

# Policy Enforcement Point Interface Control Document

EOEPCA.ICD.xxx

TVUK System Team

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# Policy Enforcement Point Interface Control Document

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# EO Exploitation Platform Common Architecture Policy Enforcement Point Interface Control Document EOEPCA.ICD.xxx

COMMENTS and ISSUES  If you would like to raise comments or issues on this document, please do so by raising an Issue at the following URL https://github.com/EOEPCA/um-pep-engine/issues.	<b>PDF</b> This document is available in PDF format here.
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#### AMENDMENT HISTORY

This document shall be amended by releasing a new edition of the document in its entirety. The Amendment Record Sheet below records the history and issue status of this document.

Table 1. Amendment Record Sheet

ISSUE	DATE	REASON
0.1	dd/mm/yyyy	Initial in-progress draft

# Chapter 1. Introduction

# 1.1. Purpose and Scope

This document presents the Policy Enforcement Point Interfaces for the Common Architecture. It servers as a complementary document to its corresponding Software Design Document.

# Chapter 2. Overview

This Interface Control Document (ICD) is a companion to the System Design Document for the Policy Enforcement Point. The ICD provides a Building Block level specification of the interfaces exposed by the PEP to the rest of EOEPCA components.

# **Section [Interfaces]**

Provides the interface specification of the Building Block.

# Chapter 3. Policy Enforcement Point Interfaces

#### **Abstract**

This OpenAPI Document describes the endpoints exposed by Policy Enforcement Point Building Block deployments. <br/>
Service and the Policy Decision Point and access them through the Policy Enforcement Endpoint. <br/>
Service and example this documentation uses |"proxy|" as the configured base URL for Policy Enforcement, but this can be manipulated through configuration parameters.

# 3.1. Endpoints

# 3.1.1. PolicyEnforcement

# **3.1.1.1. Proxy DELETE**

DELETE /proxy/{path}

Request to Back-End Service

#### **3.1.1.1.1. Description**

This operation propagates all headers

#### **3.1.1.1.2. Parameters**

#### **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

#### 3.1.1.1.3. Return Type

\_

# **3.1.1.1.4.** Responses

Table 2. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

# 3.1.1.1.5. Samples

# 3.1.1.2. Proxy GET

# GET /proxy/{path}

Request to Back-End Service

# **3.1.1.2.1. Description**

This operation propagates all headers and query parameters

#### **3.1.1.2.2. Parameters**

#### **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.1.2.3. Return Type

# 3.1.1.2.4. Responses

Table 3. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

# 3.1.1.2.5. Samples

# 3.1.1.3. Proxy HEAD

HEAD /proxy/{path}

# Request to Back-End Service

# 3.1.1.3.1. **Description**

This operation propagates all headers and query parameters

#### 3.1.1.3.2. Parameters

#### **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.1.3.3. Return Type

-

# 3.1.1.3.4. Responses

# Table 4. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

# 3.1.1.3.5. Samples

# **3.1.1.4. Proxy POST**

# POST /proxy/{path}

Request to Back-End Service

# 3.1.1.4.1. Description

This operation propagates all headers, query parameters and body

#### **3.1.1.4.2. Parameters**

# **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.1.4.3. Return Type

\_

# 3.1.1.4.4. Responses

# Table 5. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

# 3.1.1.4.5. Samples

# 3.1.1.5. Proxy PUT

# PUT /proxy/{path}

Request to Back-End Service

# 3.1.1.5.1. **Description**

This operation propagates all headers, query parameters and body

# 3.1.1.5.2. Parameters

# **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.1.5.3. Return Type

\_

# 3.1.1.5.4. Responses

Table 6. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

# 3.1.1.5.5. Samples

# **3.1.1.6. Proxy PATCH**

# PATCH /proxy/{path}

Request to Back-End Service

# 3.1.1.6.1. **Description**

This operation propagates all headers, query parameters and body

#### **3.1.1.6.2. Parameters**

#### **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.1.6.3. Return Type

-

#### 3.1.1.6.4. Responses

# Table 7. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

# 3.1.1.6.5. Samples

# 3.1.2. PolicyAuthorize

# 3.1.2.1. Authorize DELETE

# DELETE /authorize

Request to Back-End Service

# **3.1.2.1.1. Description**

This operation propagates all headers

#### **3.1.2.1.2. Parameters**

#### **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

# **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.2.1.3. Return Type

\_

#### **3.1.2.1.4.** Responses

# Table 8. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>>

# 3.1.2.1.5. Samples

# 3.1.2.2. Authorize GET

# GET /authorize

Request to Back-End Service

# **3.1.2.2.1. Description**

This operation propagates all headers and query parameters

#### **3.1.2.2.2. Parameters**

# **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.2.2.3. Return Type

-

#### **3.1.2.2.4. Responses**

Table 9. http response codes

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

# 3.1.2.2.5. Samples

# 3.1.2.3. Authorize HEAD

# HEAD /authorize

Request to Back-End Service

# 3.1.2.3.1. **Description**

This operation propagates all headers and query parameters

#### **3.1.2.3.2. Parameters**

# **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.2.3.3. Return Type

\_

# **3.1.2.3.4. Responses**

# *Table 10. http response codes*

Code	Message	Datatype
200	OK	<<>>

Code	Message	Datatype
401	Unauthorized access request.	<<>>>

# 3.1.2.3.5. Samples

# 3.1.2.4. Authorize POST

#### POST /authorize

Request to Back-End Service

# **3.1.2.4.1. Description**

This operation propagates all headers, query parameters and body

#### **3.1.2.4.2. Parameters**

#### **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

#### 3.1.2.4.3. Return Type

\_

#### 3.1.2.4.4. Responses

# *Table 11. http response codes*

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>>

# 3.1.2.4.5. Samples

# 3.1.2.5. Authorize PUT

#### PUT /authorize

Request to Back-End Service

# **3.1.2.5.1. Description**

This operation propagates all headers, query parameters and body

#### **3.1.2.5.2. Parameters**

# **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

#### **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

# 3.1.2.5.3. Return Type

-

# **3.1.2.5.4. Responses**

# *Table 12. http response codes*

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

#### 3.1.2.5.5. Samples

# 3.1.2.6. Authorize PATCH

# PATCH /authorize

Request to Back-End Service

# **3.1.2.6.1. Description**

This operation propagates all headers, query parameters and body

# 3.1.2.6.2. Parameters

#### **Path Parameters**

Name	Description	Required
path	Path to the Back-End Service	X

# **Header Parameters**

Name	Description	Required
Authorization	RPT Token generated through UMA Flow	-

#### 3.1.2.6.3. Return Type

-

#### **3.1.2.6.4. Responses**

*Table 13. http response codes* 

Code	Message	Datatype
200	OK	<<>>
401	Unauthorized access request.	<<>>

#### 3.1.2.6.5. Samples

# 3.1.3. Resources

#### 3.1.3.1. Resources GET

#### GET /resources

List all owned resources

# 3.1.3.1.1. **Description**

This operation lists all resources filtered by ownership ID. Ownership ID is extracted from the OpenID Connect Token

# **3.1.3.1.2. Parameters**

# **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

# 3.1.3.1.3. Return Type

array[[resource]]

# 3.1.3.1.4. Content Type

• application/json

# 3.1.3.1.5. Responses

# *Table 14. http response codes*

Code	Message	Datatype
200	ОК	List[[resource]]

#### 3.1.3.1.6. Samples

#### 3.1.3.1.7. Filter by path

#### GET /resources?path=<PATH>

Get the resource with the path specified

# 3.1.3.1.8. Description

This operation returns the resource filtered by ownership ID and the path passed as argument in the URL. Ownership ID is extracted from the OpenID Connect Token

#### 3.1.3.1.9. Parameters

#### **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

#### **URL Parameters**

Name	Description	Required
path	reverse_match_url of resource	-

#### 3.1.3.1.10. Return Type

**JSON** 

#### 3.1.3.1.11. Content Type

• application/json

#### 3.1.3.1.12. Responses

Table 15. http response codes

Code	Message	Datatype
200	OK	JSON

#### 3.1.3.1.13. Samples

#### 3.1.3.2. Resources POST

#### POST /resources

Creates a new Resource reference in the Platform

# **3.1.3.2.1. Description**

This operation generates a new resource reference object that can be protected. Ownership ID is set to the unique ID of the End-User

#### **3.1.3.2.2. Parameters**

#### 3.1.3.2.3. Body Parameter

Name	Description	Required
NewResource	NewResource	X

#### **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

# 3.1.3.2.4. Return Type

[resource]

# 3.1.3.2.5. Content Type

• application/json

# 3.1.3.2.6. Responses

Table 16. http response codes

Code	Message	Datatype
200	OK	[resource]
401	UNAUTHORIZED	<<>>
404	NOT FOUND	<<>>>

# 3.1.3.2.7. Samples

#### 3.1.3.3. Resources DELETE

# DELETE /resources/{resource\_id}

Deletes an owned Resource Reference from the Platform

# 3.1.3.3.1. **Description**

This operation removes an existing Resource reference owned by the user.

# 3.1.3.3.2. Parameters

#### **Path Parameters**

Name	Description	Required
resource_id	Unique Resource ID	X

# **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

# 3.1.3.3.3. Return Type

-

#### 3.1.3.3.4. Responses

*Table 17. http response codes* 

Code	Message	Datatype
200	OK	<<>>
401	UNAUTHORIZED	<<>>>
404	NOT FOUND	<<>>>

# 3.1.3.3.5. Samples

# 3.1.3.4. Resource GET (ID)

# GET /resources/{resource\_id}

Retrieve a specific owned resource

# **3.1.3.4.1. Description**

This operation retrieves information about an owned resource.

#### 3.1.3.4.2. Parameters

# **Path Parameters**

Name	Description	Required
resource_id	Unique Resource ID	X

# **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

# 3.1.3.4.3. Return Type

[resource]

# 3.1.3.4.4. Content Type

• application/json

#### 3.1.3.4.5. Responses

# Table 18. http response codes

Code	Message	Datatype
200	OK	[resource]
404	NOT FOUND	<<>>

# 3.1.3.4.6. Samples

# 3.1.3.5. Resource HEAD (ID)

# HEAD /resources/{resource\_id}

Retrieve a specific owned resource

# 3.1.3.5.1. **Description**

This operation retrieves information about an owned resource.

#### **3.1.3.5.2. Parameters**

#### **Path Parameters**

Name	Description	Required
resource_id	Unique Resource ID	X

#### **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

# 3.1.3.5.3. Return Type

# [resource]

# 3.1.3.5.4. Content Type

• application/json

# 3.1.3.5.5. Responses

# Table 19. http response codes

Code	Message	Datatype
200	OK	[resource]
404	NOT FOUND	<<>>

#### 3.1.3.5.6. Samples

# **3.1.3.6. Resource PUT (ID)**

# PUT /resources/{resource\_id}

Updates an existing Resource reference in the Platform

# 3.1.3.6.1. **Description**

This operation updates an existing 'owned' resource reference.

#### **3.1.3.6.2. Parameters**

#### **Path Parameters**

Name	Description	Required
resource_id	Unique Resource ID	X

#### 3.1.3.6.3. Body Parameter

Name	Description	Required
Resource	Resource	X

# **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

# 3.1.3.6.4. Return Type

\_

# **3.1.3.6.5. Responses**

Table 20. http response codes

Code	Message	Datatype
200	OK	<<>>
401	UNAUTHORIZED	<<>>
404	NOT FOUND	<<>>>

# 3.1.3.6.6. Samples

# 3.1.3.7. Resource PATCH (ID)

# PATCH /resources/{resource\_id}

Patches an existing Resource reference in the Platform

Currently, only support for this method is presented, and requires and functions the same as PUT.

# 3.1.3.7.1. **Description**

This operation updates an existing 'owned' resource reference.

#### 3.1.3.7.2. Parameters

#### **Path Parameters**

Name	Description	Required
resource_id	Unique Resource ID	X

# 3.1.3.7.3. Body Parameter

Name	Description	Required
Resource	Resource	X

# **Header Parameters**

Name	Description	Required
Authorization	JWT or Bearer Token	-

# 3.1.3.7.4. Return Type

-

# **3.1.3.7.5. Responses**

# Table 21. http response codes

Code	Message	Datatype
200	OK	<<>>
401	UNAUTHORIZED	<<>>
404	NOT FOUND	<<>>>

# 3.1.3.7.6. Samples

# 3.1.4. API

# 3.1.4.1. Swagger UI

/swagger-ui

# **3.1.4.1.1. Description**

This operation accesses the API for the Policy Enforcement Point

#### **3.1.4.1.2. Parameters**

# **Path Parameters**

Name	Description	Required
-	-	-

# **Header Parameters**

Name	Description	Required
-	-	-

# 3.1.4.1.3. Return Type

\_

# 3.1.4.1.4. Responses

# Table 22. http response codes

Code	Message	Datatype
200	OK	<<>>

# 3.1.4.1.5. Samples

# 3.2. Models

# 3.2.1. NewResource

Field Name	Require d	Туре	Description	Format
name	Y	String	Human readable name for the resource	-
description	Y	String	Human readable description of the resource	-
icon_uri	Y	String	Protected uri of the resource.	-
resource_scopes	Y	List of [string]	List of scopes associated with the resource	-

# 3.2.2. Resource

Field Name	Require d	Туре	Description	Format
ownership_id	Y	UUID	UUID of the Owner End-User	uuid
description	Y	UUID	Human readable description of the resource	uuid

Field Name	Require d	Туре	Description	Format
name	Y	String	Human readable name for the resource	-
icon_uri	Y	String	Protected uri of the resource.	-
resource_scopes	Y	List of [string]	List of scopes associated with the resource	-

<sup>&</sup>lt;< End of Document >>