Scan Anything

System Administrator Guide to Setup

Scan Anything consists of 3 components;

1. A Barcode Scan Lightning Web Component (LWC) & Flow Component
2. A Scan and Search LWC
3. A generate a Barcode LWC

Scan Anything is a set of tools that allow a Salesforce Administrator to integrate Barcode (and QR Code) scanning and generation into a Lightning App.

Use of the word Barcode

We use the word barcode in this document extensively. For Scan Anything components the word barcode includes both 1D and 2D codes. Even though we do not expressly refer to QR Codes these are fully supported by all Scan Anything components. We use the term barcode to represent all 1D and 2D symbologies.

Scan a Barcode (**LWC & Flow Component Label:** Scan **LWC Name:** scan)

The Scan LWC can be placed only onto Lightning App Pages and is enabled for Phone and Tablet form factors. Scan offers the user two modes of operation: Single or Multiple Scan. Single scan will finish the scan when a single barcode is successfully read. Multiple Scan will read a series of barcodes (with a controllable delay between reads) and pass a list of scanned values into a Flow. The user exits Multiple scan mode by pressing the X in the top right of the scanning window. The use case for scan is simply to collect the barcode value(s) and pass them into a Flow or other component for further processing. This component utilizes the following Salesforce barcode API:
https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.use_barcodescanner_compatibility

Component Attributes
- Barcode types (symbologies supported: code128,code39,code93,datamatrix,ean13,ean8,itf,pdf417,qr,upce),
  - If left blank all symbologies will be supported
  - You can use a comma separated list to restrict the symbologies supported IE: code39,code128,qr would only successfully scan Code 3 of 9, Code 128 or QR Codes. You can use this to restrict the symbologies that can be read.
- Delay between scans - Delay between scans in multiple scan mode
  - Defaults to 1000 ms
  - Appies to Multiple scan mode only
- Is value visible - Deselect this attribute if you plan to display the scanned value yourself
- Postprocessing
  - Values - Outputs the scanned value without manipulation
  - Unique - Removes any duplicate scanned values (only applicable to Multiple scan)
- Scanning mode
  - All - Both single scan and multiple scan buttons are displayed
  - Single - Only Single scan button is displayed
  - Multiple - Only the Multiple scan button is displayed

Scan and Search (**LWC Label:** Scan & Search **LWC Name:** scanSearch)

Scan and Search is a stand alone component that scans a Single barcode and then attempts to find matching records in the Salesforce Org. The match is performed in 2 ways. If the scanned value matches the SFDC ID of a record in the org,that record is opened for the user. If the scan does not match an SFDC ID a further search is performed to see if the barcode scan matches on or more SA_ID fields. See the section on how to add these fields on any object in your org. This allows users to use existing or pre-printed barcodes and link them to specific records. Scan and Search does not integrate to a Flow. Scan & Search is pre-configured as a Menu item and can be added as a Global Action.

Generate a Barcode on page (**LWC Label:** Barcode (1D) and mosaic (2D) code generator **LWC Name:** code)

Component Attributes
- Object + field API Name
  - Use this to encode a fields value into a barcode
  - Supports going up like formulas eg. Contact.Account.Owner.Profile.Name
  - If left empty the record ID will be encoded (Text Value must be empty also)
- Text Value
  - If you wish to encode a specific value enter it here
  - If there is a value in this attribute this value will be encoded and the Object + field API Name will be ignored
- Code type
  - Select the encoding symbology to use (note: we support more encoding symbologies than are supported by our Scan component. Choose one of the following if you intend to scan the resulting image using our Scan component: code128,code39,code93,datamatrix,ean13,ean8,itf,pdf417,qr,upce)
- Scale
  - This is the relative size of the displayed encoded barcode
- Caption Position - Choose one of three options
  - Bottom
  - Top
  - Off

Assigning Scan Anything Licenses

Scan Anything is licensed on a per user basis. When you install the trial all users will have access to Scan Anything. Once your license has been converted into a production license you will need to assign which users can use Scan Anything.

You need to navigate to the Installed Packages, locate Scan Anything and click the Manage Licenses link. Then add the users you wish to have access to Scan Anything. Unlicensed users will receive a license warning when they attempt to use a component.

Add Users to the ScanAnything Full User Permission Set

In order to access the required functionality you will need to add all Scan Anything users to the ScanAnything Full User permission set.
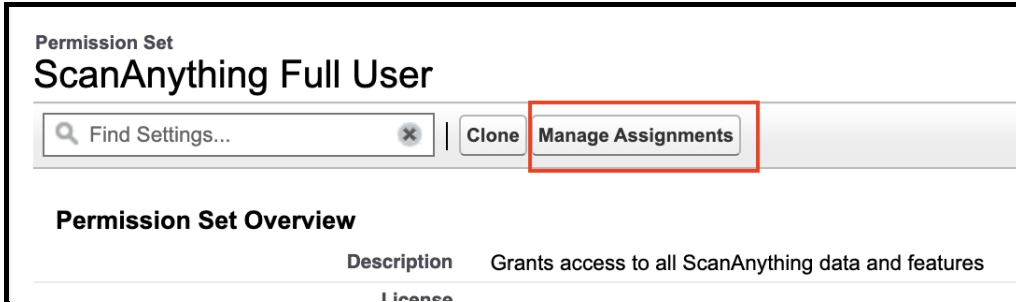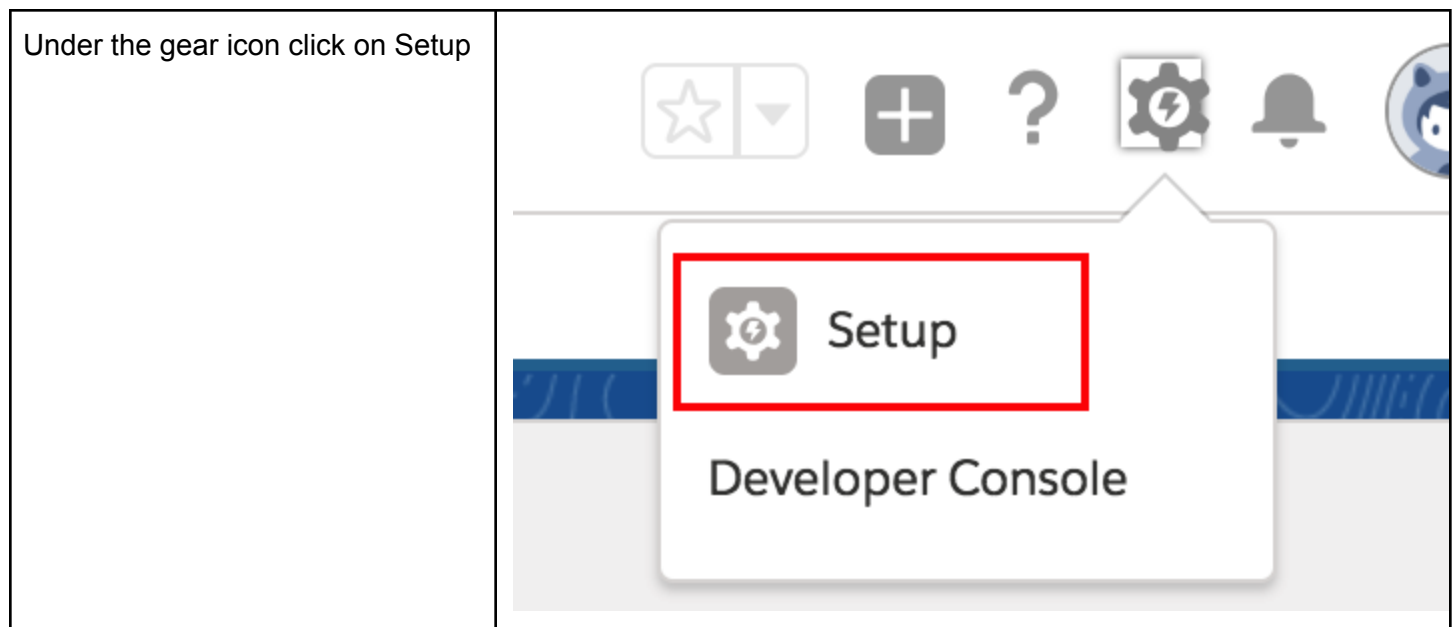

Locate the ScanAnything permission set and click the Manage Assignment button. Add all users to the permission set that will use Scan Anything.

Adding Scannable Fields to your Objects

Scan Anything looks for fields in your salesforce org that have the API Name SA_ID__c. Alternatively Scan Anything will open a record if the Salesforce Record ID is scanned. You can add a custom field to any object in your Salesforce org both standard objects and custom objects with the correct API name (SA_ID__c) and Scan Anything will use that field to match the scanned barcode value.

Let's walk through adding a scannable field to the Contact object as an example.

Under the gear icon click on Setup	

Using the Object Manager tab, click on the Contact object	
Select Fields & Relationships, then click the New button	

Choose a field type of Text, then click Next (No picture)
 	
In the New Custom Field page follow the image. Enter your desired field name for the new field.
1. Length must be long enough to accommodate your data, 120 is recommended
2. Field Name must be SA_ID
3. Unique may be checked if you wish to enforce unique values for barcodes
4. External ID must be checked
Enter the Description, Help text, Required and Case sensitivity as desired. Click Next.
	Contact
	New Custom Field
	
	Step 2. Enter the details
	
	Field Label **Contact Barcode**
	
	Please enter the maximum length for a text field below.
	1 Length **120**
	2 Field Name **SA_ID**
	Description Barcode for the Contact - Used by Scan Anything
	
	Help Text Enter the barcode for this Contact
	
	Required ☐ Always require a value in this field in order to save a record
	3 Unique ☑ Do not allow duplicate values
	    ◉ Treat "ABC" and "abc" as duplicate values (case insensitive)
	    ◯ Treat "ABC" and "abc" as different values (case sensitive)
	4 External ID ☑ Set this field as the unique record identifier from an external system
	
	Default Value Show Formula Editor
	
	Use formula syntax: Enclose text and picklist value API names in double quotes : ("the_text"), include numbers without quotes : (25), show percentages as decimals: (0.10), and express date calculations in the standard format: (Today() + 7)

Set the field-level security and Add to page layouts as desired. Click Save. You should see your new field to match the image. It is **mandatory that the field have a field name of SA_ID__c, that it be an External ID**, and be long enough to store your expected barcode data.	Birthdate Birthdate Date Contact Barcode SA_ID__c Text(120) (External ID) (Unique Case Insensitive) ✓ Contact Owner OwnerId Lookup(User) ✓

Congratulations, you now have a field that you can scan and link to a Contact record. Let's add a value to this field.

Goto the Contacts object and select any contact, then select the Details tab.

Edit the record and record a value in the Contact Barcode field, then click Save.

Contact
Mr. Avi Green

Title Account Name Phone(2) ▼ Email Contact Owner
CFO United Oil & Gas Corp. (212) 842-5500 agreen@uog.com Gordon Derk

RELATED **DETAILS**

Contact Owner   Contact Barcode ⓘ
Gordon Derk

               125

*Name   Phone
Salutation   (212) 842-5500

When a Scan Anything user scans a barcode = 125 the record for Avi Green will open on their salesforce app.

Scan & Search Menu Item

Scan Anything has a preconfigured Lightning Page Tab called Scan & Search. This tab only functions on mobile devices. Use the Salesforce Navigation option to position this tab so that users can see the function where desired.

Scan & Search Global Action

We have included a Custom Visualforce Action that you can use to create a Global Action that starts Scan & Search. You can then place the Global Action on any page you choose. Under Setup go to Global actions and create a New global action based on the image below. Choose ChangeIcon and select the BarCodeIcon. Then add that action to pages as desired.
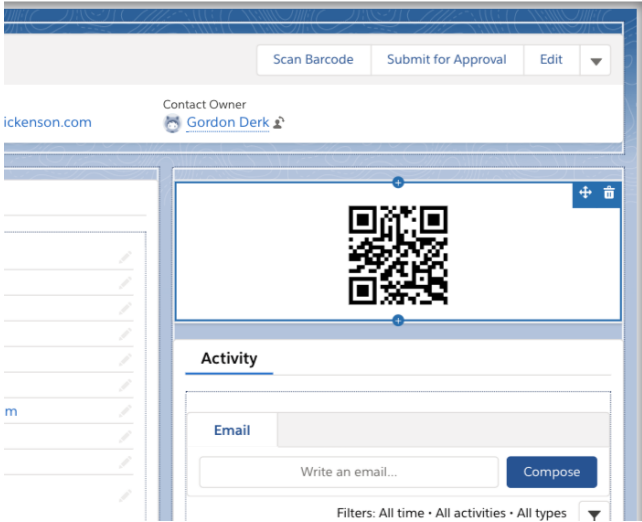
Generate a Barcode on Page

Scan Anything also includes a Lightning Web Component you can use to render a machine readable code in any Salesforce Lightning page. Administrators can drag this Custom Managed Component onto any Lightning App Builder page. Then choose the value to render, symbology and relative size.

Enter the Lighting App Builder. Scroll to the bottom of the Components Tab and you will find the Barcode (1D) and mosaic (2D) component.	
Drag the component onto the app page where desired.	

Use the component attributes to control what value is rendered and which symbology is used.

Into the **Object + field API Name** field enter a valid field to use as the value to be rendered. The help text offers suggestions on a few common techniques.

Text value allows you to specify a static value to be rendered. Leave this blank if you are rendering a field. If any value is entered into the **Text value** it will be rendered and the **Object + field API Name** will be ignored.

Code type allows you to choose from over 100 symbologies both 1D and 2D for the component to render the code. NOTE: Some symbologies do not support all characters so choose a symbology that supports the values you wish to render.

Scale allows you to control the relative size of the rendered code.

As with all components you can use the Set Component Visibility options to determine if the component is visible or not.

Page > Barcode (1D) and mosaic (2D...

Object + field API Name ⓘ

Contact.ID

Text value ⓘ

*Code type

qrcode ✕

*Scale ⓘ

2

⌄ **Set Component Visibility**

Filters

+ Add Filter

Below is an example of the Contact Lightning page with a QR code rendering the Contact.ID field.

Details   Related

Contact Owner	👤 Gordon Derk		Contact Barcode	ⓘ 1656
Name	Mr Andy Young		Phone	(785) 241-6200
Account Name	Dickenson plc		Home Phone	
Title	SVP, Operations		Mobile	(785) 265-5350
Department	Internal Operations		Other Phone	
Birthdate			Fax	
Reports To			Email	a_young@dickenson.com
Lead Source	Purchased List		Assistant	
			Asst. Phone	
Mailing Address	1301 Hoch Drive Lawrence, KS 66045 USA		Other Address	1301 Hoch Drive Lawrence, KS 66045 USA

Activity
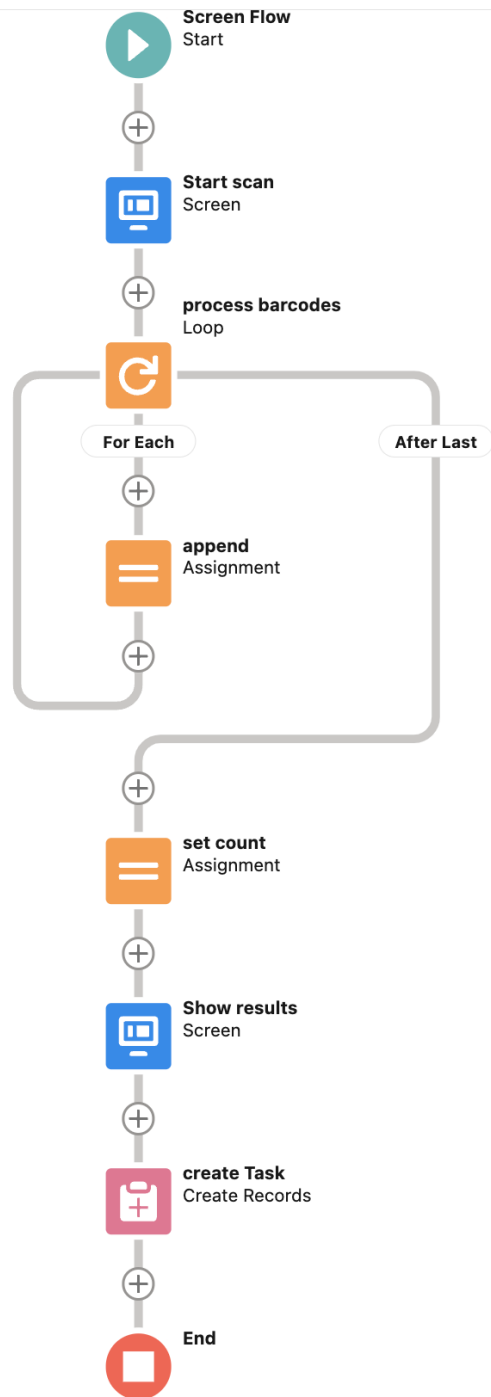
Email

Write an email...   **Compose**

Filters: All time · All activities · All types

Refresh · Expand All · View All

Using Scan in a Flow

We have included an inactive flow template that you can use as a way to learn how Scan Anything can provide 1 or more scanned barcodes to a Flow. Scan is also a Flow Component with the same attributes as the Scan LWC.

The Flow is called Scan & Task. It takes the output from the Scan - Lightning Flow Component and creates 1 or more tasks using the scanned results.	**Screen Flow** Start **Start scan** Screen **process barcodes** Loop For Each After Last **append** Assignment **set count** Assignment **Show results** Screen **create Task** Create Records **End**

In the Screen element, we have added the Scan Custom flow component. The scanned values are passed as output from the component.

Edit Screen

Components | Fields (Beta)

Search components...

Email
File Upload
Long Text Area
Lookup
Multi-Select Picklist
Name
Number
Participants Involved
Password
Phone
Picklist
Radio Buttons
Slider
Special Navigation Buttons
Text
Toggle
URL
Visit Details
⌄ Display (2)
Display Text
Section
⌄ Custom (1)
Scan

Get more on the AppExchange

For demo purposes the component is configured to scan only QR codes.
Remember it will work properly only from Salesforce mobile app.

Scan

Scan
No preview is available for this component.

Pause   Previous   Finish

← Scan

* API Name
scanComponent

Barcode types (symbologies)   ⓘ
{!barcodeTypes}

Delay between scans   ⓘ
1000

Is value visible   ⓘ
{!$GlobalConstant.False}

Postprocessing (type 'unique' to remove
duplicates)
values

> Set Component Visibility

> Advanced

Cancel   Done