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 1 - 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 2 - Create Web Part Page

1. Set the values and click on “Create”

Graphical user interface, text, application

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Figure 3 - 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 4 - 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 5 – 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

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Figure 6 - 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 7 - 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 8 - Developer Apps Library Settings

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

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Figure 9 - Document Set Content Type

1. Click on “Document Set Settings”

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Figure 10 - Document Set Settings

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

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Figure 11 - Edit the Document Set Homepage

1. Edit the Page

Graphical user interface, application, Word

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Figure 12 - Edit Document Set Home Web Part Page

1. Delete the Image Webpart

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Figure 13 - Delete Image Web Part

1. Delete Document Set Properties

Text

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Figure 14 - 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 15 - Delete Document Set Contents

# Solution

## User Agreement

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Figure 16 - 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 17 - 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 18 - 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

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Figure 19 - Main Dashboard

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

### Admin Navigation Menu

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Figure - 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 - 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 22 - 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 23 - 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.

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Figure 24 - New App Form

#### Filters

Text

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Figure 25 - 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 26 - Filters Panel

#### Refresh

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

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Figure 27 - 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 28 - 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

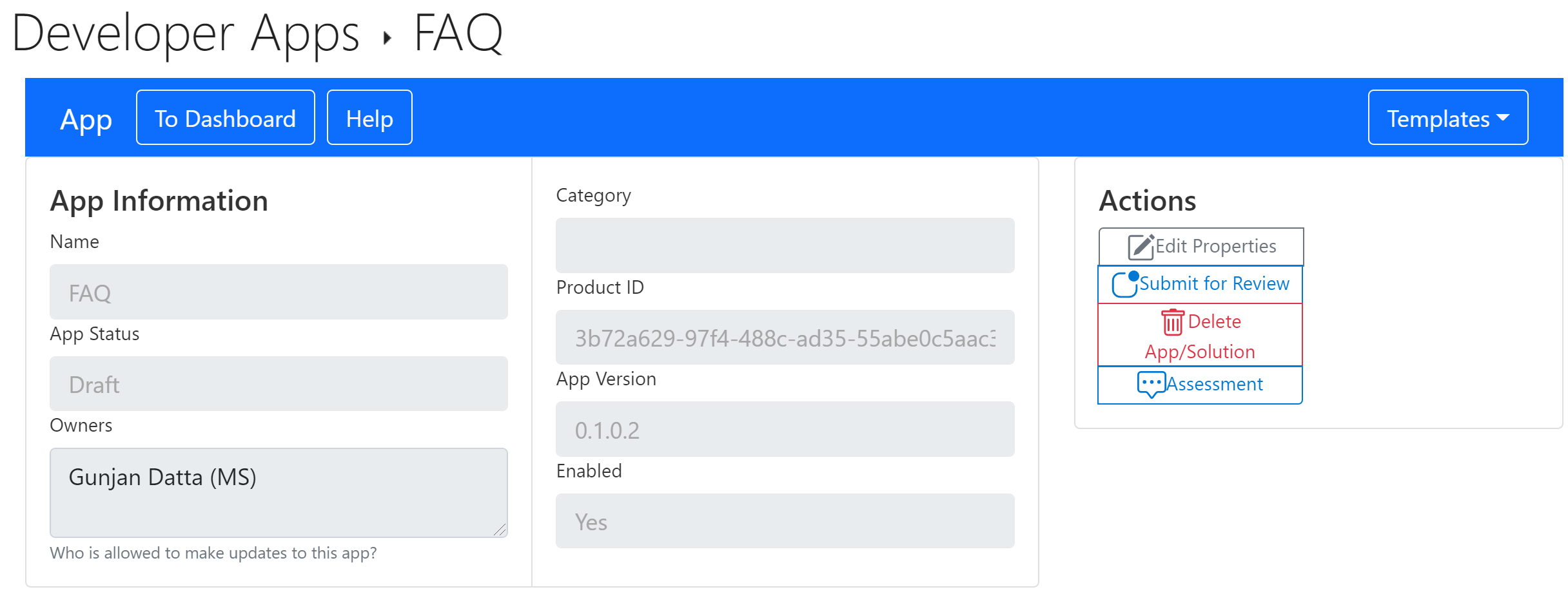


Figure 29 - App Dashboard

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 30 - 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 31 - 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 32 - Application Request Assets

### Application Dashboard Actions

Graphical user interface, diagram, application

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Figure 33 - 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 34 - Developer App Submission

### Developer App Review/Approval



Figure 35 - Developer App Review/Approval

### Approver App Deployment/Retraction



Figure 36 - Approver App Deployment/Retraction