App Catalog Management

# Overview

This document will give an overview of the “App Catalog Management” proof of concept solution for SharePoint On-Premise and Online environments. This solution will allow development groups to help manage custom SharePoint applications requests for the tenant app catalog. A main group identified as approvers will have the ability to approve and deploy/retract solutions from the tenant app catalog.

# Requirements

This JavaScript (client-side) solution is designed to run in a SharePoint 2013+/Online environment. It utilizes the following features in SharePoint:

* Document Set Content Type
  + Site Collection Feature
* Security Groups
  + App Developers – Ability to add app requests
  + App Approvers – Ability to approve and deploy apps to the tenant app catalog
    - Must have security rights to the tenant app catalog

Currently, the solution utilizes a classic webpart page and a content editor webpart. The solution can be updated as a SPFx solution.

## Installation

### Upload Solution Assets

1. Access the site collection to install the solution to
   1. It’s recommended to create a new site collection for this solution
2. Upload the SharePoint solution assets to the “Site Assets” library

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Figure - Solution Assets

* 1. app-catalog-dashboard.js/app-catalog-dashboard.min.js
     1. JavaScript solution bundled file
  2. config.json
     1. Configuration specific to the client’s environment
  3. dashboard.aspx
     1. Web Part page for the solution (Created in the next step)
  4. index.html
     1. Referenced by the content editor webpart
  5. user\_agreement.html
     1. User agreement content that is customizable by the client

### Create Dashboard Page

1. Access the “Site Pages” or “Pages” library
2. Select the “New” menu button and select “Web Part Page”

Graphical user interface, application

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Figure - Create Web Part Page

1. Set the values and click on “Create”

Graphical user interface, text, application

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Figure - Web Part Page Creation

1. Click on “Add a web part” and select the “Content Editor” webpart

Graphical user interface, application, Word

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Figure - Add Content Editor Web Part

1. Edit the web part and set the content link and chrome type properties

Graphical user interface, text, application

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Figure – Content Editor Web Part Properties

1. Click on “Install” to create the SharePoint solution assets, and then “Security” to create the security groups used by the solution

Graphical user interface, text, application, email

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Figure - Installation Modal

1. Once the installation completes, click on the “x” button to close the modal and select “Stop Editing” from the ribbon

Graphical user interface, application, Word

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Figure - Complete Web Part Page Edits

### Configure Document Set Homepage

1. Access the “Developer Apps” library settings

Graphical user interface, application

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Figure - Developer Apps Library Settings

1. Click on the “App” content type under the “Content Types” section

Graphical user interface, text, application, email

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Figure - Document Set Content Type

1. Click on “Document Set Settings”

Graphical user interface, text, application

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Figure - Document Set Settings

1. Click on the “Customize the Welcome Page” link

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Figure - Edit the Document Set Homepage

1. Edit the Page

Graphical user interface, application, Word

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Figure - Edit Document Set Home Web Part Page

1. Delete the Image Webpart

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Figure - Delete Image Web Part

1. Delete Document Set Properties

Text

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Figure - Delete Document Set Properties Web Part

1. Delete Document Set Contents

[Don’t do this until the modern doc view is added to the solution]

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Figure - Delete Document Set Contents

# Solution

## User Agreement

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Figure - User Agreement

A user agreement will be displayed for any user that doesn’t belong to either the “Developers” or “Approvers” security group. Clicking on “Agree” will automatically add you to the developer’s security group.

Graphical user interface, text, application, email

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Figure - User Agreement HTML File

The user agreement can be found in the “Site Assets” library as part of the solution assets. SharePoint Online has a built-in text editor which will allow the administrators to edit the file contents and add their policy requirements.

## Configuration

Graphical user interface, text, application

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Figure - Solution Configuration

A JSON (config.json) file is used to hold the solution’s dynamic configuration options.

* (Optional) appCatalogAdminEmailGroup
  + The email user/group that is CC’ed on emails sent to the approvers
* (Optional) helpPageUrl
  + The url to a page for additional help
  + Displays a dropdown on the app dashboard if set
* (Optional) templatesLibraryUrl
  + The url to the templates library’s (root-folder or sub-folder) containing template documents
  + Displays a dropdown on the app dashboard if set
* (Required) tenantAppCatalogUrl
  + The url to the tenant app catalog

## Main Dashboard

Graphical user interface, text, application

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Figure - Main Dashboard

The main dashboard will display the app requests and current status from all developers.

### Admin Navigation Menu

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Figure 20 - Administration Menu

The “Admin” navigation menu will be made available for the members of the approver group. This menu will provide links to the security groups used by this solution so they are able to add/remove users. The “Manage App” option will display the “Installation” modal allowing an administrator to reinstall the solution, as shown in the figure below.

Graphical user interface, text, application, email, Teams

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Figure 21 - Administration Installation Menu

This function should only be used for future upgrades when new fields have been added.

### Developer Navigation Menu

The developer menu is available for all users in the developer or approver security groups.

#### Add/Update an App

Graphical user interface, text, application

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Figure - Add/Update an App

Clicking the “Add/Update” button will display a file upload window, allowing the user to select a SPFx package file, as shown in the figure below.

A screenshot of a computer

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Figure - Upload SPFx Package

Once validated and uploaded, a “New App” form will be displayed for the developer to fill out. Some of the metadata will be pre-filled by the data extracted from the SPFx package file.

Graphical user interface, text, application, email

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Figure - New App Form

#### Filters

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Figure - Filtering the Dashboard

Clicking on the “Filters” button will display a panel to view apps by status, as shown in the figure below.

Graphical user interface, text, application

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Figure - Filters Panel

#### Refresh

Graphical user interface, text, application, chat or text message

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Figure - Refresh the Dashboard

The refresh button will load the latest data for the user.

### Dashboard Actions

Graphical user interface, text, application

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Figure - Dashboard Actions

Each app will have a set of available actions. The actions will be made available based on the app’s status.

* View
  + Redirects the user to the app dashboard
* Edit
  + Displays the item form in edit mode
* Submit
  + Submits the application for review
* Review
  + Creates/Continues an app assessment
* Reject
  + Sends the application back to the developer

## App Dashboard

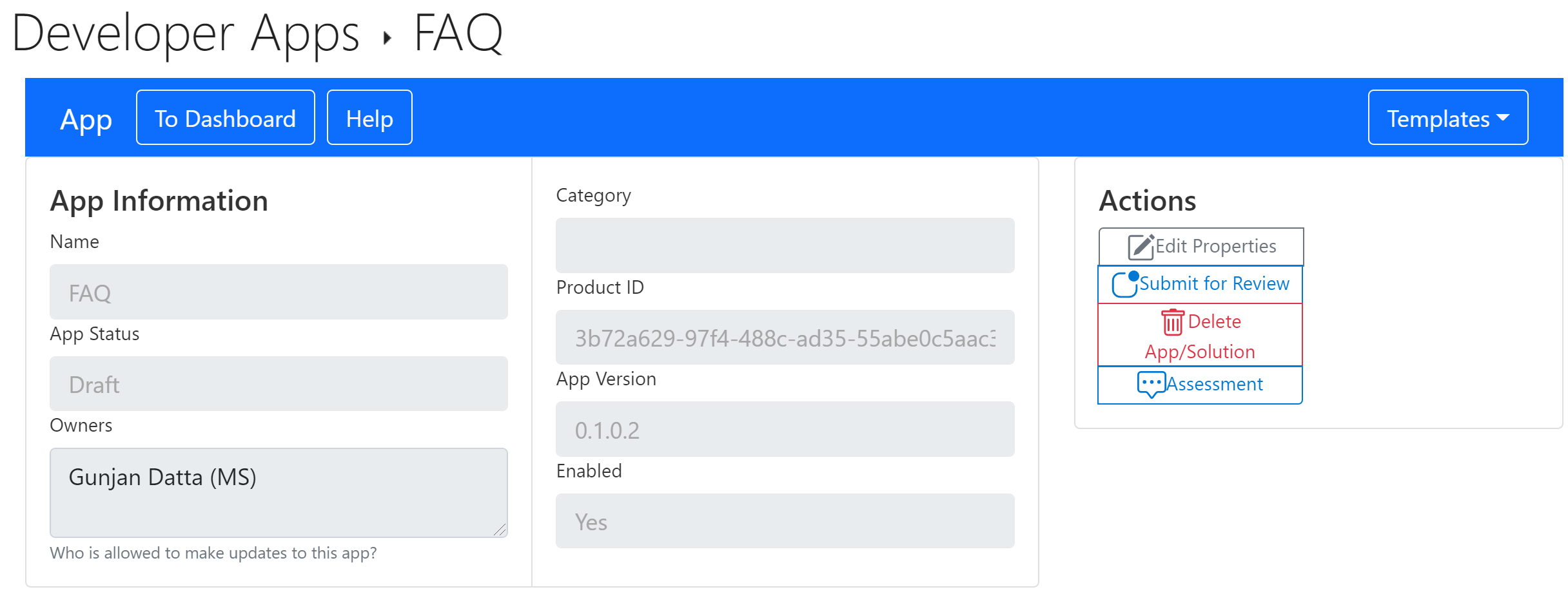


Figure - App Dashboard

The application dashboard contains all of the files related to the application.

### Navigation Options

#### To Dashboard

Redirects the user back to the main dashboard.

#### Help

Graphical user interface, text, application, email

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Figure - Help Page

The optional help page that is configurable by the solution’s configuration file. This will display a help page in a new window/tab.

#### Templates

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Figure - Templates Dropdown

The optional templates dropdown will display the available templates. Selecting a template will copy it to the app’s folder.

Graphical user interface, application

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Figure - Application Request Assets

### Application Dashboard Actions

Graphical user interface, diagram, application

Description automatically generated

Figure - Application Dashboard Actions

The application dashboard will display additional actions which are not available on the main dashboard. The actions will be made available based on the app’s status.

* Edit
  + Displays the item form in edit mode
* Submit for Review
  + Submits the application for review
* Review
  + Creates/Continues an app assessment
* Reject
  + Sends the application back to the developer
* Delete App/Solution
  + Deletes the app request
  + This option will only be available for apps that haven’t been deployed to the app catalog
* Assessment
  + Views the last/current assessment of the application
* Approve
  + Approves the application request
* Retract
  + Retracts the app from the tenant app catalog
* Deploy
  + Copies and deploys the app to the tenant app catalog

## Application Processes

### Developer App Submission



Figure - Developer App Submission

### Developer App Review/Approval



Figure - Developer App Review/Approval

### Approver App Deployment/Retraction



Figure - Approver App Deployment/Retraction