

# **Study Definition Repository (SDR) Reference Implementation**

## **API Key Generation**

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## 1. Introduction

This document details the steps to be performed by users/vendors of the SDR Reference Implementation (RI) <sup>1</sup>to login into Azure APIM Developer portal and generate API-key, which can be used for authorization of SDR APIs. The alternate authorization method to access SDR APIs is through user-based access token. Please refer section 2.2 of [API User Guide](#) for more information.

### 1.1. Target Audience

This guide targets users who need to establish system to system integration with SDR RI APIs using an API-Key.

### 1.2. Definitions and Acronyms

Term / Abbreviation	Definition
SDR	Study Definitions Repository
API	Application Programming Interface
APIM	API Management
USDM	Unified Study Definition Model
REST	Representational State Transfer
JSON	JavaScript Object Notation

## 2. Developer Portal

The SDR RI API is configured to support bearer token authorization and API-Key based authorization. Hence, users can now use either bearer token from SDR UI or API-Key created through the developer portal to invoke SDR API endpoints. Below are the steps to be followed to generate an API-Key.

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<sup>1</sup> The SDR Reference Implementation is an attempt to demonstrate the vision of the DDF initiative, not a commercial product.

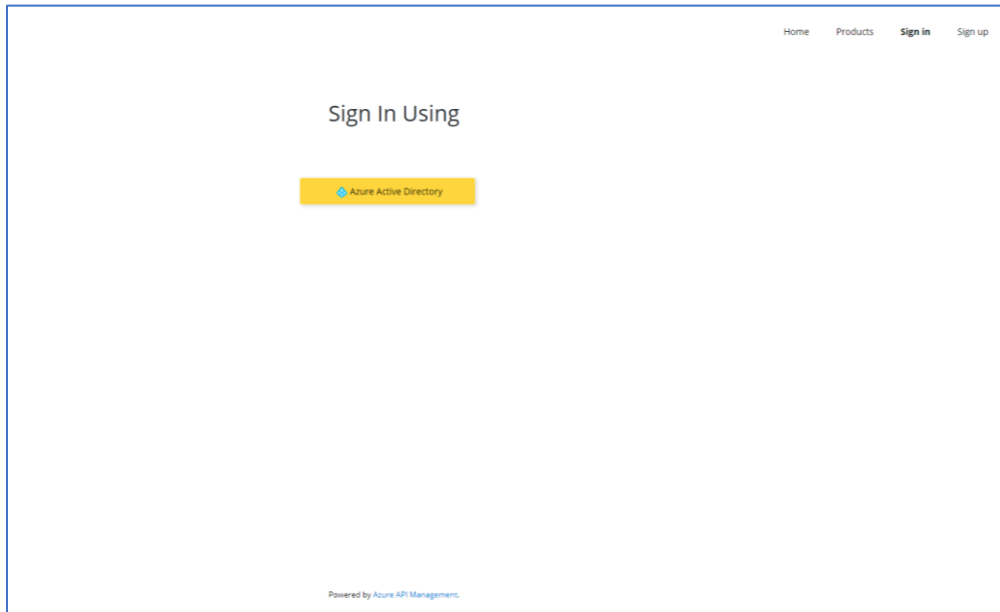
To be clear, TransCelerate does not endorse any particular software, system, or service. And the use of specific brands of products or services by TransCelerate and its collaboration partners in developing the SDR Reference Implementation should not be viewed as any endorsement of such products or services. To the extent that the SDR Reference Implementation incorporates or relies on any specific branded products or services, such as Azure, this resulted out of the practical necessities associated with making a reference implementation available to demonstrate the SDR's capabilities. Users are free to download the source code for the SDR from GitHub and design their own implementations. Those implementations can be on an environment of the user's choice, and do not have to be on Azure.

### **2.1. Pre-requisite**

- User must be registered and completed the access set-up for SDR RI environment. Also, user must have access to APIM developer portal.

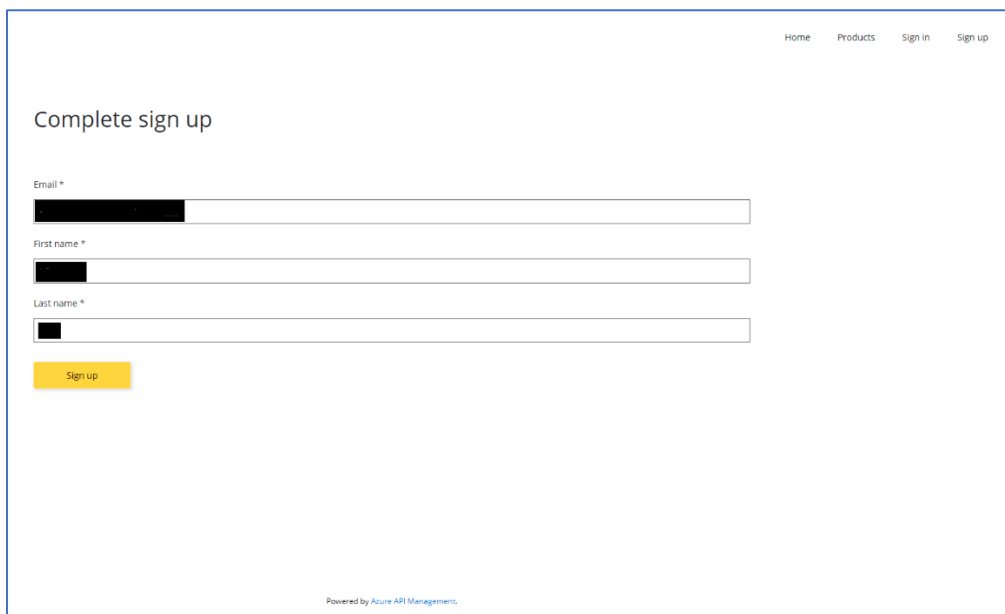
### **2.2. Sign Up to Developer Portal**

- Launch developer portal. User will be redirected to the Sign-In Page.

*Figure 1: Sign-In Page*

The screenshot shows the 'Sign In Using' page. At the top right, there are navigation links: Home, Products, Sign in, and Sign up. The main heading is 'Sign In Using'. Below it is a yellow button with the Azure Active Directory logo and text 'Azure Active Directory'. At the bottom, it says 'Powered by Azure API Management.'

- Click Azure Active Directory button to Sign-In into developer portal. On click, the portal will navigate to Microsoft Login page and user should login with same credentials as of SDR UI App.
- After successful authentication, if the user is accessing the developer portal for the first time, then the user will be prompted to add first name and last name. A confirmation mail will be sent to the user after successful Sign-Up.

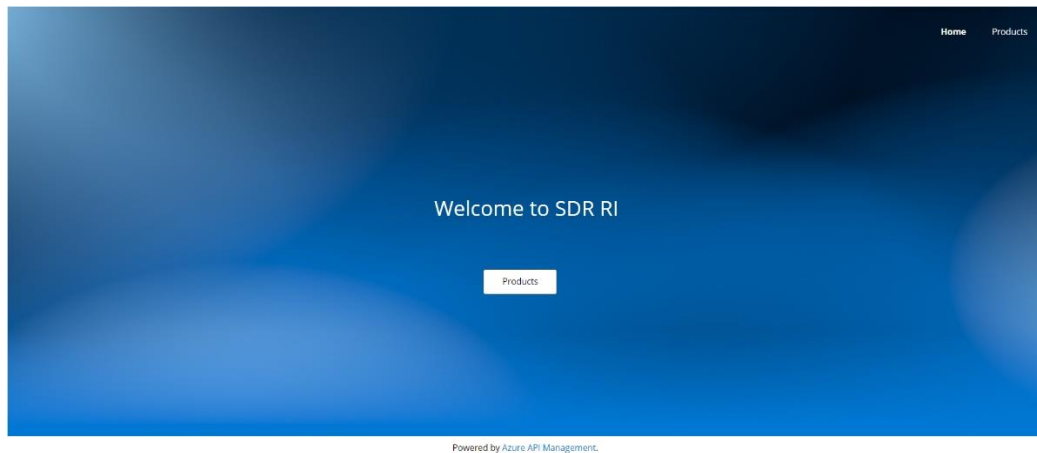
*Figure 2: Sign-Up Page*

The screenshot shows the 'Complete sign up' page. At the top right, there are navigation links: Home, Products, Sign in, and Sign up. The main heading is 'Complete sign up'. Below it are three input fields: 'Email \*', 'First name \*', and 'Last name \*'. Each field has a small black square icon on the left. Below the input fields is a yellow button with the text 'Sign up'. At the bottom, it says 'Powered by Azure API Management.'

- After Sign-Up, the user will be redirected to the home page.

- The Sign-Up step will be skipped for successive logins. Users will be navigated directly to the home page after successful authentication.

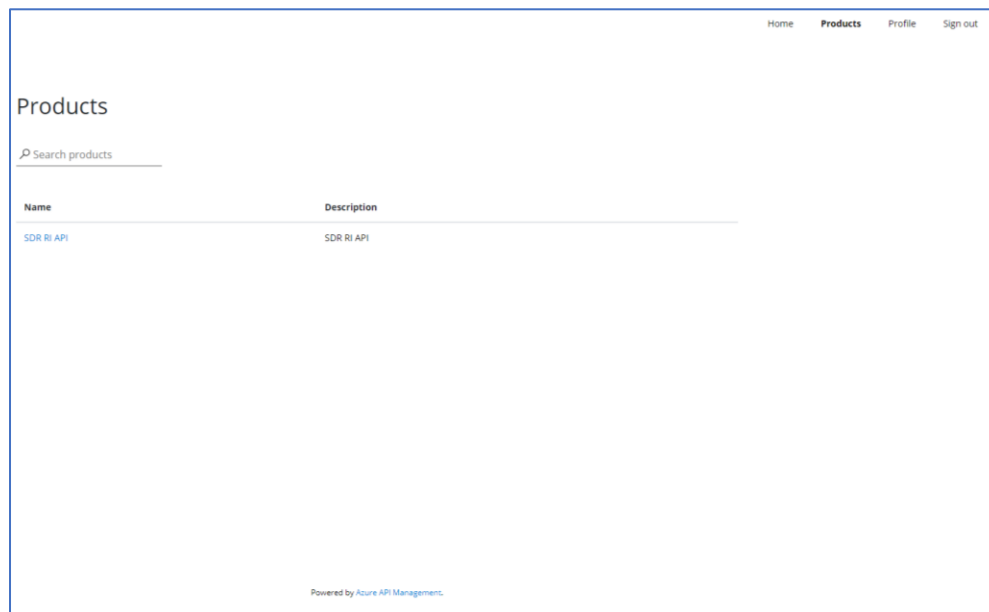
Figure 3: Home Page - Developer Portal



### 2.3. Generate API-Key

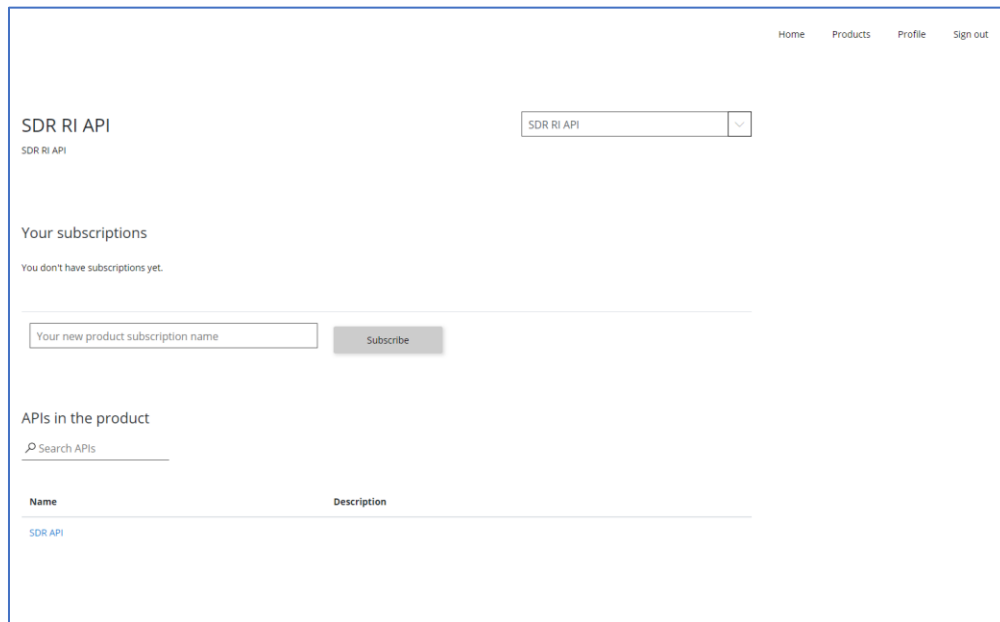
- After logging into the developer portal, click the Products button.
- The products screen will be displayed.

Figure 4: Products Page



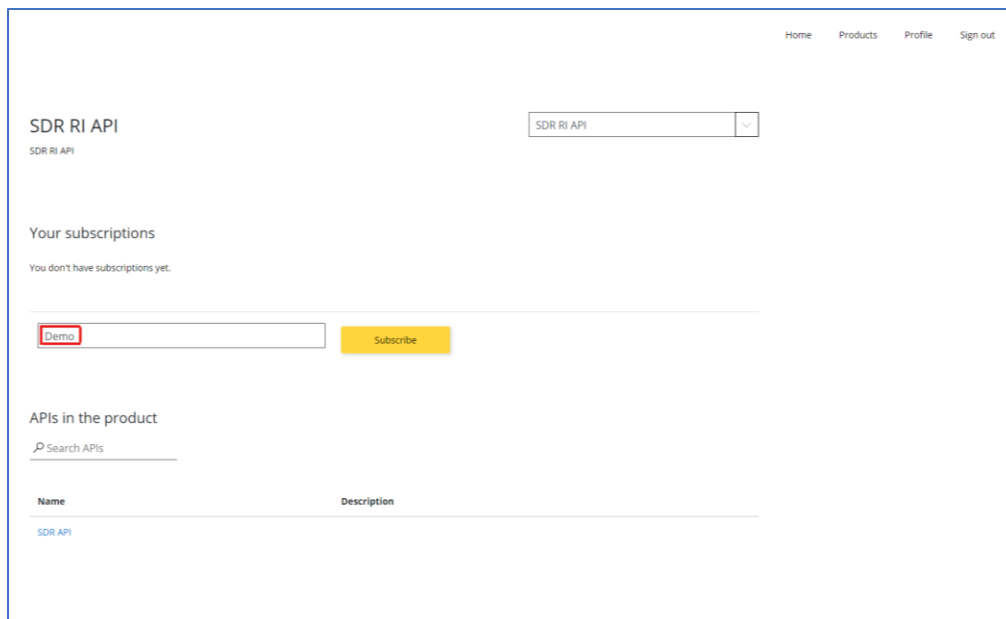
- Click SDR RI API product to show the list of APIs and subscriptions created by the logged-in user.

Figure 5:Product - SDR RI API



- For generating an API-Key, user need to choose a name for the subscription and click on Subscribe button.

Figure 6:Create Subscription



- After clicking the subscribe button, a new subscription will be created, and the user will be navigated to the profile page.
- A confirmation mail will be sent to the user.

Figure 7:Profile Page

Home

Products

Profile

Sign out

User profile

Account details

Email

First name

Last name

Registration date

Close account

Subscriptions

Subscription details	Product	State	Action
<div>Name</div> Demo	SDR RI API	Active	<a href="#">Cancel</a>
<div>Started on</div> 10/16/2023			
<div>Primary key</div> XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			<a href="#">Show</a>   <a href="#">Regenerate</a>
<div>Secondary key</div> XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			<a href="#">Show</a>   <a href="#">Regenerate</a>

Powered by [Azure API Management](#).

- Subscription Key/API key (Primary and Secondary) details will be displayed in the profile page. Any of the two keys can be used as API-Key for authorization to invoke SDR APIs.
- The generated API keys are non-expiring, and it is the responsibility of user/organization to make sure API keys are re-generated at regular intervals in alignment with security best practices. User can click on Regenerate link available in Profile page to generate new keys.
- If a user requests for SDR access revocation, access will be revoked for both SDR application and APIM developer portal. This will permanently disable/delete all the API keys associated with the respective user account.