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How to develop an Adobe Launch Extension
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About me

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What is this about

- Provide a general understanding regarding Launch and its Extensions

- Required tools and items

- Creating the setup to develop a Launch Extension

- Overall: Provide the most important information
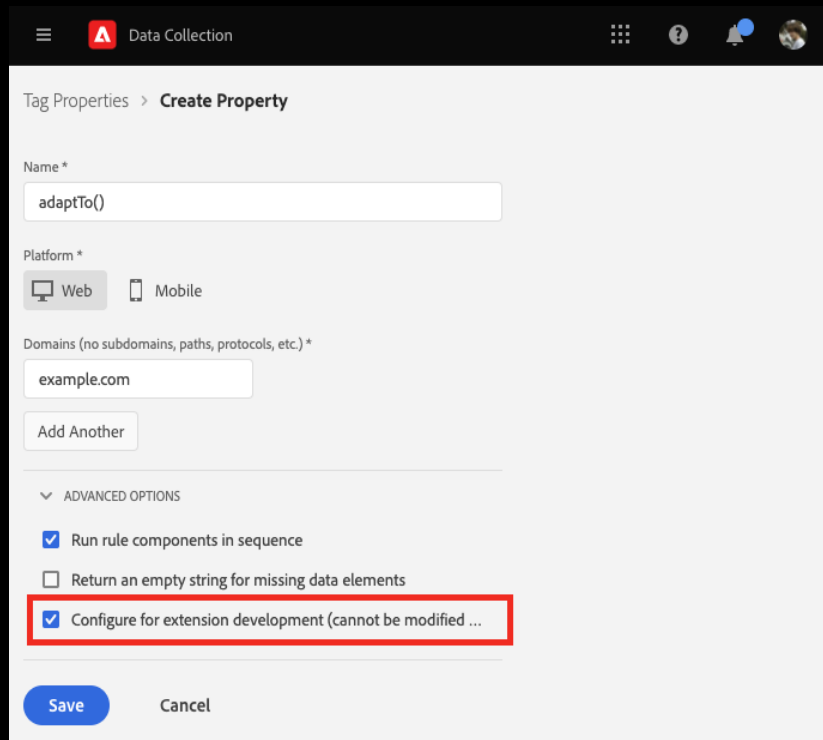
Launch and its Extensions

- **Successor of Adobe DTM**
- **Tag Management System**
- **Rule based**
  - **Events**
  - **Conditions**
  - **Actions**
- **Catalog === App Store / Google Play Store**
- **Extensions === Apps**

Tools & Requirements

- Node.js (https://nodejs.org/en/)
- Know-How (JavaScript, HTML, CSS)
- Access to Launch
- Dummy website

- **Create a new Launch Property**
- **Be sure to check the "Configure for extension development" checkbox within the "Advanced Options"**

Preparing the Environment
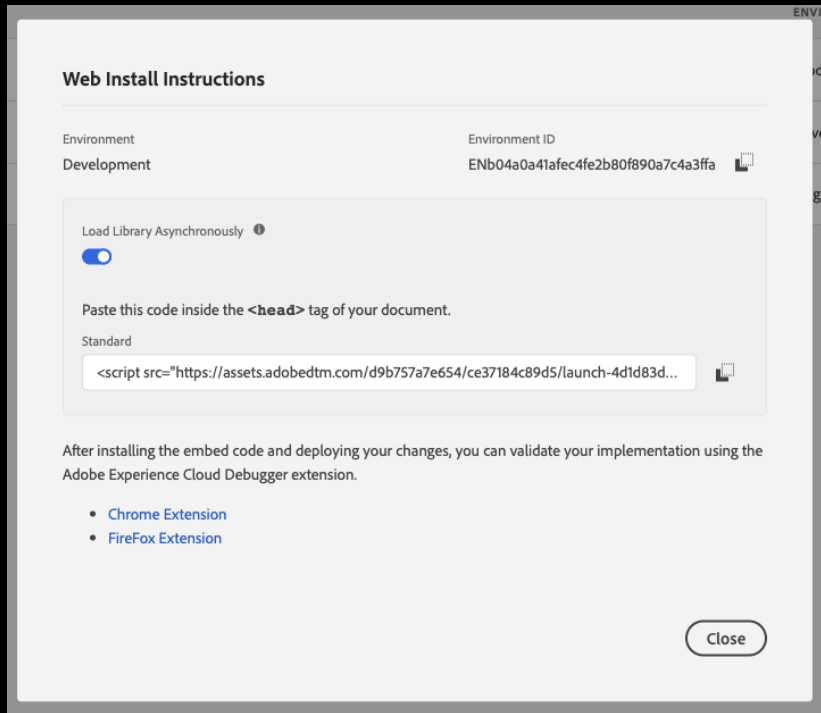
- **Integrate the Launch "Development Environment"-Script on Dummy Website**

Preparing the Environment
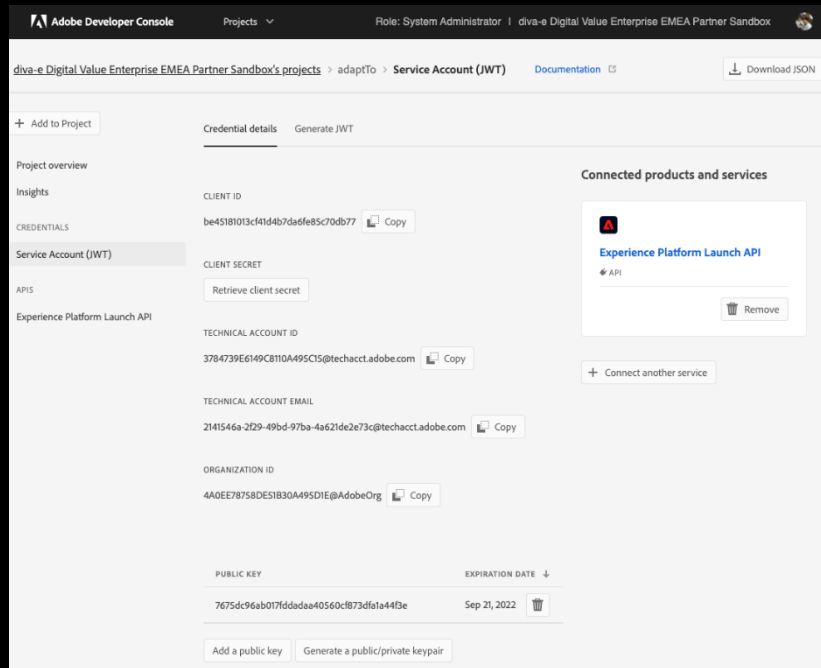
- Create a **Service Account (JWT)** via the Adobe I/O console (adobe.io/console)
- The following information will be required to publish and share the extension
  - **Private Key**
  - **Organization ID**
  - **Technical Account ID**
  - **Client ID / API Key**
  - **Client Secret**

Setup

- **Scaffold**
  - `npx @adobe/reactor-scaffold`
  - „The scaffold tool allows extension developers to quickly and easily build out the initial file structure of a Launch extension"
    - Rule types: **Event** / **Condition** / **Action**
    - Data elements
    - Shared modules
    - Exchange URL
    - Icon path

Coding

- "VIEW" Scripts
  - Used to get input / data from users
  - Provide "extensionBridge" functions
    ```
    init()
    getSettings()
    validate()
    ```

- "LIB" Script
  - Used for the actual functions

- Styling (Optional)
  - Hint: Adobe Spectrum (https://spectrum.adobe.com/)

Debugging

- **Sandbox**
  - `npx @adobe/reactor-sandbox`
  - "Provides a sandbox in which you can manually test your Launch extension. You can test both your views that will eventually appear in the Launch application and your library logic that will eventually run on the user's website"

- **Available under http://localhost:3000 (HTTP) or https://localhost:4000 (HTTPS)**

Private Publish

- **Packager**
  - `npx @adobe/reactor-packager`
  - „The extension packager is a command-line utility for packaging a Launch extension into a zip file suitable to be uploaded to Launch"

- **Uploader**
  - `npx @adobe/reactor-uploader"`
  - „The uploader tool allows extension developers to easily upload their Launch extension to the Launch extension marketplace. It can be used for uploading brand new extension packages or new versions of existing extension packages"

Public Publish

- **Releaser**
  - `npx @adobe/reactor-releaser`
  - "The releaser tool allows extension developers to easily change the availability of their Launch extension. It can be used to change the availability from `development` to `private`"

- Use the **Public Release Request Form** to get it released to the Adobe Launch Catalog
  - https://adobe.allegiancetech.com/cgi-bin/qwebcorporate.dll?idx=7DRB5U

References & Links

- **Jan Exner's "Launch – Make an Extension" Series**
  - https://webanalyticsfordevelopers.com/2018/01/16/launch-make-an-extension-setup/
  - https://webanalyticsfordevelopers.com/2018/01/23/launch-make-an-extension-coding/
  - https://webanalyticsfordevelopers.com/2018/01/30/launch-make-an-extension-debug/
  - https://webanalyticsfordevelopers.com/2018/05/15/launch-make-an-extension-on-a-mac/
  - https://webanalyticsfordevelopers.com/2018/11/20/launch-make-an-extension-reloaded/
  - https://webanalyticsfordevelopers.com/2018/12/04/launch-make-an-extension-publish/
  - https://webanalyticsfordevelopers.com/2019/06/18/launch-make-an-extension-principles/
  - https://webanalyticsfordevelopers.com/2019/07/02/launch-make-and-extension-better-practice/
  - https://webanalyticsfordevelopers.com/2019/07/16/launch-make-an-extension-techniques/

- **Jeff Chasin's "Extension Intro" Series**
  - https://www.youtube.com/playlist?list=PLOdw8u2F8CIgynzKrPEwCPuDxzHW1WP5m

- **MisterPhilip's "Awesome Adobe Launch" Guide**
  - https://github.com/MisterPhilip/awesome-adobe-launch

- **Datanalyst's "Creating Adobe Launch Extension" Series**
  - https://www.datanalyst.info/web_analytics/adobe-launch/creating-adobe-launch-extension-introduction/

References & Links

- Aaron Hardy's "Launch, by Adobe – Extension Tutorial"
  - https://www.youtube.com/watch?v=rxjtC9o4rl0&ab_channel=AdobeExperiencePlatform

- Adobe's "Extension Development" Documentation
  - https://experienceleague.adobe.com/docs/experience-platform/tags/extension-dev/overview.html?lang=en

- Adobe's Launch Extension NPM Packages
  - https://www.npmjs.com/package/@adobe/reactor-scaffold
  - https://www.npmjs.com/package/@adobe/reactor-sandbox
  - https://www.npmjs.com/package/@adobe/reactor-packager
  - https://www.npmjs.com/package/@adobe/reactor-validator
  - https://www.npmjs.com/package/@adobe/reactor-uploader
  - https://www.npmjs.com/package/@adobe/reactor-releaser

References & Links

- Adobe Spectrum (Component Library)
  - https://spectrum.adobe.com/

- Adobe Launch (Tags Documentation)
  - https://experienceleague.adobe.com/docs/launch.html?lang=en

- Open Source & Example Extensions
  - Facebook Pixel (React) (https://github.com/facebookincubator/reactor-extension-facebook-pixel)
  - Adobe Alloy (https://github.com/adobe/reactor-extension-alloy)
  - Adobe's Core Extension (https://github.com/adobe/reactor-extension-core)
  - Pinterest (https://github.com/jeffchasin/extension-pinterest)
  - PitchMuc's Extension (https://github.com/pitchmuc/launch_extension)