok**
6. Repeat Steps 5a-c three more times to create 3 sections to match the graphic above.
  - a. Create sections for **Screening Decision**, **Location** and **Record Info**
7. Now, drag/drop the fields to arrange them into the right groupings. Match the graphic above. Note that you can use the keyboard trick: **CTRL+Click** to click on multiple fields in order to drag them all at once. In the graphic below, we **CTRL+Click** on Category, Status and Status Indicator to drag/drop them all at once.



8. Once you have arranged all of the fields according to the illustration, click **Save** in the palette



9. **Create a new Referral record** to test your new layout

## 3.4 Create a Default Field Value

---

### Duration: 5 Minutes

Now that you have entered a couple Referral records you may have noticed it may be helpful to have some of the fields default information for you. In this example, the child welfare business analyst is asking you to configure a default value for the status field. Anytime a new record is entered it should default the Status to "New" so the worker does not have to manually select a value.

1. Click on the **Referrals Tab**
2. Click on the **Force .com pop-out menu** on the right hand side of the screen, then click **View Fields**



3. Scroll down to the Status field and click the **Status field hyperlink** (not the edit link)
  4. Scroll down to the Picklist Values section and **click Edit** next on the **New** picklist value
  5. Click the **Default checkbox** to make this the default value
- |             |                                                                                         |
|-------------|-----------------------------------------------------------------------------------------|
| Status      | <input type="text" value="New"/>                                                        |
| Default     | <input checked="" type="checkbox"/> Make this value the default for the master picklist |
| Chart Color | Assigned dynamically                                                                    |
6. Now go and create another Referral record. Does the Status field default to **New?** ( ) Yes ( ) No

## 3.5 Create a Validation Rule

---

### Duration: 10 Minutes

In the child welfare agency, users are procedurally required to enter a comment/reason anytime a Referral record's Screening Decision is set to "Screen Out". When deciding to "Screen Out" a Referral, management has made the decision based on evidence that the allegations are either unsubstantiated or that perhaps the Referral could be a duplicate. So in essence, they are conditionally requiring a value be placed in one field based on the value of another field. The child welfare business analyst has come to you to ask that you implement the logic that meets the following requirement: "If the Screening Decision picklist is set to Screen Out, then require a comment to be entered in the Screening Decision Comments field and you cannot save the

record unless this is satisfied.” In order to address this business requirement, you will implement a Validation Rule on the Referral object.

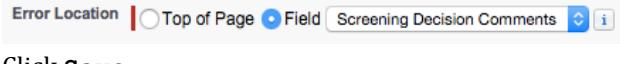
Validation Rules are logical expressions you create using the same formula field syntax you saw when creating formula fields. Validation Rules are written such when a rule expression evaluates TRUE, an error message will display to the end user. So in this example we will write the expression logic to evaluate whether or not the Screening Decision = Screened Out AND if the Screening Decision Comments field = blank/null. If both of these are true, an error message will fire alerting the user that they forgot to enter comments.

We will use 2 logical expression templates and the concatenate `&&` operator to build our logic:

```
IS PICKVAL(picklist_field, text_literal) && ISBLANK(expression)
```

## Create a Validation Rule

1. Click on the **Referrals** Tab
2. Click on the **Force.com pop-out menu** on the right hand side of the screen, then select **View Object**
3. Scroll down to the **Validation Rules section** and click **New**
4. Fill in the following properties:
  - a. Rule Name: **Screen Out Requires Comments**
  - b. Active: True (**checked**)
  - c. Description: **If Screening Decision = Screened Out, you MUST enter comments**
  - d. Enter the following syntax for the Error Condition Formula (or copy/paste from .txt file)

```
IS PICKVAL(Screening_Decision__c, "Screened Out") &&
ISBLANK(Screening_Decision_Comments__c)
```
  - e. Click **Check Syntax** to make sure you have no typos or incorrect field API name references
  - f. Error Message: **If Screening Decision = Screened Out, you MUST enter comments**
  - g. Error Location: **Field, Screening Decision Comments**  

  - h. Click **Save**

## Test Your Validation Rule

5. Return to an existing Referral record that you created
6. **Edit** the referral record and **change the Screening Decision field to: Screened Out** and **remove any comments in the Screening Decision Comments field**, then click **Save**

7. What happens? \_\_\_\_\_  
(Troubleshooting tip: make sure the Validation Rule is **Active**)

## 3.6 Enable Field History Tracking for Referrals

---

### Duration: 5 Minutes

One more thing we want to do before moving forward is show you how to enable “Field History Tracking” for an object. Because we created the Referral object using the New Application wizard, field history tracking was not automatically enabled. Enabling Field History tracking at the Object Level will then make it possible for you as an administrator to pick which specific fields in the object you’d like to track/audit.

1. Navigate to **Setup > Create > Objects > Referrals**
2. At the top of the Referral Object click **Edit**
3. Scroll down to Optional Features and **check the box (True) for: Track Field History**
4. Click **Save**
5. Next, scroll down to Referral Page Layouts
6. Click **Edit** next to the Referral Layout
7. **Drag/drop the Referral History related list** to the bottom of the page and **Save**
8. Next, scroll to the **Custom Fields & Relationships section** of the Referral Object
9. Click the **Set History Tracking** button
10. Enable the following fields for history tracking: **Status, Response Priority, Screening Decision** and click **Save**
11. Now navigate back to a Referral record and edit the Status, Response Priority and Screening Decision Fields. What do you notice after saving the record? \_\_\_\_\_
12. What does the audit trail show? \_\_\_\_\_

## 3.7 Enable Chatter Feed Tracking for Referrals

---

**Duration:** 5 minutes

Next, it is also possible to track audited fields in the Chatter Feed for a given record of data. Since caseworkers can “follow” a Referral record’s chatter feed, we want to make sure that when key fields are changed, an audit trail will automatically be posted to the chatter feed for the record.

1. Navigate to **Setup > Build > Customize > Chatter > Feed Tracking**
2. Scroll down to the **Referral Object**
3. Click the **Enable Feed Tracking** checkbox
4. Enable the following fields to be tracked in the feed: **Status, Response Priority, Owner, Category, Sub Category, Screening Decision**
5. Next, navigate back to one of your rest Referral records and make changes to the fields above and **Save** the record.
6. What do you see in the Chatter Feed? \_\_\_\_\_



**Brian Murphy** changed Response Priority from P1 to P2 and Screening Decision from Screened In to Screened Out. ▼

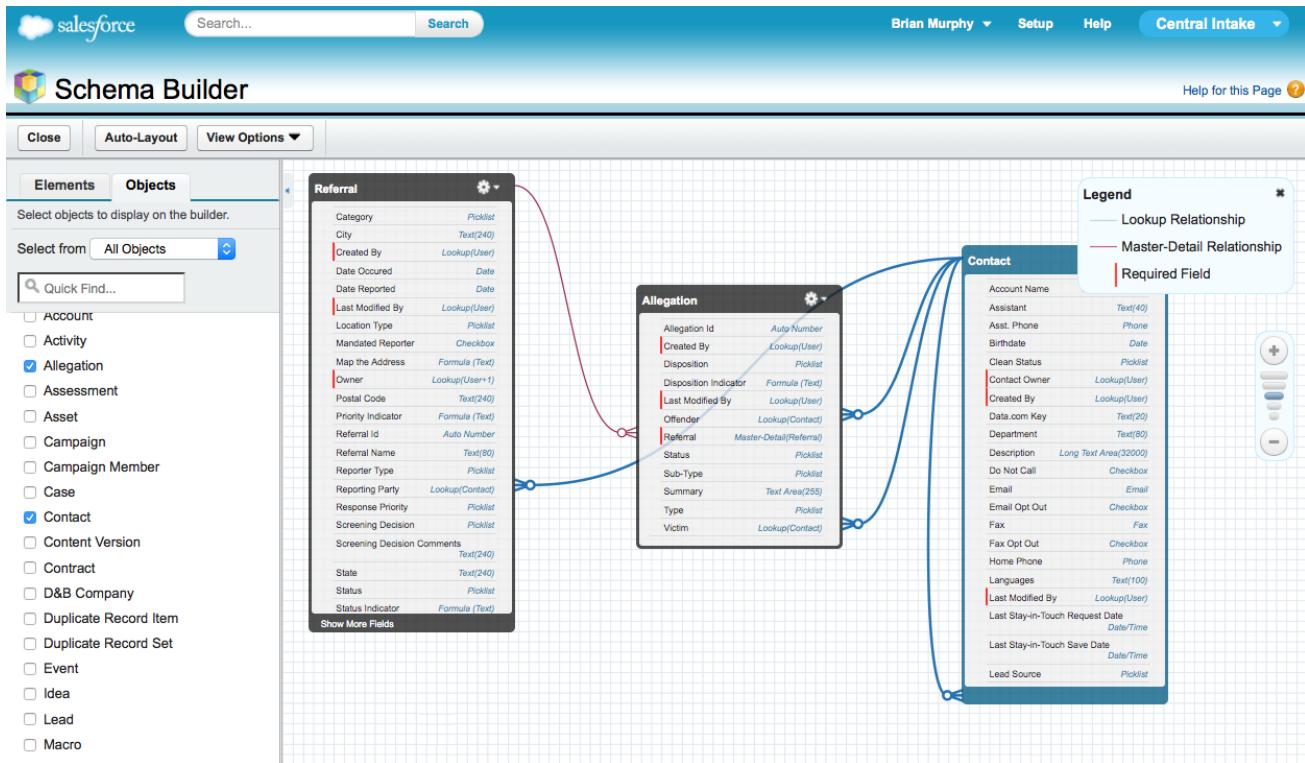
[Comment](#) · [Like](#) · Yesterday at 10:56 AM

# 4.0 Create a New Object: Allegations

**Duration:** 30-40 Minutes

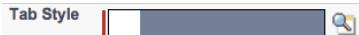
Now that you have created your Referral object, we will now create our second custom object:

**Allegations.** Referrals typically contain one or more allegations such as medical neglect or physical abuse that must be investigated. In our data model, Referrals will have a Master-Detail (1:M) relationship with Allegations.



## Create the Allegations Object Using the Wizard

1. Navigate to **Setup > Create > Objects**
2. Click **Create New Custom Object**
3. Fill in the following properties: (skip any other properties not listed here)
  - a. Label: **Allegation**
  - b. Plural Label: **Allegations**
  - c. Starts with Vowel Sound: **True (checked)**
  - d. Record Name: **Allegation Id** (change from the default: Allegation Name)
  - e. Data Type: **Auto Number**
  - f. Display Format: **ALLEG-{000000}**

- g. Starting Number: **1**
- h. Allow Reports: **True (checked)**
- i. Allow Activities: **True (checked)**
- j. Track Field History: **True (checked)**
- k. Allow Search: **True (checked)**
- l. Add Notes & Attachments: **True (checked)**
- m. Launch New Custom Tab Wizard: **True (checked)**
- n. Click **Save**
- o. You should now be in the second part of the New Object Wizard to create a Tab. Click on the Tab Style Lookup
- p. Select a tab style icon of your choice
- q. Click **Next**
- r. Accept the defaults for profile visibility, click **Next**
- s. In the next screen, **de-select all apps except for Central Intake**, then click **Save**

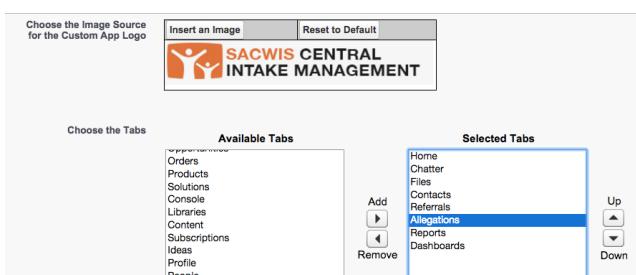
## Tell Me More...

- The checkbox for vowel sounds ensures that the correct article is used: "a" or "an."
- The Auto Number data type tells the platform to automatically assign a number to each new record that is created, beginning with the starting number you specify. Because of the display format you chose, the allegation numbers will be ALLEG-0001, ALLEG-0002, and so on.

## Re-Order the Tabs in your Application

Take a look at the tabs across the top of your screen and you see the new Allegations tab isn't next to the Referrals tab. You can put tabs in any order you like, so go ahead and put them next to each other.

4. Navigate to **Setup > Create > Apps** and click **Edit** next to your **Central Intake** app
5. In the **Selected Tabs list**, select **Allegations** and use the up arrow to move it under **Referrals**.



6. Click **Save** and then take a look at the tabs

## Add Custom Fields to the Allegations Object

We will now define fields to include in the Allegations Object.

7. Navigate to **Setup > Create > Objects > Allegations**
8. Create a new field with the following properties:
  - a. Data Type: **Master-Detail Relationship**
  - b. Related to: **Referral**
  - c. Field Label: **Referral**
  - d. Click **Next, Next, Next, Save**
9. Create another new field with the following properties:
  - a. Data Type: **Picklist**
  - b. Field Label: **Status**
  - c. Values (copy/paste from .txt file): **Open, Pending Approval, Closed**
  - d. Click **Next, Next, Save**
10. Create another new field with the following properties:
  - a. Data Type: **Text Area**
  - b. Field Label: **Summary**
  - c. Click **Next, Next, Save**
11. Create another new field with the following properties
  - a. Data Type: **Picklist**
  - b. Field Label: **Type**
  - c. Values (copy/paste from .txt file): **Abuse, Neglect, Maltreatment, Other**
  - d. Click **Next, Next, Save**
12. Create another new field with the following properties
  - a. Data Type: **Picklist**
  - b. Field Label: **Sub-Type**
  - c. Values (copy/paste from .txt file): **Physical Abuse, Emotional Abuse, Physical Abuse Shaken Baby, Child Fatality, Baby Doe/Disabled Infant, Physical Neglect, Medical Neglect, General Neglect, Emotional Maltreatment, Permanent Surrender, Safe Haven/Deserted Child**
  - d. Click **Next, Next, Save**
13. Click the **Field Dependencies** Button

Set the **Type** as the **Controlling Picklist** and the **Sub-Type** as the **Dependent Picklist** and then set the values according to the graphic below:

| Showing Columns: 1 - 4 (of 4) <a href="#">View sets of 5</a> |                            |                            |                            |                            |
|--------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Type:                                                        | Abuse                      | Neglect                    | Maltreatment               | Other                      |
| Sub-Type:                                                    | Physical Abuse             | Physical Abuse             | Physical Abuse             | Physical Abuse             |
|                                                              | Emotional Abuse            | Emotional Abuse            | Emotional Abuse            | Emotional Abuse            |
|                                                              | Physical Abuse Shaken Baby |
|                                                              | Child Fatality             | Child Fatality             | Child Fatality             | Child Fatality             |
|                                                              | Baby Doe/Disabled Infant   | Baby Doe/Disabled Infant   | Baby Doe/Disabled Infant   | Baby Doe/Disabled Infant   |
|                                                              | Physical Neglect           | Physical Neglect           | Physical Neglect           | Physical Neglect           |
|                                                              | Medical Neglect            | Medical Neglect            | Medical Neglect            | Medical Neglect            |
|                                                              | General Neglect            | General Neglect            | General Neglect            | General Neglect            |
|                                                              | Emotional Maltreatment     | Emotional Maltreatment     | Emotional Maltreatment     | Emotional Maltreatment     |
|                                                              | Permanent Surrender        | Permanent Surrender        | Permanent Surrender        | Permanent Surrender        |
|                                                              | Safe Haven/Deserted Child  | Safe Haven/Deserted Child  | Safe Haven/Deserted Child  | Safe Haven/Deserted Child  |

Showing Columns: 1 - 4 (of 4) [View sets of 5](#)

14. Create another new field with the following properties:

- a. Data Type: **Lookup Relationship**
- b. Related to: **Contact**
- c. Field Label: **Victim**
- d. Click **Next, Next, Save**

15. Create another new field with the following properties:

- a. Data Type: **Lookup Relationship**
- b. Related to: **Contact**
- c. Field Label: **Offender**
- d. Click **Next, Next, Save**

16. Create another new field with the following properties:

- a. Data Type: **Picklist**
- b. Field Label: **Disposition**
- c. Values (copy/paste from .txt file): **Substantiated, Unsubstantiated, Unfounded**
- d. Click **Next, Next, Save**

17. Create another new field with the following properties:

- a. Data Type: **Formula**
- b. Field Label: **Disposition Indicator**
- c. Formula Return Type: **Text**
- d. Formula syntax (copy/paste from .txt file):

```
IF(ISPICKVAL(Disposition__c , "Substantiated") ,
IMAGE("http://icons.iconarchive.com/icons/paomedia/small-n-flat/32/sign-check-icon.png", "Substantiated"),

IF(ISPICKVAL(Disposition__c , "Unsubstantiated") ,
IMAGE("http://icons.iconarchive.com/icons/custom-icon-design/pretty-office-8/24/Thumb-down-icon.png", "Unsubstantiated"),

IF(ISPICKVAL(Disposition__c , "Unfounded") ,
IMAGE("http://icons.iconarchive.com/icons/oxygen-icons.org/oxygen/32/Actions-trash-empty-icon.png", "Unfounded"),

IF(ISPICKVAL(Disposition__c , "Null"), null,null))))
```

- e. Click **Check Syntax**

f. Click **Next**, **Next**, **Save**

## Try out the Application

18. Navigate to one of your recent Referral Records and drill down to the record detail page
19. Scroll down to the Allegations Related List
20. Click **New Allegation**
21. Fill out each field in the form and click **Save**

The screenshot shows the SACWIS CENTRAL INTAKE MANAGEMENT application interface. At the top, there is a logo and a search bar with a 'Search' button. Below the header, a navigation bar includes links for Home, Chatter, Files, Contacts, Referrals, Allegations (which is highlighted in blue), Reports, Dashboards, and a plus sign for more options. On the left side, there is a sidebar with a 'Create New...' button and a 'Recent Items' section containing links to various records like 'Alleged Neglect - Danny Leder', 'ALLEG-000002', 'Alleged Neglect - Baby Doe', 'ALLEG-000001', and 'TEST Referral'. Below the sidebar is a 'Recycle Bin' button. The main content area is titled 'Allegation Edit' and 'New Allegation'. It contains a form with sections for 'Information' and 'Details'. The 'Information' section includes fields for Referral (set to 'Alleged Neglect - Danny'), Status (set to 'Open'), Summary (containing the text 'This is a TEST allegation'), Type (set to 'Neglect'), Sub-Type (set to 'Physical Neglect'), Victim (set to 'Andy Young'), Offender (set to 'Josh Davis'), and Disposition (set to 'Substantiated'). At the bottom of the form are three buttons: 'Save', 'Save & New', and 'Cancel'.

## Modify the Allegations Page Layout & Allegations Related List Columns

Notice that when you created your Allegation record all of the fields were on a single column. Next, we will modify the page layout to match the graphic below.

22. Click **Edit Layout** on the Allegation page
23. Use what you now know about modifying page layouts to match the graphic below and then **Save** your changes. *Hint:* Create 3 Sections to drag/drop your fields.

 Allegation  
ALLEG-000004

[Customize Page](#) | [Edit Layout](#) | [Printable View](#) | [Help for this Page](#) ?

[« Back to List: Custom Object Definitions](#)

[Open Activities \[0\]](#) | [Activity History \[0\]](#) | [Notes & Attachments \[0\]](#)

| Allegation Detail                                                 |                                 | <a href="#">Edit</a> | <a href="#">Delete</a> | <a href="#">Clone</a> |                                                                                     |
|-------------------------------------------------------------------|---------------------------------|----------------------|------------------------|-----------------------|-------------------------------------------------------------------------------------|
| <b>▼ Allegation Info</b>                                          |                                 |                      |                        |                       |                                                                                     |
| Referral                                                          | Alleged Neglect - Danny Leder   |                      |                        | Allegation Id         | ALLEG-000004                                                                        |
| Summary                                                           | TEST 2                          |                      |                        | Status                | Open                                                                                |
| Type                                                              | Neglect                         |                      |                        | Disposition           | Substantiated                                                                       |
| Sub-Type                                                          | Medical Neglect                 |                      |                        | Disposition Indicator |  |
| <b>▼ Parties</b>                                                  |                                 |                      |                        |                       |                                                                                     |
| Victim                                                            | Danny Leder                     |                      |                        | Offender              | Amy Nibbi                                                                           |
| <b>▼ Record Info</b>                                              |                                 |                      |                        |                       |                                                                                     |
| Created By                                                        | Brian Murphy, 2/19/2016 1:18 PM |                      |                        | Last Modified By      | Brian Murphy, 2/19/2016 1:18 PM                                                     |
| <a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Clone</a> |                                 |                      |                        |                       |                                                                                     |

24. Now, lets also add some additional elements to the Allegation layout. Use what you know about editing a page layout to drag/drop the following elements to the Allegation Page Layout:
25. Add the **Approval History** and **Allegation History** related lists to the layout beneath the Notes & Attachments related list
26. Add the **Submit for Approval Button** to the layout **next to the Clone Button** (we will use this feature in a later exercise)
27. Click **Save**
28. Now, navigate back to the Referral Record and scroll down to the Allegations related list.
29. How many columns are visible? \_\_\_\_\_
30. What Column is Visible? \_\_\_\_\_
31. Again, click **Edit Layout** on the Allegation page
32. Scroll down to the **Allegations related list** on the page layout editor
33. Click the **wrench icon** ()
34. Expose the following columns for the related list and then click **Save**

| Allegations          |                   |             |                 |              |              |               |                    |                              |  | <a href="#">New</a> |
|----------------------|-------------------|-------------|-----------------|--------------|--------------|---------------|--------------------|------------------------------|--|---------------------|
| Allegation Id        | Created Date      | Type        | Sub-Type        | Victim       | Offender     | Status        | Disposition        | Disposition Indicator        |  |                     |
| Sample Allegation Id | 2/19/2016 1:39 PM | Sample Type | Sample Sub-Type | Sarah Sample | Sarah Sample | Sample Status | Sample Disposition | Sample Disposition Indicator |  |                     |

35. Create and save a new Allegation record in order to observe the new page layout

## 4.1 Create a New Object: Assessment

### Duration: 30-40 Minutes

One of the key business processes in a child welfare agency is to periodically conduct an assessment. In the intake process, caseworkers need to assess the safety and risk for children who are reportedly being harmed. Assessments are typically done on paper and are historically cumbersome processes for caseworkers to both execute and evaluate. In addition, caseworkers need mobile access to assessments in order to get them out from under this paper-based process.

Assessments consist of a number of questions and answers that are scored. Each answer to a question may be worth a number of points based on the assessment instrument being used by the agency. When an assessment is complete, a total score is generated which may drive a particular workflow. For example, a high safety score may require a 24-hour response priority and an investigation to be created and assigned to a field investigator. Therefore, the Child Welfare business analyst has come to you in order to automate this process of conducting safety and risk assessments.

In this next exercise we will create the Assessment object and several custom fields. In addition, we will introduce you to the concept of Record Types and Page Layouts so we can create two different types of assessments for safety and risk.

The screenshot shows the Salesforce Schema Builder interface. On the left, a sidebar lists various objects like Account, Activity, Allegation, Assessment, etc. The 'Allegation' object is currently selected and displayed in a central card. This card shows fields such as Allegation Id (Auto Number), Created By (Lookup(User)), Disposition (Picklist), Disposition Indicator (Formula (Text)), Last Modified By (Lookup(User)), Offender (Lookup(Contact)), Status (Picklist), Sub-Type (Picklist), Summary (Text Area(255)), Type (Picklist), and Victim (Lookup(Contact)). A red arrow points from the Allegation card to the Referral card, indicating a Master-Detail relationship. Another red arrow points from the Referral card to the Assessment card, also indicating a Master-Detail relationship. The 'Referral' object card contains fields like Category (Picklist), City (Text(240)), Created By (Lookup(User)), Date Occurred (Date), Date Reported (Date), Last Modified By (Lookup(User)), Location Type (Picklist), Mandated Reporter (Checkbox), Map the Address (Formula (Text)), Owner (Lookup(User+1)), Postal Code (Text(240)), Priority Indicator (Formula (Text)), Referral Id (Auto Number), Referral Name (Text(80)), Reporter Type (Picklist), Reporting Party (Lookup(Contact)), Response Priority (Picklist), Screening Decision (Picklist), Screening Decision Comments (Text(240)), State (Text(240)), Status (Picklist), and Status Indicator (Formula (Text)). The 'Assessment' object card contains fields like Assessment Date (Date), Assessment Id (Auto Number), Created By (Lookup(User)), Decision (Picklist), Decision Indicator (Formula (Text)), Last Modified By (Lookup(User)), Owner (Lookup(User+1)), R01 - Current Referral for Neglect (Checkbox), R02 - Motivation to Improve Parenting (Picklist), R03 - Response to Investigation (Picklist), Record Type (Record Type), Referral (Lookup(Referral)), Risk Assessment Score (Formula (Number)), S01 - Serious Physical Harm (Checkbox), S02 - Previous History of Maltreatment (Checkbox), S03 - Failure to Protect Child (Checkbox), Safety Assessment Score (Formula (Number)), and Status (Picklist). A legend on the right explains the symbols: a blue line for Lookup Relationship, a red line for Master-Detail Relationship, and a red border for Required Field.

## Create the Assessments Object Using the Wizard

1. Navigate to **Setup > Create > Objects**
2. Click **Create New Custom Object**
3. Fill in the following properties: (skip any other properties not listed here)
  - a. Label: **Assessment**
  - b. Plural Label: **Assessments**
  - c. Starts with Vowel Sound: **True (checked)**
  - d. Record Name: **Assessment Id** (change from the default: Assessment Name)
  - e. Data Type: **Auto Number**
  - f. Display Format: **ASSESS-{000000}**
  - g. Starting Number: 1
  - h. Allow Reports: **True (checked)**
  - i. Allow Activities: **True (checked)**
  - j. Track Field History: **True (checked)**
  - k. Allow Search: **True (checked)**
  - l. Add Notes & Attachments: **True (checked)**
  - m. Launch New Custom Tab Wizard: **True (checked)**
  - n. Click **Save**
  - o. You should now be in the second part of the New Object Wizard to create a Tab. Click on the Tab Style Lookup
  - p. Select a tab style icon of your choice
  - q. Click **Next**
  - r. Accept the defaults for profile visibility, **click Next**
  - s. In the next screen, **de-select all apps except for Central Intake**, then **click Save**

## Add Custom Fields to the Assessment Object

We will now define custom fields to include in the Assessment Object.

4. Create a new field with the following properties:
  - a. Data Type: **Date**
  - b. Field Label: **Assessment Date**
  - c. Click **Next, Next, Save**
5. Create another new field with the following properties:
  - a. Data Type: **Picklist**
  - b. Field Label: **Decision**
  - c. Enter Picklist Values: **Low Risk, Medium Risk, High Risk**

- d. Click **Next, Next, Save**
6. Create another new field with the following properties:
- Data Type: **Formula**
  - Field Label: **Decision Indicator**
  - Formula Return Type: **Text**
  - Click **Next**
  - Enter Formula (copy/paste from .txt file):
- ```
IF(ISPICKVAL(Decision__c , "Low Risk") ,
IMAGE("http://icons.iconarchive.com/icons/sekkymu/developpers/32/Green-Ball-icon.png",
"Low Risk"),

IF(ISPICKVAL(Decision__c , "Intermediate Risk") ,
IMAGE("http://icons.iconarchive.com/icons/sekkymu/developpers/32/Yellow-Ball-icon.png",
"Intermediate Risk"),

IF(ISPICKVAL(Decision__c , "High Risk") ,
IMAGE("http://icons.iconarchive.com/icons/sekkymu/developpers/32/Red-Ball-icon.png",
"High Risk"),

IF(ISPICKVAL(Decision__c, "Null"), null,null)))
```
- f. Click **Next, Next, Save**
7. Create another new field with the following properties:
- Data Type: **Master-Detail Relationship**
 - Related to: **Referral**
 - Field Label: **Referral**
 - Click **Next, Next, Next, Save**
8. Create another new field with the following properties:
- Data Type: **Picklist**
 - Field Label: **Status**
 - Enter Picklist Values: **In Progress, Complete**
 - Click **Next, Next, Save**
9. Create another new field with the following properties:
- Data Type: **Checkbox**
 - Field Label: **S01 - Serious Physical Harm**
 - Help Text (copy/paste from .txt file): **The caregiver or perpetrator has caused serious physical harm or made a plausible threat to cause physical harm to a child as indicated by: Serious injury or abuse to the child other than accidental. Caregiver fears he/she will maltreat the child.**
 - Click **Next, Next, Save**
10. Create another new field with the following properties:
- Data Type: **Checkbox**
 - Field Label: **S02 - Previous History of Maltreatment**
 - Help Text (copy/paste from .txt file): **The severity of previous maltreatment or the employer/caregiver's response to previous incidents AND current**

- circumstances suggest that the child's safety may be an immediate concern.
- d. Click **Next, Next, Save**
11. Create another new field with the following properties:
- Data Type: **Checkbox**
 - Field Label: **S03 - Failure to Protect Child**
 - Help Text (copy/paste from .txt file): **The caregiver/employer has failed to protect the child from serious harm or threatened harm by others, OR current circumstances suggest that the caregiver would likely be unable to protect the child from serious harm by others if the child were returned**
 - Click **Next, Next, Save**
12. Create another new field with the following properties: (Note that the formula calculates 1 point for each checkbox field marked TRUE, and 0 points for FALSE)
- Data Type: **Formula**
 - Field Label: **Safety Assessment Score**
 - Formula Return Type: **Number**
 - Decimal Places: **0**
 - Formula (copy/paste from .txt file):

if (S01_Serious_Physical_Harm_c = TRUE ,1,0) +
if (S02_Previous_History_of_Maltreatment_c = TRUE ,1,0) +
if (S03_Failure_to_Protect_Child_c = TRUE ,1,0)
 - Click **Next, Next, Save**
13. Create another new field with the following properties:
- Data Type: **Checkbox**
 - Field Label: **R01 - Current Referral for Neglect**
 - Help Text (copy/paste from .txt file): **Is the current referral for Neglect?**
 - Click **Next, Next, Save**
14. Create another new field with the following properties:
- Data Type: **Picklist**
 - Field Label: **R02 - Motivation to Improve Parenting**
 - Enter Picklist Values (copy/paste from .txt file): **Motivated and Realistic, Unmotivated, Motivated but Unrealistic**
 - Help Text (copy/paste from .txt file): **What is the primary caregiver's motivation to improve their parenting skills?**
 - Click **Next, Next, Save**
15. Create another new field with the following properties:
- Data Type: **Picklist**
 - Field Label: **R03 - Response to Investigation**

- c. Enter Picklist Values (copy/paste from .txt file): **Attitude consistent w seriousness of allegation, Attitude not consistent w seriousness of allegation, Failed to comply satisfactorily**
 - d. Help Text (copy/paste from .txt file): **What was the overall attitude of the primary caregiver observed during the investigation?**
 - e. Click **Next, Next, Save**
16. Create another new field with the following properties: (Note that the formula calculates different points for the various picklist values)
- a. Data Type: **Formula**
 - b. Field Label: **Risk Assessment Score**
 - c. Formula Return Type: **Number**
 - d. Decimal Places: **0**
 - e. Formula (copy/paste from .txt file):
- ```
if (R01_Current_Referral_for_Neglect__c = TRUE ,1,0) +
CASE(R02_Motivation_to_Improve_Parenting__c ,
'Motivated and Realistic', 0,
'Motivated but Unrealistic', 3,
'Unmotivated', 5, 0) +
CASE(R03_Response_to_Investigation__c ,
'Attitude consistent w seriousness of allegation', 0,
'Attitude not consistent w seriousness of allegation', 3,
'Failed to comply satisfactorily', 5, 0)
```
17. Click **Next, Next, Save**

## Try out the Application

1. Navigate back to one of your test Referral records, scroll down to the Assessments Related List and **click New Assessment**
2. Fill in a value for each field. (Notice the help text contains the full question for the various fields)
3. Click **Save**
4. What is the safety assessment score? \_\_\_\_\_ Risk Assessment Score? \_\_\_\_\_
5. Use what you know about editing page layouts to make the Assessment Layout look like the following:

Assessment  
**ASSESS-000002**

[Customize Page](#) | [Edit Layout](#) | [Printable View](#) | [Help for this Page](#) ?

[« Back to List: Custom Object Definitions](#)

[Open Activities \[0\]](#) | [Activity History \[0\]](#) | [Notes & Attachments \[0\]](#)

| Assessment Detail                                                 |                                                     | <a href="#">Edit</a>    | <a href="#">Delete</a> | <a href="#">Clone</a>        |
|-------------------------------------------------------------------|-----------------------------------------------------|-------------------------|------------------------|------------------------------|
| <b>Assessment Info</b>                                            |                                                     |                         |                        |                              |
| Assessment Id                                                     | ASSESS-000002                                       | Status                  | In Progress            |                              |
| Assessment Date                                                   | 2/22/2016                                           | Decision                | Low Risk               |                              |
| Referral                                                          | TEST Referral                                       | Decision Indicator      |                        |                              |
| <b>Safety Assessment</b>                                          |                                                     |                         |                        |                              |
| S01 - Serious Physical Harm                                       | <input checked="" type="checkbox"/>                 | Safety Assessment Score | 3                      |                              |
| S02 - Previous History of Maltreatment                            | <input checked="" type="checkbox"/>                 |                         |                        |                              |
| S03 - Failure to Protect Child                                    | <input checked="" type="checkbox"/>                 |                         |                        |                              |
| <b>Risk Assessment</b>                                            |                                                     |                         |                        |                              |
| R01 - Current Referral for Neglect                                | <input checked="" type="checkbox"/>                 | Risk Assessment Score   | 7                      |                              |
| R02 - Motivation to Improve                                       | Motivated but Unrealistic Parenting                 |                         |                        |                              |
| R03 - Response to Investigation                                   | Attitude not consistent w seriousness of allegation |                         |                        |                              |
| <b>Record Info</b>                                                |                                                     |                         |                        |                              |
| Created By                                                        | Brian Murphy, 2/22/2016 2:01 PM                     |                         |                        | Owner  Brian Murphy [Change] |
| Last Modified By                                                  | Brian Murphy, 2/22/2016 2:01 PM                     |                         |                        |                              |
| <a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Clone</a> |                                                     |                         |                        |                              |

6. **Challenge:** Access the Salesforce1 Mobile App Simulator for Google Chrome or Native App on your iOS or Android phone and create a new Assessment record on a Referral.
7. **Challenge:** Enable Chatter for the **Assessment Object**

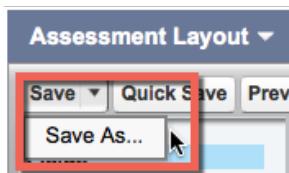
# 4.2 Create Separate Page Layouts and Record Types for Safety & Risk Assessments

**Duration:** 20 Minutes

In the last exercise we created the Assessment Object and its fields. Currently there is a single page layout with both Risk and Safety assessment questions co-mingled together. However, in typical child welfare business processes, caseworkers execute safety assessments separately from risk assessments. So in order to address the business requirement in Salesforce, we will create separate page layouts for the fields we need for a Safety Assessment and the fields we need for a Risk assessment. Then, we will create separate record types and assign the appropriate page layout.

## Create Separate Page Layouts for Safety & Risk Assessments

1. Navigate to **Setup > Create > Objects > Assessment**
2. Scroll down to the Page Layouts related list and click **Edit on the Assessment Layout**
3. In the page layout editor, select **Save > Save As...**



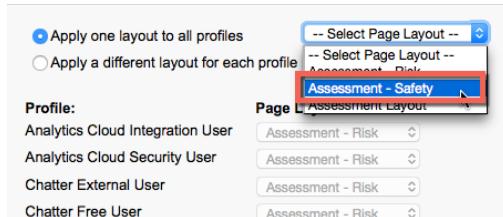
4. In the Page Layout Name, rename this layout to: **Assessment - Safety**, then click **Save**
5. While still in the page layout editor, scroll down to the Risk Assessment section and **remove that section**

A screenshot of the page layout editor. It shows two sections: 'Safety Assessment' and 'Risk Assessment'. The 'Safety Assessment' section contains fields S01, S02, and S03. The 'Risk Assessment' section contains fields R01, R02, and R03. To the right of each section are their respective scores: 16,337 for Safety and 99,111 for Risk. A red box highlights the 'Remove Section' button for the Risk Assessment section. The bottom of the screen shows a 'Record Info' section.

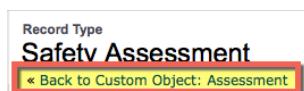
6. **Save** the layout
7. Repeat the above steps by editing the original Assessment Layout and removing the Safety Assessment section and **save the layout as: Assessment - Risk**

## Create Record Types on the Assessment Object and Associate the Appropriate Page Layouts

8. Navigate to **Setup > Create > Objects > Assessment**
9. Scroll down to the Record Types related list and click **New**
10. Fill in the following properties: (skip any other properties not listed here)
  - a. Record Type Label: **Safety Assessment**
  - b. Description: **Initial Child Safety Assessment to determine the initial referral intake priority and response timeline**
  - c. Active: **True (checked)**
  - d. Click **Next**
  - e. Choose the **Apply one layout to all profiles** option
  - f. Select the **Assessment - Safety** option



- g. Click **Save**
- h. Click the **Back to Custom Object: Assessment** link



11. Create another new Record Type:
  - a. Record Type Label: **Risk Assessment**
  - b. Description: **To assess family needs and strengths as they relate to neglect, abuse, maltreatment and overall risk**
  - c. Active: **True (checked)**
  - d. Click the **Enable for Profile** checkbox for to enable this record type for all profiles
  - e. Click **Next**
  - f. Choose the **Apply one layout to all profiles** option
  - g. Select the **Assessment - Risk** option

h. Click **Save**

## Try Out the Application

12. Now, navigate to one of your Referral records and **scroll down to the Assessments related list**
13. Create 1 new assessment for **Safety**
14. Create 1 new assessment for **Risk**
15. **Challenge:** Use what you now know about editing page layouts to move the Assessments related list beneath Allegations and add additional columns to the Assessments related list on the Referral detail page to match the below graphic:

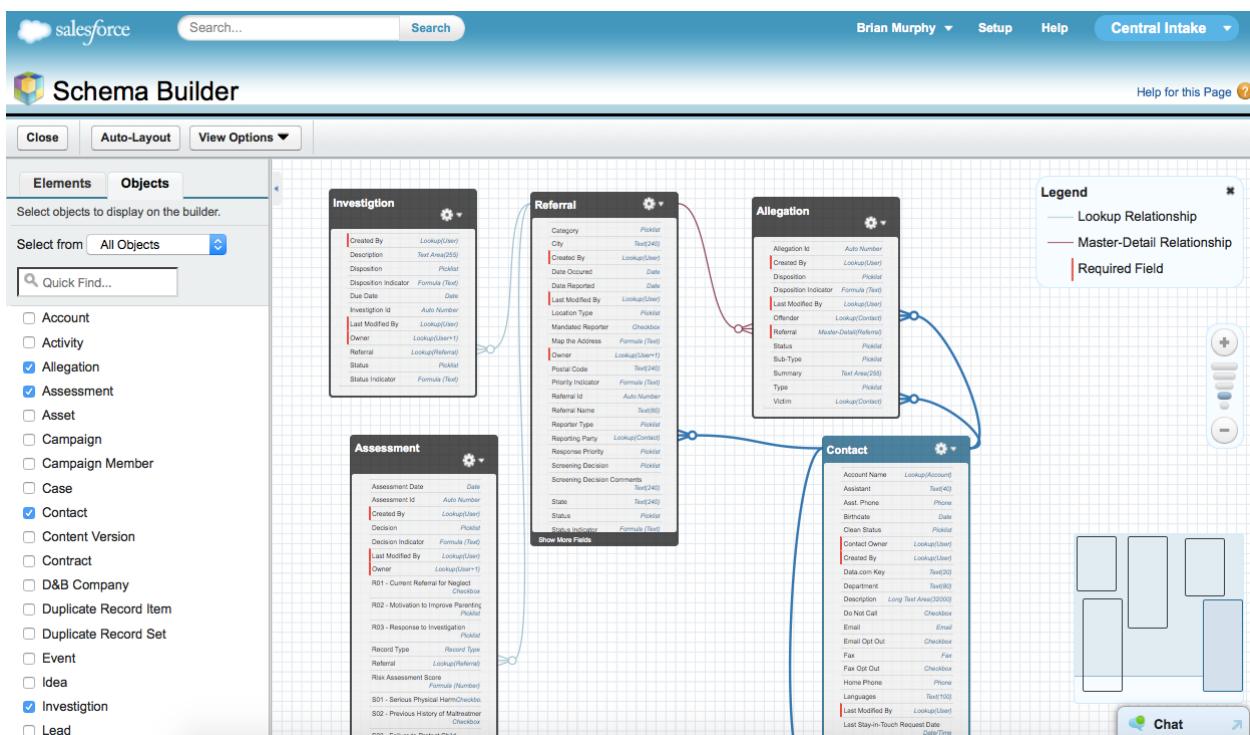
| Action     | Assessment Id | Assessment Date | Record Type       | Risk Assessment Score | Safety Assessment Score | Status      | Decision  | Decision Indicator |
|------------|---------------|-----------------|-------------------|-----------------------|-------------------------|-------------|-----------|--------------------|
| Edit   Del | ASSESS-00004  | 2/22/2016       | Safety Assessment | 0                     | 3                       | In Progress | High Risk |                    |
| Edit   Del | ASSESS-00005  | 2/22/2016       | Risk Assessment   | 11                    | 0                       | In Progress | High Risk |                    |

# 4.3 Create a New Object: Investigation

## Duration: 15 Minutes

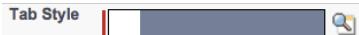
A key component of any child protection agency's business process is to conduct field investigations for allegations of abuse and neglect. Depending on the outcome (score) of the initial safety assessment, a response priority (P1, P3, P3) is assigned to the Referral. Each Referral's response priority determines the timeframe in which an investigation must be completed (e.g. 24, 48, 72 hours).

Obviously, the higher the score of the initial safety assessment drives a more immediate need to investigate the allegation(s). In our example, if an assessment score results in a P1 response priority, we must complete an investigation within 24 hours. Therefore, we need to create an Investigation object to manage and track the investigation lifecycle and relate it to the Referral object.



## Create the Investigation Object Using the Wizard

1. Fill in the following properties: (skip any other properties not listed here)
  - a. Label: **Investigation**
  - b. Plural Label: **Investigations**
  - c. Starts with Vowel Sound: **True (checked)**
  - d. Record Name: **Investigation Id** (change from the default: Investigation Name)
  - e. Data Type: **Auto Number**
  - f. Display Format: **INV-{000000}**

- g. Starting Number: **1**
- h. Allow Reports: **True (checked)**
- i. Allow Activities: **True (checked)**
- j. Track Field History: **True (checked)**
- k. Allow Search: **True (checked)**
- l. Add Notes & Attachments: **True (checked)**
- m. Launch New Custom Tab Wizard: **True (checked)**
- n. Click **Save**
- o. You should now be in the second part of the New Object Wizard to create a Tab. Click on the Tab Style Lookup  

- p. Select a tab style icon of your choice
- q. Click **Next**
- r. Accept the defaults for profile visibility, click **Next**
- s. In the next screen, **de-select all apps except for Central Intake**, then click **Save**

## Add Custom Fields to the Investigation Object

2. Create a new field with the following properties:
  - a. Data Type: **Date**
  - b. Field Label: **Due Date**
  - c. Click **Next, Next, Save**
3. Create a new field with the following properties:
  - a. Data Type: **Text Area**
  - b. Field Label: **Description**
  - c. Click **Next, Next, Save**
4. Create a new field with the following properties:
  - a. Data Type: **Picklist**
  - b. Field Label: **Disposition**
  - c. Enter Values for the Picklist (or copy/paste from .txt file): **Substantiated, Unsubstantiated, Unfounded**
  - d. Click **Next, Next, Save**
5. Create a new field with the following properties:
  - a. Data Type: **Formula**
  - b. Field Label: **Disposition Indicator**
  - c. Formula Return Type: **Text**
  - d. Formula (copy/paste from .txt file):

```
IF(ISPICKVAL(Disposition__c , "Substantiated") ,
IMAGE("http://icons.iconarchive.com/icons/paomedia/small-n-flat/32/sign-check-icon.png", "Substantiated"),
```

```

IF(ISPICKVAL(Disposition__c , "Unsubstantiated") ,
IMAGE("http://icons.iconarchive.com/icons/custom-icon-design/pretty-office-
8/24/Thumb-down-icon.png", "Unsubstantiated"),

IF(ISPICKVAL(Disposition__c , "Unfounded") ,
IMAGE("http://icons.iconarchive.com/icons/oxygen-icons.org/oxygen/32/Actions-
trash-empty-icon.png", "Unfounded"),

IF(ISPICKVAL(Disposition__c, "Null"), null,null)))

```

e. Click **Next, Next, Save**

6. Create a new field with the following properties:

- a. Data Type: **Lookup Relationship**
- b. Related To: **Referral**
- c. Field Label: **Referral**
- d. Field Name: **Referral**
- e. Click **Next, Next, Next, Save**

7. Create a new field with the following properties:

- a. Data Type: **Picklist**
- b. Field Label: **Status**
- c. Enter Values for the Picklist (or copy/paste from .txt file): **Open, Pending, Under Review, Closed**
- d. Click **Next, Next, Save**

8. Create a new field with the following properties:

- a. Data Type: **Formula**
- b. Field Label: **Status Indicator**
- c. Formula Return Type: **Text**
- d. Formula (copy/paste from .txt file):

```

IF(ISPICKVAL(Status__c , "Open") ,
IMAGE("http://icons.iconarchive.com/icons/custom-icon-design/pretty-office-
11/32/shop-open-icon.png", "Open"),

IF(ISPICKVAL(Status__c , "Pending") ,
IMAGE("http://icons.iconarchive.com/icons/custom-icon-design/flatastic-
8/32/Open-folder-info-icon.png", "Pending"),

IF(ISPICKVAL(Status__c , "Under Review") ,
IMAGE("http://icons.iconarchive.com/icons/custom-icon-design/flatastic-
8/32/Open-folder-search-icon.png", "Assessment"),

IF(ISPICKVAL(Status__c , "Closed") ,
IMAGE("http://icons.iconarchive.com/icons/custom-icon-design/pretty-office-
11/32/shop-closed-icon.png", "Closed"),

IF(ISPICKVAL(Status__c, "Null"), null,null))))

```

- e. Click **Next**, **Next**, **Save**

## Try out the Application

9. Now, navigate to one of your Referral records and **scroll down to the Investigation related list**
10. Create 1 new Investigation record, fill out each field and **Save** the record
11. **Challenge:** Use what you know about page layouts to make the Investigation record detail page look like the following:

**Investigation Detail** Edit Delete Clone

**Investigation Info**

|                  |               |          |                       |
|------------------|---------------|----------|-----------------------|
| Investigation Id | INV-00001     | Due Date | 2/24/2016             |
| Referral         | TEST Referral | Owner    | Brian Murphy [Change] |

**Status & Disposition**

|                  |      |                       |  |
|------------------|------|-----------------------|--|
| Status           | Open | Disposition           |  |
| Status Indicator |      | Disposition Indicator |  |

**Narrative**

|             |                                                    |
|-------------|----------------------------------------------------|
| Description | Investigation regarding Medical Neglect allegation |
|-------------|----------------------------------------------------|

**Record Info**

|                                                                                                                                                                                                    |                                  |                  |                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------|----------------------------------|
| Created By                                                                                                                                                                                         | Brian Murphy, 2/23/2016 10:12 AM | Last Modified By | Brian Murphy, 2/23/2016 10:12 AM |
| <span style="border: 1px solid #ccc; padding: 2px;">Edit</span> <span style="border: 1px solid #ccc; padding: 2px;">Delete</span> <span style="border: 1px solid #ccc; padding: 2px;">Clone</span> |                                  |                  |                                  |

12. **Challenge:** Use what you now know about editing page layouts to move the Investigations related list beneath the Assessments related list and add additional columns to the Investigations related list on the Referral detail page to match the below graphic:

| Investigation           |                    |           |               |                         |                    |                              |
|-------------------------|--------------------|-----------|---------------|-------------------------|--------------------|------------------------------|
| Investigation Id        | Description        | Due Date  | Status        | Status Indicator        | Disposition        | Disposition Indicator        |
| Sample Investigation Id | Sample Description | 2/23/2016 | Sample Status | Sample Status Indicator | Sample Disposition | Sample Disposition Indicator |

# 5.0 Create Business Logic to Automate Business Processes

---

## Duration: 30-45 Minutes

So far we have created a Central Intake Application, complete with several custom objects: Referrals, Allegations, Assessments and Investigations. In addition, you have modified page layouts in order to organize fields into sections for the objects you have created so it is easy and clear to navigate.

Now that we have the Data Model defined, we now need to begin automating some of the Central Intake business processes by creating workflow rules that automatically “make things happen” when events occur in the application. For example, if an initial safety assessment score is over a certain value and results in a high risk situation, we need to notify the central intake shift supervisor via email that a P1 Referral requires immediate attention and an investigation needs to be initiated. Furthermore, tasks and alerts need to be generated according to standard operating procedures. Investigations need to be completed within a specific timeframe or else escalations will occur. Approvals need to be generated when the investigation is completed so agency management can decide what the Referral disposition should be, and so on.

In order to introduce this business logic, we will use some of the following Salesforce App Cloud platform core services to automate these processes:

- User Management
- Letterheads & Email Templates
- Workflow Rules
- Approval Processes
- Lightning (Workflow) Process Builder

## Create a New Demo User to Represent the Central Intake Supervisor

**Note:** Your Developer Edition (DE) Org will allow you to create 2 users with the Salesforce license type and the Salesforce Administrator profile. To make it easy we will create this user as a Salesforce Admin so they have access to everything your other user also has access to.

1. Navigate to **Setup > Administer > Manage Users > Users**
2. Click **New User**
3. Fill in the following user details: (ignore fields not listed below when creating the user)
  - a. First Name: **Intake**
  - b. Last Name: **Supervisor**
  - c. Email: **YourPersonalEmail@domain.com**

**Note:** This email address needs to be a real email address where you can receive the new user confirmation email

- d. User Name: **Make Up your own UNIQUE user name in the form of an email address (e.g. supervisorABC@centralintake.demo)**
  - e. Nickname: **IntakeSupe**
  - f. Title: **Intake Shift Supervisor**
  - g. Role: **CEO**
  - h. User License: **Salesforce**
  - i. Profile: **System Administrator**
  - j. Receive the Salesforce newsletter: **FALSE (not checked)**
  - k. Receive the Salesforce administrator newsletter: **FALSE (not checked)**
  - l. Generate Password and Notify user Immediately: **TRUE (checked)**
4. Click **Save**
5. Access your personal eMail and look for the "**Your Developer Edition Login Information**" email

Your Developer Edition Login Information

**Salesforce Developers** info@salesforcedevs.com via v1 11:39 AM (0 minutes ago)

to me

Dear Intake Supervisor,

Welcome to Your Developer Edition! Your user name is below.

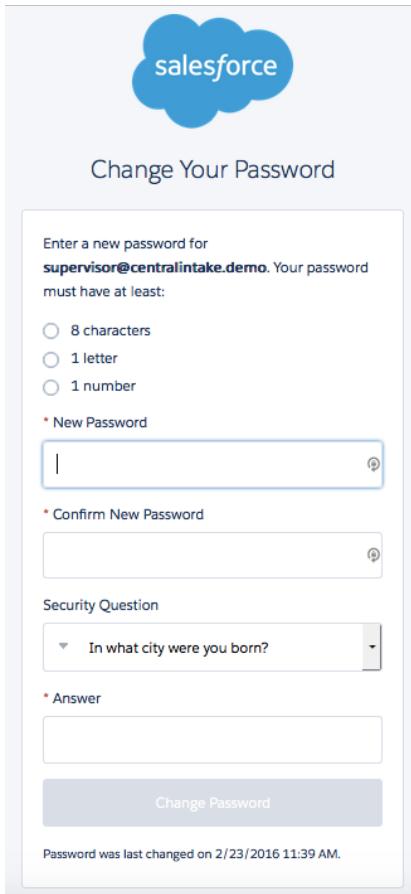
User Name: supervisor@centralintake.demo

You'll be asked to set a password when you first log in. Passwords are case sensitive. You'll also be asked to set a password question and answer that will be used if you forget your password.

To log in now, click: [https://login.salesforce.com/?c=2\\_ttAORIjHXLW5KboTdUn30I0oWPpeYhdrsJJkIOM\\_pEOB\\_oFGYbRKZLpFHNbZUX8OrvFNQNB4IR3d4vIMZmSP9Q\\_fixEg6CDaxWPKFw3RIJbSJ207ZpsAx56UoVaT7iaOAunYQuDH\\_WaovU8RIHJqYjh14c7wmreq1R073RFPZsuedGnqvMa8jVAct1Y1pKNklqadvR302TIOPcc\\_YUgQIMQKhsESZjeBohfqK1nb4wLqxByAsLmQu99QtwLAMZC\\_y9](https://login.salesforce.com/?c=2_ttAORIjHXLW5KboTdUn30I0oWPpeYhdrsJJkIOM_pEOB_oFGYbRKZLpFHNbZUX8OrvFNQNB4IR3d4vIMZmSP9Q_fixEg6CDaxWPKFw3RIJbSJ207ZpsAx56UoVaT7iaOAunYQuDH_WaovU8RIHJqYjh14c7wmreq1R073RFPZsuedGnqvMa8jVAct1Y1pKNklqadvR302TIOPcc_YUgQIMQKhsESZjeBohfqK1nb4wLqxByAsLmQu99QtwLAMZC_y9)

For assistance, contact us at [info@salesforcedevs.com](mailto:info@salesforcedevs.com). Once again, welcome to Your Developer Edition.

6. Click the link in the email to log in
7. Select a password that you will remember and enter the information for the challenge question



The screenshot shows the Salesforce 'Change Your Password' page. At the top, there's a blue cloud icon with the word 'salesforce'. Below it, the title 'Change Your Password' is displayed. A message prompts the user to enter a new password for 'supervisor@centralintake.demo'. It specifies that the password must have at least one letter, one number, and eight characters. There are three radio buttons for these requirements. Below this is a field labeled 'New Password' with a placeholder 'Type your password here'. Underneath is a 'Confirm New Password' field. A 'Security Question' section contains a dropdown menu set to 'In what city were you born?'. An 'Answer' field is provided below. At the bottom right is a large grey button labeled 'Change Password'. At the very bottom of the page, a note states 'Password was last changed on 2/23/2016 11:39 AM.'

8. Click **Change Password**
9. You should now be logged in as the Supervisor user. In the "App Picker", **select the Central Intake app**, then **Logout**.



## Create a Letterhead

**Note:** In order for us to begin adding application logic where tasks and email alerts will be generated, we first need to setup a "letterhead" in Salesforce for the HTML Email templates we will be creating.

10. Navigate to **Setup > Administer > Communication Templates > Letterhead**
11. Read the note on Letterheads and then click **Next**
12. Click **New Letterhead**
  - a. Available for Use: **TRUE (checked)**
  - b. Letterhead Label: **Central Intake Letterhead**

c. Click **Save**

13. **Note:** You will now see the Letterhead Properties page where you can add a logo, change the background colors etc. Don't worry about this. We will bypass making the letterhead look pretty for this exercise.

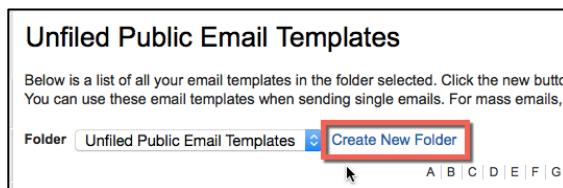
14. Click **Save**

## Create an Email Template

Next, in order to generate an email alert through workflow, we need to first create an email template that will be referenced in the workflow email action we will create in a future step. In our business example, the child welfare business analyst wants the intake shift supervisor to be notified via email whenever a Referral is designated with a P1 priority response. Let's create the email template that will be used in this use case.

15. Navigate to **Setup > Administer > Communication Templates > Email Templates**

16. Click the **Create New Folder** hyperlink



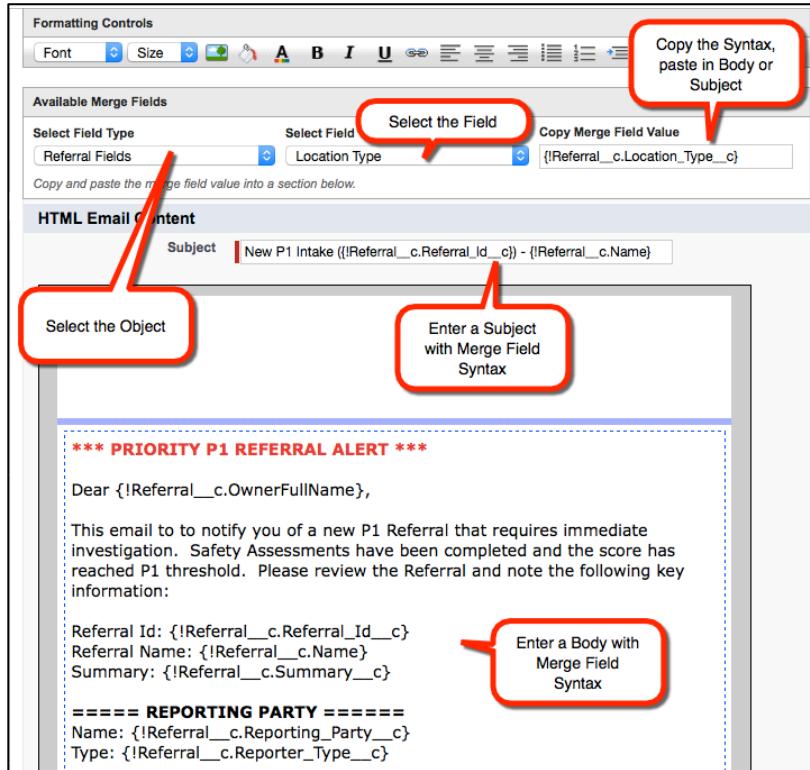
17. Fill in the following properties for the new folder:

- Label: **Central Intake**
- Folder Unique Name: **(Accept the default value)**
- Label: **Central Intake**
- Public Folder Access: **Read/Write**
- Click **Save**

18. Click **New Template** and fill in the following properties:

- Select the **HTML (using Letterhead)** radio button
- Click **Next**
- Folder: **Central Intake**
- Available for Use: **TRUE (checked)**
- Email Template Name: **P1 Intake Notification**
- Letterhead: **Central Intake Letterhead**
- Email Layout: **Free Form Letter**
- Description: **Email Template for P1 Referral Notifications**
- Click **Next**
- You are now in the **HTML Email Template editor** where you can use the rich text editor to construct your email. Salesforce has special syntax to represent field/value substitutions for your email templates where you can copy/paste the Merge Field Values into the email body.

Review the graphic below:



- k. Use the .txt file to copy/paste the following in the **Subject Line**:

```
Alert! New P1 Intake ({!Referral_c.Referral_Id_c}) - {!Referral_c.Name}
```

- l. Use the .txt file to copy/paste the following in the **Body**:

```
*** P1 REFERRAL ALERT ***
This email is to notify you of a new P1 Referral that requires immediate investigation. Safety Assessments have been completed and the score has reached P1 threshold. Please review the Referral and note the following key information:

Referral Id: {!Referral_c.Referral_Id_c}
Referral Name: {!Referral_c.Name}
Summary: {!Referral_c.Summary_c}

===== REPORTING PARTY =====
Name: {!Referral_c.Reporting_Party_c}
Type: {!Referral_c.Reporter_Type_c}

===== STATUS, RESPONSE PRIORITY, SCREENING DECISION ====
Status: {!Referral_c.Status_c}
Screening Decision: {!Referral_c.Screening_Decision_c}
Response Priority: {!Referral_c.Response_Priority_c}
Category: {!Referral_c.Category_c}
Sub-Category: {!Referral_c.Sub_Category_c}

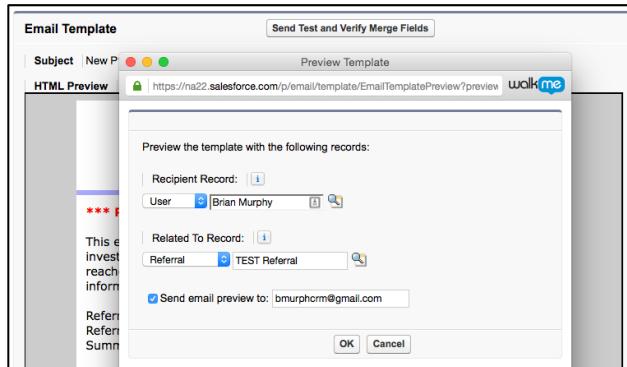
===== LOCATION OF INCIDENT =====
Address: {!Referral_c.Street_c}
City: {!Referral_c.City_c}
State: {!Referral_c.State_c}
Zip: {!Referral_c.Zip_c}
```

```
Location Type: {!Referral__c.Location_Type__c}
```

```
Thank you,
{!User.Name}
{!User.Title}
{!User.Email}
{!User.Phone}
```

**NOTE:** You can embed a link to the specific Referral record in your email template by inserting the following syntax: `{!ObjectName__c.Link}`. Just highlight a word in the HTML email body, click the “Insert a Link” icon in the email editor toolbar and enter: `{!Referral__c.Link}` for the URL.

- m. Click **Next**
- n. Click **Copy Text From HTML version** button, Click **Ok**
- o. Click **Save**
- p. Click the **Send Test & Verify Merge Fields** button
- q. In the Preview Template window enter yourself as the User and select one of your test Referral records, then enter your email address in order to send the preview



- r. Click **Ok**
- s. **Login to your email** and view the test

## Create Your First Workflow Rule

Now that we have our Letterhead and Email Template setup, we can now start on our first Workflow Rule. A new Referral comes in and the initial Safety Assessment indicates that we need escalate the response priority and investigate. The child welfare business analyst has come to you with the following business requirement for you to automate:

- When a completed Safety Assessment score is = 3 points (remember our formula on the Safety Assessment? Each of the 3 safety assessment questions is worth 1 point if True), we need the following actions to occur:
  - Create a task on the Assessment to log that the assessment was completed by the intake Worker
  - Update the Assessment Decision to High Risk
  - Update the Referral Priority to P1
  - Update the Referral status to Investigation
  - Update the Referral Screening Decision to Screen In
  - Send a P1 Referral Email Alert to the Intake Shift Supervisor

19. Navigate to **Setup > Build > Create > Workflow & Approvals > Workflow Rules**
20. Read the Understanding Workflow screen, then click **Continue**
21. Click the **New Rule button** and enter the following properties
22. Object: **Assessment**
23. Click **Next**
24. Rule Name: **Safety Assessment - High Risk**
25. Description: **High Risk Safety Assessment updates Referral to P1 Response Priority and Generates Alerts**
26. Evaluate the Rule When: **created, and any time it's edited to subsequently meet criteria**
27. Scroll down to the **Rule Criteria** Section and set he fields according to the graphic below

**Rule Criteria**

Run this rule if the following criteria are met :

| Field                               | Operator | Value    | AND |
|-------------------------------------|----------|----------|-----|
| Assessment: Status                  | equals   | Complete |     |
| Assessment: Safety Assessment Score | equals   | 3        | AND |

28. Click **Save & Next**
29. Now let's define a few actions for when the workflow criteria is met. Click **Add Workflow Action > New Task** and fill in the following properties:
  - a. Assigned To: **<your user>**
  - b. Subject: **Initial Safety Assessment Completed**
  - c. Status: **Completed**
  - d. Due Date: **Rule Trigger Date - plus - 0 days**

- e. Comments: **Initial Safety Assessment is complete (generated by workflow rule)**

The screenshot shows the 'Edit Task' interface. At the top, it says 'Create a task to associate with one or more workflow rules, approval processes, or entitlement processes. When changing a task, any modifications will apply to all rules, approvals, or entitlement processes associated with it.' Below this is a legend: a red vertical bar followed by '=' Required Information. The main form has sections for 'Object' (set to 'Assessment'), 'Assigned To' (Brian Murphy), 'Status' (Completed), 'Priority' (Normal), 'Subject' (Assessment Completed), 'Unique Name' (Initial\_Safety\_Assessme), 'Due Date' (Rule Trigger Date), and 'Protected Component' (unchecked). Under 'Description Information', there is a 'Comments' field containing the text 'Initial Safety Assessment is complete (generated by workflow rule)'.

- f. Click **Save**

30. Add another action. Click **Add Workflow Action > Field Update** and fill in the following properties

- Name: **Update Assessment Decision**
- Field to Update: **Assessment > Decision**
- Specific Value: **High Risk**
- Click **Save**

31. Add another action. Click **Add Workflow Action > Field Update** and fill in the following properties

- Name: **Update Referral Screening Decision**
- Field to Update: **Referral > Screening Decision** (Note that you can access the Assessment's related object fields. Because Assessment is a child to Referral in the data model, you can update fields in the parent object via point-an-click configuration too!)
- Specific Value: **Screen In**
- Click **Save**

32. Add another action. Click **Add Workflow Action > Field Update** and fill in the following properties

- Name: **Update Referral Response Priority**
- Field to Update: **Referral > Response Priority**
- Specific Value: **P1**
- Click **Save**

33. Add another action. Click **Add Workflow Action > Field Update** and fill in the following properties

- Name: **Update Referral Status**
- Field to Update: **Referral > Status**
- Specific Value: **Investigation**
- Click **Save**

34. Add another action. Click **Add Workflow Action > New Email Alert** and fill in the following properties

- Description: **Send P1 Referral Email Alert**

- b. Email Template: **P1 Intake Notification**
- c. Recipient Type: Move the **User: Intake Supervisor** over to the Selected Recipients Column

| Recipient Type | Search: User for: <input type="text"/>                                                             | <input type="button" value="Find"/> |
|----------------|----------------------------------------------------------------------------------------------------|-------------------------------------|
| Recipients     | <b>Available Recipients</b><br>User: Brian Murphy<br>User: Integration User<br>User: Security User |                                     |
|                | <b>Selected Recipients</b><br>User: Intake Supervisor                                              |                                     |

- d. Click **Save**
- e. Click **Done**
- f. Click **Activate**

## Try Out the Application

Now lets go and test your workflow to see if it meets the business requirement.

35. Create a **New Referral** and fill in the following information

- a. Referral Name: **Test Workflow 1**
- b. Click **Save**
- c. What is the current Status? \_\_\_\_\_

36. Scroll down to the Assessments Related List and click **New Assessment**

37. Fill in the following properties:

- a. Record Type: **Safety Assessment**
- b. Click **Continue**
- c. Assessment Date: **Today's Date**
- d. Status: **In Progress**
- e. Safety Assessment Questions: **Mark all 3 questions TRUE (checked)**
- f. Click **Save**
- g. What is the Assessment Score? \_\_\_\_\_
- h. How many activities were created? \_\_\_\_\_
- i. Why didn't the workflow run? \_\_\_\_\_
- j. Change the Status from In Progress to **Complete** and **Save** the record
- k. What is the Status Now? \_\_\_\_\_
- l. Review the graphic below:

**Assessment Info**

|                 |                                 |
|-----------------|---------------------------------|
| Assessment Id   | ASSESS-000007                   |
| Assessment Date | 2/24/2016                       |
| Referral        | <a href="#">Test Workflow 1</a> |

**Safety Assessment**

|                                        |   |
|----------------------------------------|---|
| S01 - Serious Physical Harm            | ✓ |
| S02 - Previous History of Maltreatment | ✓ |
| S03 - Failure to Protect Child         | ✓ |

**Record Info**

|                  |                                 |
|------------------|---------------------------------|
| Created By       | Brian Murphy, 2/24/2016 9:36 AM |
| Last Modified By | Brian Murphy, 2/24/2016 9:38 AM |

**Open Activities**

No records to display

**Activity History**

| Action     | Subject                             | Name | Task | Due Date  | Assigned To  | Last Modified Date/Time |
|------------|-------------------------------------|------|------|-----------|--------------|-------------------------|
| Edit   Del | Initial Safety Assessment Completed |      | ✓    | 2/24/2016 | Brian Murphy | 2/24/2016 9:38 AM       |

- m. Click the **Test Workflow 1** hyperlink to navigate back to the Referral record
- n. What is the Status of the Referral? \_\_\_\_\_
- o. What is the Response Priority? \_\_\_\_\_
- p. What is the Screening Decision? \_\_\_\_\_
- q. Congratulations you just created your first workflow rule!

## 5.1 Create Standard Tasks for New Referrals with Workflow Rules

**Duration:** 15 Minutes

No that you have created your first workflow rule, we will create another workflow that will assign standard operating procedure tasks to the Referral in order to be completed. For every new Referral, intake workers must document as much information as possible; they must create allegations; and the must conduct an initial safety assessment. In addition, management would like every new Referral to be assigned to the New Referral Queue.

### Create New Referrals Queue & Assign Users to the Queue

Before we create the workflow, we need to first create a Queue for the new Referrals to be assigned to.

1. Navigate to **Setup > Administer > Manage Users > Queues**
2. Click **New** and fill in the following information:
  - a. Label: **New Referral Queue**
  - b. Send Email to Members: **TRUE (Checked)**
  - c. Move the **Referral Object to the Selected Objects Column**
  - d. Add **Your User Name** and the **Intake Supervisor user** to the queue **Selected Members** column
  - e. Click **Save**
3. Navigate to **Setup > Build > Create > Workflow & Approvals > Workflow Rules**
4. Click **New Rule** and fill in the following information:
  - a. Object: **Referral**
  - b. Click **Next**
  - c. Rule Name: **Standard Tasks for New Referrals**
  - d. Evaluate the Rule when a record is: **created**
  - e. Enter the Rule Criteria according the following graphic:

**Rule Criteria**

Run this rule if the following criteria are met :

| Field            | Operator | Value |
|------------------|----------|-------|
| Referral: Status | equals   | New   |

AND

  - f. Click **Save & Next**
5. Add a workflow action. Click **Add Workflow Action > New Task** and fill in the following properties
  - a. Assign to: **Owner > Referral Owner**

**Lookup**

Type: **Owner** Search... Go!

You can use "\*" as a wildcard next to other characters to improve your search results.

Recently Viewed Workflow Tasks

|                |  |
|----------------|--|
| Owner Type     |  |
| Referral Owner |  |
  - b. Subject: **Document & Complete Referral Record Data**
  - c. Status: **In Progress**
  - d. Due Date: **Rule trigger Date + 0 Days**
  - e. Comments: **Please document all Referral Data including reporting party, category and location**
  - f. Click **Save**
6. Add another workflow action. Click **Add Workflow Action > New Task** and fill in the following properties
  - a. Assign to: **Owner > Referral Owner**

- b. Subject: **Document Allegations**
  - c. Status: **In Progress**
  - d. Due Date: **Rule trigger Date + 0 Days**
  - e. Comments: **Add allegations, alleged victims and alleged offenders**
  - f. Click **Save**
7. Add another workflow action. Click **Add Workflow Action > New Task** and fill in the following properties
- a. Assign to: **Owner > Referral Owner**
  - b. Subject: **Conduct Initial Safety Assessment**
  - c. Status: **In Progress**
  - d. Due Date: **Rule trigger Date + 0 Days**
  - e. Comments: **Conduct Initial Safety Assessment to determine response priority**
  - f. Click **Save**
8. Add another workflow action. Click **Add Workflow Action > New Field Update** and fill in the following properties
- a. Name: **Assign to New Referral Queue**
  - b. Field to Update: **Owner**
  - c. Owner: **Queue > New Referral Queue**
- Specify New Field Value**

Owner: Queue

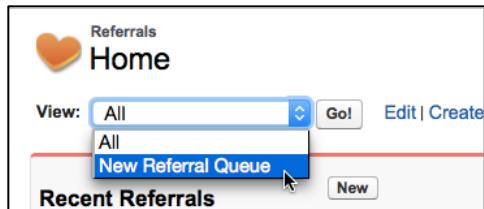
Notify Assignee
- d. Notify Assignee: **TRUE (Checked)**
  - e. Click **Save**
  - f. Click **Done**
9. Click **Activate**

## Try Out the Application

Now lets go and test your workflow to see if it meets the business requirement.

10. Create a **New Referral** and fill in the following information
- a. Referral Name: **Test Workflow 2**
  - b. Summary: **New Referral Tasks Test**
  - c. Click **Save**
  - d. What is the current Status? \_\_\_\_\_
  - e. Who is the Owner of the Record? \_\_\_\_\_
  - f. Were the activities generated and assigned? \_\_\_\_\_
  - g. What do you notice in the Chatter Feed? \_\_\_\_\_
  - h. Click the **Referrals Tab**

- i. Navigate to the **View > New Referrals Queue**



- j. How many records are visible? \_\_\_\_\_  
k. Click the Checkbox next to the Test Workflow 2 record and click Accept  
l. What happens? \_\_\_\_\_  
m. Who is the Owner of the record now? \_\_\_\_\_
- Hint:** Navigate to the **All view**

## 5.2 Automatically “Flag” Mandated Reporters with Workflow Rules

---

**Duration: 10 Minutes**

The child welfare business analyst has come to you and needs to report on Referrals submitted by mandated reporters. (Mandated reporters are certain types of people, such as teachers and child care providers, which are mandated by law to report alleged abuse, neglect and maltreatment) Currently the mandated reporter (boolean) checkbox field has no logic that automatically checks the box based on the reporting party type that is specified on the Referral. You need to create a workflow rule that will automatically flag the Referral's mandated reporter field when certain criteria are met.

### Change the Mandated Reporter (Boolean) Checkbox Field to Read-Only for All Profiles

Before we create the workflow, we want to convert the Mandated Reporter Boolean field to read only so it is only checked or unchecked by workflow.

1. Navigate to **Setup > Create > Objects > Referral**
2. Scroll down to the **Mandated Reporter Field**
3. **Drill down** on the field hyperlink (don't click Edit)
4. Click the **Set Field-Level Security** button
5. Set the Field as **Read-only for all Profiles**
6. Click **Save**

## Create Two Workflow Rules to Update the Mandated Reporter Flag

Next, we will create 2 workflow rules that will update the Mandated Reporter to TRUE (checked) and FALSE (unchecked) when the rule criteria are met.

7. Navigate to **Setup > Build > Create > Workflow & Approvals > Workflow Rules**
8. Click **New Rule** and fill in the following information:
  - a. Object: **Referral**
  - b. Click **Next**
  - c. Rule Name: **Mandated Reporter Flag True**
  - d. Evaluate the Rule when a record is: **created and any time it's edited to subsequently meet the criteria**
  - e. Field: **Reporter Type**
  - f. Operator: **Equals**
  - g. Values: **Day Care Provider, Legal Personnel, Police/Law Enforcement, School Official**
  - h. Click **Save & Next**
9. Add a workflow action. Click **Add Workflow Action > New Field Update** and fill in the following properties
  - a. Name: **Mandated Reporter True**
  - b. Field to Update: **Mandated Reporter**
  - c. Checkbox Options: **True**
  - d. Click **Save**
  - e. Click **Done**
  - f. Click **Activate**
10. **Challenge:** Now, Repeat steps 8 & 9 above to write another rule that marks the Mandated Reporter field as FALSE when the Reporter Type Field is not one of the picklist values in step 8g. And, don't forget to **Activate** the rule when you are done!

## Try Out the Application

11. Navigate to the **Referrals Tab**
12. Go to your **Test Workflow 2 Referral** record and drill down to the record detail page
13. Set the Reporter Type field to **Day Care Provider and Save**
14. Did the Workflow mark the Mandated Reporter flag **true?** \_\_\_\_\_
15. Now, change the Reporter Type field to **Anonymous and Save**
16. Did the Workflow mark the Mandated Reporter flag **false?** \_\_\_\_\_

# 5.3 Create an Approval Process

---

**Duration:** 20 Minutes

The child welfare business analyst has come to you with the following business requirement: anytime an allegation is unsubstantiated or unfounded, the caseworker needs to send it to their manager for an approval before the allegation status can be closed. In addition, the business analyst says that management is often on the road or out of the office, so being able to approve or reject the allegation on a mobile device or in the chatter feed would be great! Lastly, when approvals are requested, the appropriate alerts and notifications should be generated so the manager knows their attention to this matter is required.

As an experienced Salesforce administrator, you tell the BA that this can easily be achieved through a Salesforce approval process. An approval process specifies the steps necessary for a record to be approved and who must approve it at each step. A step can apply to all records included in the process or just records that have certain attributes. An approval process also specifies the actions to take when a record is first submitted for approval and that record is approved, rejected, or recalled.

## Create an Approval Process

1. Navigate to **Setup > Create > Workflow & Approvals > Approval Processes**

2. In the **Manage Approval Processes for:** picklist, select **Allegation**



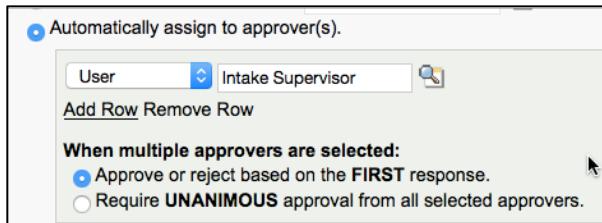
3. Click **Create New Approval Process > Use JumpStart Wizard**



4. Use the JumpStart Wizard to fill in the following approval process information:

- a. Name: **Unsubstantiated Allegations Require Supervisor Approval**
- b. Add the Approval History Related List to all Allegation page layouts: **TRUE (checked)**
- c. Specify Entry Criteria:
  - i. Field: **Allegation: Disposition**
  - ii. Operator: **Equals**
  - iii. Value: **Unsubstantiated, Unfounded**
- d. Select Approver:
  - i. Automatically Assign to Approver: **TRUE (Selected)**

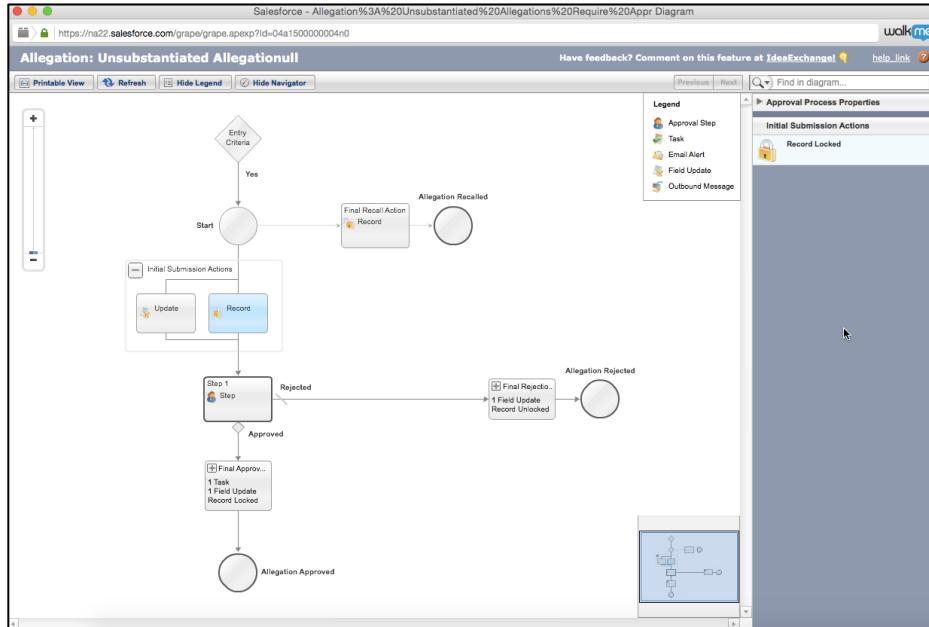
ii. User: **Intake Supervisor**



iii. Approve or Reject on the FIRST response: **TRUE (selected)**

- e. Click **Save**
  - f. Click **Ok** to the message pop-up box that mentions you need to make sure you activate the process at the end
  - g. **Read the next page.** Note: These red items are only suggestions, not errors!
  - h. Click **View Approval Process Detail Page**
5. Scroll down to the **Initial Submission Actions** section. You will now add an action to update the Allegation record when the user submits the approval.
- a. Click **Add New > Field Update**
  - b. Name: **Update Status**
  - c. Description: **Update Status to Pending Approval**
  - d. Field to Update: **Status**
  - e. Picklist Options: **A specific value:** **Pending Approval**
  - f. Click **Save**
6. Scroll down to the **Final Approval Actions** section. You will now add actions to the Allegation record when the manager approves it.
- a. Click **Add New > Field Update**
  - b. Name: **Update Status to Closed**
  - c. Description: **Update Allegation Status to Closed**
  - d. Field to Update: **Status**
  - e. Picklist Options: **A specific value:** **Closed**
  - f. Click **Save**
  - g. Click **Add New > Task**
  - h. Assigned to: **User > Intake Supervisor**
  - i. Subject: **Automatically Closed Allegation**
  - j. Due Date: **Rule Trigger Date + 0 Days**
  - k. Status: **Completed**
  - l. Comments: **Automatically closed allegation based on approval by supervisor**
  - m. Click **Save**
7. Scroll down to the **Final Rejection Actions** section. You will now add actions to the Allegation record when the manager rejects it.
- a. Click **Add New > Field Update**
  - b. Name: **Update Status to Open**
  - c. Description: **Approver Rejection Updated Status to Open**

- d. Field to Update: **Status**
  - e. Picklist Options: A specific value: **Open**
  - f. Click **Save**
8. **Review** your approval process page
9. Click **View Diagram** in order to see a graphical depiction of your process



10. **Close** the Diagram window

11. Click **Activate**

12. Click **Ok**

## Try Out the Application

Before we try the application, let's first enable the Chatter feed and Chatter approvals on the Allegation object.

13. Navigate to **Setup > Build > Chatter > Feed Tracking**

14. **Enable Feed tracking** on the Allegation Object and track the following fields and **Save**

- Status**
- Disposition**

15. Navigate to **Setup > Build > Chatter > Chatter Settings**

16. Click **Edit**

17. Enable Approval Posts by clicking the **Allow Approvals** checkbox



18. Click **Save**

19. Now, navigate to the **Referrals Tab**

20. Pick one of your test Referral records and **drill down to the record detail page**

21. Create a **New Allegation** with the following information

- a. Fill out all the fields in the form making sure that the **Status = Open** and **Disposition = Substantiated**
- b. Click **Save**
- c. Click the **Submit for Approval** Button, then Click **Ok**
- d. What happens? \_\_\_\_\_
- e. Click the "**Here**" **hyperlink** to return to the previous page
- f. Change the Disposition to **Unsubstantiated** and **Save** the record
- g. Click the **Submit for Approval** Button, then Click **Ok**
- h. What is the Status? \_\_\_\_\_
- i. Is the Record Locked? ( ) Yes ( ) No
- j. What shows in the **Approval History** related list? \_\_\_\_\_

22. Logout as the Intake Worker and **re-login as the Intake Shift Supervisor** user

23. As the Intake Shift Supervisor, navigate to the **Home Tab**

24. What do you see in the Chatter Feed on the Home page? \_\_\_\_\_

25. Next, Scroll down to the **Items to Approve** related list on the Home page

26. **Drill down** on the Allegation record

27. Scroll down to **the Approval History** related list

28. Click the **Approve/Reject hyperlink**

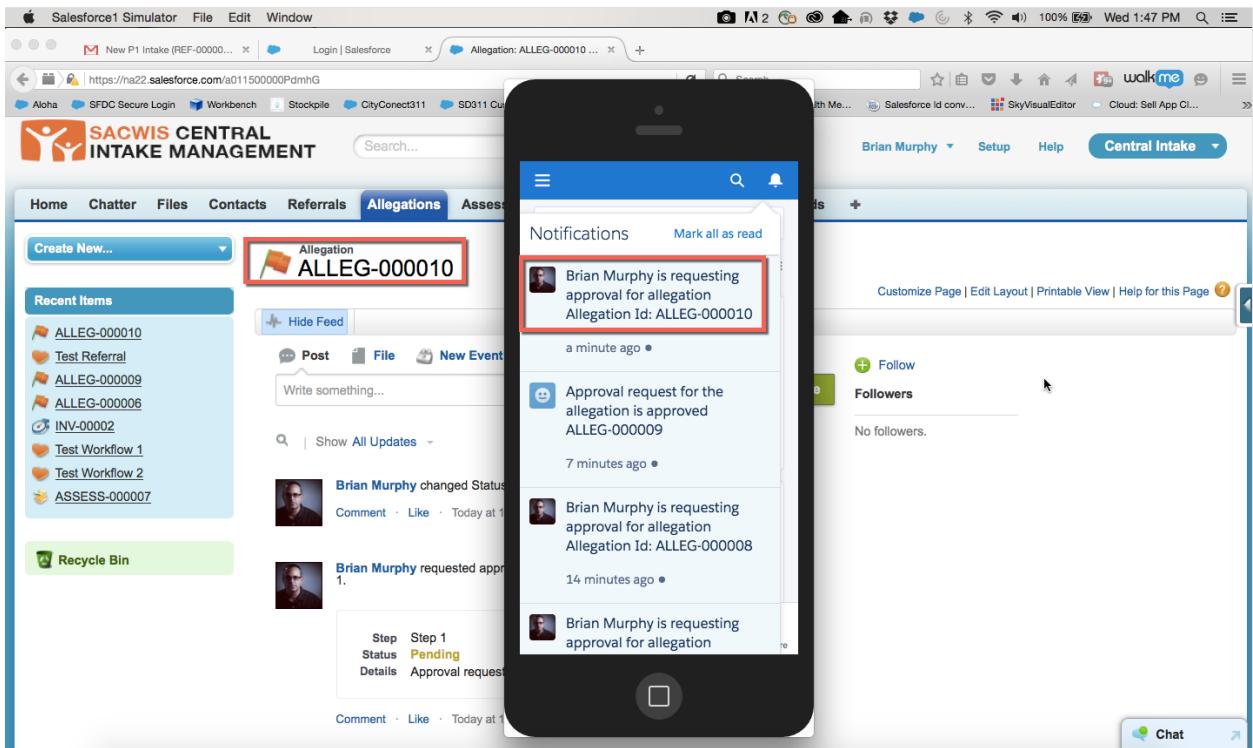
29. Enter a Comment: **Yes, this is approved**

30. Click **Approve**

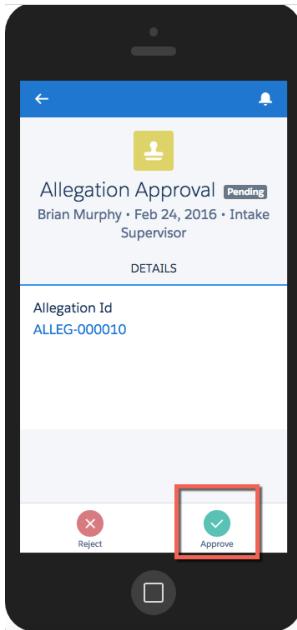
31. What do you notice right away in the Chatter feed? \_\_\_\_\_

32. What is in the Activity History related list? \_\_\_\_\_

33. Logout as the Supervisor and **re-login as the Intake Worker**
34. Navigate back to the Allegation and review the approval
35. Login to your email (the email address of your Shift Supervisor user) and see if you were sent an alert for the approval request
36. Congratulations you just created an approval process!
37. **Challenge: Create another Allegation record** with the right entry criteria on the Referral and submit it for approval. Then login to the Salesforce1 app on your phone or in the Google Chrome Simulator as the supervisor and approve the request from the chatter feed.



38. Drill down on the Feed Notification and **Approve**



39. Switch back to the browser, **refresh the record** and review the mobile approval

## 5.4 Use Lightning Workflow Process Builder to Auto-Submit Approvals Processes

---

**Duration: 20 Minutes**

You may have noticed that in the last exercise, the user physically had to click the Submit for Approval button in order for the approval request to be generated on the Allegation record. What if the user forgets to click the button? How can we automate this approval button-click? The answer is we can create a workflow process using the Salesforce Lightning Process Builder that submits the approval request automatically. The Salesforce Lightning Process Builder is the next generation of Salesforce workflow, so we wanted to get you familiar with Workflow Rules and Lightning Process Builder! Lightning Process Builder goes beyond Salesforce Workflow Rules and allows you to create additional types of actions such as: creating a record, posting to Chatter, and submitting approval processes.

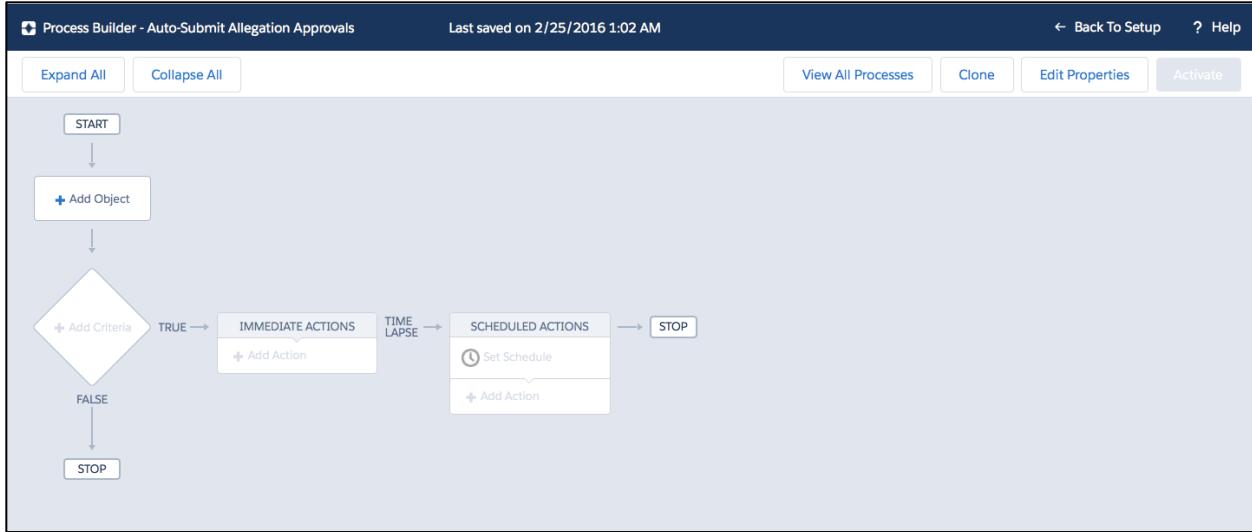
In this exercise, we will create a process that is similar to the one we just did. In this example when an **Allegation has the Status = Open and the Disposition = Unsubstantiated OR Unfounded**, we will create a chatter post to @Mention the Intake Shift Supervisor and will automatically submit the approval process so the user doesn't have to remember to click the button themselves!

### Create a Lightning Workflow Process

1. Navigate to **Setup > Create > Workflow & Approvals > Process Builder**

2. Review the Welcome to Process Builder screen
3. Click the **New** button and fill in the following properties
  - a. Process Name: **Auto-Submit Allegation Approvals**
  - b. Description: **Auto-Submit Allegation Approvals**
  - c. Click **Save**

When you first enter the Lightning Process Builder canvass, it should look like this:



You build the workflow by clicking on the elements in the canvass and setting the relevant properties.

4. Click the **+Add Object** element. A properties window will appear on the right-half of the screen. The properties window will be specific to each type of element you may be editing in the workflow.

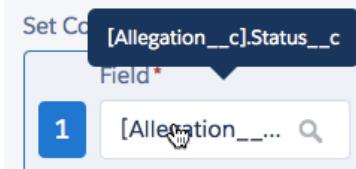
Properties appear on the right for each type of element in the workflow process

Choose Object and Specify When to Start the Process
   
  
 Object\* 
  
  
 Start the process\*
   
 only when a record is created
   
 when a record is created or edited
   
  
 > Advanced

5. In the right-hand side set the following properties:
  - a. Object: **Allegation**
  - b. Start the Process: **When a Record is Created or edited (selected)**
  - c. Click **Save**

6. Next click on the **+Add Criteria** decision step and set the following properties:

- Criteria Name: **Assess Status & Disposition**
- Criteria for Executing Actions: **Conditions are met (selected)**
- Field: **Allegation\_\_c.Status\_\_c**



- Operator: **Equals**
- Value: **Open**
- Click **+Add Row**
- Field: **Allegation\_\_c.Disposition\_\_c**
- Operator: **Equals**
- Value: **Unsubstantiated**
- Click **+Add Row**
- Field: **Allegation\_\_c.Disposition\_\_c**
- Operator: **Equals**
- Value: **Unfounded**
- Click the **Customize the Logic** radio button
- Enter the following logic: **1 AND (2 OR 3)**
- When you are done, it should look like the following:

A screenshot of the 'Define Criteria for this Action Group' dialog. The 'Set Conditions' section shows three rows of criteria:

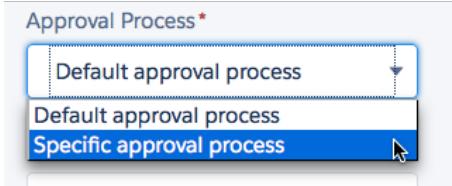
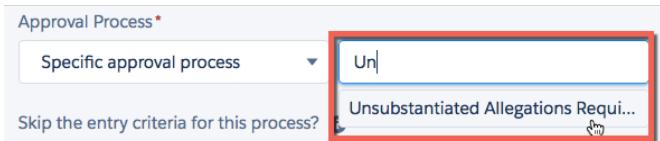
| Field*               | Operator* | Type*    | Value*          |
|----------------------|-----------|----------|-----------------|
| 1 [Allegation__c...] | Equals    | Picklist | Open            |
| 2 [Allegation__c...] | Equals    | Picklist | Unsubstantiated |
| 3 [Allegation__c...] | Equals    | Picklist | Unfounded       |

A blue '+ Add Row' button is below the table. The 'Conditions\*' section has three radio buttons: 'All of the conditions are met (AND)', 'Any of the conditions are met (OR)', and 'Customize the logic' (which is selected). The 'Logic\*' section shows the entered logic: '1 AND (2 OR 3)'.

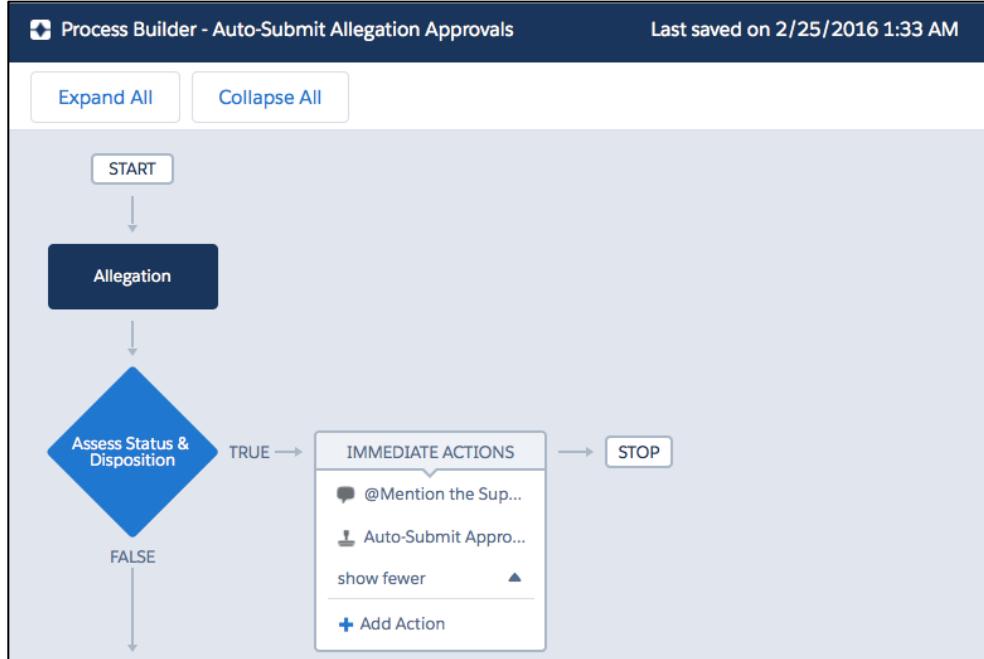
- Click **Save**

7. In the Immediate Actions element, click **+Add Action** and set the following properties:

- Action Type: **Post to Chatter**
- Action Name: **@Mention the Supervisor**
- Post to: **This Record**
- Message: **@[Intake Supervisor] an Unsubstantiated or Unfounded Allegation requires your approval.** (Note: type the "@" sign and PICK the Intake Supervisor)

- e. Click **Save**
8. In the Immediate Actions element, click **+Add Action** and set the following properties:
- Action Type: **Submit for Approval**
  - Action Name: **Auto-Submit Approval**
  - Approval Process: **Specific Approval Process**
- 
- d. Specific Approval Process: **Unsubstantiated Allegations Require Approval** (You need to pick the name of the approval process you created earlier. Start typing the name of your approval process and it should appear for you to select.)
- 

- e. Click **Save**
9. When complete, your workflow process should look like the following



10. Click **Activate**

11. Click **Confirm**

12. Click **Back to Setup**

← Back To Setup

## Try Out the Application

13. Navigate to the **Referrals Tab**

14. Select an existing referral record and drill down to the record detail page

15. Create a **New Allegation** with the following properties:

- a. Summary: **Testing Workflow Rules + Workflow Process Builder**
- b. Status: **Open**
- c. Disposition: **Unfounded**
- d. Click **Save**

16. Is the Allegation record automatically submitted for approval? ( ) Yes ( ) No

17. How can you tell? \_\_\_\_\_

18. Login as the **Intake Shift Supervisor** to the Salesforce1 mobile app or the Google Chrome Simulator and review the chatter post

19. **Approve** the Request

20. Navigate back to the browser as the Intake Worker, refresh the page and note the mobile approval updates to the Allegation record

Congratulations, you just used the new Lightning Process Builder to automatically submit a record for approval and auto-post an alert to Chatter for the Intake Shift Supervisor.

## 5.5 Use Lightning Workflow Process Builder to Create an Investigation

---

**Duration: 20 Minutes**

So far, we have automated part of the business process for when an initial safety assessment results in a score determined to be high risk. Currently, when the (child object) safety assessment score is high, we update the (parent object) Referral response priority to P1.

We need to take the automation a step further. When the (parent object) Referral response priority is updated to P1, it requires that an investigation (child object) be initiated and completed within 24 hours. This is a prime case for using the Lightning Process Builder!

## Create a Lightning Workflow Process

1. Navigate to **Setup > Create > Workflow & Approvals > Process Builder**
2. Click the **New** button and fill in the following properties
  - a. Process Name: **Create Investigation for P1 Referrals**
  - b. Description: **Create Investigation due within 24 hours for P1 Referrals**
  - c. Click **Save**
3. Click the **+Add Object element**.
4. In the right-hand side set the following properties:
  - a. Object: **Referral**
  - b. Start the Process: **When a Record is Created or edited (selected)**
  - c. Click **Save**
5. Next **click on the +Add Criteria** decision step and set the following properties:
  - a. Criteria Name: **Assess P1 Referrals**
  - b. Criteria for Executing Actions: **Conditions are met (selected)**
  - c. Field: **Referral\_\_c.Status\_\_c**
  - d. Operator: **Equals**
  - e. Value: **Investigation**
  - f. Click **+Add Row**
  - g. Field: **Referral\_\_c.Response\_Priority\_\_c**
  - h. Operator: **Equals**
  - i. Value: **P1**
  - j. Click **+Add Row**
  - k. Field: **Referral\_\_c.Screening\_Decision\_\_c**
  - l. Operator: **Equals**
  - m. Value: **Screened In**
  - n. Click the **All of the Conditions are met (AND)** radio button
  - o. When you are done, it should look like the following:

The screenshot shows the 'Criteria Definition' section of the Process Builder. It includes fields for 'Criteria Name' (Assess P1 Referrals), 'Criteria for Executing Actions' (Conditions are met selected), and a 'Set Conditions' table. The 'Set Conditions' table has three rows, each with columns for 'Field' (Referral\_\_c), 'Operator' (Equals), 'Type' (Picklist), and 'Value'. The first row has Value 'Investigation'. The second row has Value 'P1'. The third row has Value 'Screened In'. Below the table is a 'Conditions' section with radio buttons for 'All of the conditions are met (AND)', 'Any of the conditions are met (OR)', and 'Customize the logic'.

| Field*            | Operator* | Type*    | Value*        |
|-------------------|-----------|----------|---------------|
| [Referral__c].... | Equals    | Picklist | Investigation |
| [Referral__c].... | Equals    | Picklist | P1            |
| [Referral__c].... | Equals    | Picklist | Screened In   |

- p. Click **Save**
6. In the Immediate Actions element, click **+Add Action** and set the following properties:
- Action Type: **Create a Record**
  - Action Name: **Create Investigation Record**
  - Record Type: **Investigation**
7. In the Set Field Values Section, set the following properties:
- Field: **Status**
    - Type: **Picklist**
    - Value: **Open**
  - Click **+Add Row**
  - Field: **Description**
    - Type: **String**
    - Value: **Investigation created for associated Referral by Lightning Process Builder.**
  - Click **+Add Row**
  - Field: **Description**
    - Type: **String**
    - Value: **Investigation created for associated Referral by Lightning Process Builder.**
  - Click **+Add Row**
  - Field: **Due Date**
    - Type: **Formula**
    - Value: **TODAY() +1**
    - Click: **Use this formula**
  - Field: **Referral**
    - Type: **Reference**
    - Value: **Referral\_\_c > Record ID**
    - Note: When you create the Investigation you are telling the workflow to associate it to the Record Id of the Referral.
    - Click **Save**

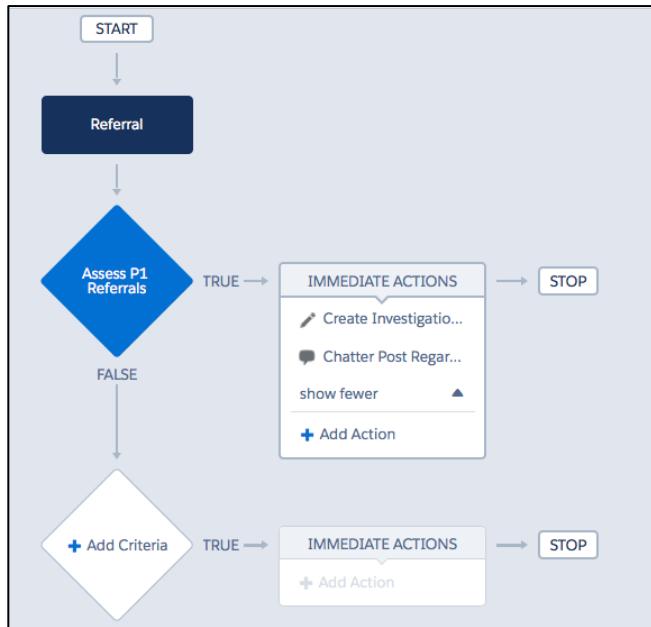
When complete, it should look like the following:

| Field*      | Type*     | Value*                                                                        |
|-------------|-----------|-------------------------------------------------------------------------------|
| Status      | Picklist  | Open                                                                          |
| Description | String    | 'Investigation created for associated Referral by Lightning Process Builder.' |
| Due Date    | Formula   | TODAY() +1                                                                    |
| Referral    | Reference | [Referral__c].Id                                                              |

**+ Add Row**

8. In the Immediate Actions element, click **+Add Action** and set the following properties:
  - a. Action Type: **Post to Chatter**
  - b. Action Name: **Chatter Post Regarding New Investigation**
  - c. Post to: **Specific Approval Process**
  - d. Message: **@[Intake Supervisor] a new Investigation has been created as a result of a P1 Referral. This message was generated by the Lightning Process Builder.** (Note: type the "@" sign and PICK the Intake Supervisor)
  - e. Click **Save**

9. When complete, your workflow process should look like the following:



10. Click **Activate**

11. Click **Confirm**

12. Click **Back to Setup**

[← Back To Setup](#)

## Try Out the Application

13. Navigate to the Referrals Tab

14. Create a **New Referral** with the following information:

- a. Name: **Test Workflow Process Builder to Create Investigation**
- b. Summary: **Testing auto-creation of investigation**

- c. Click **Save**
15. Scroll down to the Assessments related list and create a **New Assessment** with the following information:
- Record Type: **Safety Assessment**
  - Date: **Today**
  - Status: Complete
  - Mark all 3 safety assessment questions **TRUE (checked)**

| Safety Assessment                                                          |  |  |
|----------------------------------------------------------------------------|--|--|
| S01 - Serious Physical Harm <input checked="" type="checkbox"/>            |  |  |
| S02 - Previous History of Maltreatment <input checked="" type="checkbox"/> |  |  |
| S03 - Failure to Protect Child <input checked="" type="checkbox"/>         |  |  |

- e. Click **Save**
16. Navigate back to the Referral record
17. Was the Investigation record automatically created? ( ) Yes ( ) No

| Investigation                              |                  |                                                                            |           | <a href="#">New Investigation</a> |                  |
|--------------------------------------------|------------------|----------------------------------------------------------------------------|-----------|-----------------------------------|------------------|
| Action                                     | Investigation Id | Description                                                                | Due Date  | Status                            | Status Indicator |
| <a href="#">Edit</a>   <a href="#">Del</a> | INV-00004        | Investigation created for associated Referral by Lightning Process Builder | 2/26/2016 | Open                              |                  |

18. What is the Investigation Due Date? \_\_\_\_\_
19. Do you see the Chatter post in the feed? ( ) Yes ( ) No


**Brian Murphy**  
 @Intake Supervisor a new Investigation has been created as a result of a P1 Referral. This message was generated by the Lightning Process Builder.  
[Comment](#) · [Like](#) · Today at 12:28 PM

# 5.6 Challenge Workflow Lab: Create Standard Tasks for New Investigations

---

**Duration:** 10 Minutes

In the last exercise, we automatically created an Investigation when a Safety Assessment score results in high risk (3 points). Use what you now know about workflow rules in order to create 3 new tasks whenever an Investigation record is first created.

## Create a Workflow Rule that Creates 3 Standard Tasks for New Investigations

1. Navigate to **Setup > Create > Workflow & Approvals > Workflow Rules**
2. Create a workflow rule on the **Investigation** object
3. Rule Criteria: **Status = Open**
4. **Rule Actions** to create:
  - a. New Task: Interview all Parties
  - b. New Task: Document all evidence
  - c. New Task: Submit for Management Review/Approval when Complete
5. **Activate** the Rule
6. Test the rule by creating a new safety assessment on an existing Referral record with the score of 3.  
(Make sure you set the Assessment **status = complete!**)

When the safety assessment is complete, the investigation will be created (by Lightning Process Builder workflow) and the 3 tasks will be created for the investigation (by the workflow rule.)

# 6.0 Install MapAnything from the AppExchange & Load Sample Referral Data

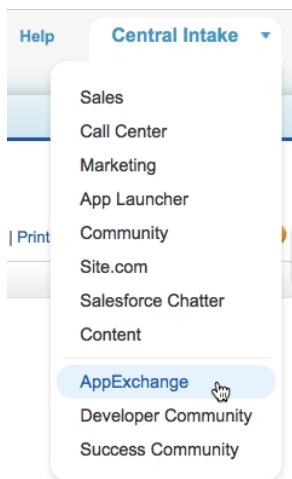
**Duration:** 30-45 Minutes

Now that we have a pretty functional Central Intake Management application, let's have some fun by showing you the power of the Salesforce AppExchange. The Child Welfare Business Analyst thinks it's great that you can enter a Referral with an address and click on the map icon to bring up a Google Map of the location. The BA, however, wants to give the caseworkers and investigators some useful tools in the field so they can plot Referrals with varying criteria on a map. In addition, the Central Intake hotline wants to be able to initiate a new Referral from an address or map location point such as a school.

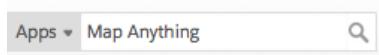
The BA saw a demo of MapAnything at a local Salesforce World Tour event and wants you to install and configure it for your Org. After all, it's as simple as installing an app for your phone!

## Access the App Exchange and Install MapAnything

1. From the App Picker, select **AppExchange**

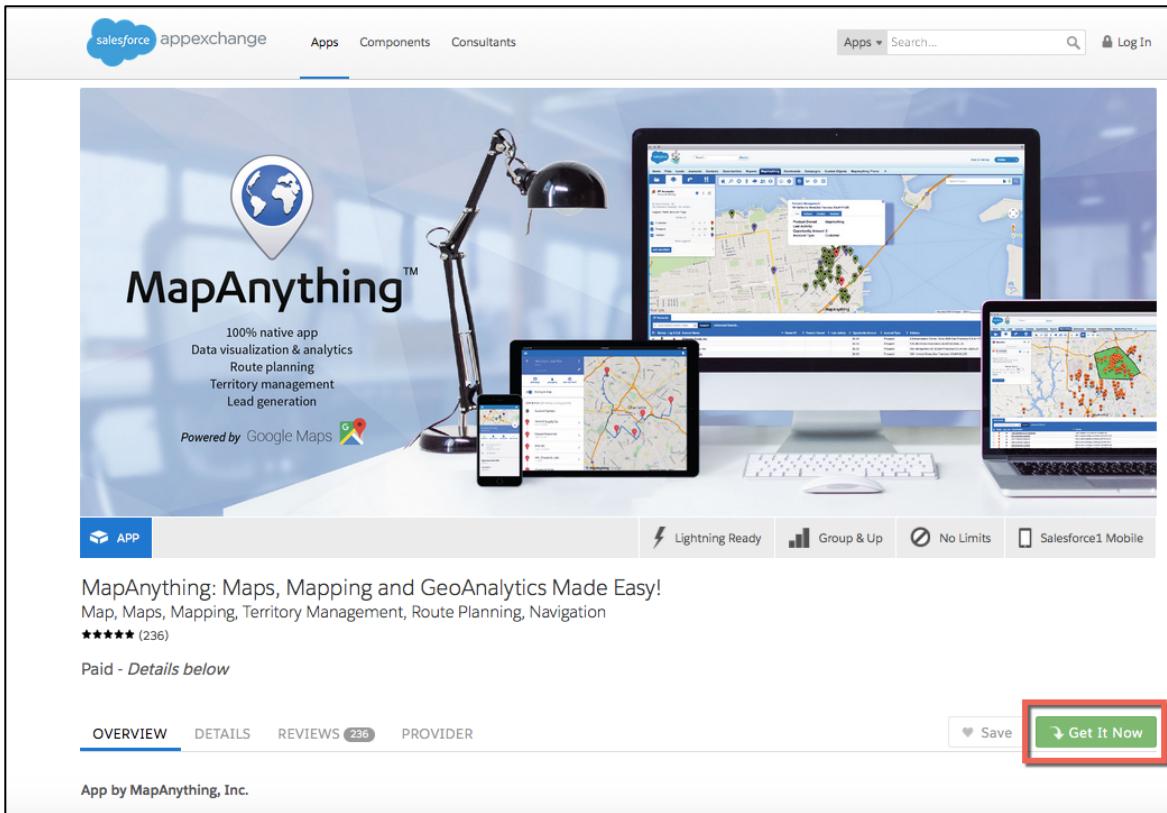


2. In the App Search Box at the top of the screen search for **Map Anything**



3. Click on the **MapAnything listing** and review the details, reviews, demo etc.

- Click the green **Get It Now** button



- If prompted, select the option to **Login to the AppExchange** with your DE org credentials

To get this app, select one of the below options

**Log in to the AppExchange**  
Use your Salesforce credentials

I don't have a login  
Continue as a guest

- Click the **Install in Production** option

**Install in production**  
Includes active, trial or developer orgs

- Agree to the terms and conditions and click **Confirm & Install**

- If prompted login with your DE Org credentials

- Select **Install for All Users**

- Click **Install**

- Click **Yes**, Click **Continue**

Note: The Installation will take a few minutes.

12. Click **Done**
13. Review the **Installed Packages** Page and note this is where you can review versions, status and the configurations of your installed packages

The screenshot shows the 'Installed Packages' page from the Salesforce AppExchange. At the top, there's a message about browsing, testing, and installing pre-built apps and components. A 'Visit AppExchange' button is visible. Below this, the 'Installed Packages' section lists one package:

| Action                    | Package Name                 | Publisher      | Version Number | Namespace Prefix | Status | Allowed Licenses | Used Licenses | Expiration Date | Install Date      | Limits | Apps | Tabs | Objects |
|---------------------------|------------------------------|----------------|----------------|------------------|--------|------------------|---------------|-----------------|-------------------|--------|------|------|---------|
| <a href="#">Uninstall</a> | Salesforce1 and Chatter Apps | Salesforce.com | 1.10           | sf_chtr_apps     | Free   | N/A              | N/A           | N/A             | 2/24/2016 1:22 PM | 0      | 0    | 0    | 0       |

**Description:** This package contains Connected Applications for all the officially supported Salesforce1 and Chatter applications on your desktop and mobile devices!

[Uninstall](#) | [Configure](#) | [Manage Licenses](#) | [MapAnything](#)

**Uninstalled Packages**

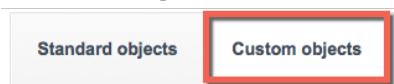
No uninstalled package data archives

14. You should now be able to see MapAnything as an option in the “App Picker”. **NOTE: Do not Click on MapAnything just yet**

## Use the Data Import Wizard to Import a Set of Demo Referral Records

Before we setup and configure MapAnything, we need to import a set of test Referral Records so we will be able to plot these records within the MapAnything maps. We have prepared a .CSV file that contains a number of Referral records. You can download it from this link: <http://bit.ly/1Qsddg0>

1. Navigate to **Setup > Administer > Data Management > Data Import Wizard**
2. **Review** the Data Import Wizard Page
3. Click the green **Launch Wizard** button
4. In the first step of the wizard, click the **Custom Objects** tab



5. In the *What do you want to do?...* section, click **Add New Records**
  - a. Leave the default values they way they are. We will not modify anything here.
6. In the *Where is your Data Located?* column, **click the .CSV Icon**
7. Click **Browse...**
8. Navigate to the **Intake\_c.csv** file

9. Click **Open**

10. Click **Next**

In the next step of the wizard you will edit the mapping of the fields in the .CSV file and point them to the fields in your Referral object.

11. Click the **Map** **Hyperlink** for each row and match up the corresponding attribute in the .CSV file with the appropriate field in the Referral Object. **NOTE: Leave the “Disposition” attribute unmapped. We did not create a Disposition field in our Referral Object.**

The screenshot shows the 'Edit Field Mapping: Referrals' step of a wizard. At the top, there's a progress bar with 'Almost done' and two buttons: 'Choose data' and 'Edit mapping'. The main area is titled 'Edit Field Mapping: Referrals' and contains a table for mapping CSV headers to Salesforce fields. A tooltip 'For each row, click "Map"' points to the first column. A red circle labeled '1' is on the 'Map' button for the first row. A red box labeled '2' contains the text 'Review Attribute Value from the .CSV File'. A red circle labeled '3' is on the 'Category' field in the 'Select field' dropdown. A red box labeled '4' contains the text 'Select the Referral Object Field'. A red circle labeled '4' is also on the 'Map' button in the bottom right corner of the modal. The modal title is 'Map your field: Category\_\_c'. The table rows include:

| CSV Header            | Salesforce Object     | Action |
|-----------------------|-----------------------|--------|
| Name                  | Referral Name         | Map    |
| Category__c           | Category__c           | Map    |
| Date_Occurred__c      | Date_Reported__c      | Map    |
| Date_Reported__c      | Disposition__c        | Map    |
| Mandated_Reportert__c | Mandated_Reportert__c | Map    |
| Response_Priority__c  | Response_Priority__c  | Map    |
| Reporter_Type__c      | Reporter_Type__c      | Map    |

12. Once you have completed all of the mappings (except for Disposition), then click **Next**

13. **Review** the summary page

14. Click **Start Import**

15. Review the **Bulk Data Load Job Detail** page

16. Did any records fail? \_\_\_\_\_

17. Navigate to the **Referrals Tab**

18. Select the **All View** and Click **Go**

19. Notice there is a number of Referral records now in the application

20. Edit the All View and expose the following columns

View: All Go! Edit Create New View

Step 3. Select Fields to Display

Available Fields

Selected Fields

Add Remove Top Up Down Bottom

Referral Id  
Referral Name  
Date Occured  
Date Reported  
Category  
Sub-category  
Status  
Status Indicator  
Response Priority  
Priority Indicator  
Owner Alias

Expose these columns in this order

21. Click Save

## Setup and Configure MapAnything

22. Click the "+" in the Tab Bar



23. Click the Customize My Tabs button

Add Tabs to Your Default Display    **Customize My Tabs**

24. Move MapAnything to the Selected Tabs column and click Save

Available Tabs

Selected Tabs

Add Remove Up Down

Accounts  
App Launcher  
Assets  
Campaigns  
Cases  
Console  
Content  
Contracts  
Contribute  
D&B Companies  
Data.com

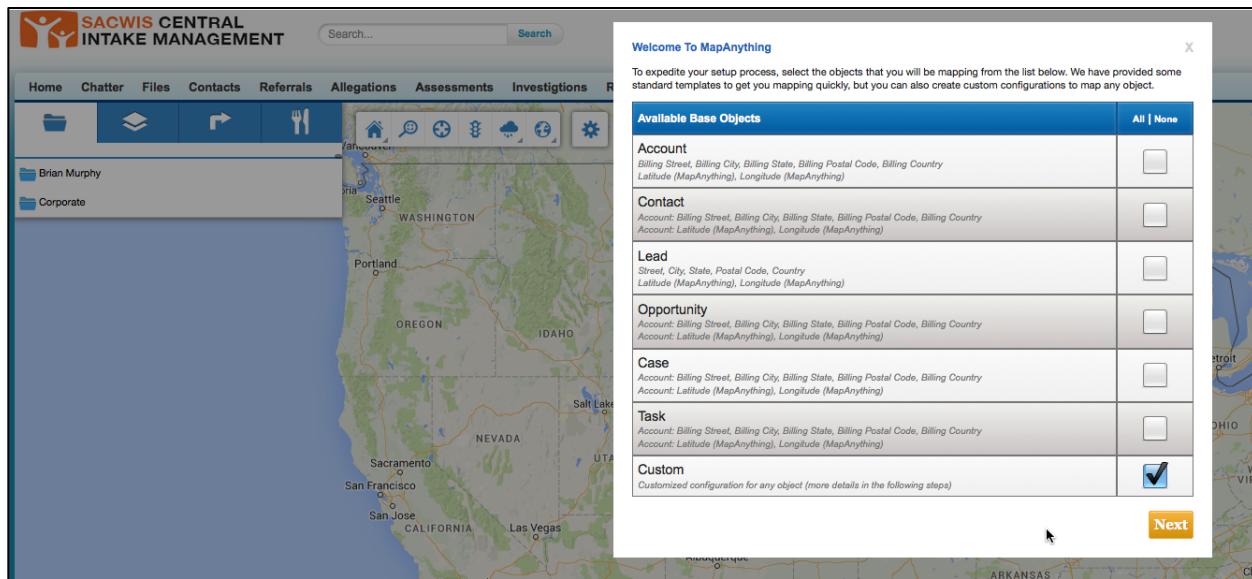
Home  
Chatter  
Files  
Contacts  
Referrals (default)  
Allegations  
Assessments  
Investigations  
Reports  
Dashboards  
**MapAnything**

25. Now, click the MapAnything Tab

You should now see a "Welcome to MapAnything" screen where you can pick which Object(s) to enable for Mapping. (Click done on any pop-up dialog that may appear over this screen)

Since our Application is for Central Intake we will choose to only map and plot Referral records.

**26. Click the Custom Checkbox and Deselect all others**



**27. Click Next**

**28. Name: Referrals**

**29. Base Object: Referral**

**30. Click Next**

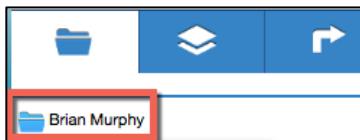
**31. In the Custom Configuration – Field Map, set up the information to match the following:**

A screenshot of the 'Custom Configuration - Field Map' dialog. The dialog has a header 'Custom Configuration - Field Map' and a sub-instruction: 'Now select the fields that are used to store the address information for this object. If needed, you can choose fields on a parent object (i.e. use the account billing address for contacts related to that account).'. A table lists fields: Address Location (set to 'This Object'), Street, City, State, Postal Code, Country, Latitude, and Longitude. Each field has a dropdown menu. The 'Country' dropdown has 'Please Choose--' selected. The 'Latitude' and 'Longitude' dropdowns have '--Create New--' selected. At the bottom are 'Back' and 'Next' buttons.

32. Click **Next**

## Setup a Query to Plot all P1 & P2 Referrals on a Map

33. Right-Click the folder with your name on it



34. Select **Create Saved Query > Referrals**

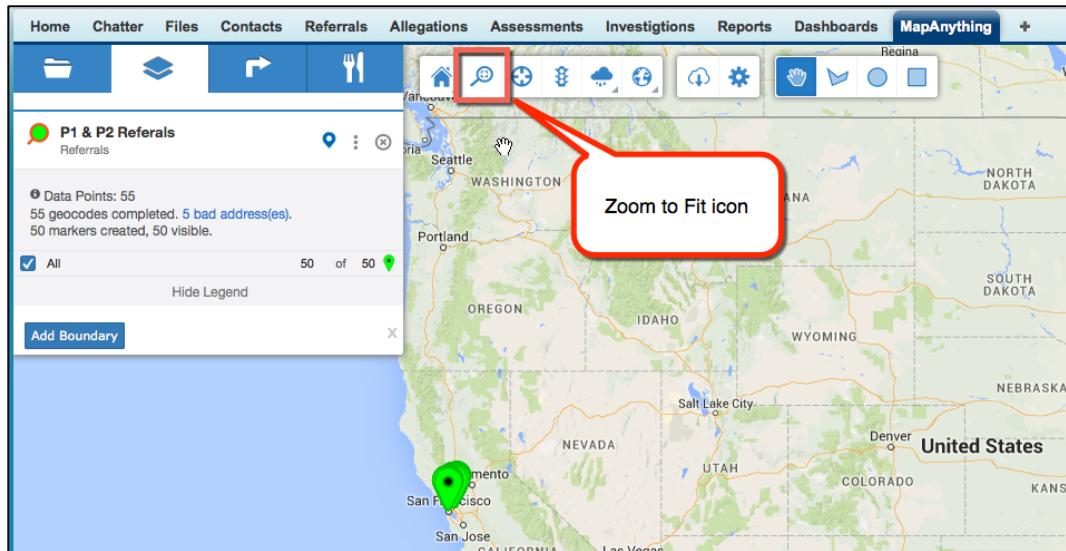
35. Enter the Following Information:

- a. Name: **P1 & P2 Referrals**
- b. Description: **Referrals for investigation within 48 hours**
- c. Click **Add Filter**
- d. Field: **Response Priority**
- e. Operator: **Equals**
- f. Values: **P1, P2**

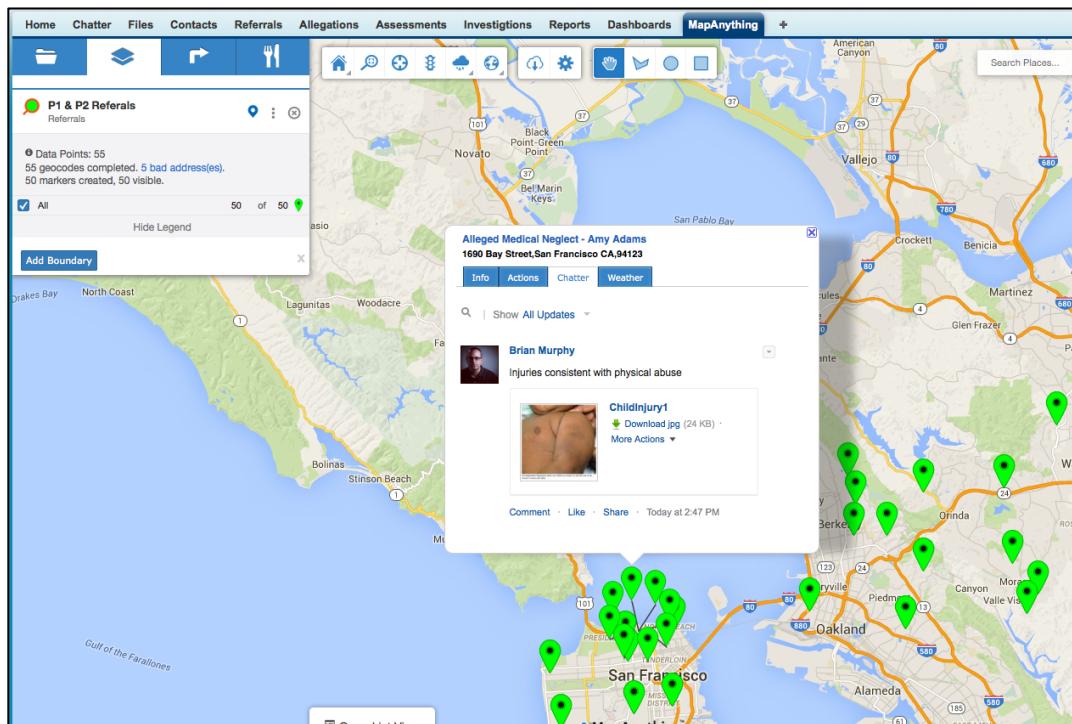
A screenshot of the 'Create/Edit Saved Query' interface. The 'Filters' tab is selected. A 'Field Filters' section shows a dropdown for 'Response Priority' set to 'equals', and a list of values 'P1, P2'. A checkbox for 'P2' is checked. Other options like 'P1' and 'P3' are also listed.

36. Click **Save & Plot**

37. Click the **Zoom to Fit** Icon to zoom into the map



38. After zooming in, pick one of the Referral pins and see what actions you can take from the map. Notice that you can execute Actions and access the Chatter feed right from the map.



39. Click the **Actions Tab**

40. Click Activities > **Log a Call**

41. What Happens? \_\_\_\_\_

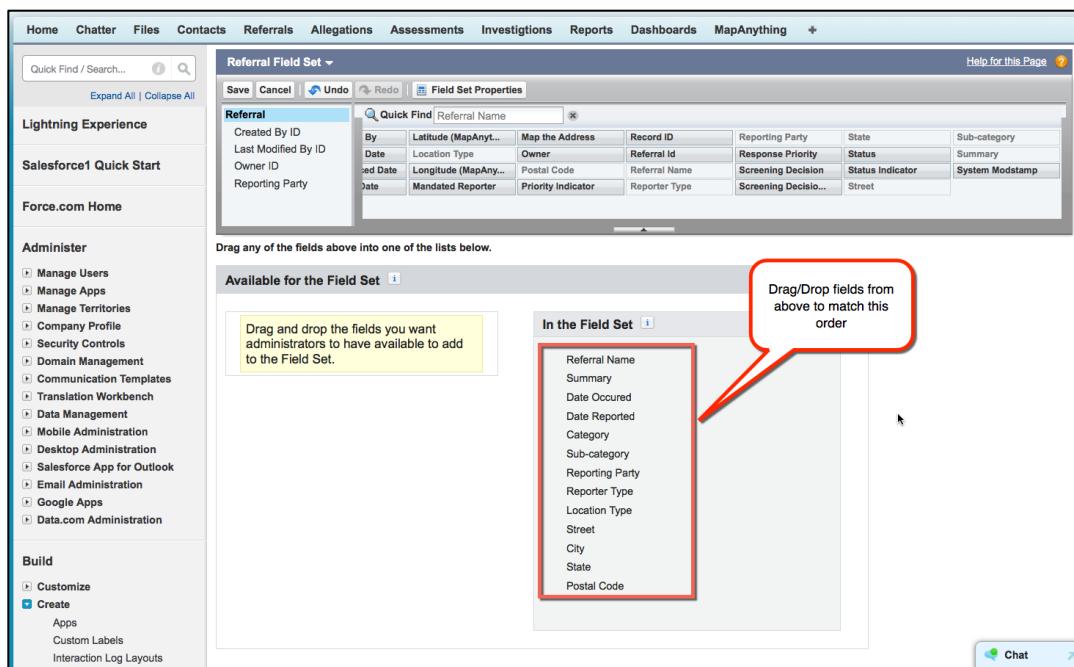
## Setup “Click2Create” in MapAnything

One of the great things about MapAnything is that it is native to the Salesforce platform. With some additional simple configuration we can enable a feature in MapAnything called “Click2Create” which allows a user to search for an address or place of interest then create a Salesforce record from the address. Let’s quickly get this feature setup! We first have to create a “Field Set” on the Referral Object, then we will configure some setup properties in MapAnything.

42. Navigate to **Setup > Create > Objects > Referral**

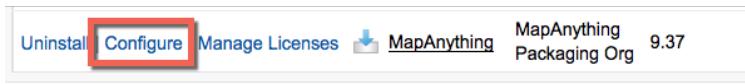
43. Scroll down to the **Field Sets** related list and create a **New Record** with the following information:

- a. Field Set Label: **Referral Field Set**
- b. Where is this used? **MapAnything**
- c. Click **Save**
- d. **Drag/Drop** the following fields to the Field Set layout and **Save**:



44. Navigate to **Setup > Build > Installed Packages**

45. Click **Configure** on the MapAnything package



46. Click the **Click 2 Create** hyperlink

MapAnything Administration  
Click 2 Create

Object  
Object Lead

Oh Snap! Looks like the object you selected doesn't have any Field Sets. Please create one or more field sets or select a different object.  
If you need assistance please reach out to our support team at <http://cloudbilt.com/support>.

47. Select the **Referral Object** from the Object Picklist

48. In the next screen you will enable the ability to execute a map point of interest (POI) and enter data according to a field mapping. Set the field mappings to match the following graphic, then click **Save**

MapAnything Administration  
Click 2 Create

Object  
Object Referral

Field Mappings

|             | POI                                 | My Position                         | Map Click                           |
|-------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Enabled     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Street      | Street                              | Street                              | Street                              |
| City        | City                                | City                                | City                                |
| State       | State                               | State                               | State                               |
| Postal Code | Postal Code                         | Postal Code                         | Postal Code                         |
| Country     | --Please Choose--                   | --Please Choose--                   | --Please Choose--                   |
| Latitude    | Latitude (MapAnything)              | Latitude (MapAnything)              | Latitude (MapAnything)              |
| Longitude   | Longitude (MapAnything)             | Longitude (MapAnything)             | Longitude (MapAnything)             |
| Name        | Referral Name                       | Referral Name                       | Referral Name                       |
| Phone       | --Please Choose--                   | N/A                                 | N/A                                 |
| Website     | --Please Choose--                   | N/A                                 | N/A                                 |

Field Set Mapping

| Record Type             | POI                | My Position        | Map Click          |
|-------------------------|--------------------|--------------------|--------------------|
| Master (System Default) | Referral Field Set | Referral Field Set | Referral Field Set |

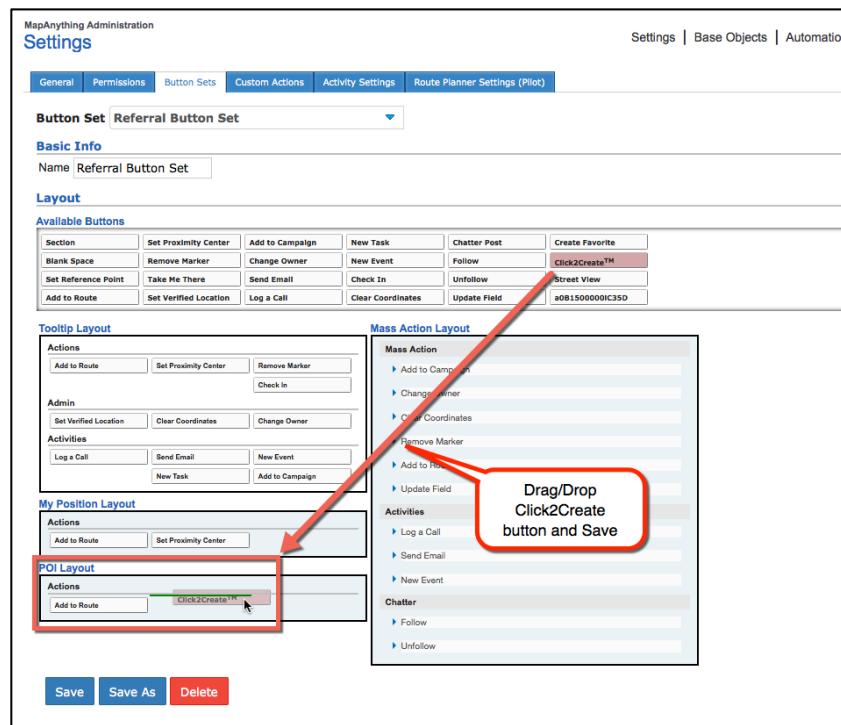
49. Now click the **Settings** hyperlink at the top right-hand side of the page

50. Click the **Button Sets** Tab

51. In the Button Sets Screen enter the following information:

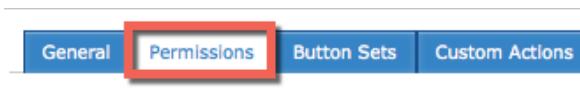
- Name: **Referral Button Set**

- b. Drag/Drop the Click2Create button to a spot on the POI Layout

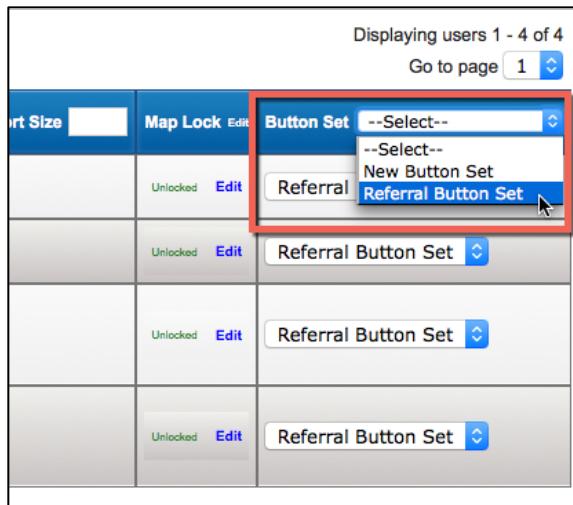


52. Click **Save**

53. Click to the **Permissions Tab**



54. Scroll over all the way to the right and select the **Referral Button Set** for each profile



55. Click the **General Tab**

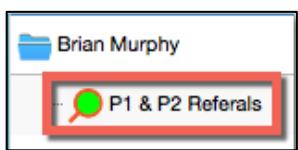
56. Click **Save**

## Try Out the Application

In this example, you are an intake worker that has received a call at the central intake hotline and the reporting party says they observed a potential physical abuse incident at Marina Middle School in San Francisco. You will start the referral process by searching the map for the location then will create the referral from the Click2Create function.

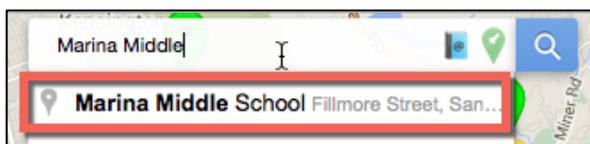
57. Click the **MapAnything Tab**

58. Double-click the **P1 & P2 Referrals** saved query

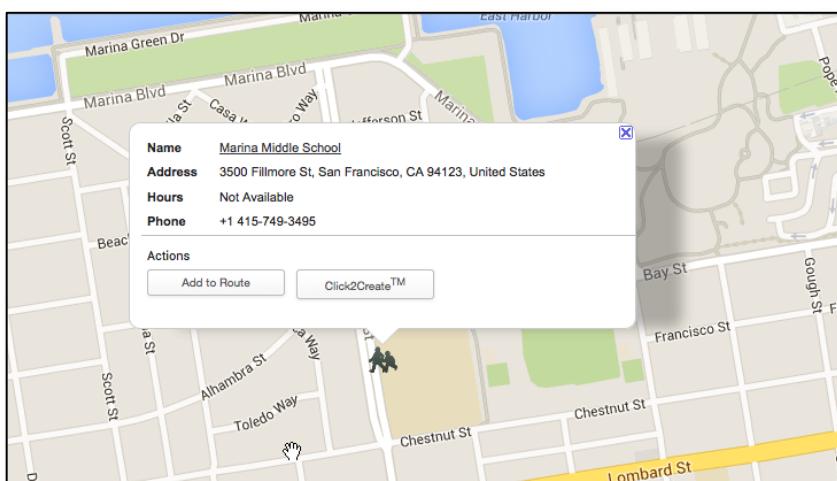


59. Click the **Zoom to Fit** Icon

60. In the Search box enter: **Marina Middle School**, select the address on Fillmore Street|

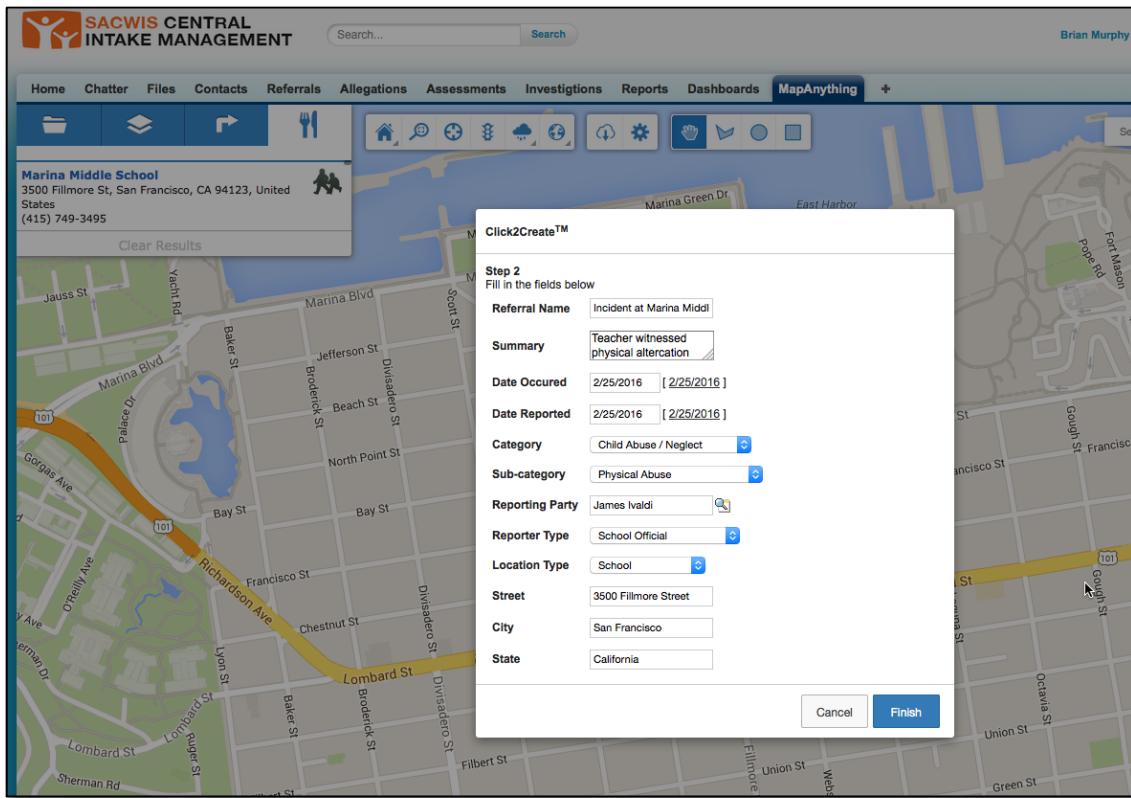


61. Zoom into the map and **click the icon**, then click the **Click2Create button**



62. Click **Continue**

63. Complete all of the fields in the Click2Create Referral form and click **Finish**



64. Once the record saves, then **click the Referral Name hyperlink**

65. What happens? \_\_\_\_\_

66. **Challenge:** Log into the Salesforce1 Mobile app and access the MapAnything tab. (Hint: You must first expose the MapAnything Tab via **Salesforce1 QuickStart** in Setup)

Congratulations you have just installed and configured the MapAnything AppExchange package!

# 7.0 Analyze Data with Reports & Dashboards

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## Duration: 30-45 Minutes

How great would it be to get a report in your inbox every morning as the director of the child welfare agency's central intake division that tells you exactly how many referrals came in the last 24 hour period? Or, a report that tells you how many P1 referrals have overdue investigations? And, perhaps you'd like to see that information displayed as a graphical chart whenever you access the app on your phone. Good news because that is all possible.

This series of tutorials introduces you to reports and dashboards. Once you've defined your reports, you can place them on a dashboard, so you can see all your key metrics at a glance. Salesforce Reporting lets you see what's important to you, exactly how and where you want to see it.

The Central Intake app you created with the App Quick Start Wizard includes a Reports tab, where you can create, edit, run, and schedule reports. Start by creating a simple report that tells you how many referrals you have. Then you'll use groupings and filters to get the most out of the data in your report.

## Create a Simple Report

1. Click on the **Reports Tab**
2. If prompted, take the quick tour of Reports functionality by clicking **Start Tour**
3. Click **New Report**
4. Expand/Open the **Other Reports Folder**



5. Select **Referrals** and then click **Create**
6. Again, click through the tour of the report builder if prompted

In order to build your report you can either drag/drop or double-click on fields from the **Fields panel** in the report builder.

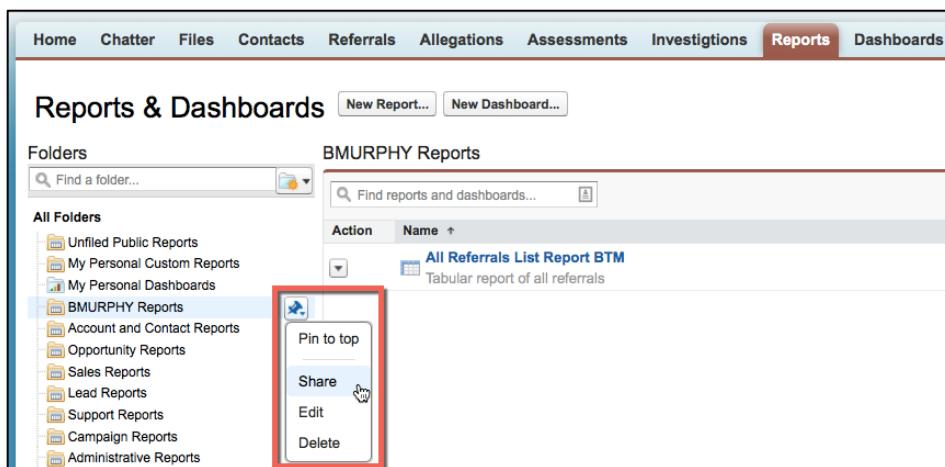
The screenshot shows the Salesforce Report Builder interface. On the left, there's a sidebar titled "Fields" with a "Quick Find" search bar and a list of fields. A red callout points to the search bar with the text "Use ‘type-ahead’ functionality to search for fields quickly". A red arrow labeled "1" points to the "Referral Id" field in the list. Another red callout points to the "Add" button in the "Filters" section with the text "Add filters to your reports". A third red callout points to the "Date Field" section with the text "Add date ranges to the report scope". The main area shows a "Preview" of the report results in "Tabular Format". A red arrow labeled "2" points from the "Referral: Created Date" field in the preview to a checked checkbox labeled "Referral: Created Date" in the "Selected Fields" list.

7. Add the following fields to the report in this order:
  - a. Referral Id
  - b. Referral Name
  - c. Category
  - d. Sub-Category
  - e. Reporter Type
  - f. Mandated Reporter
  - g. Status
  - h. Status Indicator
  - i. Response Priority
  - j. Priority Indicator
  - k. City
  
8. In the **Show Picklist**, set the value to **All Referrals**
  
9. Click **Save**
  
10. Fill in the following information to name the report
  - a. Name: **All Referrals List Report**
  - b. Description: **Tabular report list of all referrals**
  - c. Report Folder: **Unfiled Public Reports** (this folder is public so everyone can access it)
  - d. Click **Save & Run Report**

11. How many records are there? \_\_\_\_\_  
 (Hint: Scroll to the bottom of the report)
12. Click the **Summarize Information by:** picklist and select **Category**.
13. Click **Run Report**. What Happens? \_\_\_\_\_
14. Click the **Hide Details** button  
 a. What do you notice? \_\_\_\_\_
15. Click **Printable View**  
 a. What do you notice? \_\_\_\_\_
16. Click **Export Details**  
 a. What do you notice? \_\_\_\_\_
17. Click **Subscribe**  
 a. What do you notice? \_\_\_\_\_

#### Additional Points on Reports

- In the **Time Frame section**, you can choose to run this report based on the created, modified, or last activity date, as well as choose the date range for the data you want to see such as Last 7 Days, Last Month, Last Quarter and so on.
- Click the **column headers** to toggle between ascending and descending order. The Grand Totals indicates the record count as well as the summaries you chose. Click **Customize** to make additional changes to this report.
- You can click through to the data records that are being reported on, a characteristic found in all reports on Salesforce. For example, click the name of any Referral record listed in the report to view its detail page.
- A report folder's sharing settings determine who can do what with reports in that folder. Click the "pin" icon next to the folder in the Reports tab and click Share. You can give people three levels of access: Viewer, Editor, or Manager.

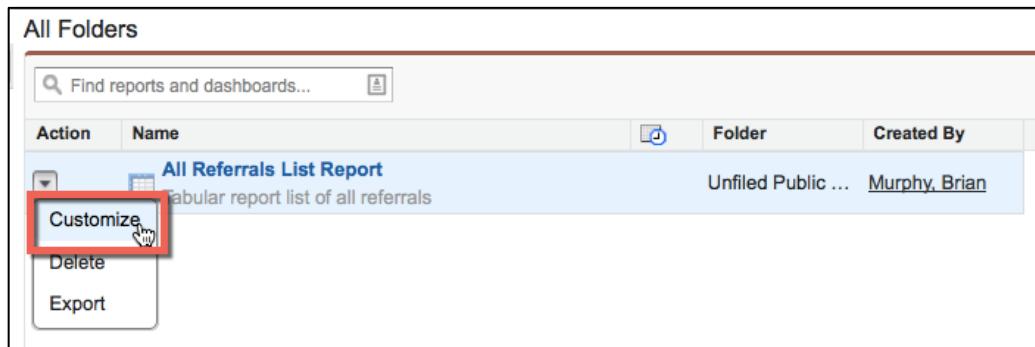


## Customize an Existing Report into a New Report

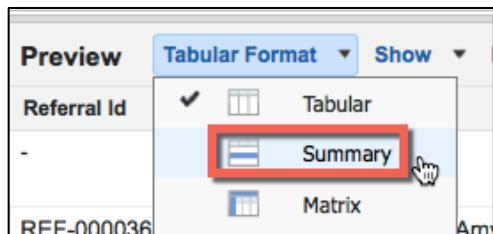
We will now use the first we report as the basis for creating 3 additional reports. Much like you can open a Microsoft Word document and use the “save as” feature to create a different version of the document, you can do the same with Salesforce Reports.

18. Click on the **Reports Tab**. You should see the report you just created in the All Folders list.

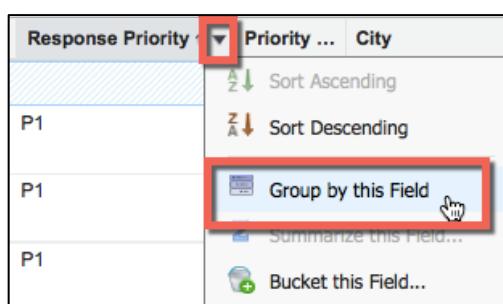
19. Click the “down arrow” icon next to the All Referrals List Report and click **customize**



20. Change the report format to a **Summary** format



21. Next, scroll over to the **Response Priority** column and in the header, select **Group by this Field**



22. Next, click the Add Chart button

23. In the **Formatting Tab**, set the Chart Title to: Referrals by **Response Priority**

24. Click **Ok**

25. Click the **Save As** button

- a. Report Name: **All Referrals by Response Priority**
- b. Description: **All Referrals grouped by Response Priority**
- c. Report Folder: **Unfiled Public Reports**
- d. Click **Save and Run Report**

We will now create 2 more reports similar to the one you just created

26. Click the **Reports Tab**

27. Click **Customize** next to the **All Referrals List Report**

28. Group the report by the **Category Column**

29. Click the **Add Chart** button

30. Select a **Pie Chart**

31. In the **Formatting Tab** set the chart title to: **Referrals by Category**

32. Click the **Show Wedge %** checkbox

33. Click **Ok**

34. Click the **Save As** button

- a. Report Name: **All Referrals by Category**
- b. Description: **All Referrals grouped by Referral Category**
- c. Report Folder: **Unfiled Public Reports**
- d. Click **Save and Run Report**

35. Next, create another report based on the **All Referrals List Report** that groups the report by **City**, and then **sort City by Record Count > Ascending**.

Add a **Vertical Bar Chart** with the title: **Referral Trend by City** and save the report to the **Unfiled Public Reports** folder.

36. **Save & Run** the Report

## Create a Referrals Dashboard

Dashboards in Salesforce are like a dashboard in your car, showing you important information at a glance. Dashboards can show data in charts, gauges, tables, metrics, or even within a Visualforce page. Naturally, you can customize dashboards to show exactly what you want. In this tutorial, you create a new dashboard that's powered by the reports you created in the previous tutorial.

37. Click on the **Reports Tab**

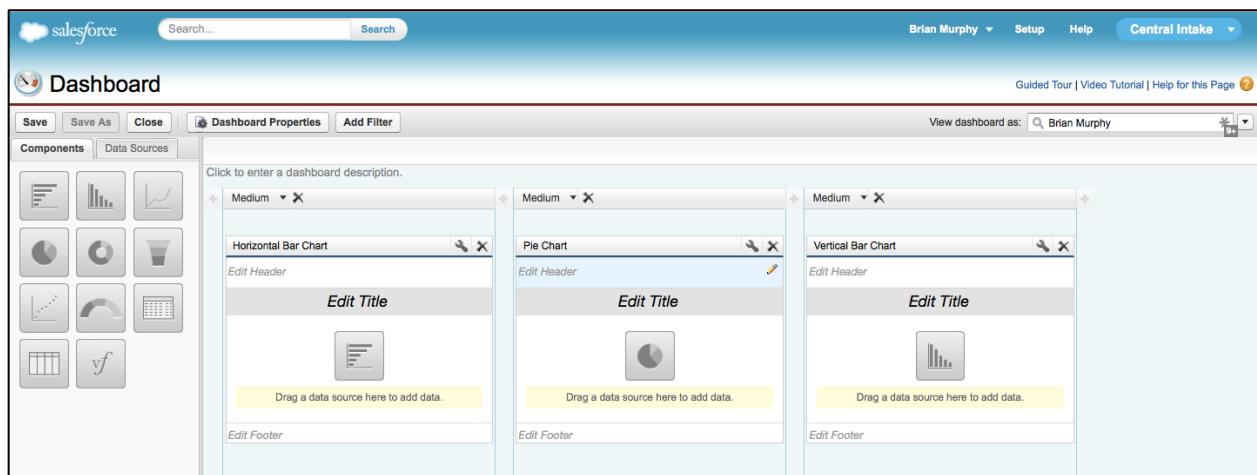
38. Click the **New Dashboard** button



39. If prompted, complete the interactive tour

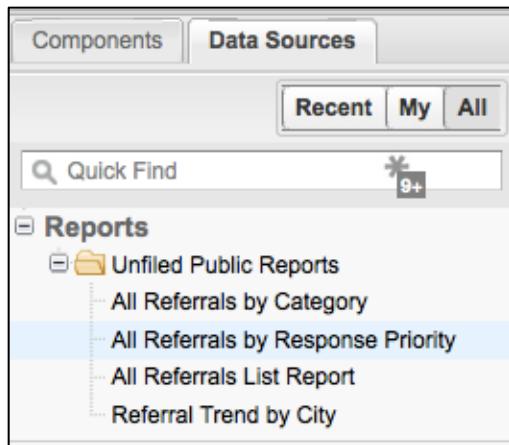
The Dashboard composer allows you to drag/drop graphical components to the canvass and then map each component to a (report) data source.

40. Drag/Drop a **Horizontal Bar Chart Component to the left column**; drag/drop a **Pie Chart Component to the middle column** and drag/drop a Vertical Bar Chart Component to the right column. When complete, your screen should look like the following:

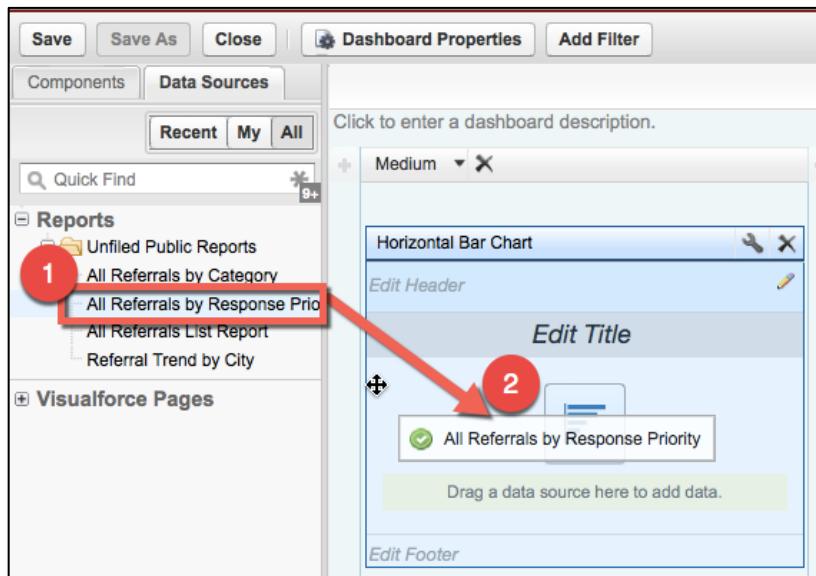


41. Next, click on the **Data Sources Tab**

42. Click **Reports > Unfiled Public Reports** to expand the folders



43. Next, drag/drop the **All Referrals by Response Priority** report on top of the Horizontal Bar Chart component in the left column



44. Drag/drop the **All Referrals by Category** report on the **Pie Chart** component in the middle column

45. Drag/drop the **Referral Trend by City** report on the **Vertical Bar Chart** component in the right column

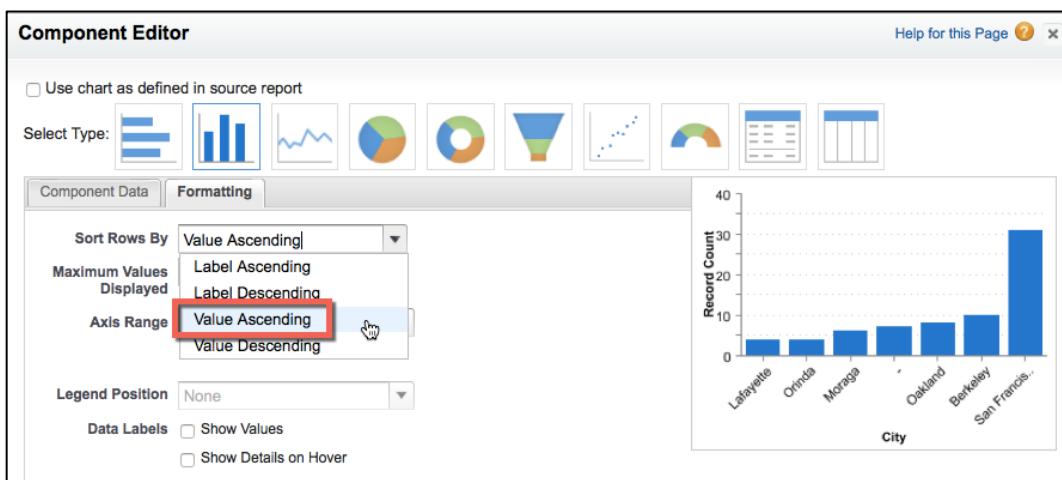
46. Next, **edit the Title** of each report from left-to-right:

- Left Column: **Referrals by Priority**
- Middle Column: **Referrals by Category**
- Right Column: **Referral Trend by City**

47. Click the “**wrench**” icon on the Referral Trend by City component



48. In the **Formatting Tab**, change the **Sort Rows By value to: Value Ascending**



49. Click **Ok**

50. Click **Save**

51. Set the Dashboard Title: **Referral Dashboard**

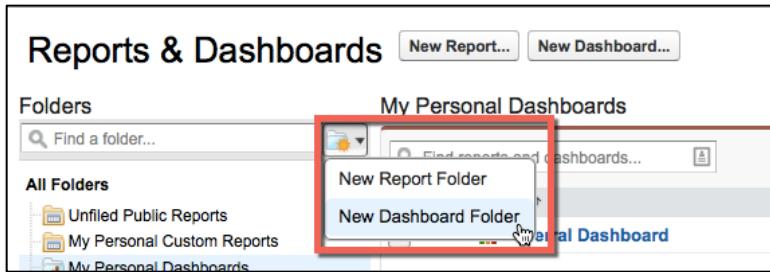
52. Save To: **My Personal Dashboard**

53. Click **Save and Run Dashboard**

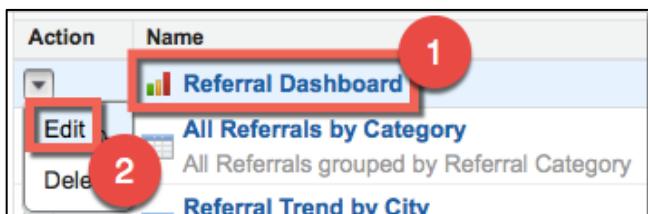
54. Click on one of the charts in the dashboard. What happens? \_\_\_\_\_

55. Click on the **Reports Tab**

56. Click the **Folder Icon > New Dashboard Folder** like in the graphic below:



57. Enter the Dashboard Folder Label: **Central Intake Division**
58. Click **Save**
59. Click the **Reports Tab**
60. Click the "down arrow" icon next to the Referral Dashboard and select **Edit**



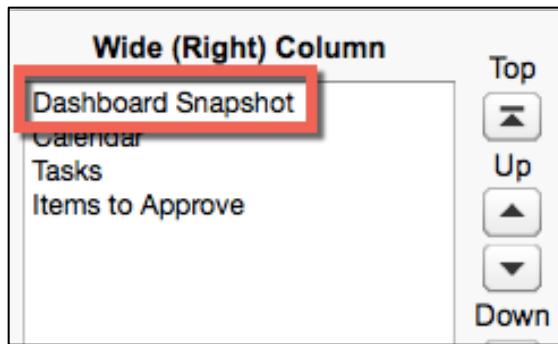
61. Click the **Dashboard Properties** button
62. Change the Save To from My Personal Dashboards to **Central Intake Division**
63. Click **Save, Close, Close**

## Update Your Home Page to Display the Dashboard Component

Salesforce has the ability to display a dashboard component on your application home page and in this exercise we will use Setup in order to expose and configure that component so it displays on the top section of your home page beneath your Chatter feed.

64. Navigate to **Setup > Build Customize > Home > Home Page Layouts**
65. Click **Edit** next to the DE Default home page layout
66. Click the **Dashboard Snapshot checkbox**
67. Click **Next**

68. Using the “up” arrow, move the Dashboard component above Calendar



69. Click **Save**

70. Click the **Home Tab**

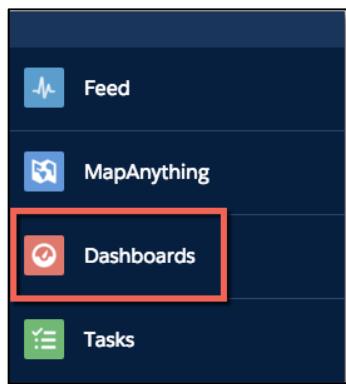
71. Does your Referrals Dashboard appear on the home page? ( ) Yes ( ) No

72. Login to the Salesforce1 Google Chrome Simulator or to the native Salesforce1 app on your phone

73. Click the **Menu Icon**



74. Click **Dashboards**



75. Click/tap into the **Referral Dashboard**

76. Can you see all 3 reports? ( ) Yes ( ) No

77. Click/tap on one of the dashboard components. What happens? \_\_\_\_\_

## Additional Notes on Dashboards

- Dashboards can be updated either manually or on a schedule, and they can be delivered through email and mobile.
- A dashboard won't automatically refresh unless it is set to do so. Each time you view a dashboard, it indicates in the upper-right corner when it was last refreshed. To update the data in the dashboard, click Refresh.

# Congratulations!

You have successfully created the Central Intake Management Application! You can now learn more about Salesforce development for FREE using your DE Org at <http://trailhead.salesforce.com>

