

# 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.

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## Scanning Modes explained

The Scan LWC can operate in three different scanning modes. You may choose to allow users to use one, two or all three modes. Each mode offers slightly different features and sometimes limitations. The following will explain the three modes in detail so you can choose which mode or modes your users may require. The buttons for each mode have overridable labels but for this document we will use the default names.

### **Single**

Opens the scanning window until a single barcode is read. The scanning window is closed and the value of the barcode is passed to the flow variable without the user indicating they have finished scanning.

### **Repeat**

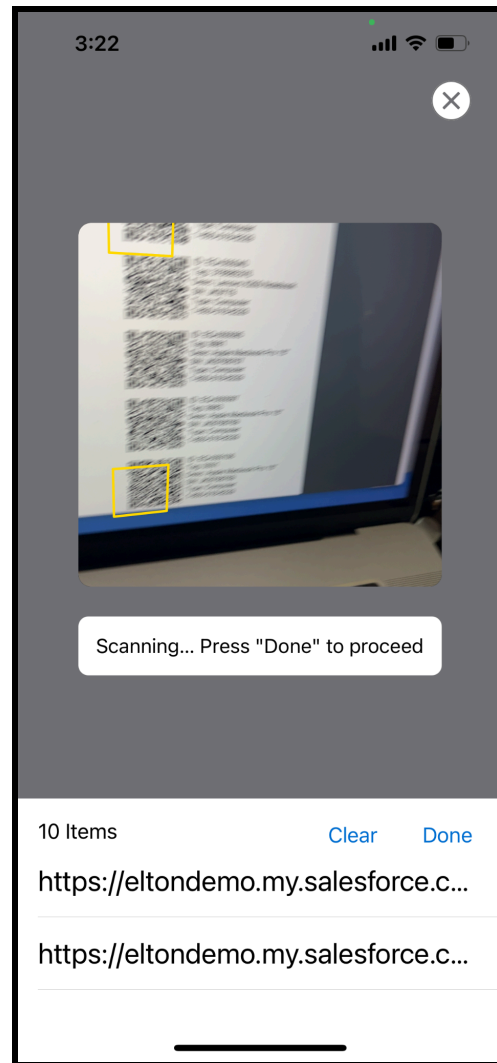
Opens the scanning window until a barcode is read, then re-opens the window until another barcode is read. This continues until the user presses X. Duplicate scans are supported if enabled in postprocessing on the component. The user must tap X to end the repeat scanning.

### **Multi**

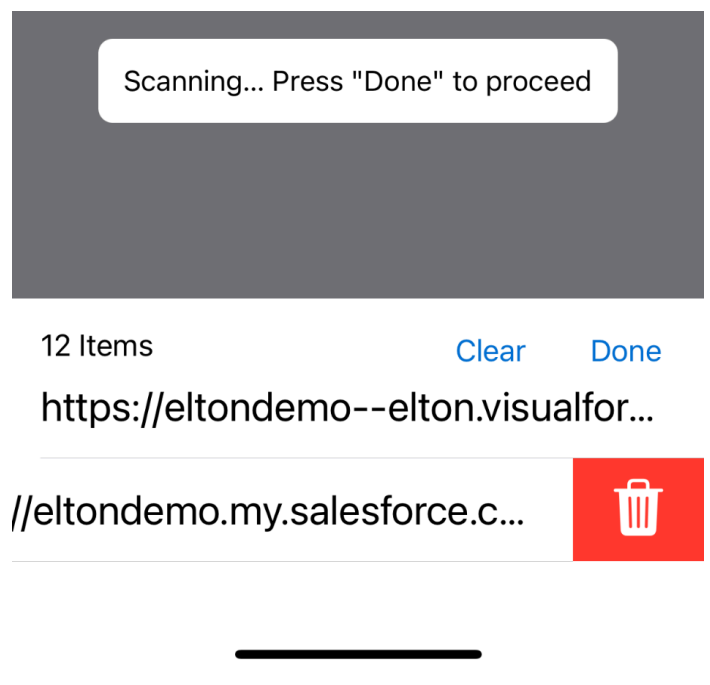
Multi scanning allows multiple barcodes to be read in a single image. All readable barcodes in the camera's view are read and added to a user displayed list of scanned values. This list allows the user to swipe left to delete a scanned value, clear the list or tap Done to accept the scanned values.

## Multi Scanning mode window

Note the Clear and Done buttons. The user must tap Done to accept the current list of barcodes and return control to your Flow.



Here the user has swiped left to delete a scanned value. When they tap the trash icon the value will be removed from the scanned values. The user must still tap Done to quit scanning and return to the Flow.



## 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\\_barcode\\_scanner\\_compatibility](https://developer.salesforce.com/docs/component-library/documentation/en/lwc/lwc.use_barcode_scanner_compatibility)

### Component Attributes

- Barcode types (symbolologies supported:  
code128,code39,code93,datamatrix,ean13,ean8,itf,pdf417,qrcode,upce),
  - If left blank all symbolologies will be supported
  - You can use a comma separated list to restrict the symbolologies supported IE:  
code39,code128,qrcode would only successfully scan Code 3 of 9, Code 128 or QR Codes.  
You can use this to restrict the symbolologies that can be read.
- Delay between scans - Delay between scans in repeat scan mode
  - Defaults to 1000 ms
  - Applies to Repeat 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 Repeat scan)
- Scanning mode
  - All - All 3 buttons below are displayed
  - Single - Only Single scan button is displayed
  - Repeat - Opens the scanning window until a barcode is read, then re-opens the window until another barcode is read. This continues until the user presses X. Duplicate scans are supported if enabled in postprocessing on the component.
  - Multi - Only the Multi scan button is displayed
  - single, repeat, multi - If you wish to display only 2 of the scanning buttons enter two of the values in lowercase with a comma and a space (ie. single, repeat)

## 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,damatrix,ean13,ean8,itf,pdf417,qrcode)
- 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.



### Installed Packages

On AppExchange you can browse, test drive, download, and install pre-built apps and components right into your salesforce.com environment. [Learn More about Installing Apps and Components](#)

Apps and components are installed in packages. Any custom apps, tabs, and custom objects are initially marked as "In Development" and are not deployed to your users before deploying. You can deploy the components individually using the other features in setup or as a group by clicking Deploy.

Depending on the links next to an installed package, you can take different actions from this page.

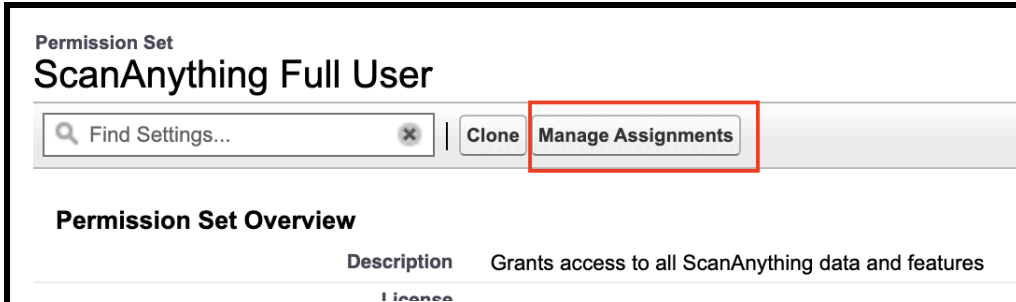
To remove a package, click **Uninstall**. To manage your package licenses, click **Manage Licenses**.

| Action   | Package Name  | Publisher      | Version Number | Namespace Prefix | Status | Allowed Licenses | Used Licenses |
|--|---|----------------|----------------|------------------|--------|------------------|---------------|
| Uninstall <b>Manage Licenses</b>   |  ScanAnything                | Scan Anything  | 1.2            | ScanAnything     | Active | 2                | 0             |
| <b>Description</b><br>Scan Anything allows users to scan Barcodes or QR Codes and open the related record in the Salesforce app.                             |   |                |                |                  |        |                  |               |
| Uninstall  |  Salesforce and Chatter Apps | Salesforce.com | 1.17           | sf_chtr_apps     | Free   | N/A              | N/A           |
| <b>Description</b><br>This package contains Connected Applications for the officially supported Salesforce apps for iOS and Android and Chatter application. |   |                |                |                  |        |                  |               |

### Uninstalled Packages

## 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.

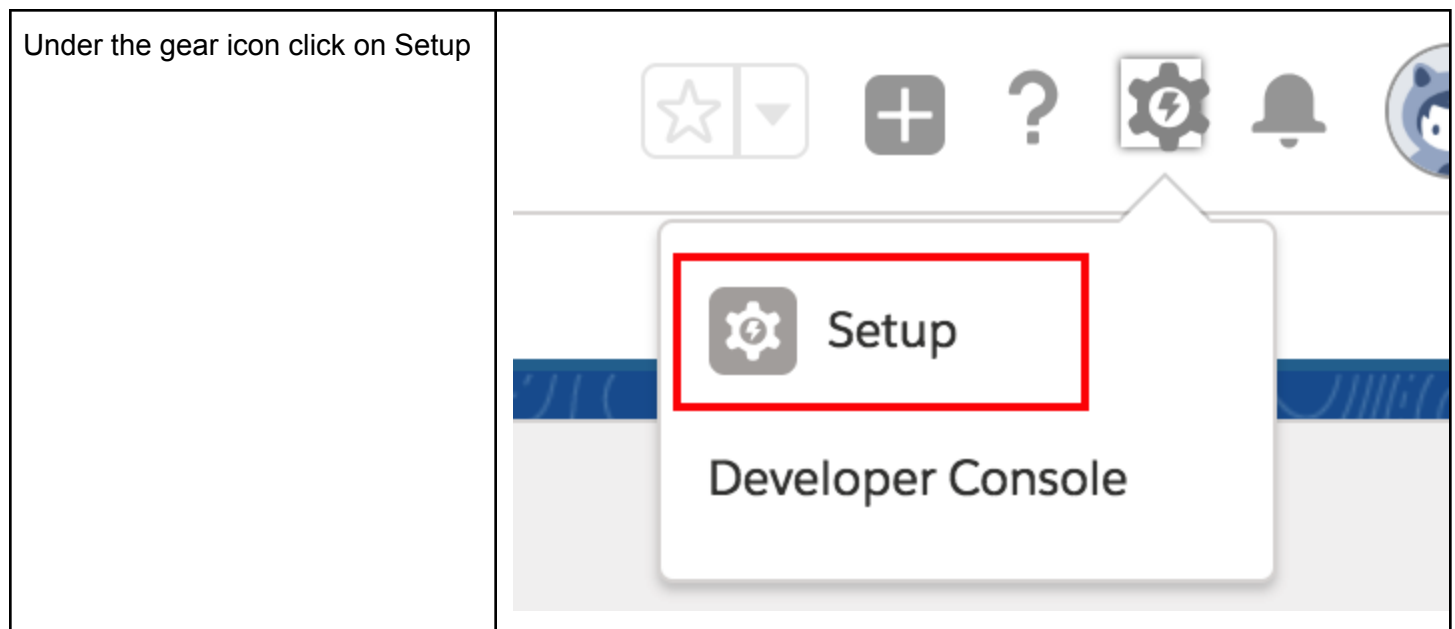


Locate the ScanAnything permission set and click the Manage Assignment button. Add all users to the permission set that will use Scan Anything.


## 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.



Using the Object Manager tab,  
click on the Contact object



Setup   Home   **Object Manager** ▼

 **SETUP**  
**Object Manager**  
33 Items, Sorted by Label

| LABEL              | API NAME          |
|--------------------|-------------------|
| Account            | Account           |
| Activity           | Activity          |
| Asset              | Asset             |
| Asset Relationship | AssetRelationship |
| Campaign           | Campaign          |
| Campaign Member    | CampaignMember    |
| Case               | Case              |
| <b>Contact</b>     | Contact           |
| Content Version    | ContentVersion    |
| Contract           | Contract          |

Select Fields & Relationships, then  
click the New button

Setup   Home   Object Manager

Search Setup

SETUP > OBJECT MANAGER  
**Contact**

Details  
**Fields & Relationships**  
Page Layouts  
Lightning Record Pages  
Buttons, Links, and Actions  
Compact Layouts  
Object Limits  
Record Types  
Related Lookup Filters

29 Items, Sorted by Field Label

| FIELD LABEL   | FIELD NAME     | DATA TYPE       | CONTROLLING FIELD |
|---------------|----------------|-----------------|-------------------|
| Account Name  | AccountId      | Lookup(Account) |                   |
| Assistant     | AssistantName  | Text(40)        |                   |
| Asst. Phone   | AssistantPhone | Phone           |                   |
| Birthdate     | Birthdate      | Date            |                   |
| Contact Owner | OwnerId        | Lookup(User)    |                   |
| Created By    | CreatedById    | Lookup(User)    |                   |
| Data.com Key  | Jigsaw         | Text(20)        |                   |

Quick Find   **New**



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

Please enter the maximum length for a text field below.

1

2

Description

Help Text

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

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 CFO Account Name [United Oil & Gas Corp.](#) Phone(2) (212) 842-5500 Email [agreen@uog.com](mailto:agreen@uog.com) Contact Owner Gordon Derk

RELATED DETAILS

Contact Owner Gordon Derk

Contact Barcode

\*Name Phone (212) 842-5500

Salutation

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.

**Navigation Menu Items** [Save] [Cancel]

**Available**

ScanAnything Config

**Selected**

Einstein Insights  
Chatter  
Today  
Scan & Search  
Dashboards  
Tasks  
Smart Search Items  
People  
Groups  
Reports

Add [Add] Remove [Remove]

Up [Up] Down [Down]

Use SHIFT + click or click and drag to select a range of adjacent items. Use CTRL + click to select multiple items that are not adjacent.

[Save] [Cancel]

## 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 Changelcon and select the BarCodelcon. Then add that action to pages as desired.

**Global Actions**

**New Action**

**Enter Action Information** [Save] [Cancel]

Action Type [Custom Visualforce]

Visualforce Page [ScanAndSearch [ScanAnything\_\_ScanAndSearch]] [i]

Height [250px] [i]

Standard Label Type [--None--] [i]

Label [Scan & Search]



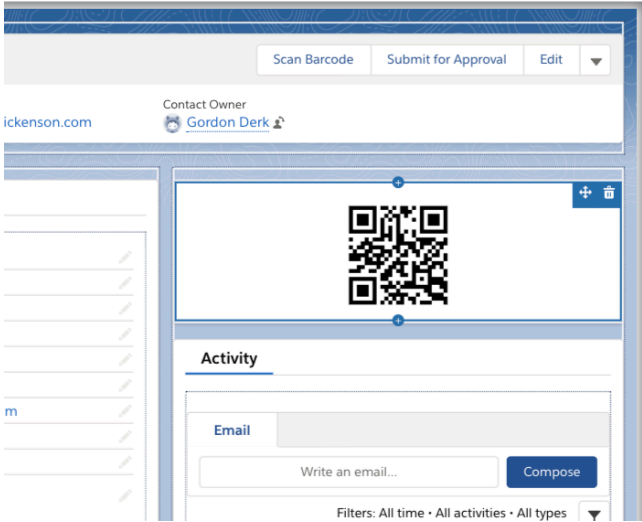
Name [Scan\_Search] [i]

Description [ ] [i]

Icon [BarCodelcon] [Change Icon] [Remove Icon]

# 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.

|  |   |
|--|---|
| <p>Enter the Lightning App Builder. Scroll to the bottom of the Components Tab and you will find the Barcode (1D) and mosaic (2D) component.</p> | <div><div>Custom - Managed (1)</div><div><div> Barcode (1D) and mosaic (2D) c...</div><div></div></div></div>   |
| <p>Drag the component onto the app page where desired.</p>   |  <p>The screenshot shows a Salesforce Lightning page for a contact named Gordon Derk. At the top, there are buttons for 'Scan Barcode', 'Submit for Approval', and 'Edit'. Below the contact information, a QR code component is displayed. The page also features an 'Activity' section with an 'Email' component that includes a text input field and a 'Compose' button. A sidebar on the left shows a list of items with checkboxes. At the bottom, there are filters for 'All time', 'All activities', and 'All types'.</p> |

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.

Title

SVP, Operations

Account Name

Dickenson plc

Contact Barcode

1656

Phone (2) ▼

(785) 241-6200

Email

a\_young@dickenson.com

Contact Owner

Gordon Derk

Details

Related

Contact Owner

Gordon Derk

Name

Mr Andy Young

Account Name

Dickenson plc

Title

SVP, Operations

Department

Internal Operations

Birthdate

Reports To

Lead Source

Purchased List

Mailing Address

1301 Hoch Drive  
Lawrence, KS 66045  
USA

Contact Barcode

1656

Phone

(785) 241-6200

Home Phone

Mobile

(785) 265-5350

Other Phone

Fax

Email

a\_young@dickenson.com

Assistant

Asst. Phone

Other Address

1301 Hoch Drive  
Lawrence, KS 66045  
USA

Activity

Email

Write an email...

Compose

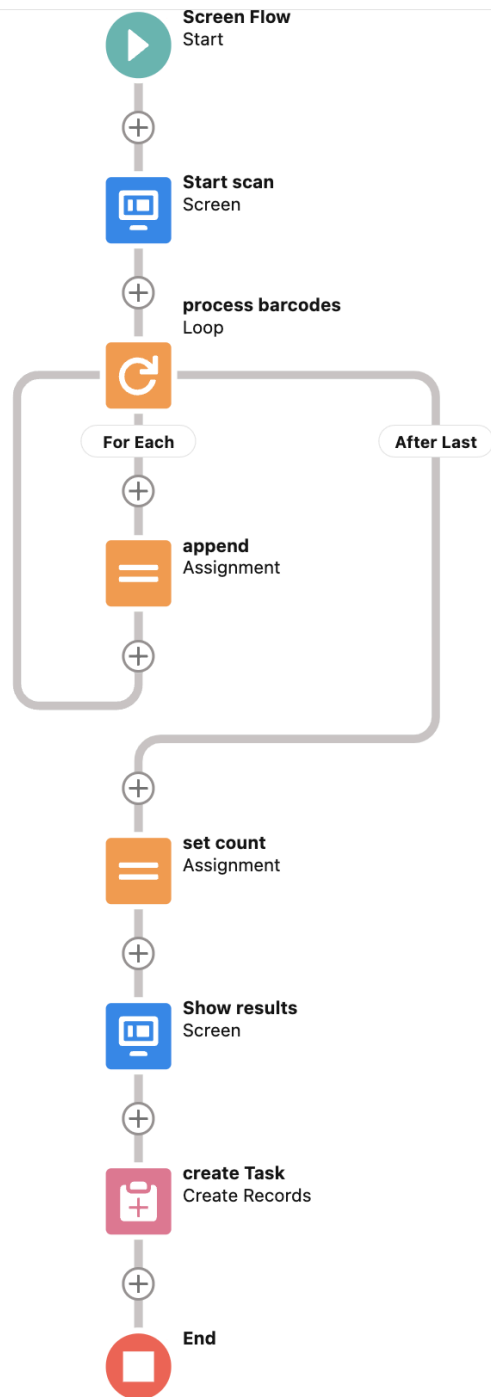
Filters: All time • All activities • All types

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 one 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.



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

ComponentsFields (Beta)

Search components... Q

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

Edit Screen

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

Scan

No preview is available for this component.

PausePreviousFinish

← Scan ↗

\* API Name  
scanComponent

Barcode types (symbolologies)  
{!barcodeTypes}

Delay between scans  
1000

Is value visible  
{!GlobalConstant.False}

Postprocessing (type 'unique' to remove duplicates)  
values

> Set Component Visibility

> Advanced

CancelDone