

DEVELOP WITH  
**DEERE**  
2018

# MyJohnDeere Contributions

November 2018



NOTHING RUNS LIKE A DEERE

# MyJohnDeere Contribution Objectives

Chris Hutchinson

Learn about what Contributions are and the value they provide to Connected Software Companies (CSCs)

---

Learn about the different types of Contributions

- § Tools
  - § Notifications
  - § Map Layers
  - § Assets
  - § Files
- 

See how to use Contributions via Postman

---

Learn how to get started with Contributions

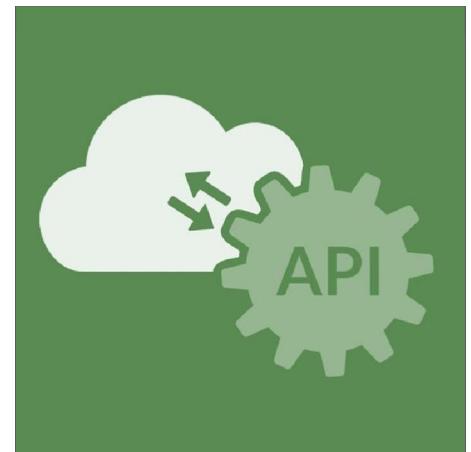
---

Questions

---

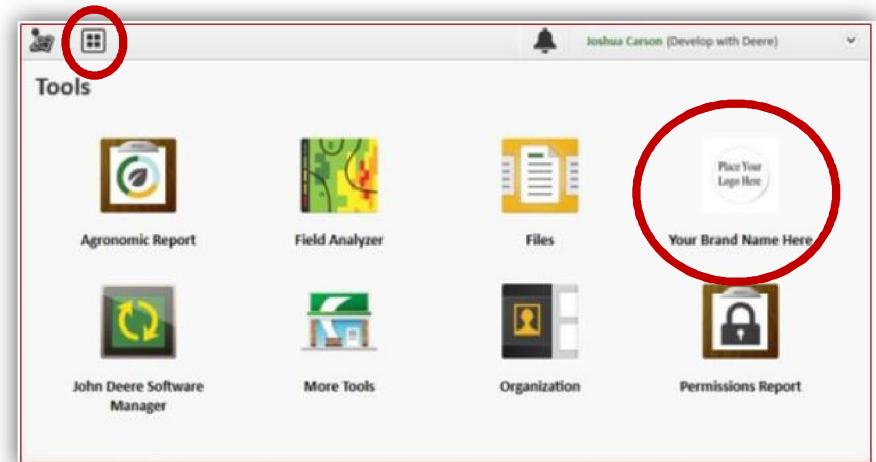
# MyJohnDeere Contributions

- § Contributions enable Connected Software Companies (CSC) to integrate insights/services within the John Deere ecosystem through APIs
- § Value to CSCs
  - § Provide custom insights/services to John Deere customers
  - § Product visibility and branding within Operations Center
- § Value to Customers
  - § Custom integration of CSC insights/services
  - § Improved operational management and execution
- § Value to John Deere
  - § Enhances the John Deere experience
  - § Enables John Deere equipment to be the best at in field execution



## Contributions – Getting Started...

- Contact [APIDevSupport@JohnDeere.com](mailto:APIDevSupport@JohnDeere.com) to configure your product for contributions
  - Product Name and Logo Icon
  - What would like to contribute?
    - Tool
    - Notification
    - Map Layer
    - Asset
    - File
  - Acquire a Contribution Product ID
    - Uniquely identifies your application
  - Acquire Product Definition IDs
    - Unique identifier for a Contribution Type for a given Contribution Product



# Reminder – Contributions are made through a Software Connection!



MyJohnDeere Account

Mike Griffin

Griffin Farming Operations

After Mike authorizes connection, PGM can access his MyJohnDeere account data on his behalf.



PGM Account

Mike Griffin

Griffin Farming Operations

# Connected Software Demo Setup



MyJohnDeere Account

Chris Hutchinson

Organization = John Deere Demo

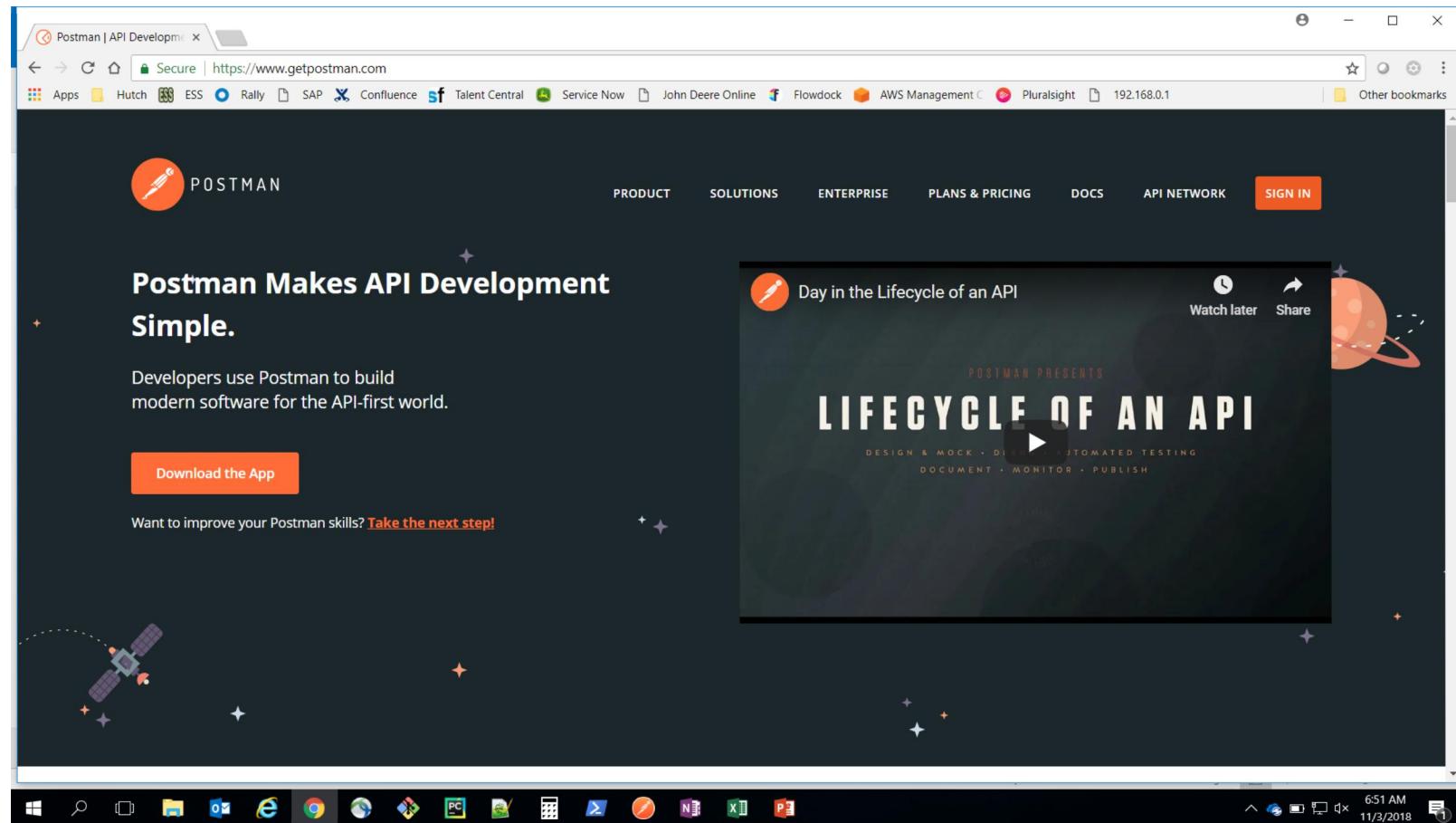
Org ID = 390740



Application

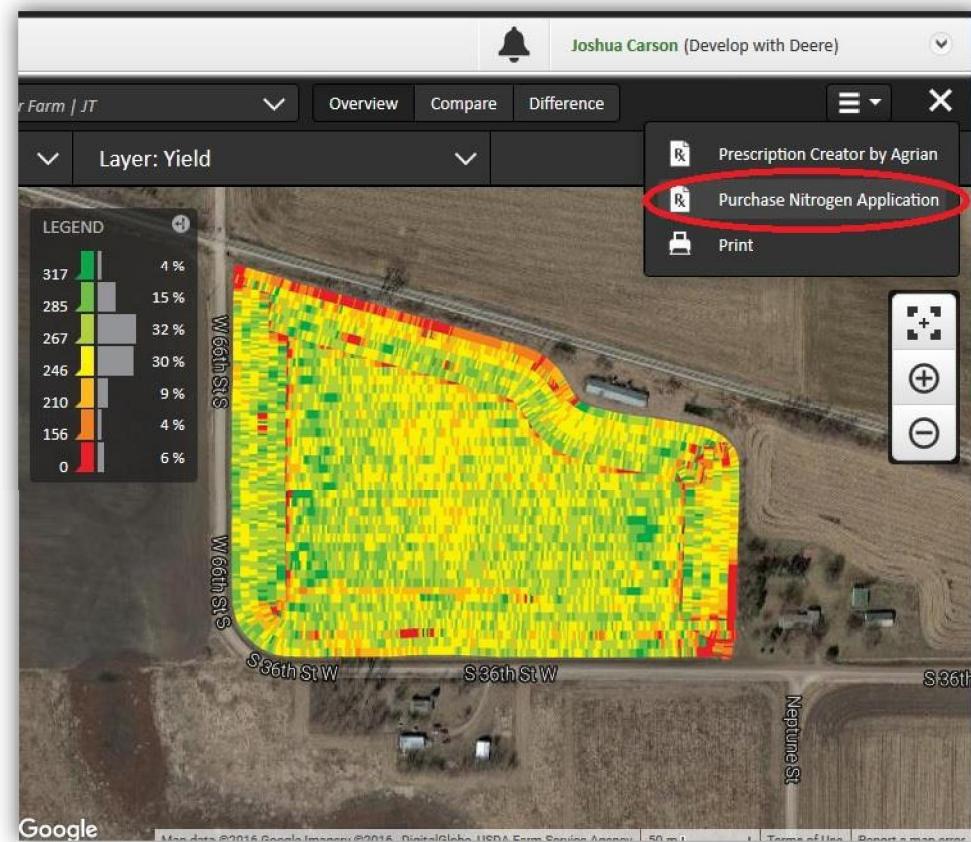
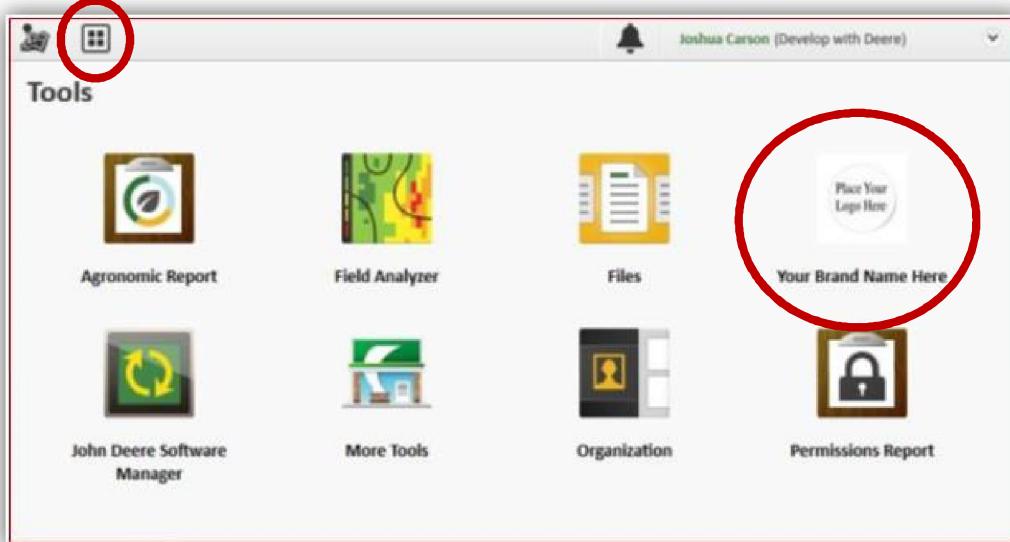
Develop With  
Deere Demo

# Postman REST API Client Tool



# Tool Contribution

- § Link to your software from within Operation Center
- § Customers maintain application/tools content

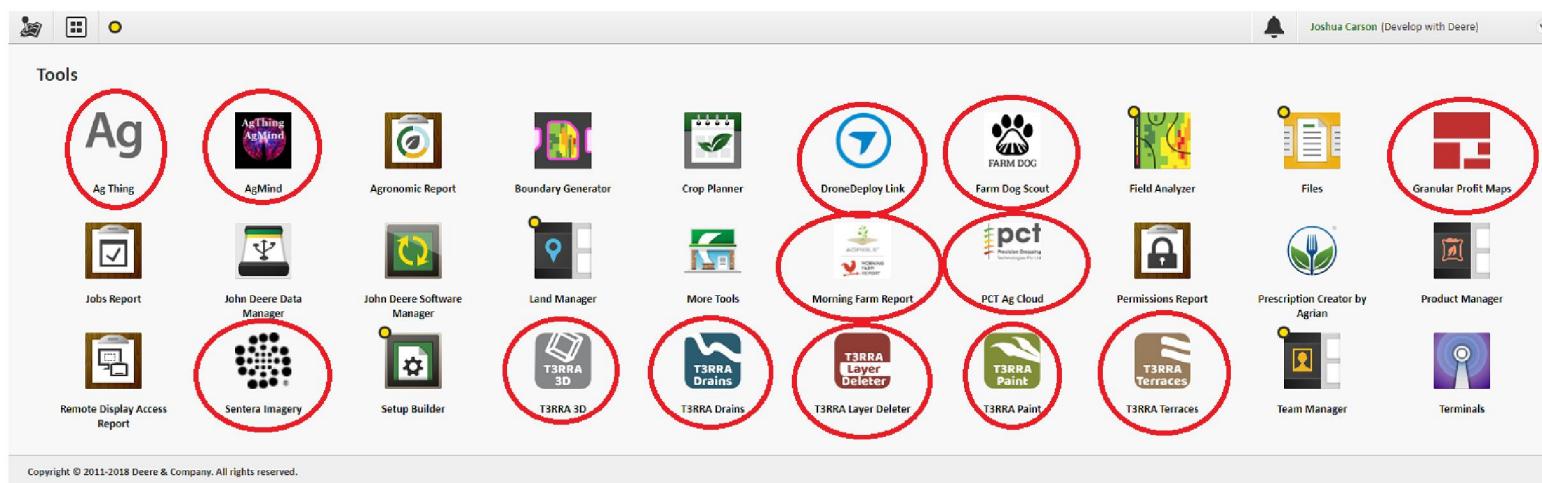


# How To Contribute a Tool

1. Activate your product for a specific org (required for Notifications and Tools)

- **POST /organizations/{orgId}/contributionActivations**

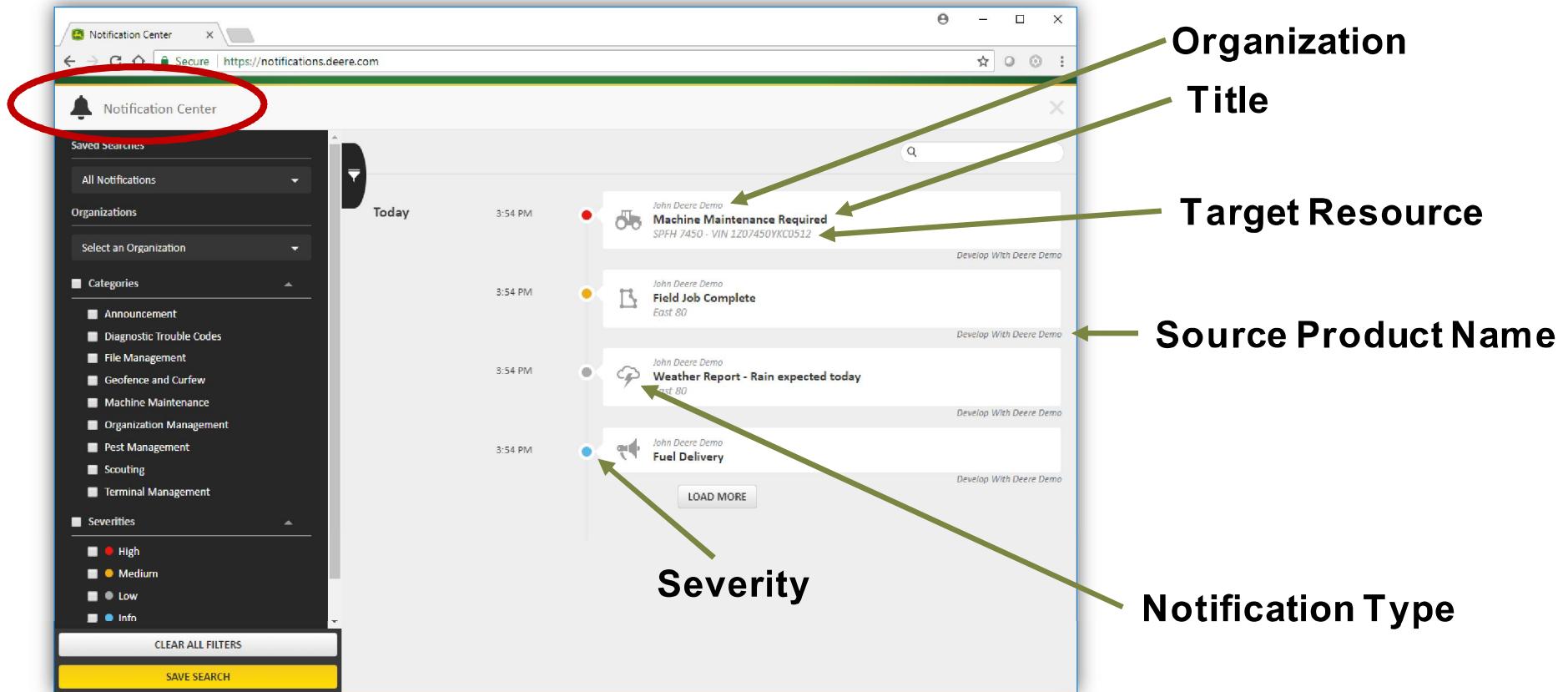
- JSON payload specifies the product to activate



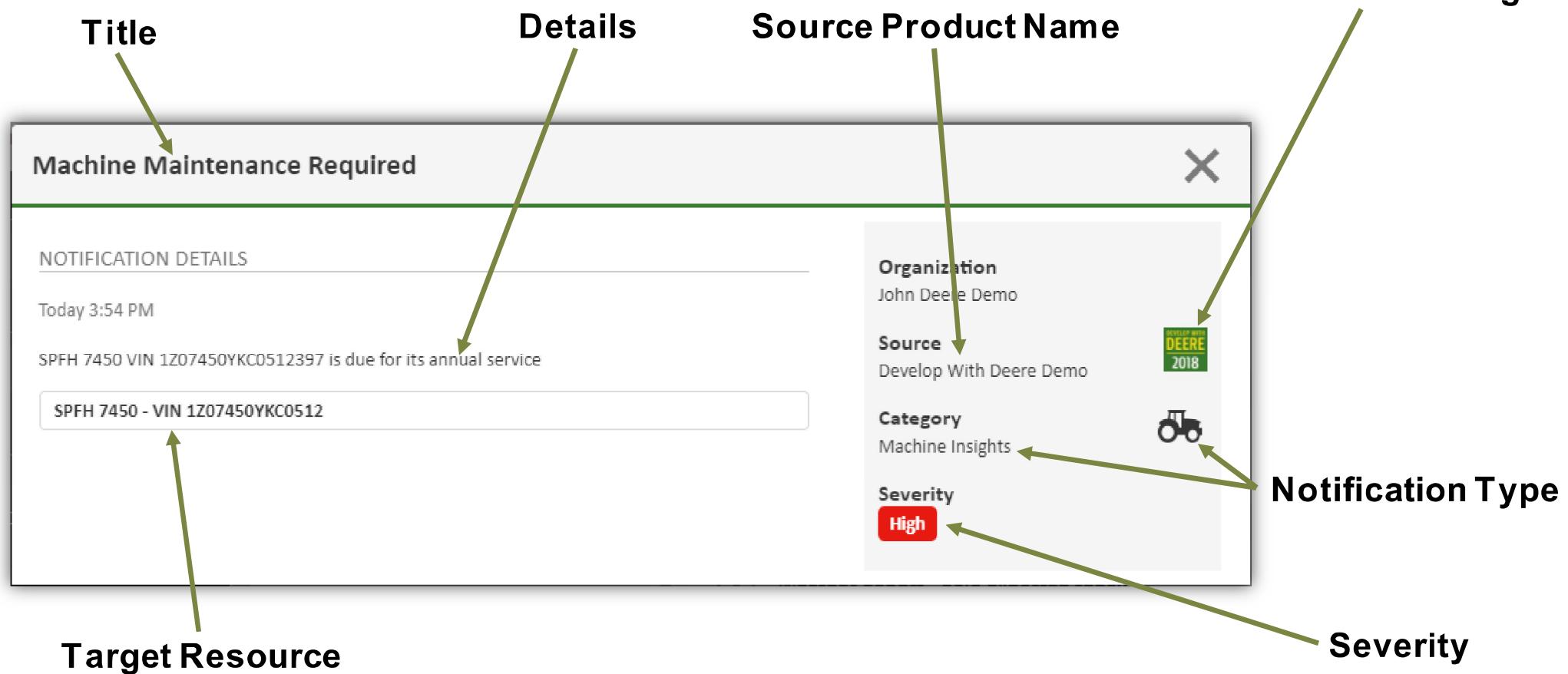
<https://developer.deere.com/#!documentation&doc=%2Fmyjohndeere%2Factivations.htm&anchor=one>

# Notification Contribution

- § Publish an event notification that refers to a target resource
- § Notifications appear in Operations Center and MyOperations mobile app



## Notification Contribution



# How To Contribute a Notification

1. Activate your product for a specific org (required for Notifications and Tools)

- **POST /organizations/{orgId}/contributionActivations**

- JSON payload specifies your product to activate

2. Post a notification to a specific org

- **POST /organizations/{orgId}/notificationEvents**

- JSON payload specifies:
  - Target Resource URI
    - Field, Machine, or Organization supported
  - Type
  - Title
  - Details
  - Severity
    - NONE, LOW, MEDIUM, or HIGH

Notification Types
ANNOUNCEMENT
FIELD_IMAGERY
FIELD_OPERATIONS
FILE
FINANCIAL
MACHINE_INSIGHTS
ORGANIZATION
PEST
SCOUTING
WEATHER

<https://developer.deere.com/#!documentation&doc=myjohndeere%2Fnotifications.htm&anchor=>

## Map Layer Contribution

### Layer Selector (Map Layer)

Event  
(Map Layer Summary)

Legend

Detail

Metadata Value Pairs

Source Product Logo

Source Product Name



# How To Contribute a Map Layer

## 1. Create a Map Layer Summary (Event)

- **POST /organizations/{orgId}/fields/{fieldId}/mapLayerSummaries**
  - Response contains a location header with the mapSummaryId

## 2. Create a Map Layer

- **POST /mapLayerSummaries/{mapSummaryId}/mapLayers**
  - Response contains a location header with the mapLayerId

## 3. Create a file resource to store your image

- **POST /mapLayers/{mapLayerId}/fileResources**
  - Response contains a location header with the fileResourceId

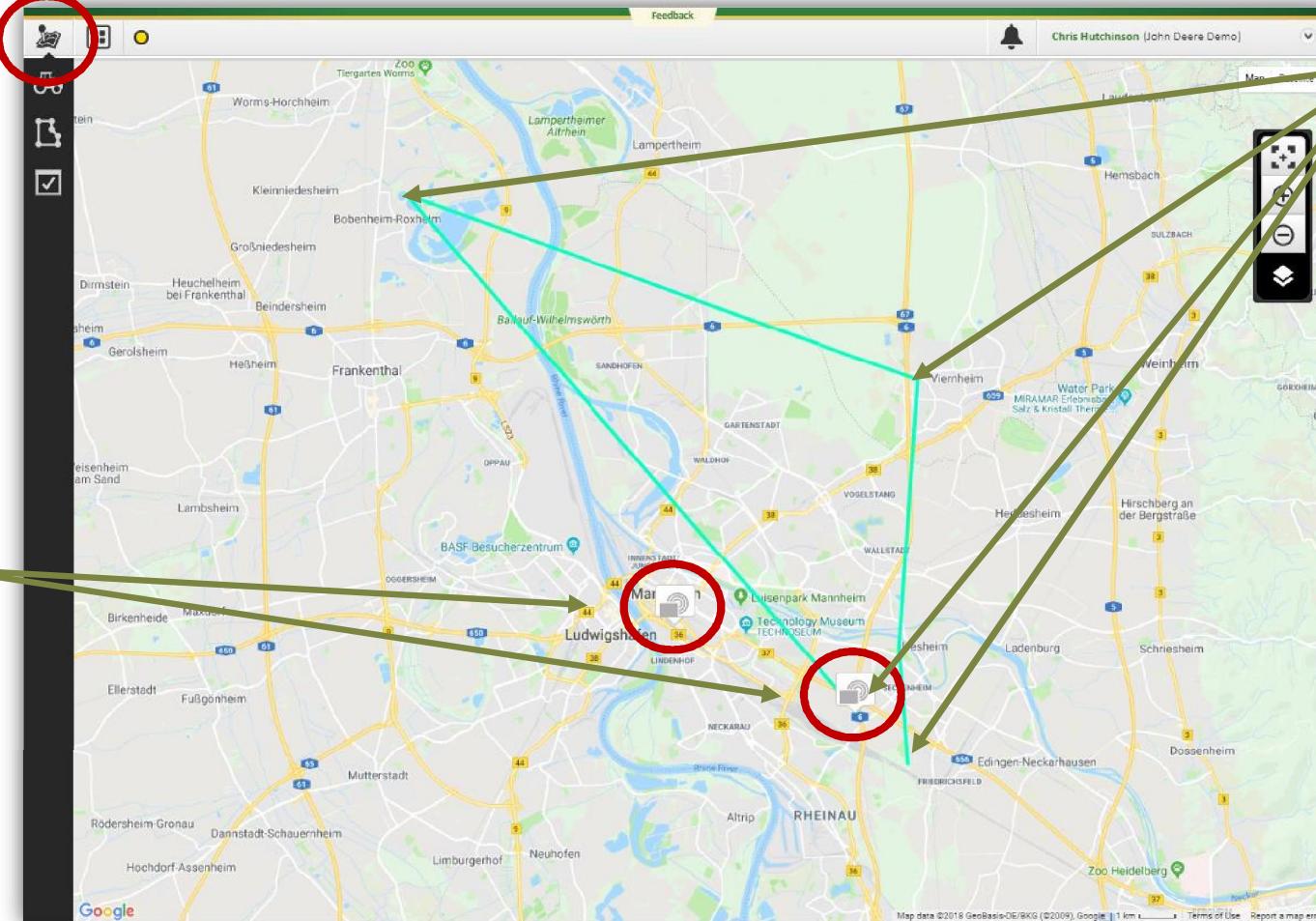
## 4. Upload your map layer image to the file resource

- **PUT /fileResources/{fileResourceId}**

<https://developer.deere.com/#!documentation&doc=myjohndeere%2Fnotifications.htm&anchor=>

# Asset Contribution

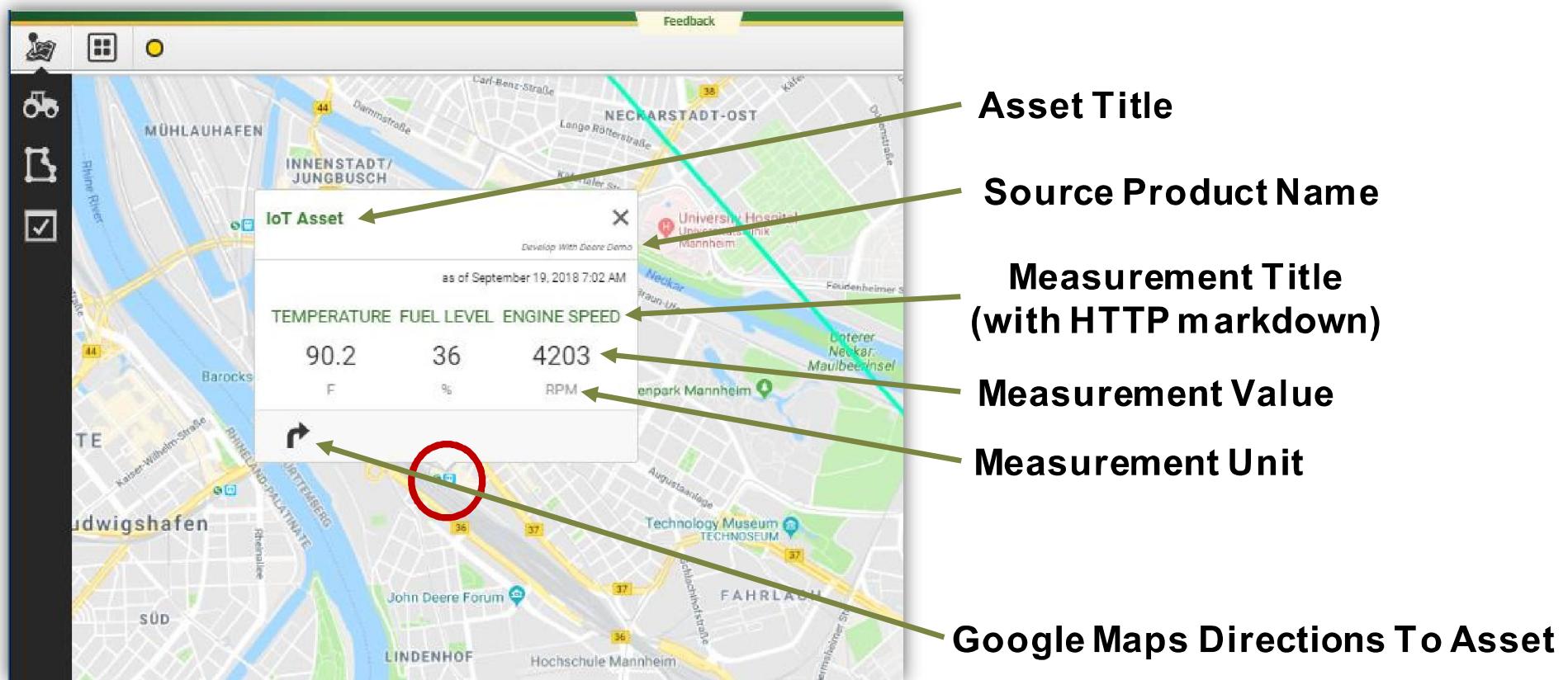
Map



Location History

Device Assets

## Asset Contribution



# How To Contribute an Asset

## 1. Create an asset

- **POST /organizations/{orgId}/assets**
  - JSON payload specifies asset category, type, and subtype
    - For now, only Device category and Sensor type are fully supported
  - Response contains a location header with the assetId

## 2. Create/update a location for the asset

- **POST /assets/{assetId}/locations**
  - JSON payload specifies:
    - GPS location
    - Up to three measurements with a value and unit of measure
      - Supports HTML markdown to specify custom links

<https://developer.deere.com/#!documentation&doc=.%2Fmyjohndeere%2FiotDeviceSupportOverview.htm>

# File Contribution

The image shows two screenshots of the John Deere Connected Software interface. The left screenshot displays the main dashboard with various tools like Agtron Report, Boundary Generator, and Files. The right screenshot shows the 'Files' tool interface with a file list and processing details.

**Left Screenshot (Dashboard):**

- Tools section:

  - Agtron Report (highlighted with a red circle)
  - Boundary Generator
  - Crop Planner
  - Develop With Deere Demo (highlighted with a red circle)
  - Field Analyzer
  - Granular Profit Maps
  - Jobs Report
  - John Deere Data Manager
  - John Deere Software Manager
  - Land Manager
  - More Tools
  - Permissions Report
  - Prescription Creator by Agric
  - Product Manager
  - Remote Display Access Report
  - Setup Builder
  - Team Manager
  - Terminals

**Right Screenshot (Files Tool):**

- Header: Select a month to display files (09/29/2018 - 10/30/2018)
- Tool tabs: Files (highlighted with a red circle), Queue, Archive
- File list table:

Name	Type	Size	Date Created	Last Modified Date	Recent Activity	Source
Gen4 - 4600 Planting Data.zip	Doc	284.7 KB	October 30, 2018 1:20:19 PM	October 30, 2018 1:21:24 PM	File processing finished	John Deere 4600
- Annotations:

  - Green arrow pointing to the 'Name' column header: **File Name**
  - Green arrow pointing to the 'Recent Activity' column: **Processing Status**
  - Green arrow pointing to the 'Source' column: **File Type**

# How To Contribute a File

1. Acquire a compatible datacard zip file
  - For examples, see - <https://github.com/JohnDeere/SampleData>
2. Create a File Id
  - **POST /organizations/{orgId}/files**
    - JSON payload specifies desired file name
    - Response contains a location header with the fileId
3. Upload a file to the FileId
  - **PUT /files/{fileId}**
    - Content-Type header set to application/octet-stream

<https://developer.deere.com/#!documentation&doc=%2Fmyjohndeere%2Ffiles.htm&anchor=three>

## **Other Contributions in consideration – feedback welcome...**

§ Clients – Farms – Fields

§ Boundaries

§ Products

  § Seeds

  § Chemicals

  § Tank Mixes

§ Rx Preview Support

§ Machines / Implements

§ Guidance Lines

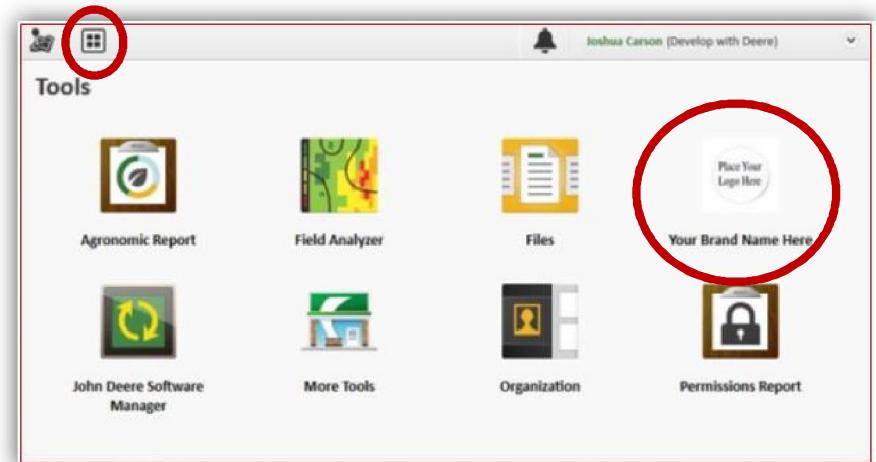
§ Operators

§ Setup Files

§ Jobs

## Contributions – Getting Started...

- Contact [APIDevSupport@JohnDeere.com](mailto:APIDevSupport@JohnDeere.com) to configure your product for contributions
  - Product Name and Logo Icon
  - What would like to contribute?
    - Tool
    - Notification
    - Map Layer
    - Asset
    - File
  - Acquire a Contribution Product ID
    - Uniquely identifies your application
  - Acquire Product Definition IDs
    - Unique identifier for a Contribution Type for a given Contribution Product



DEVELOP WITH  
**DEERE**  
2018

## Feedback

[APIDevSupport@JohnDeere.com](mailto:APIDevSupport@JohnDeere.com)  
[Developer.Deere.com](http://Developer.Deere.com)





**JOHN DEERE**