



TELESPAZIO

a LEONARDO and THALES company

Policy Decision Point Interface Control Document ***EOEPCA.ICD.xxx***

TVUK System Team

Version 1.0, 30/11/2020:

Policy Decision Point Interface Control Document

1. Introduction	2
1.1. Purpose and Scope	2
2. Overview	3
3. Policy Decision Point Interfaces	4
3.1. Endpoints	4
3.1.1. Policy Checks	4
3.1.1.1. Policy Validation	4
3.1.1.1.1. Description	4
3.1.1.1.2. Parameters	4
3.1.1.1.3. Return Type	4
3.1.1.1.4. Responses	4
3.1.1.1.5. Samples	4
3.1.2. Policy Management	4
3.1.2.1. Policy GET	4
3.1.2.1.1. Description	5
3.1.2.1.2. Parameters	5
3.1.2.1.3. Return Type	5
3.1.2.1.4. Content Type	5
3.1.2.1.5. Responses	5
3.1.2.1.6. Samples	5
3.1.2.2. Policy DELETE (ID)	5
3.1.2.2.1. Description	5
3.1.2.2.2. Parameters	5
3.1.2.2.3. Return Type	6
3.1.2.2.4. Responses	6
3.1.2.2.5. Samples	6
3.1.2.3. Policy GET (ID)	6
3.1.2.3.1. Description	6
3.1.2.3.2. Parameters	6
3.1.2.3.3. Return Type	6
3.1.2.3.4. Content Type	6
3.1.2.3.5. Responses	6
3.1.2.3.6. Samples	7
3.1.2.4. Policy PUT (ID)	7
3.1.2.4.1. Description	7
3.1.2.4.2. Parameters	7
3.1.2.4.3. Body Parameter	7

3.1.2.4.4. Return Type	7
3.1.2.4.5. Responses	7
3.1.2.4.6. Samples	7
3.1.2.5. Policy POST	8
3.1.2.5.1. Description	8
3.1.2.5.2. Parameters	8
3.1.2.5.3. Body Parameter	8
3.1.2.5.4. Return Type	8
3.1.2.5.5. Content Type	8
3.1.2.5.6. Responses	8
3.1.2.5.7. Samples	8
3.1.3. API	8
3.1.3.1. Swagger UI	8
3.1.3.1.1. Description	9
3.1.3.1.2. Parameters	9
3.1.3.1.3. Return Type	9
3.1.3.1.4. Responses	9
3.1.3.1.5. Samples	9
3.2. Models	9
3.2.1. <i>NewPolicy</i>	9
3.2.2. <i>Policy</i>	9
3.2.3. <i>PolicyCfg</i>	10

EO Exploitation Platform Common Architecture
Policy Decision 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-pdp-engine/issues .	PDF This document is available in PDF format here .
EUROPEAN SPACE AGENCY CONTRACT REPORT The work described in this report was done under ESA contract. Responsibility for the contents resides in the author or organisation that prepared it.	TELESPAZIO VEGA UK Ltd 350 Capability Green, Luton, Bedfordshire, LU1 3LU, United Kingdom. Tel: +44 (0)1582 399000 www.telespazio-vega.com

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 Decision Point Interfaces for the Common Architecture. It serves 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 Decision Point. The ICD provides a Building Block level specification of the interfaces exposed by the PDP to the rest of EOEPKA components.

Section [\[Interfaces\]](#)

Provides the interface specification of the Building Block.

Chapter 3. Policy Decision Point Interfaces

Abstract

*This OpenAPI Document describes the endpoints exposed by Policy Decision Point Building Block deployments.

 Using this API will allow to register policies that support the protection of policies using both the Login Service and the Policy Decision Point and to perform checks based on XACML requests and responses*

3.1. Endpoints

3.1.1. Policy Checks

3.1.1.1. Policy Validation

POST /policy/validate

XACML Policy Checks

3.1.1.1.1. Description

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

3.1.1.1.2. Parameters

3.1.1.1.3. Return Type

-

3.1.1.1.4. Responses

Table 2. http response codes

Code	Message	Datatype
200	OK	<<>>

3.1.1.1.5. Samples

3.1.2. Policy Management

3.1.2.1. Policy GET

GET /policy

List all owned policies

3.1.2.1.1. Description

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

3.1.2.1.2. Parameters

Header Parameters

Name	Description	Required
Authorization	JWT or Bearer Token	-

3.1.2.1.3. Return Type

array[[[policy](#)]]

3.1.2.1.4. Content Type

- application/json

3.1.2.1.5. Responses

Table 3. http response codes

Code	Message	Datatype
200	OK	List[[policy]]

3.1.2.1.6. Samples

3.1.2.2. Policy DELETE (ID)

DELETE /policy/{policy_id}

Deletes an owned Policy Reference from the Platform

3.1.2.2.1. Description

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

3.1.2.2.2. Parameters

Path Parameters

Name	Description	Required
policy_id	Unique Policy ID	X

Header Parameters

Name	Description	Required
Authorization	JWT or Bearer Token	-

3.1.2.2.3. Return Type

-

3.1.2.2.4. Responses

Table 4. http response codes

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

3.1.2.2.5. Samples

3.1.2.3. Policy GET (ID)

GET /policy/{policy_id}

Retrieve a specific owned policy

3.1.2.3.1. Description

This operation retrieves information about an owned policy.

3.1.2.3.2. Parameters

Path Parameters

Name	Description	Required
policy_id	Unique Policy ID	X

Header Parameters

Name	Description	Required
Authorization	JWT or Bearer Token	-

3.1.2.3.3. Return Type

[policy]

3.1.2.3.4. Content Type

- application/json

3.1.2.3.5. Responses

Table 5. http response codes

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

3.1.2.3.6. Samples

3.1.2.4. Policy PUT (ID)

PUT /policy/{policy_id}

Updates an existing Policy reference in the Platform

3.1.2.4.1. Description

This operation updates an existing 'owned' policy reference.

3.1.2.4.2. Parameters

Path Parameters

Name	Description	Required
policy_id	Unique Policy ID	X

3.1.2.4.3. Body Parameter

Name	Description	Required
Policy	<i>Policy</i>	X

Header Parameters

Name	Description	Required
Authorization	JWT or Bearer Token	-

3.1.2.4.4. Return Type

-

3.1.2.4.5. Responses

Table 6. http response codes

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

3.1.2.4.6. Samples

3.1.2.5. Policy POST

POST /policy

Creates a new Policy reference in the Platform

3.1.2.5.1. Description

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

3.1.2.5.2. Parameters

3.1.2.5.3. Body Parameter

Name	Description	Required
NewPolicy	NewPolicy	X

Header Parameters

Name	Description	Required
Authorization	JWT or Bearer Token	-

3.1.2.5.4. Return Type

[\[policy\]](#)

3.1.2.5.5. Content Type

- application/json

3.1.2.5.6. Responses

Table 7. http response codes

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

3.1.2.5.7. Samples

3.1.3. API

3.1.3.1. Swagger UI

/swagger-ui

3.1.3.1.1. Description

This operation accesses the API for the Policy Decision Point

3.1.3.1.2. Parameters

Path Parameters

Name	Description	Required
-	-	-

Header Parameters

Name	Description	Required
-	-	-

3.1.3.1.3. Return Type

-

3.1.3.1.4. Responses

Table 8. http response codes

Code	Message	Datatype
200	OK	<<>>

3.1.3.1.5. Samples

3.2. Models

3.2.1. NewPolicy

Field Name	Required	Type	Description	Format
name		String	Human readable name for the policy	
description		String	Custom description for the policy purpose	
policy_cfg		policy_cfg		
scopes		List of [string]	List of scopes associated with the policy	

3.2.2. Policy

Field Name	Required	Type	Description	Format
ownership_id		UUID	UUID of the Owner End-User	uuid
id		UUID	UUID of the policy	uuid
name		String	Human readable name for the policy	
description		String	Custom description for the policy purpose	
policy_cfg		policy_cfg		
scopes		List of [string]	List of scopes associated with the policy	

3.2.3. PolicyCfg

Custom rules for the policy configuration

Field Name	Required	Type	Description	Format
resource_id		UUID	UUID of the applicable Resource	uuid
action		String	Applicable XACML Action	
rules		List of [object]	List of checks to create a policy. Each one will be executed in sequence, and the policy will fail as soon as one fails	

<< End of Document >>