



# **Xively Simulator Application**

## **Installation, Configuration and Salesforce**

## **Integration Guide**

**May 2016**

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## 1.0 Introduction

This document is designed to guide you through the process of installing the Xively Simulator Demo application and integrating Salesforce with the application. The application code is stored in GitHub and installed in Heroku. The tutorial assumes you have existing GitHub, Heroku and Salesforce accounts. If you do not, you will need to create those accounts before starting the installation.

## 2.0 Business Case

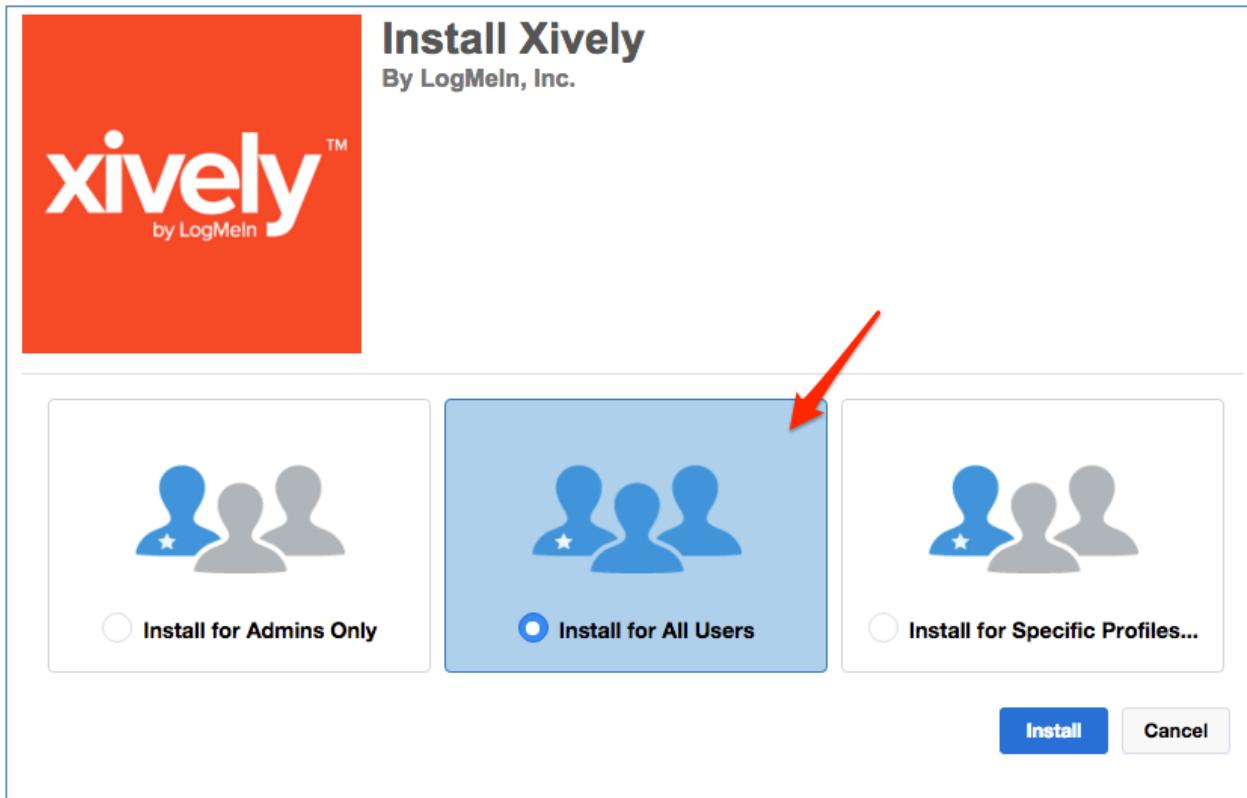
The Xively Simulator was created to demonstrate the power and ease of setting up a connected business through Xively. Xively is an enterprise IoT platform and application that simplifies building and running a connected business. Many businesses choose to extend their connected business with tools such as Salesforce.com.

## 3.0 Installation and Set Up

### 3.1 Salesforce Package Installation & Set Up

This tutorial assumes you have an existing Salesforce account and you are using a developer, sandbox, or SDO instance. We do not recommend installing the demo in a production instance of Salesforce. If you choose to skip the Salesforce installation, skip to section 3.4.

1. Log in to Salesforce. Click the following link to start the package installation:  
<https://login.salesforce.com/packaging/installPackage.apexp?p0=04t36000000hDwj>
2. At the install screen select *Install for All Users* and click Install. Your Salesforce User must be a System Admin profile to install the package correctly.



3. The installation will begin. You should receive an email after the package has installed. If you stay on this page your browser will update when the package is done loading. Click Done.
4. After installation you need to configure OAuth settings for the Canvas App:
  - a. Click Setup > expand Manage Apps > click on Connected Apps. Edit "Xively Device Bridge" in the list of Apps.
  - b. In the OAuth policies section set the Permitted Users picklist field to "Admin approved users are pre-authorized".

Connected App  
Xively Device Bridge

Help for this Page ?

**Connected App Edit**

Version 2  
Description

**Basic Information**

Start URL [ ] ⓘ Mobile Start URL [ ] ⓘ

**OAuth policies**

All users may self-authorize  
Permitted Users  Admin approved users are pre-authorized

IP Relaxation Enforce IP restrictions ⓘ Refresh Token Policy: Immediately expire refresh token ⓘ

**Session Policies**

Timeout Value --None-- ⓘ High assurance session required

**Custom Connected App Handler**

Apex Plugin Class [ ] ⓘ Run As [ ] ⓘ

**User Provisioning Settings**

Enable User Provisioning ⓘ

**Buttons**

Save Cancel

- c. Click OK to the pop up that says: "Enabling this option will result in..."
  - d. Leave all other options as-is. Click Save!
5. Grant profile access to the Canvas App for profiles in your demo:
- a. Navigate to Setup > Expand Manage Users > click Profiles and locate the profile(s) you wish to update such as System Administrator. Click Edit to edit the profile
  - b. In the Connected App Access section locate the Xively Device Bridge. Check the check box and click Save!:

Profile Edit  
System Administrator

Help for this Page ?

Set the permissions and page layouts for this profile.

**Profile Edit**

Name System Administrator  
User License Salesforce Custom Profile

**Custom App Settings**

	Visible	Default		Visible	Default
App Launcher	<input checked="" type="checkbox"/>	<input type="radio"/>	Sales	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>
Call Center	<input checked="" type="checkbox"/>	<input type="radio"/>	Salesforce Chatter	<input checked="" type="checkbox"/>	<input type="radio"/>
Community	<input checked="" type="checkbox"/>	<input type="radio"/>	Sample Console	<input type="checkbox"/>	<input type="radio"/>
Content	<input checked="" type="checkbox"/>	<input type="radio"/>	Site.com	<input checked="" type="checkbox"/>	<input type="radio"/>
Marketing	<input checked="" type="checkbox"/>	<input type="radio"/>	Work.com	<input checked="" type="checkbox"/>	<input type="radio"/>

**Connected App Access**

Xively Device Bridge

6. In Salesforce, update the Case Page Layout to the “Xively Case Layout”:
  - a. Click on Set Up > under Build expand Customize > expand Cases > select Page layouts
  - b. Click Edit for the Xively Case Layout
  - c. In the header tool bar on the left, scroll down until you see Canvas Apps and click it.
  - d. Locate Xively Device Bridge the header tool bar.
  - e. Drag the Xively Device Bridge onto the page layout. We recommend placing it in the Additional Information section of the page or create a new section. Note: You may place the App anywhere on the page or on any Case Page Layout.
  - f. Edit the section properties so the Canvas App renders correctly:
    - i. Mouse over the section name and notice the wrench icon that appears to the right. Click on the wrench.
    - ii. You may update the Section Name and/or Display Section Header On option or leave them as-is.
    - iii. Update the Layout to 1-Column and click OK
  - g. Edit the Xively Device Bridge properties:
    - i. Mouse over the gray box labeled Xively Device Bridge. Notice a similar wrench appears to the right. Click on the wrench to pop up the Canvas App Properties:
    - ii. Width = 100%, Height = 500, Show scrollbars = unchecked, Show label = unchecked and click OK
  - h. Click Save in the header to save your changes!

**Information:** Depending on how much configuration already exists in your Salesforce Org, you might consider dragging the Canvas App and fields on to an existing Case Page Layout. Just make sure you configure the Canvas App Properties to a width of 100% and height of 500 pixels (or test other settings so the App renders properly).

7. Set up the Page Layout Assignment for the demo profile(s) (ie. System Admin):

**Information:** After you finish editing the Case Layout you need to assign that layout to the Profile of the User who will demo the simulator. For the tutorial, we'll assume you're using the Xively Case Layout and System Administrator Profile.

- a. Click on Set Up > expand Customize > expand Cases > Page layouts
- b. Click on the Case Page Layout Assignment button (the top button, not in the Case Close Page Layout section)
- c. In the next screen click the Edit Assignment button
- d. Select the profiles you wish to assign the Xively Case Layout (they will change color when selected). If you're unsure which profile will be demo'ing you can assign all profiles the Xively Case Layout as shown in the screenshot below.

- e. Find the Page Layout To Use picklist and select Xively Case Layout. The selected profiles should update.
- f. Click Save!

Edit Page Layout Assignment		Case		Help for this Page
<p>The table below shows the page layout assignments for different profiles. Use SHIFT + click or click and drag to select a range of adjacent cells. Use CTRL + click to select multiple cells that are not adjacent. Then choose a new page layout from the drop-down.</p>				
		<input type="button" value="Save"/>	<input type="button" value="Cancel"/>	
		<div style="border: 1px solid #ccc; padding: 2px;">-- Select Page Layout --</div> <div style="background-color: #f0f0ff; padding: 2px;">Case (Marketing) Layout</div> <div style="background-color: #f0f0ff; padding: 2px;">Case (Sales) Layout</div> <div style="background-color: #f0f0ff; padding: 2px;">Case (Support) Layout</div> <div style="background-color: #f0f0ff; padding: 2px;">Case Layout</div>		
		<b>Page Layout To Use</b> <input checked="" type="checkbox"/> <b>Xively Case Layout</b>		22 Selected    22 Changed
Profiles		Page Layout		
Analytics Cloud Integration User		Xively Case Layout		
Analytics Cloud Security User		Xively Case Layout		
Contract Manager		Xively Case Layout		
Custom: Marketing Profile		Xively Case Layout		
Custom: Sales Profile		Xively Case Layout		
Custom: Support Profile		Xively Case Layout		
Customer Community Login User		Xively Case Layout		
Customer Community Plus Login User		Xively Case Layout		
Customer Community Plus User		Xively Case Layout		
Customer Community User		Xively Case Layout		
Customer Portal Manager Custom		Xively Case Layout		
Customer Portal Manager Standard		Xively Case Layout		
Gold Partner User		Xively Case Layout		
High Volume Customer Portal		Xively Case Layout		
High Volume Customer Portal User		Xively Case Layout		
Marketing User		Xively Case Layout		
Partner Community Login User		Xively Case Layout		
Partner Community User		Xively Case Layout		
Read Only		Xively Case Layout		
Solution Manager		Xively Case Layout		
Standard User		Xively Case Layout		
System Administrator		Xively Case Layout		

## 3.2 Salesforce Case Queues & Workflows (optional)

The Xively Salesforce package comes with Workflow Rules & actions, Email Templates and an Email Template folder. These components are provided to help you set up a Case Queue, Case Assignment Rules and email notifications to Users and Customers. *This entire section is optional:*

1. Create a Case Queue:
  - a. Create a new Case Queue
    - i. Click on Setup
    - ii. In the Quick Find menu, type in "Queues" and click on the hyperlink below
  - b. Click the button "New" and enter the following values:
    - i. Label = AirSoClean Support
    - ii. Queue Name = Air\_So\_Clean\_Support
    - iii. Queue Email = blank (Optional field)
    - iv. Send Email to Members = "checked" (Optional field)
    - v. Supported Objects = Case
    - vi. Queue Members = Select and add necessary users
    - vii. Click the button "Save"
2. Create a new Case Assignment Rule
  - a. Click on Setup
  - b. In the Quick Find menu, type in "Case Assignment Rules" and click on the hyperlink

- c. Either edit an existing Case Assignment Rule, or create a New Rule if there are no active rules. For the tutorial, we will assume that you have no active Case Assignment Rules.
- d. Click on the button "New"
  - i. Rule Name: Standard Rule
  - ii. Active = True
- e. Click on the hyperlink "Standard Rules"
- f. Click the button "New" and enter the following values:
  - i. Step 1 Sort Order: 1
  - ii. Step 2 Criteria:
    1. Set pick list to: Run this rule if the following: criteria are met
    2. Field: Asset:Asset.Name
    3. Operator = contains
    4. Value = AirSoClean 3000
  - iii. Step 3 Assign to:
    1. Queue: AirSoClean Support
    2. Click the look up icon
    3. In the pick list at the top of the dialogue box select: Xively Email Templates
    4. Select: Email Template: Support: Case Received
    5. Click Save!

### 3.3 SDO Orgs & Pre-existing Configuration

**Do you have validation rules or required fields on the Account, Product or Price Book object? SDO orgs and orgs with other AppExchange Apps installed are likely to have existing validation rules and/or required fields that could interfere with the Xively install. Read and perform the steps in this section if you answered yes. Although we designed the installation to work with all orgs, some additional set up may be necessary to ensure the integration works correctly. Otherwise skip to section 3.4**

1. Pricebooks:
  - a. Click on the Product Tab
  - b. Scroll down to the lower right and locate the Maintenance section. Click on Manage Price Books
  - c. View All Price Books by clicking the Go! Button next to the View: All pick list
  - d. Confirm you have the Xively Pricebook
  - e. If you don't see this Pricebook manually create it now. Make sure to spell the Pricebook Name exactly "Xively Pricebook" and make sure it's Active. Leave all other options as-is and click Save!

The screenshot shows the Xively Pricebook interface. At the top, there's a navigation bar with links for 'Customize Page', 'Edit Layout', 'Printable View', and 'Help for this Page'. Below the navigation is a 'Price Book Detail' section for 'Xively Pricebook'. It includes fields for 'Price Book Name' (set to 'Xively Pricebook'), 'Active' (checked), and 'Is Standard Price Book' (unchecked). Below this is a 'Products' section listing three items: AirSoClean 3000, AirSoClean 3000 Filter, and AirSoClean 5000. Each item has a 'List Price' and an 'Active' checkbox. A 'Price Book History' section at the bottom shows a single entry for 'Created'.

## 2. Product:

- Click on the Product tab and view All Products
- Confirm you have the following 3 Products in the list:
  - AirSoClean 3000
  - AirSoClean 3000 Filter
  - AirSoClean 5000
- If you don't see them in the list, manually create them now. Make sure to spell the records exactly as you see above in this tutorial and make sure they are all Active. Leave all other options as-is and click Save!
- Add each Product to the Standard Price Book with a price greater than \$0 and check the Active checkbox
- Add each Product to the Xively Pricebook with a price greater than \$0 and check the Active checkbox and click Save!

The screenshot shows the product detail page for 'AirSoClean 3000'. It includes fields for 'Product Name' (AirSoClean 3000), 'Active' (checked), and 'Product Family'. Below this is a 'Standard Price' section listing one item with a 'Standard Price' of \$300.00 and an 'Active' checkbox checked. A 'Price Books' section at the bottom shows the product associated with the 'Xively Pricebook' with a 'List Price' of \$300.00, 'Use Standard Price' checked, and an 'Active' checkbox checked.

## 3. Account:

- Click on the Account Tab or search for "Xively Account"

- b. Confirm you have the account: "Xively Account"
  - c. If you don't see this Account, manually create it now. If you have existing record types select the option that makes the most sense for your demo otherwise select a default record type or let the system select for you.
  - d. Account Name = Xively Account
  - e. Account Owner = You, the running user
  - f. All other fields can be left blank however, if you need to populate required fields and/or satisfy validation rules, do so now and click Save!
4. Update the records inside the Custom Setting "XivelyDemo":
    - a. Open the Set Up menu and search for "Custom Setting". Click on the Custom Setting link under the Develop section.
    - b. Click on the XivelyDemo custom setting
    - c. Click on the Manage button
    - d. Edit the Asset Account record
      - i. Open the Xively Account in a new browser window.
      - ii. In the Xively Account window click in the URL box and copy the record id. The record id is the alpha-numeric code at the end of the URL. For example:



<https://na30.salesforce.com/0013600000HjjXb>

- iii. Navigate to the browser window where you are editing the Custom Setting.  
Paste the record id into the Default Value field
  - iv. Field API Name = AccountId
  - v. Object = Asset
  - vi. Click Save!
- e. Edit the Asset Name:
    - i. Default Value = AirSoClean 3000
    - ii. Field API Name = Name
    - iii. Object = Asset
    - iv. Click Save!
  - f. Edit the Asset Product:
    - i. Default Value = In a new browser window, navigate to the Product Tab. Click on the AirSoClean 3000 product. Copy the record id from the URL and paste it in the Default Value field.
    - ii. Field API Name = Product2Id
    - iii. Object = Asset
    - iv. Click Save!
  - g. Edit the Asset Status:
    - i. Default Value = Activated
    - ii. Field API Name = Status
    - iii. Object = Asset

- iv. Click Save!
- h. Edit the Contact Account:
  - i. Default Value = This is the same Account record id you pasted into the Asset Account record above.
  - ii. Field API Name = AccountId
  - iii. Object = Contact
- i. Edit the Contact First Name:
  - i. Default Value = Auto-Generated
  - ii. Field API Name = FirstName
  - iii. Object = Contact
  - iv. Click Save!
- j. Edit the Contact Last Name:
  - i. Default Value = Contact
  - ii. Field API Name = LastName
  - iii. Object = Contact
  - iv. Click Save!

### 3.4 Xively Simulator Installation and Set up

This step assumes you have an existing GitHub account. Sign up for a new account if you do not already have one. Otherwise sign in to GitHub.

Search  Search

Repositories	Code	Issues	Users
xively/concaria Updated 4 days ago	37	36	2
ionia-corporation/concaria Concaria Demo Virtual Device and Web App Updated 21 days ago	37	36	2

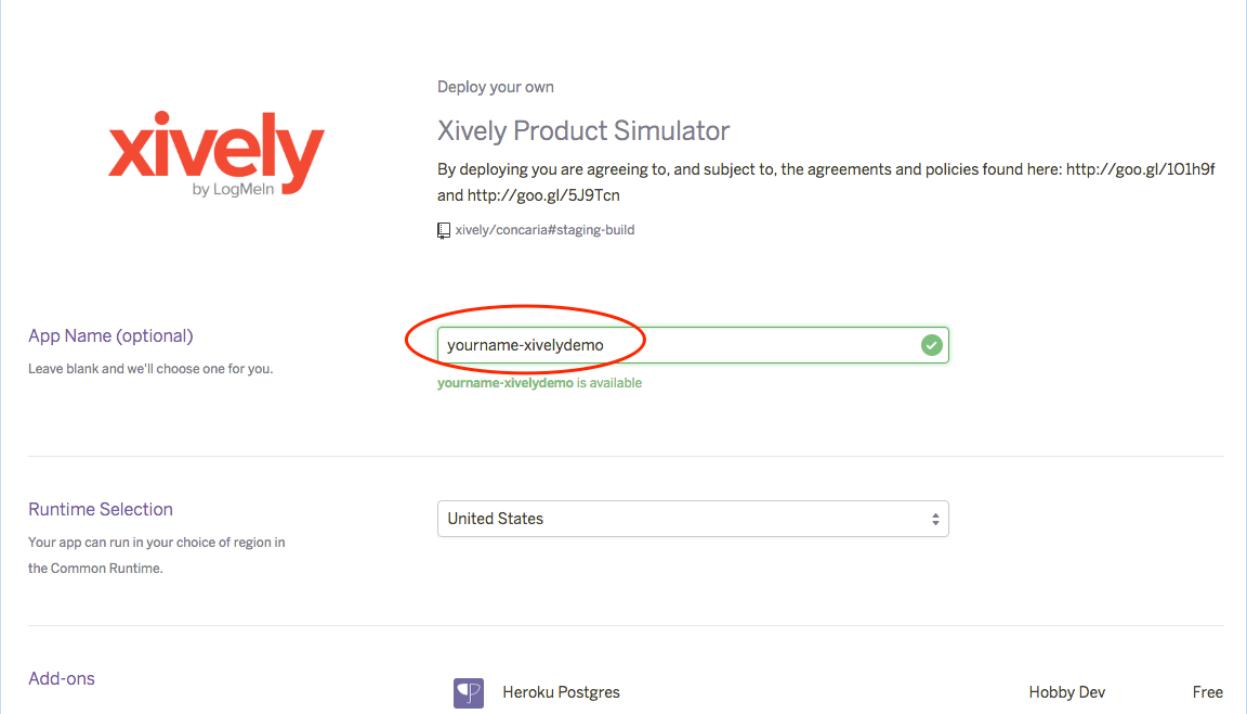
Languages  2

[Advanced search](#) [Cheat sheet](#)

1. Search the entire GitHub repository for ‘concaria’. Open the ‘xively/concaria’ repository
2. After opening the *xively/concaria* repository scroll down to the README.md section and click the  button.
3. There may be extra steps here to log in to your Heroku account and link your GitHub account. Follow the prompts to connect your accounts. Inquire within Heroku for help with this process if needed.

**Information:** Our app is free but you will need a valid credit card attached to your Heroku account for the demo to work. Enter your credit card information into Heroku now if needed.

- After you click the Deploy to Heroku button a new browser tab will open in Heroku. This is the application set up page. In the first field create an App Name. We recommend naming the app '*yourname-xivelydemo*'. Replace *yourname* with your name or another identifying name.



The screenshot shows the Xively Product Simulator deployment interface. At the top, it says 'Deploy your own' and 'Xively Product Simulator'. Below that, there's a note about agreeing to terms and conditions. A green input field contains the placeholder 'yourname-xivelydemo'. A red circle highlights this field. Below the field, a message says 'yourname-xivelydemo is available'. To the right of the input field is a checkmark icon. Further down, there's a 'Runtime Selection' section with a dropdown menu set to 'United States'. At the bottom, there's an 'Add-ons' section featuring 'Heroku Postgres' with a small icon, followed by 'Hobby Dev' and 'Free'.

- Choose the correct Runtime Selection for your physical location: US or Europe
- Skip the Add-ons section. This is informational only
- Input your Salesforce Config Variable:
  - SALESFORCE\_USER – Populate your Salesforce username (ex. [name@test.com](mailto:name@test.com))
  - SALESFORCE\_PASSWORD – Populate your Salesforce password.
  - SALESFORCE\_TOKEN – Populate your Salesforce API Token. To get your Salesforce token navigate to Salesforce and go to your settings... name—>My settings—>Personal—>reset my security token. You will receive the token by email.
  - HABANRO\_HOST – You may leave this variable blank.

**Important! Config Variables section: You must populate the 3 SALESFORCE variables. The Salesforce integration will fail if you don't populate them now.**

**Important!:** For Salesforce SE's or AE's using a SDO org type: You must split up your password into the password and token config variables. Populate SALESFORCE\_PASSWORD with the first half of your password and populate SALESFORCE\_TOKEN with the second half of your password. This is required because SDO orgs do not require a token to access the API. If you leave the SALESFORCE\_TOKEN variable blank the integration will fail.

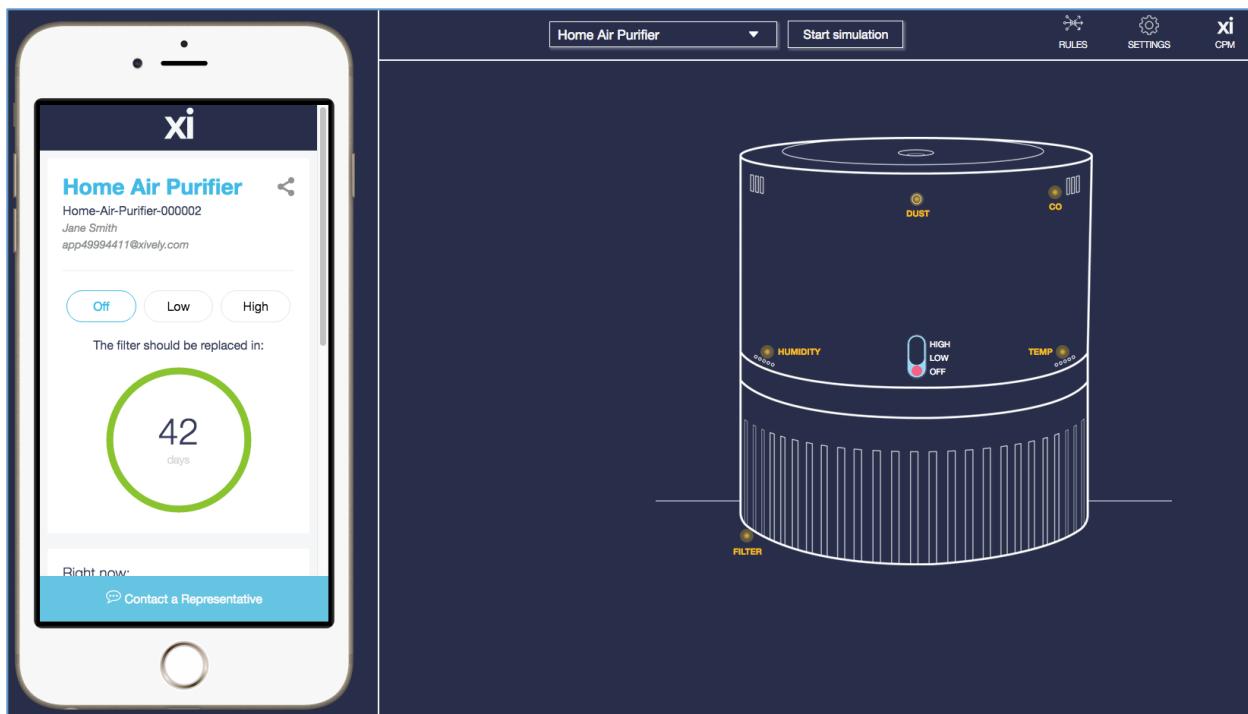
Config Variables  
Keys marked with \* require a value.

SALESFORCE_USER Your Salesforce username	<input type="text" value="XXXXXXXXXX"/>
SALESFORCE_PASSWORD Your Salesforce password	<input type="text" value="XXXXXXXXXX"/>
SALESFORCE_TOKEN Your Salesforce token	<input type="text" value="XXXXXXXXXX"/>
HABANERO_HOST Heroku domain or app id for habanero	<input type="text"/>

**Deploy for Free**

8. Click **Deploy for Free** You will see some log messages and status details as the app deploys. This process is creating the Xively account, devices, organization and provisioning the integration.

**Congratulations!** You have started your IoT journey!! Click "View" to see your new Xively Simulator Application.



### 3.5 Heroku Configuration Variables (optional)

Heroku allows you to manually create/edit the Configuration Variables (Config Vars) of the Xively Demo App. For example, you may need to modify your Salesforce username, password or token. The following steps can be used to edit these variables, troubleshoot and (passively) restart the Heroku to Salesforce integration. *This section is optional.*

1. Navigate to Heroku. Click on the Heroku app from your list of applications.
2. This will open the app Resources tab. Click on Settings:

3. Click on Reveal Config Vars:

The screenshot shows the Xively app interface. At the top, there are navigation tabs: Resources, Deploy, Metrics, Activity, Access, and Settings. The Settings tab is active. Below the tabs, there is a 'Name' field with a pencil icon. Underneath it, there is a section titled 'Config Variables' with a sub-section titled 'Reveal Config Vars'. A red circle highlights the 'Reveal Config Vars' button. Below this, there is a detailed 'Info' section with various application details:

Region	United States
Stack	cedar-14
Framework	Node.js
Git URL	<a href="https://git.heroku.com/xxxxxx.git">https://git.heroku.com/xxxxxx.git</a>
Repo size	1.3MB
Slug size	22.9MB of 300MB

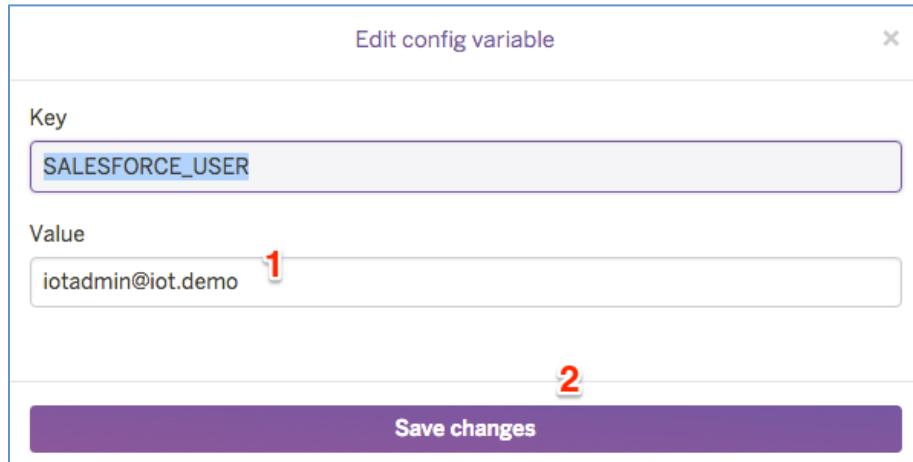
- Locate the Config Var: SALESFORCE\_USER. Click the pencil icon to edit this value:

The screenshot shows the Xively app interface with the 'Reveal Config Vars' section expanded. It displays the 'SALESFORCE\_USER' variable with the value 'iotadmin@iot.demo'. A red circle highlights the edit pencil icon next to the value.

- In the pop up window, clear the value and click *Save changes*. You are saving the variable with a blank value:

The screenshot shows a modal dialog titled 'Edit config variable'. It has two fields: 'Key' containing 'SALESFORCE\_USER' and 'Value' which is currently empty (highlighted with a red circle labeled '1'). At the bottom is a purple 'Save changes' button (highlighted with a red circle labeled '2').

- Again, click the SALESFORCE\_USER pencil icon to edit this value. Populate your user name and click Save changes:



7. The Heroku > Salesforce sync will start silently/passively after you Save changes. Remember, you must install the Salesforce package first (section 3). Your Salesforce Username, Password and Token must be populated and valid for the integration to operate.
  - a. **Remember:** SDO orgs have special handling of the Token value. See section 3
  - b. **Tip:** Troubleshoot the Config Vars first if the sync fails.

## 4.0 Create Rules & Salesforce Case Integration

### 4.1 Confirm the Salesforce Integration

Validate the integration with Salesforce was successful. You can easily confirm by viewing the list of Asset records in Salesforce. The Heroku provisioning process inserts 45 Assets (among other things) into Salesforce org automatically.

1. Navigate to Salesforce and confirm you have 45 Assets (There are 15 virtual Home Air Filters and 30 Commercial HVAC assets):
  - a. In Salesforce locate the + symbol to the right of the Tabs. Click it
  - b. Select Assets from the list below. You should see something like this:

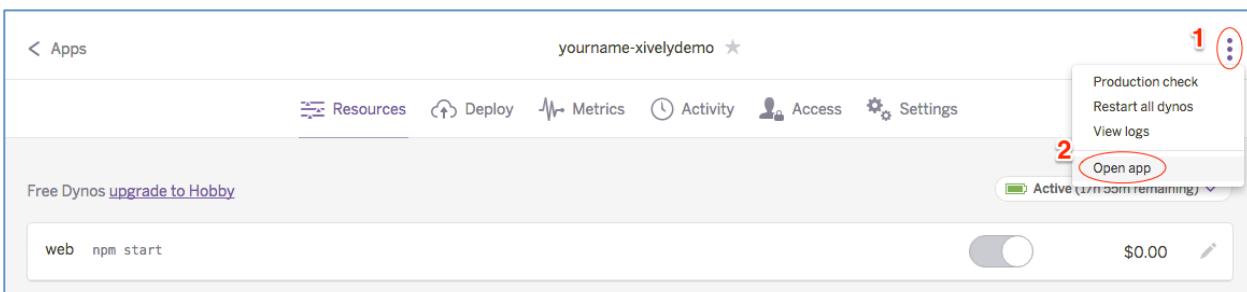
Action	Asset Name	Serial Number	Install Date	Account Name	Contact Name	Product Name
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-0	Home-Air-Purifier-000013		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-0	Home-Air-Purifier-000010		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-0	Home-Air-Purifier-000004		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-0	Home-Air-Purifier-000007		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-0	Home-Air-Purifier-000001		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-1	Home-Air-Purifier-000014		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-1	Home-Air-Purifier-000011		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-1	Home-Air-Purifier-000005		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-1	Home-Air-Purifier-000008		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-1	Home-Air-Purifier-000002		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-2	Home-Air-Purifier-000015		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-2	Home-Air-Purifier-000012		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-2	Home-Air-Purifier-000006		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-2	Home-Air-Purifier-000009		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Home-Air-Purifier-2	Home-Air-Purifier-000003		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-0	Industrial-HVAC-000021		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-0	Industrial-HVAC-000011		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-0	Industrial-HVAC-000001		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-1	Industrial-HVAC-000022		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-1	Industrial-HVAC-000012		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-1	Industrial-HVAC-000002		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-2	Industrial-HVAC-000023		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-2	Industrial-HVAC-000013		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-2	Industrial-HVAC-000003		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-3	Industrial-HVAC-000024		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-3	Industrial-HVAC-000014		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-3	Industrial-HVAC-000004		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-4	Industrial-HVAC-000025		Concaria Account		AirSoClean 3000
<input type="checkbox"/> Edit   Del	Industrial-HVAC-4	Industrial-HVAC-000015		Concaria Account		AirSoClean 3000

1-45 of 45 ▾ 0 Selected ▾ ◀◀ Previous Next ▶▶

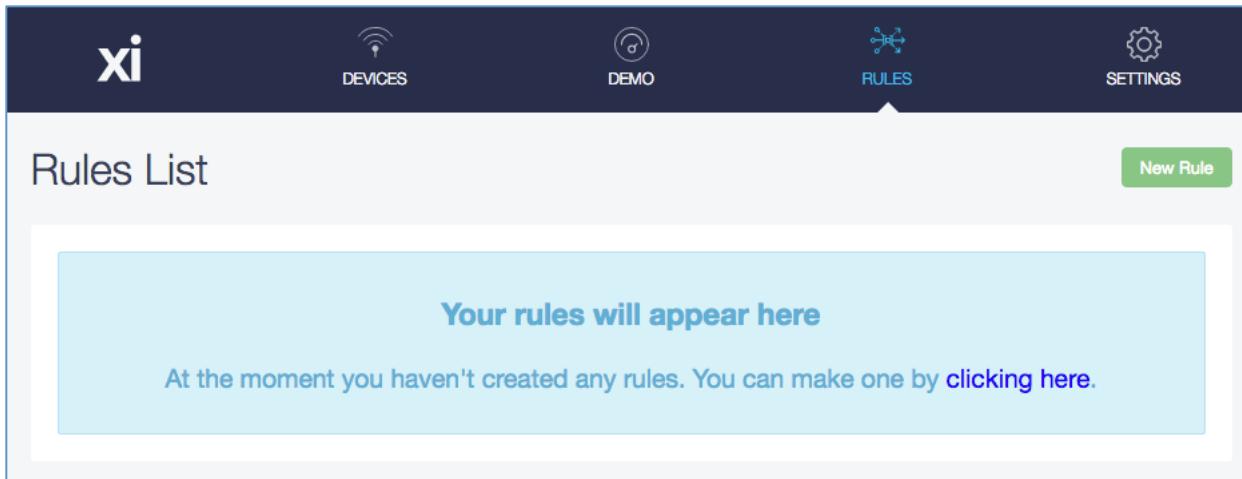
## 4.1 Create Rules in the Xively Simulator

The section describes how to create a rule in the Xively Simulator and insert a Salesforce Case. You are free to create your own rules however, you should at least create the rules in this tutorial to properly demo the full functionality of the app.

1. Navigate to Heroku and click View to open your Xively Simulator App. Note: If the Xively Simulator App isn't already open in a browser tab you can get there from Heroku by following these steps:
  - a. In Heroku, open the app from your list of apps.
  - b. (1) Click on the menu icon in the upper right corner in the app's Resources page.
  - c. (2) Click Open app:



2. Your Xively Simulator App will open in a new browser tab. Click on Rules in the header.



3. Click the **New Rule** button:
- Name the Rule: 'Malfunction'
  - Set the rule Conditions. *Tip: Use the Rule conditions in the screenshot below. The Xively Simulator App has been designed to showcase this functionality:*

1

2 if all conditions are true

3 Industrial HVAC

4 + Add

5 Create a salesforce case titled: Malfunction

6 Save Cancel

- Name the rule: Malfunction
- If **all** conditions are true
- Industrial HVAC, log:message, = , malfunction
- Click +Add
- Check the checkbox: Create a salesforce case titled: Malfunction
- Click Save!

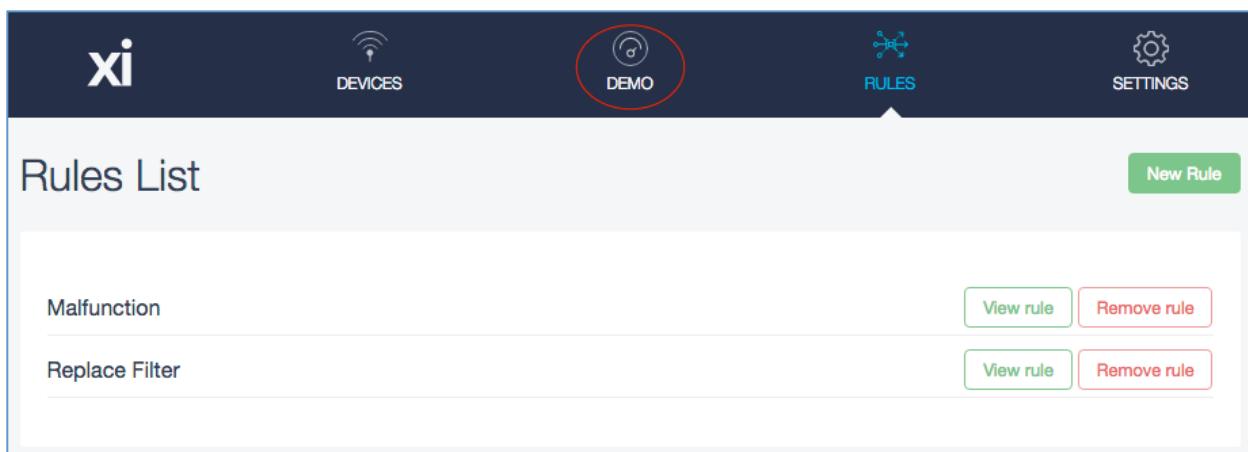
4. Click the **New Rule** button again to create another rule:
- Name the Rule: 'Replace Filter'
  - Set the Conditions. *Tip: Use the Rule conditions in the screenshot below. The Xively Simulator App has been designed to showcase this functionality:*

The screenshot shows the Xively Simulator App interface for creating a new rule. The rule is named "Replace Filter". It contains one condition: "if all conditions are true" (Industrial HVAC, filter < 42). An action is defined: "Create a salesforce case titled: Replace Filter". Buttons at the bottom are "Save" (highlighted) and "Cancel".

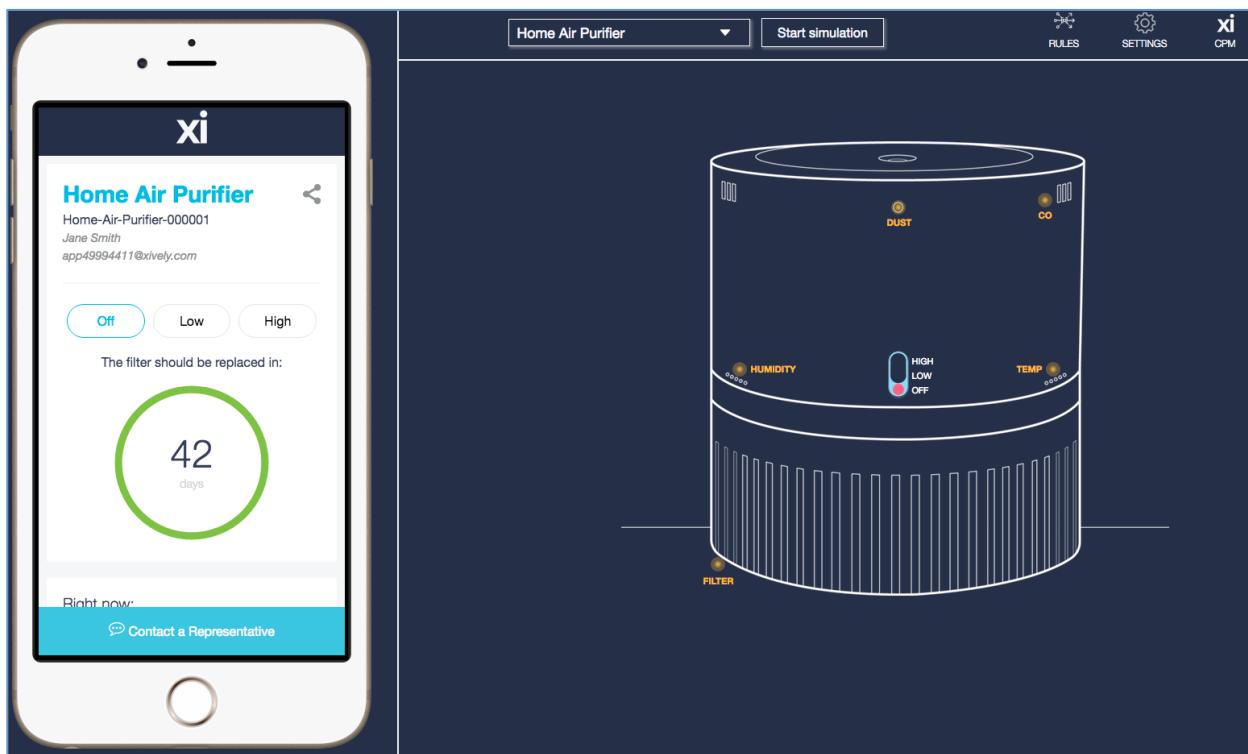
- Name the rule: Replace Filter
- If **all** conditions are true
- Industrial HVAC, filter, <, 42
- Click +Add
- Check the checkbox: Create a salesforce case titled: Replace Filter
- Click Save!

## 4.2 Insert a Case to Salesforce

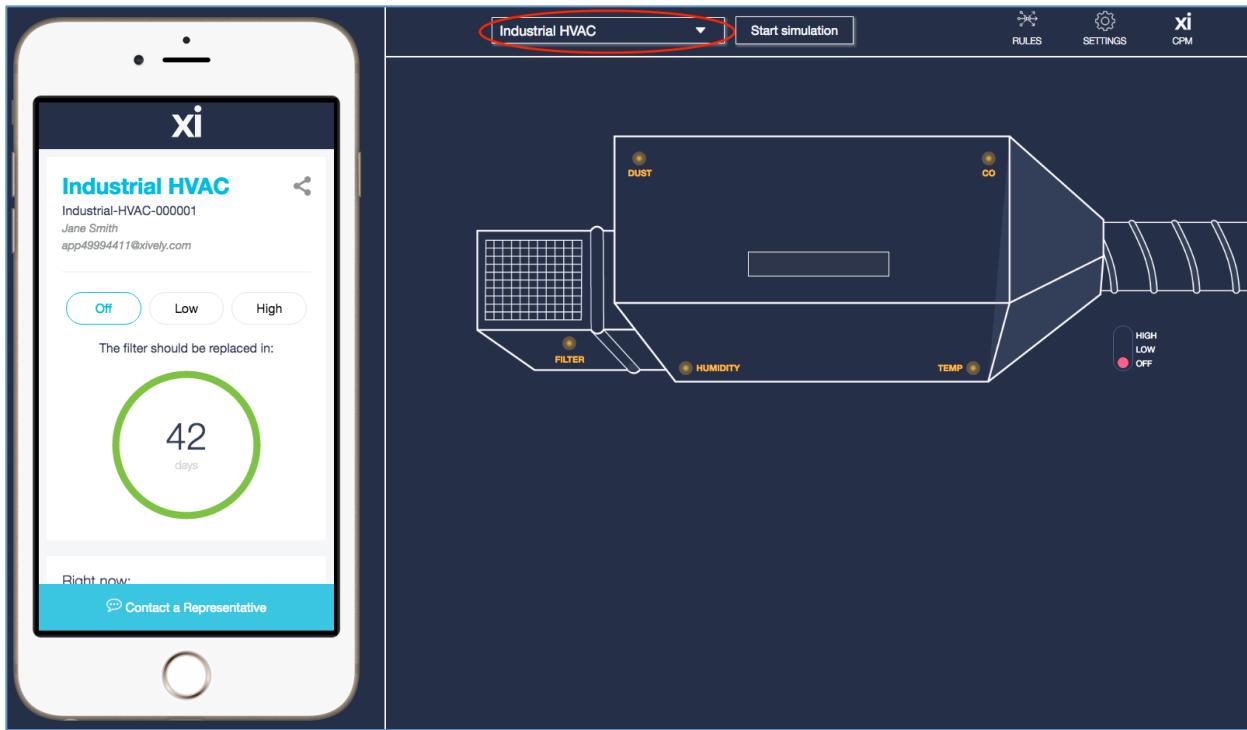
- To insert a Case you need to satisfy the rule criteria you just created. Click on DEMO in the header bar:



2. Your browser will open the Xively Simulator App:

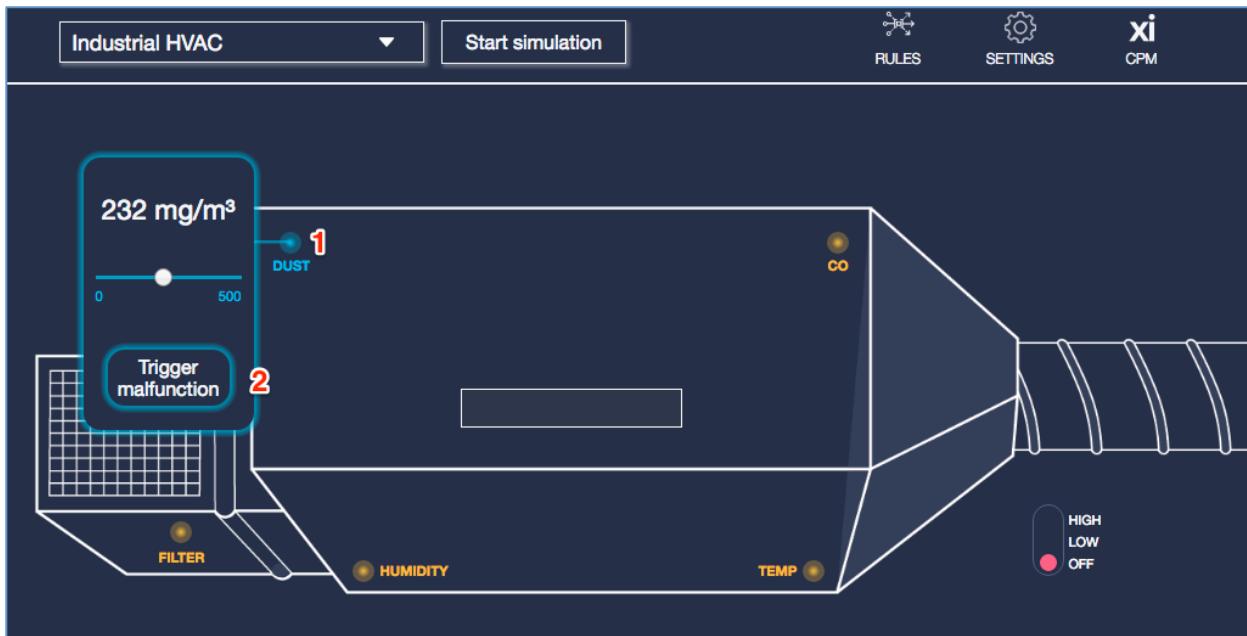


3. Notice the header bar has a picklist currently displaying Home Air Purifier. Change this picklist to Industrial HVAC. *Note: Some users may already be viewing the Industrial HVAC device:*

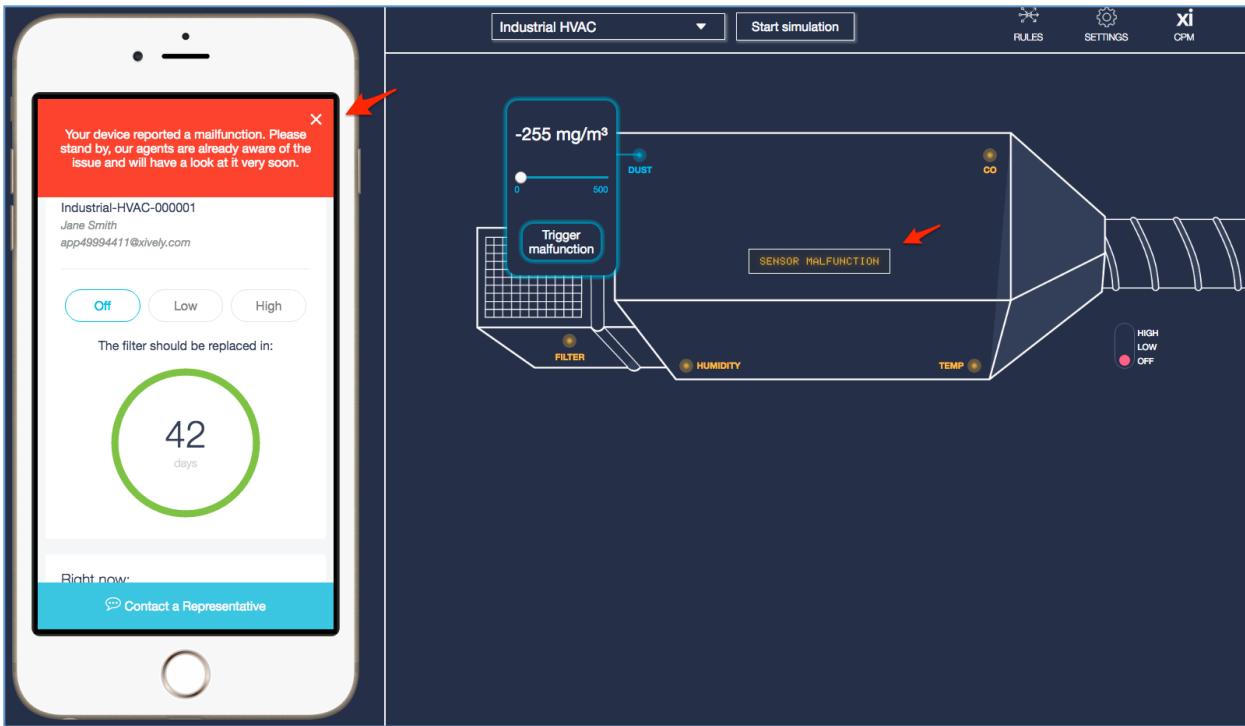


4. Trigger the Malfunction rule:

1. Click on the Dust Sensor
2. Click Trigger malfunction



5. Notice the 2 areas of the UI that update with the malfunction:



6. If your rule was triggered properly, a Case will be inserted in your Salesforce org. Navigate to Salesforce and click on the Case tab.
7. Use the All Open Cases List View and click Go to locate the Case that was just created.

All Open Cases							
				Edit   Delete   Create New View			
<a href="#">New Case</a>		<a href="#">Close</a>	<a href="#">Change Owner</a>	<a href="#">Change Status</a>	<a href="#">Edit</a>		
Action	Case Number	Contact Name	Subject	Status	Priority	Date/Time Opened	
<input type="checkbox"/>	00001029	Contact, Auto-Generated	Malfunction	New	Medium	4/27/2016 9:27 AM	

**Information:** Alternatively, you can search for the new Case. Note: The name of the Case will match the name you set in the Rule.

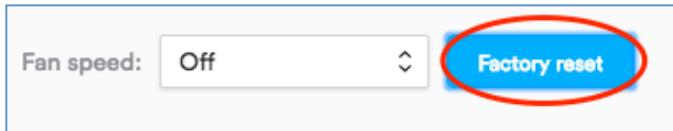
8. Click on the Case with the subject of the rule you just created ie. Malfunction
9. Click the Detail Tab:

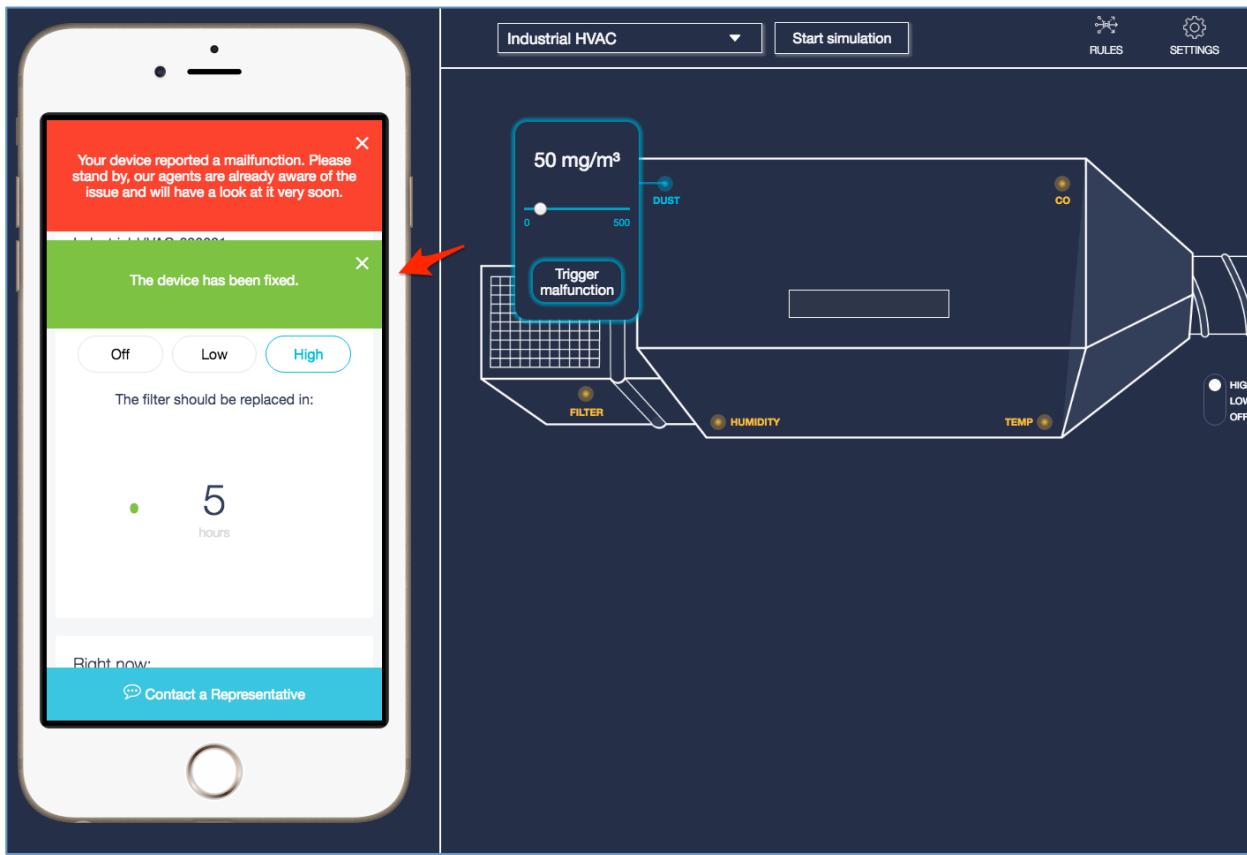
The screenshot shows the Xively Case Detail page. At the top, there are navigation links: Solutions, Open Activities, Activity History, Case Comments, Attachments, and Case History. Below that, the Case Detail section includes fields for Case Owner (redacted), Case Number (00001026), Contact Name, Account Name, Case Reason, Date/Time Opened (4/27/2016 10:27 AM), Status (New), Priority (Medium), Contact Phone, Contact Email, and Case Origin. A 'Close Case' and 'Clone' button are also present. The Xively Information section shows an Asset (Xively Device ID redacted) and an Industrial HVAC device. The Industrial HVAC details include: Created (Apr 27, 2016), Provisioning state (activated), Included sensors (Temperature, Humidity, VOC, CO, Dust, Filter), Filter type (carbonHEPA), Id (redacted), Firmware version (2.0.0), Color (white), Power version (12VDC), Serial number (Industrial-HVAC-000001), Hardware version (1.1.0), Production run (DEC2016), and Activated date (-). A 'Factory reset' button is located next to the fan speed dropdown. To the right, an Activity log shows several events: Device boot complete (02:05 PM Today), Device disconnected (02:04 PM Today), Sensor malfunction occurred (01:27 PM Today), Device boot complete (01:27 PM Today), and Device connected (01:27 PM Today). There is also a 'xively' logo.

**Information:** Case page layouts and views vary widely. The above screen shot displays the Xively Case Layout on the Detail Tab. Your Salesforce org may be different!

**Tip:** If the App window appears blank try refreshing a page a few times. Alternatively, clear your browser cookies, log back in and view the Case again.

10. Send a Factory Reset to clear the Malfunction by clicking the button on the Case Layout:

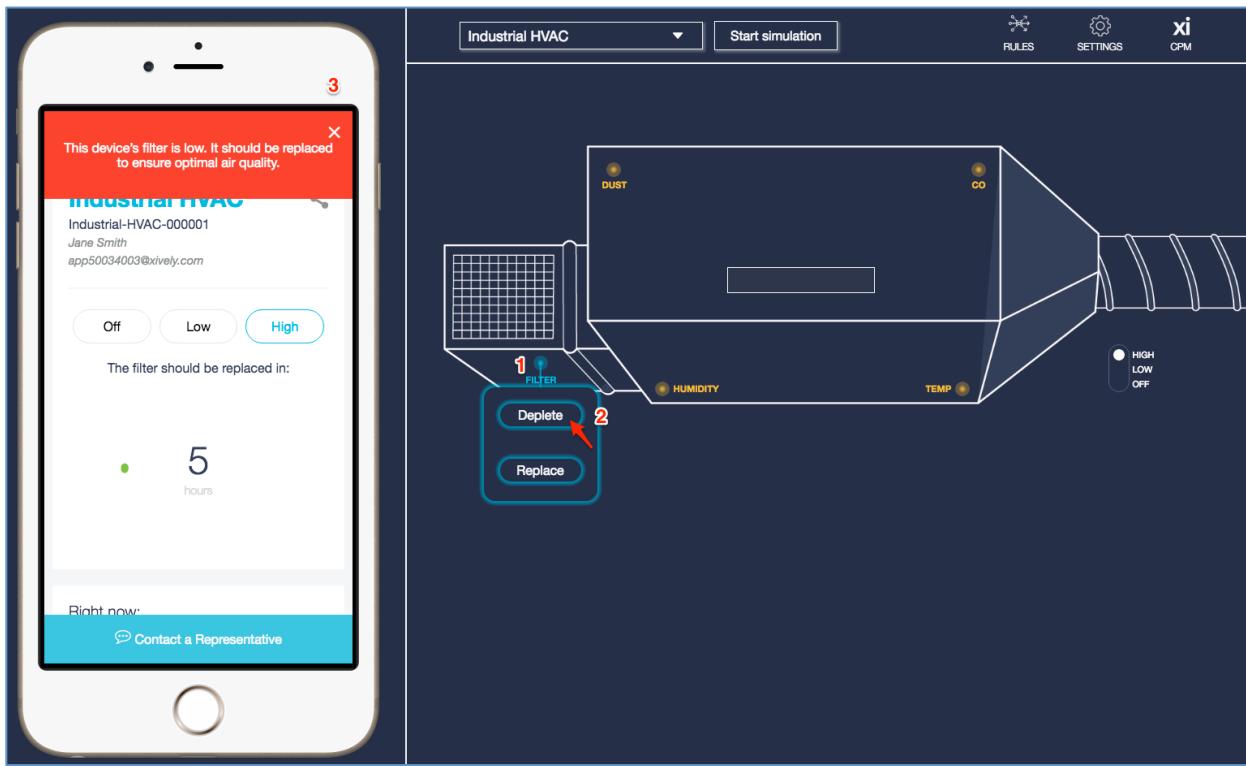




11. Notice the message in the UI stating the device has been fixed. The Activity Log in Salesforce will also update.

**Information:** You may want to “X” out or close the red warning message in the UI.

12. Now trigger the Replace Filter Rule.
- Navigate to the Xively Simulator App. Click on DEMO in the header.
13. Locate the Filter sensor:
- Click on the Filter Sensor
  - Click Deplete
  - Notice the error message that appears in the mobile app



14. Navigate to Salesforce and confirm a new Case has been created:

Case Number	Subject	Date/Time Opened	Priority
00001027	Replace Filter	4/27/2016 12:26 PM	Medium
00001026	Malfunction	4/27/2016 10:27 AM	Medium

15. Click on the Replace Filter subject to open the new Case record.

16. Click on the Detail Tab. Notice how the Activity Log in the Xively Salesforce App updates:

Feed Details

Solutions | Open Activities | Activity History | Case Comments | Attachments | Case History

**Case Detail**

Case Owner	Case Number	Status	New
00001027		Priority	Medium
Contact Name	Account Name	Contact Phone	
Case Reason	Date/Time Opened	Contact Email	
4/27/2016 12:26 PM	Date/Time Closed	Case Origin	

**Xively Information**

Asset

Xively Device ID: -1046b3135d00

**Industrial HVAC**

Created: Apr 27, 2016	Id: -1046b3135d00	Fan speed: Off	Factory reset
Provisioning state: activated	Firmware version: 2.0.0	Serial number: Industrial-HVAC-000001	
Included sensors: Temperature, Humidity, VoC, CO, Dust, Filter	Color: white	Hardware version: 1.1.0	
Filter type: carbonHEPA	Power version: 12VDC	Production run: DEC2016	
		Activated date: -	

Affected end users: 3

**Activity**

- Filter low 03:26 PM Today
- Device recovered from error 03:26 PM Today
- Device is being reset 03:26 PM Today
- Factory reset command received 03:26 PM Today
- Fan high 03:26 PM Today

17. You can simulate replacing the Filter. Navigate to the Xively Simulator and click the Replace button in the (1) Filter Sensor. Additionally, you can navigate to Salesforce and confirm the Activity Log updates in the Case detail.

The filter has been replaced.

**Industrial HVAC**  
Industrial-HVAC-000001  
Jane Smith  
app50034003@xively.com

Off Low High

The filter should be replaced in: 42 days

**FILTER**

Deplete Replace 1

DUST CO TEMP HUMIDITY HIGH LOW OFF

Right now: Contact a Representative

## 5.0 Appendix A: Other Functionality

### 5.1 Xively Management App

This section details how to log in and start working with the Xively Management App. In addition to this brief summary, there is an ever-growing library [here](#) to help you learn about Xively APIs and best practices.

1. Navigate to the Xively Simulator in your browser. Locate the  link in the header bar (1). Click the link to open a new tab at the Xively Management App log in screen.
  - a. To log in to the Xively Management App. You will need 3 credentials. They are stored in the Settings icon (2) in the header bar:

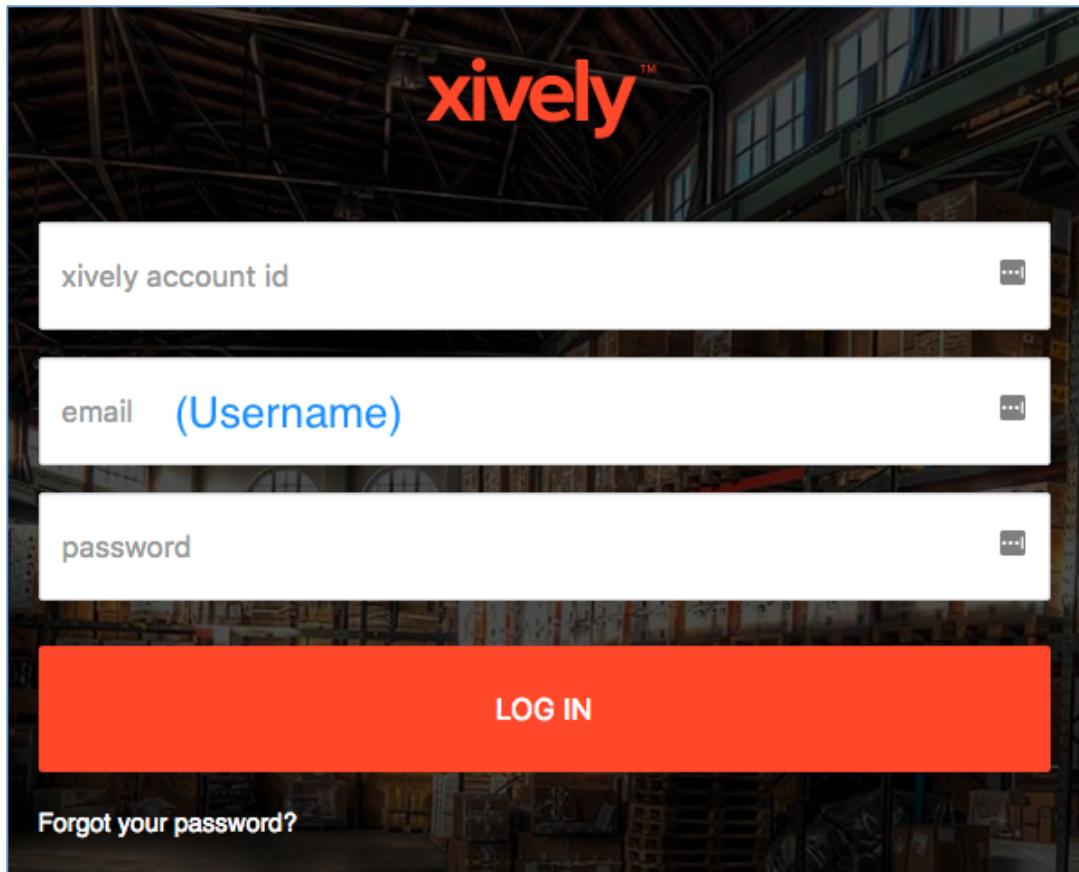


5. Copy and paste the values from Settings into the Xively Management log in page. Note: Username should be pasted into the email field.

Xively Account	
Account ID:	[REDACTED]
Username:	[REDACTED]
Password:	Hidden. Click here to view. 

Salesforce Settings	
Username:	[REDACTED]
Password:	Hidden. Click here to view. 
Secret:	Hidden. Click here to view. 



6. Once you log in to the Xively Management App you will see two options:
  - a. Account Details – View various details and usage for your Xively account
  - b. Workbench – View Xively entity models and statistics.

Select an application:

**Account Details**  
View various details and usage data for your account.

---

**Workbench**  
This is an app to set up and see your models within Blueprint

## 5.2 Xively Workbench

Workbench (pictured below) is designed to manage your connected solution. It visualizes information such as number of devices, device templates (types) and high-level usage data. For more Xively Workbench tutorials click [here](#). The tutorial below just scratches the surface of the Xively Management App's capability!

The screenshot shows the Xively dashboard interface. On the left, a dark sidebar contains navigation links: DEVICES, USERS, ORGANIZATIONS, TEMPLATES, INSIGHTS, and INTEGRATIONS. Below these are account-related links: Account and Help. At the top right, there are status indicators: Xively Status (Online), Messaging: Online, and API: Online. The main content area features a "Dashboard" header with "Welcome" and "AT A GLANCE" sections. The "AT A GLANCE" section includes three large teal boxes: "DEVICES" (45), "ORGANIZATIONS" (11), and "USERS" (19). Below each box are sub-sections: DEVICE TEMPLATES (Home Air Purifier, 15 devices), ORGANIZATION TEMPLATES (Warehouse, 3 organizations), and USER TEMPLATES (Operations Manager, 3 users). A bar chart titled "NEW DEVICES PER DAY" shows a daily average of 7 devices added per day. The bottom of the page has a footer with a "Talk to us!" button.

1. View a list of devices by clicking on DEVICES in the left hand panel or the button on the page:

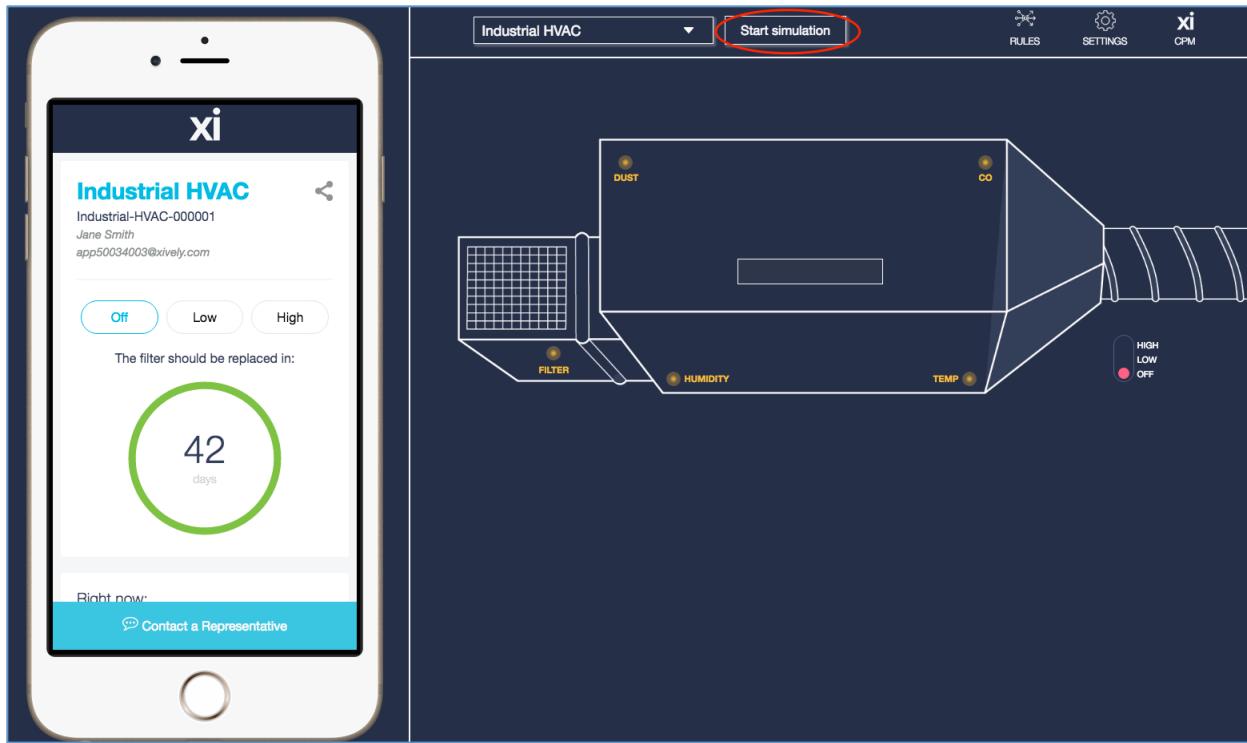
## Devices

Add new device

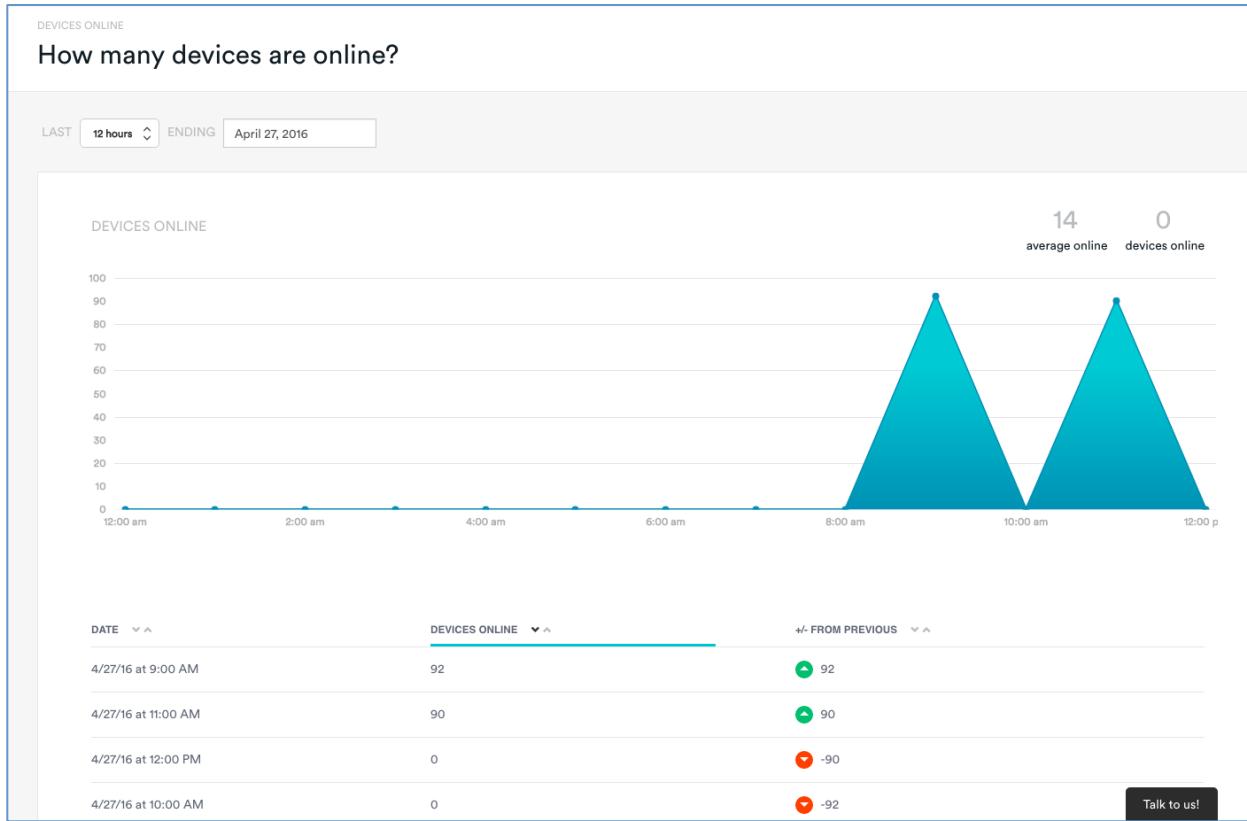
TOTAL DEVICES 45		Device Template Filter	Connected		
SERIAL NUMBER	DEVICE ID	All	All	Search By	
Home-Air-Purifier-000001	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier	04/27/2016 at 3:58 PM	2.0.0
Home-Air-Purifier-000002	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier	04/27/2016 at 1:26 PM	2.0.1
Home-Air-Purifier-000003	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.2
Home-Air-Purifier-000004	[REDACTED] 0	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.0
Home-Air-Purifier-000005	[REDACTED] 4	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.1
Home-Air-Purifier-000006	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.2
Home-Air-Purifier-000007	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.0
Home-Air-Purifier-000008	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.1
Home-Air-Purifier-000009	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.2
Home-Air-Purifier-000010	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.0
Home-Air-Purifier-000011	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.1
Home-Air-Purifier-000012	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.2
Home-Air-Purifier-000013	[REDACTED]	04/27/2016 at 1:26 PM	Home Air Purifier		2.0.0

Talk to us!

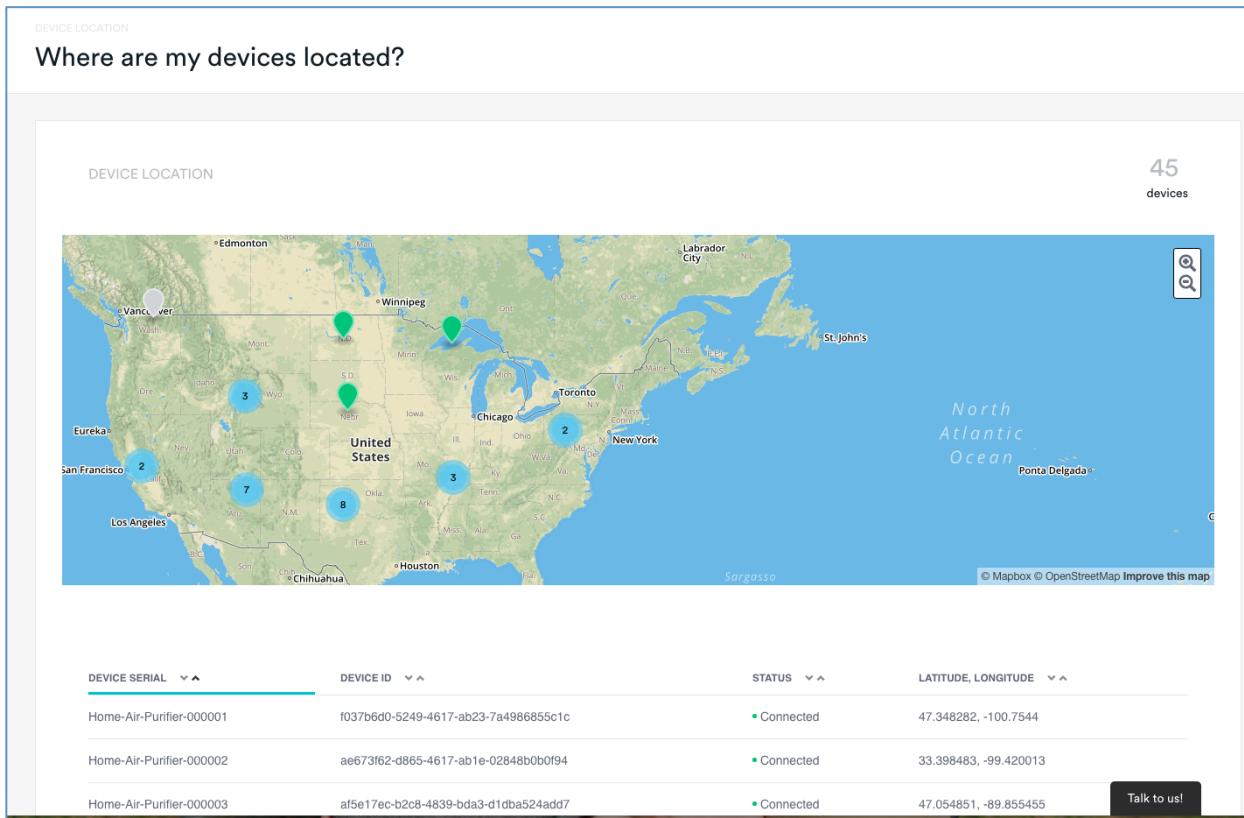
2. Try out the Xively Simulator App's Workbench Simulator. This simulation is designed to bring the Xively Management App to life. You'll see devices connect and update in real time.
  - a. Navigate to the Xively Simulator App browser tab and click DEMO in the header.
  - b. In the header tool bar click on the Start Simulation button:



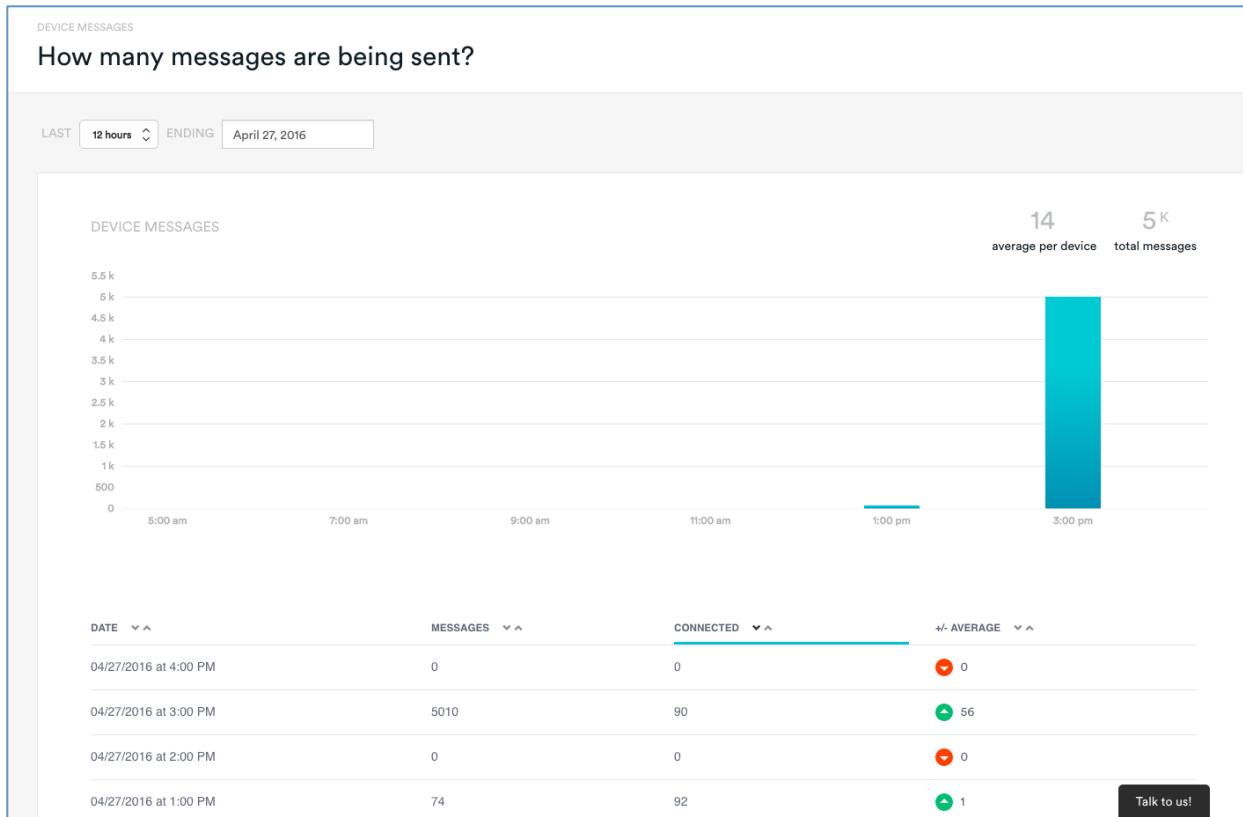
3. Navigate back to the Xively Management App and locate Devices Online in the left hand menu bar. Click to view real time data:



4. Click on Device Locations to view a map of devices:



5. Click on Messages Sent in the left hand menu to see details of the MQTT message volume:



## 5.3 Xively Account Details

View Account Details for enhanced data usage metrics and contact information about for your company.

xi |

HEROKU-[REDACTED]

Account ID	Created
[REDACTED]	02/09/2016

Usage

	December	January	February
Blueprint Domain Model	0	0	54
Devices (# objects)	0	0	51
Users (# objects)	0	0	3
Data Transfer	<i>See expanded</i>	<i>See expanded</i>	<i>See expanded</i>
Messaging (MQTT)	0	0	4.7 K
Published	0	0	1.8 K
Delivered	0	0	2.9 K
API Bandwidth (HTTP)	0 B	0 B	48.4 KB
Blueprint	0 B	0 B	48.4 KB
Time Series	0 B	0 B	0 B
Data Storage	0	0	12.1 K
Blueprint Data	0 B	0 B	11.8 KB
Timeseries Data	0 B	0 B	0 B

## 6.0 Appendix B: Salesforce Package Details:

### 6.1 Description of Classes, Triggers, and Custom Setting:

#### 6.1.1 Classes:

##### **ConcariaDemoPostInstallClass**

Class that automatically runs after the initial installation of the Xively Managed Package. This automatically creates an Account, a Pricebook, and 3 custom products.

##### **CononcariaDemoInstallClass**

A helper class that calls the Class “ConcariaDemoPostInstallClass”. This helps to populate the Custom Setting values.

#### 6.1.2 Triggers:

##### **ConcariaDemoCaseTrigger**

The trigger helps create the relationships within a Case record. This includes reviewing to see if an Asset has a “Xively\_Device\_ID”, and if so, setting this Asset related to the Case. If there is a Contact or Account related to the Asset, then this is automatically related to the Case as well.

##### **ConcariaDemoAssetTrigger**

When a new Asset record is inserted, the trigger tests “Xively\_Device\_ID\_\_c” for a value. If it matches it updates fields provided such as related Contact (matching on Xively\_End\_User\_ID). If no match, the trigger uses the Custom Setting “XivelyDemo” to map in values for the Asset including: Asset Name, Asset Status, Asset Product2id, Asset Account ID.

##### **ConcariaDemoContactTrigger**

When inserting a new Contact this trigger tests Xively\_End\_User\_ID for a value. If matched, update email address. If no match, the trigger creates a Contact using default values from the custom setting “XivelyDemo”. It also relates the Contact to the Account listed in the “XivelyDemo” custom setting record Contact Account

#### **Important Sequencing during record insertion:**

1. Insert or Upsert Contacts first because you need to relate the Asset and/or Case to a Contact
2. Insert or Upsert the Asset next, then insert the Case
3. Create a timeout function in the script to allow the asynchronous methods to complete. This avoids errors and orphan records.

**Information:** Sequencing has been set up for you in the Xivley demo. 1-3 above is for reference purposes only.

### 6.1.3 Custom Setting:

#### ConcariaDemo

This custom setting defines default values for Asset, Contact, and Case records in each environment. These Custom Setting values can be easily updated/removed by an Admin.

### 6.1.4 Package Component List:

Account:

1. Page Layout: Xively Account Layout

Contact:

1. Page Layout: Xively Contact Layout
2. Custom Field: Xively End User ID
3. Custom Field: Type

Asset:

1. Page Layout: Xively Asset Layout
2. Custom Field: Activated Date
3. Custom Field: Device ID

Case:

1. Page Layout: Xively Case Layout
2. Custom Field: Asset Name (text)
3. Custom Field: Xively Device ID

Opportunity:

1. Page Layout: Xively Opportunity Layout

Email Template Folder:

1. Xively Email Templates

Email Templates:

1. Support: Case Closed
2. Support: Case Received

Workflow Rule:

1. Case Closed
  - a. Email Alert: Support: Case Closed

2. Case Received
  - a. Email Alert: Support: Case Received
  - b. Set Asset Status to Activated
  - c. Field Update: Activated Date Today
  - d. Set Asset Status to Purchased
3. Field Update: Purchased Date Today

APEX Classes:

1. ConcariaDemoPostInstallClass
2. ConcariaDemoTestMethods
3. ConcariaDemolInstallClass

APEX Trigger:

1. ConcariaDemoCaseTrigger
2. ConcariaDemoAssetTrigger
3. ConcariaDemoContactTrigger

Custom Setting:

1. XivelyDemo
2. Custom Setting Object: XivelyDemo