# adaptTo()

#### EUROPE'S LEADING AEM DEVELOPER CONFERENCE 27<sup>th</sup> – 29<sup>th</sup> SEPTEMBER 2021

## How to develop an Adobe Launch Extension Chris Haider, diva-e NEXT GmbH



## 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







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



## **Preparing the Environment**

		•	¢	2
Tag Properties > Create Property				
Name *				
adaptTo()				
Platform *				
Add Another				
✓ ADVANCED OPTIONS				
Run rule components in sequence				
Return an empty string for missing data elements				
Configure for extension development (cannot be modified				
Save Cancel				

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



## **Preparing the Environment**

Web Install Instructions	
Environment Development	Environment ID ENb04a0a41afec4fe2b80f890a7c4a3ffa
Load Library Asynchronously 0	
Paste this code inside the <b><head></head></b> tag of your docun Standard	nent.

After installing the embed code and deploying your changes, you can validate your implementation using the Adobe Experience Cloud Debugger extension.

- Chrome Extension
- FireFox Extension

#### Integrate the Launch "Development Environment"-Script on Dummy Website



## **Preparing the Environment**

Adobe Developer Console	Projects 🗸	Role: System Ad	ministrator i diva-e Digi	tal Value Enterprise EMEA Par	ther Sandbox 🛛 🚳
diva-e Digital Value Enterprise EMEA	Partner Sandbox's projects	adaptTo > Service Acco	ount (JWT) Docume	entation 🖸	⊥ Download JSON
+ Add to Project	Credential details Generate	JWT			
Project overview				Connected products an	d services
Insights	CLIENT ID				
CREDENTIALS	be45181013cf41d4b7da6fe85c70	db77 Copy			
Service Account (JWT)	CLIENT SECRET			Experience Platform L	aunch API
APIS	Retrieve client secret			€ API	
Experience Platform Launch API	TECHNICAL ACCOUNT ID 3784739E6149C8110A495C15@t	echacct.adobe.com	ру	+ Connect another service	Tremove Remove
	TECHNICAL ACCOUNT EMAIL 2141546a-2f29-49bd-97ba-4a62	1de2e73c@techacct.adobe.co	om 📔 Copy		
	ORGANIZATION ID 4A0EE78758DE51B30A495D1E@	AdobeOrg 📔 Copy			
	PUBLIC KEY		EXPIRATION DATE $\downarrow$		
	7675dc96ab017fddadaa4056	0cf873dfa1a44f3e	Sep 21, 2022		
	Add a public key Genera	te a public/private keypair			

- Create a Service Account (JWT) via the Adobe I/O console (<u>adobe.io/console</u>)
- 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



#### 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



- "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 (<u>https://spectrum.adobe.com/</u>)



#### 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 <u>http://localhost:3000</u> (HTTP) or <u>https://localhost:4000</u> (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/
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- 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) (<u>https://github.com/facebookincubator/reactor-extension-facebook-pixel</u>)
  - Adobe Alloy (<u>https://github.com/adobe/reactor-extension-alloy</u>)
  - Adobe's Core Extension (<u>https://github.com/adobe/reactor-extension-core</u>)
  - Pinterest (<u>https://github.com/jeffchasin/extension-pinterest</u>)
  - PitchMuc's Extension (<u>https://github.com/pitchmuc/launch\_extension</u>)