Veterans Data Integration and Federation Enterprise Platform (VDIF-EP):

InterSystems Application Programming Interface (API) Manager

Technical Guide



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Revision History

Date	Revision	Description	Author
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1. Introduction

The Application Programming Interface (API) Manager is an application that resides on an InterSystems IRIS for Health data platform and serves as a gateway between applications and the intended API. This allows organizations to securely access, manage, and analyze their APIs.

This guide focuses on the Developers' portal, which displays information necessary for a developer to code against an API and incorporate that API into application code.

1.1. Purpose

The Veterans Data Integration and Federation Enterprise Platform (VDIF-EP) API Manager is a commercial-off-the-shelf (COTS) product from InterSystems that provides a way to route API traffic through a centralized gateway, which then forwards requests to the correct target endpoints. It is an application that resides on an InterSystems IRIS for Health data platform. API Manager serves as a gateway between applications (such as Fast Healthcare Interoperability Resources [FHIR] R4 a subset of Health Level Seven [HL7]) and the intended API.



NOTE: The process for project teams to request an application be added is currently under development.



Figure 1: API Manager Overview

2. System Summary

The VDIF-EP API Manager application is hosted on Amazon Web Service (AWS). The system is only accessible within the VA intranet. The Developers' portal is intended for internal VA users to discover existing APIs available for use through self-service.

3. Getting Started

i

The <u>Developers' portal</u> (Figure 2) is available to all VA users from the VA intranet.

REF: For general login and use of the Developer's portal, see the <u>VDIF-EP</u> InterSystems API Manager User Guide.

VA | VDIF Application Programming Interface (API) Catalog Login Register **Empowering Developer Self-Service through API Discovery** The VA VDIF API Gateway provides a self-service experience through API discovery. Published OpenAPI specifications expose the latest API documentation, complete with details needed to understand and consume API functionality. View API Catalog **VDIF APIs** HL7 FHIR APIs FHIR R4 View Open API Specification for VDIF FHIR R4 API, Resources VDIF API Reference Material User Guide VA.gov playbook Accessibility Web governance & policies Privacy

Figure 2: API Manager Developers' Portal

3.1. Registering Account

To register an account for the Developers' portal, do the following:

- 1. Open a browser (such as Microsoft[©] Edge or Google[©] Chrome).
- 2. Navigate to the API Manager Developers' portal.
- 3. Select **Register**.
- 4. Enter values in the following fields (Figure 3):
 - Full Name
 - Email
 - Password
- 5. Select Create Account (Figure 3).
- 6. Select **OK** in the "Thank you Registering..." popup message (Figure 4).

VA VDIF Application P Gateway	rogramming Interface (API)	Catalog	Login	Register	User Guide
	Full Name				
	Email				
	Password				
	Create Account				
VA.gov playbook Accessibility Wet	governance & policies Privacy				

Figure 3: Registering API Manager Account Screen

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← C බ ⊡ https://vac10apphsh809.va.gov:8446,	/register	A∥	☆	C I D	£′≡	Ē
🛱 Import favorites 📔 VA Bookmarks 🏼 🦚 Technical Writers 🧃	vac10apphsh809.va.gov:8446 says					
VA VDIF Application Prog	Thank you for registering! Your account is under admin review. You will be emailed once approved.	; Logir	ı	Register	User Guide	
Galeway	ок					
	Full Name					

7. An admin will then approve your application registration.

3.2. Logging In

To log onto the Developers' portal, do the following:

- 1. Open a browser (such as Microsoft[©] Edge or Google[©] Chrome).
- 2. Navigate to the <u>API Manager Developers' portal</u>.
- 3. Select **Login** in the top dashboard (Figure 5).
- 4. Enter:
 - Email
 - Password
- 5. Select Login.

Figure 5: Logging into API Manager Screen

VA VDIF Application Pro	ogramming Interface (API)	Catalog	Login	Register	User Guide
Gateway					
	Use your credentials to access your account.				
	Email				
	Password				
	Forgot Password?				
	Login				
	Don't have an account? Register here				
VA.gov playbook Accessibility Web go	overnance & policies Privacy				

3.3. Exit System

To exit the Developers' portal, close the browser. Logout is *not* necessary.

4. Testing API Key

4.1. Navigation

Navigation of the Developers' portal is accomplished by:

- Pressing buttons.
- Selecting links.
- Using built-in browser features, such as a link to go back to the previous page.

4.2. Registering Application

To use an application outside of the **Try It Out** feature and directly access the Sandbox, a developer *must* register an application and receive an API key.

To register for an application:

- 1. Open a browser (such as Microsoft[©] Edge or Google[©] Chrome).
- 2. Navigate to the API Manager Developers' portal.
- 3. Select My Applications in the top menu (Figure 6).
- 4. Select +New Application (Figure 6).

5	5		
VDIF Application Pr teway	rogramming Interface (API)	My My Dashboard Applications	User Logout Guide
Applications		Filters	· New Application
Name 🗸	Application ID	Created 🗸	
Jon's Application	be3eaf1f-ce8d-4334-8d28-6285ac044000	2024-05-02	View >
1 to 1 of 1	<pre></pre>	25 i	tems per page 🗸

Figure 6: VDIF-EP API Manager Application Screen

- 5. Enter the following fields in the "Create Applications" screen (Figure 7):
 - Application Name.
 - Redirect URI.



NOTE: This can be any valid URI, such as <u>http://www.google.com</u>.

- **Description**—This is optional and can be filled in with any detail you would like API Manager to know.
- 6. Select **Create**.
- 7. A green **success** popup message appears and redirects you to the **My Applications** page.

Figure 7: Create Application Screen

Create Application					
Name *					
Jon's Application					
Redirect URI *					
http://www.google.com					
Description					
I					
	h				

8. An admin will then approve your application registration.

4.3. Activate Registration

You need to activate and get your application approved before using your API key.

From your application home page in Figure 6:

- 1. Select **View** on the Application you are wanting to approve.
- 2. Scroll down to Services (Figure 8).
- 3. Select Activate (Figure 8).
- 4. Application status will appear as **Pending Approval** until approved (Figure 9).

Figure 8: Approval Status Screens (1 of 2)

Services

Filters

Registration_R4	<u>(</u>		Inactive	Activate
Name 🖌	Info Spec		Status ~	

Figure 9: Approval Status Screens (2 of 2)

Services				Filters
Name 👻	Info	Spec	Status ~	
Registration_R4	(i)		Pending Approval	Deactivate

4.4. Authentication

While waiting for application approval, you can generate an API key for your API Requests. After you login, from the home page:

- 1. Select My Applications in the top menu.
- 2. Select **View** on your Application.
- 3. Select +Generate Credential (Figure 10).
- 4. Copy the **Client ID** to save it in your buffer(Figure 10).

gramming Interface (API) Gat	eway ^{мy∎}	Dashboard	My Applications	User Guide	Logout
					_
test1					Edit
Details					
App ID f325bab5-cea2-4e6f-a20c-86d08909f90a					
Description testing Created					
2024-06-05 Redirect URI https://google.com/xyz					
Authentication				Filters	+ Generate Credential
Client ID		Clien	t Secret		
Xq4pVvEZMWI4FQnClLHVCwpwHn9mq8w	rd			•••••	0
i to 1 of 1				2	15 items per page
Services					Filters
Name	Info	Spec	Status		
application registration	(i)		Pending Approval		Deactivate
itoiofi				1	15 items per page

Figure 10: Generate Credential Screen

4.5. Testing through Postman

After you have generated your credential, you can now test through the <u>Postman API</u> <u>Platform</u>.

In the Postman Authorization tab:

- 1. Enter the following (Figure 11):
 - Key (apikey)
 - Value (Client ID copied in Section <u>4.4</u>, **Step 4**)
- From the Add to drop-down, select where you want your API key to be shown (Figure 11).

API Mgr FHIR Silver / Patient		🖺 Save 🗸 🍹
GET ~ https://vac10ap	phsh809.va.gov:443/Patient	Send ~
Params Authorization • Heade	rs (8) Body Pre-request Script Tests •	Settings Cookies
Type API Key 🗸	Heads up! These parameters hold sensitive da collaborative environment, we recommend usin	ta. To keep this data secure while working in a X g variables. Learn more about <u>variables</u> .
The authorization header will be automatically generated when you send the request. Learn more about API Key authorization	Key	apikey
Arrikey, autionzation.	Value	Value
	Add to	Header v

Figure 11: Postman API Testing Page

5. Troubleshooting

Getting access is manually approved through the admin's developer portal. From the developer portal, admins can view the requested access and approve the request. Admins can also revoke access.

Be sure to reach out directly to the admin via email, so that they may manually approve your access.

6. Acronyms and Abbreviations

Таки	Definition
Term	Denmition
API	Application Programming Interface
AWS	Amazon Web Service
CD2	Critical Decision Point #2
COTS	Commercial-Off-the-Shelf
FHIR	Fast Healthcare Interoperability Resources
HL7	Health Level Seven
OIT	Office of Information and Technology
SSOi	Single Sign On internal
VA	Department of Veterans Affairs
VDIF-EP	Veterans Data Integration and Federation Enterprise Platform
VIP	Veteran-focused Integrated Process

Table 1: Acronyms and Abbreviations