FTG FEARLESS TECHNOLOGY GROUP

commercetools
Next generation commerce

Building commercetools
customizations using Subscriptions and the Google Cloud Platform

www.commercetools.com

Table of Contents

Introduction

> ***"By using Event Messages you can easily decouple senders and receivers both in terms of identity (you broadcast events without caring who responds to them) and time (events can be queued and forwarded when the receiver is ready to process them). Such architectures offer a great deal for scalability and modifiability due to this loose coupling."***
>
> – Focusing on Events, Martin Fowler

commercetools is a dynamically extensible, cloud-native commerce solution. It allows retailers to sculpt a solution that fits their unique needs today, and is flexible to support their evolving business strategy tomorrow.

There are many powerful extensibility features built into commercetools that handle a wide variety of use cases. For an overview of them, see Building commercetools customizations - Overview.

In this whitepaper we will do a deep dive on one powerful technique for customizing commercetools: Subscriptions.

What are Subscriptions?

Subscriptions allow you to trigger custom asynchronous background processing in response to an event on the commercetools platform.

> ***"Subscriptions allow you to be notified of new messages or changes via a Message Queue of your choice."***
>
> – Subscriptions, Platform Documentation, commercetools

Because Subscriptions execute asynchronously based on events emitted from the platform, they allow your custom solutions to be loosely coupled to commercetools. This greatly reduces the risk of your code impacting commercetools API execution and performance.

commercetools differentiates between **messages** and **changes**. A single subscription can listen to both depending on the resource. Changes are straight-forward: events are fired whenever the subscribed resource type is created, updated or deleted. Messages are more specific: