

# SafeNet Data Protection On Demand 1.5

## API REFERENCE GUIDE



# Document Information

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## Document Information

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# Data Protection on Demand (DPoD) API

Gemalto

Version 1.5.0, 2018-06-05

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# Overview

The DPoD API can manage HSM on Demand services.

## Version information

*Version* : 1.5.0

## URI scheme

*BasePath* : /v1

*Schemes* : HTTPS

## Produces

- `application/json`

# Security

## OAuth2

Type : oauth2

Flow : application

Token URL : /oauth/token

Name	Description
dpod.tenant.spadmin	Service provider tenant administrator
dpod.tenant.admin	Tenant administrator
dpod.tenant.appowner	Application owner
dpod.tenant.api_appowner	Application owner credentials
dpod.tenant.api_service	Service credentials

# Paths

## Service API

### Create a service

POST /services

#### Parameters

Type	Name	Description	Schema
Body	<b>serviceRequest</b> <i>required</i>	Contains the name of the service to create, and the passwords to set on that service. If no Crypto User password is provided, the Crypto User role will not be created.	<a href="#">serviceRequest</a>

#### serviceRequest

Name	Description	Schema
<b>coPassword</b> <i>optional</i>	Crypto Officer (CO) password to set on the service. <b>Length : 7 - 255</b>	string
<b>createParams</b> <i>optional</i>	Pass through parameters for service creations.	< string, object > map
<b>cuPassword</b> <i>optional</i>	Crypto User (CU) password to set on the service. <b>Length : 7 - 255</b>	string
<b>deviceType</b> <i>required</i>	Type of device to use when creating the service. <b>Default : "cryptovisor"</b>	enum (cryptovisor, cryptovisor_fips)
<b>name</b> <i>required</i>	Name of the service. <b>Length : 4 - 45</b> <b>Pattern : "[a-z0-9]{4,45}"</b>	string
<b>servicePlan</b> <i>optional</i>	<b>Maximal length : 255</b>	string
<b>serviceType</b> <i>optional</i>	Type of service (deprecated). <b>Maximal length : 255</b>	enum (key_vault, pk_protection, digital_signing, tde_database, salesforce_key_broker, hyperledger, protectv)
<b>serviceVersion</b> <i>optional</i>	The version of the service. <b>Default : "1.0.0"</b>	enum (0.5.0, 1.0.0)



Name	Description	Schema
<b>soPassword</b> <i>optional</i>	Partition Security Officer (SO) password to set on the service. <b>Length : 7 - 255</b>	string
<b>tileId</b> <i>optional</i>	Tile ID of the active service.	string (uuid)

## Responses

HTTP Code	Description	Schema
201	Service created.	No Content
<b>default</b>	Unexpected error.	<a href="#">Response default</a>

## Response default

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string

## Consumes

- `application/json`

## Security

Type	Name	Scopes
<b>oauth2</b>	<b>OAuth2</b>	dpod.tenant.appowner, dpod.tenant.api_appowner

## Show active services

GET /services

## Description

The services endpoint returns information about the services that exist in your tenant space.

## Parameters

Type	Name	Description	Schema
Query	<b>page</b> <i>optional</i>	Page number to retrieve, starting at 0.	integer
Query	<b>size</b> <i>optional</i>	Number of results per page.	integer

## Responses

HTTP Code	Description	Schema
200	An array of active services.	<a href="#">Response 200</a>
default	Unexpected error.	<a href="#">Response default</a>

## Response 200

Name	Description	Schema
<b>content</b> <i>optional</i>	The array of the services.	< <a href="#">content</a> > array
<b>number</b> <i>required</i>	Current page number out of a total of 'totalPages'.	integer
<b>size</b> <i>required</i>	Number of elements in this response.	integer
<b>totalElements</b> <i>required</i>	Total number of elements.	integer (int64)
<b>totalPages</b> <i>required</i>	Total number of pages.	integer

## content

Name	Description	Schema
<b>clients</b> <i>optional</i>	Client names bound to the current service.	< object > array
<b>createdAt</b> <i>optional</i>	Timestamp indicating time of creation.	string
<b>created_by</b> <i>optional</i>	ID of the user who created the service.	string (uuid)
<b>created_by_username</b> <i>optional</i>	User name of the user who created the service.	string
<b>device_type</b> <i>optional</i>	Type of device used for the service.	enum (cryptovisor, cryptovisor_fips)

Name	Description	Schema
<b>name</b> <i>optional</i>	Name of the active service.	string
<b>partition_serial_number</b> <i>optional</i>	Serial number of the partition.	string
<b>serviceType</b> <i>optional</i>	Service type.	string
<b>serviceVersion</b> <i>optional</i>	The version of the service.	enum (0.5.0, 1.0.0)
<b>service_id</b> <i>optional</i>	GUID representing a specific service.	string
<b>subscriberGroup</b> <i>optional</i>	Subscriber group that the service belongs to.	string

### Response default

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string

### Produces

- `application/json`

### Security

Type	Name	Scopes
<b>oauth2</b>	<b>OAuth2</b>	dpod.tenant.appowner, dpod.tenant.api_appowner, dpod.tenant.admin

### Example HTTP response

### Response 200

```

{
  "services": [
    {
      "id": "00001111-2222-3333-4444-555566667777",
      "name": "Service A"
    },
    {
      "id": "88889999-AAAA-BBBB-CCCC-DDDDEEEFFFFFF",
      "name": "Service B"
    }
  ]
}

```

## Show service details

```
GET /services/{id}
```

### Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	The resource ID.	string (uuid)

### Responses

HTTP Code	Description	Schema
200	Details about the requested service.	<a href="#">Response 200</a>
default	Unexpected error.	<a href="#">Response default</a>

### Response 200

Name	Description	Schema
<b>clients</b> <i>optional</i>	Client names bound to the current service.	< object > array
<b>createdAt</b> <i>optional</i>	Timestamp indicating time of creation.	string
<b>created_by</b> <i>optional</i>	ID of the user who created the service.	string (uuid)
<b>created_by_username</b> <i>optional</i>	User name of the user who created the service.	string

Name	Description	Schema
<b>device_type</b> <i>optional</i>	Type of device used for the service.	enum (cryptovisor, cryptovisor_fips)
<b>name</b> <i>optional</i>	Name of the active service.	string
<b>partition_serial_number</b> <i>optional</i>	Serial number of the partition.	string
<b>serviceType</b> <i>optional</i>	Service type.	string
<b>serviceVersion</b> <i>optional</i>	The version of the service.	enum (0.5.0, 1.0.0)
<b>service_id</b> <i>optional</i>	GUID representing a specific service.	string
<b>subscriberGroup</b> <i>optional</i>	Subscriber group that the service belongs to.	string

### Response default

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string

### Produces

- `application/json`

### Security

Type	Name	Scopes
<b>oauth2</b>	<b>OAuth2</b>	dpod.tenant.appowner, dpod.tenant.admin, dpod.tenant.api_appowner, dpod.tenant.api_service

### Example HTTP response

### Response 200

```
{
  "id": "00001111-2222-3333-4444-555566667777",
  "name": "Service A"
}
```

## Remove an active service

```
DELETE /services/{id}
```

### Description

Deletes the service with the given ID. Any existing credentials will be invalidated.

### Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	The resource ID.	string (uuid)

### Responses

HTTP Code	Description	Schema
204	Service was deleted.	No Content
<b>default</b>	Unexpected error.	<a href="#">Response default</a>

### Response default

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string

### Security

Type	Name	Scopes
<b>oauth2</b>	<a href="#">OAuth2</a>	dpod.tenant.appowner, dpod.tenant.api_appowner

## Show all active clients

GET /services/{id}/client

## Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	The resource ID.	string (uuid)
Query	<b>page</b> <i>optional</i>	Page number to retrieve, starting at 0.	integer
Query	<b>size</b> <i>optional</i>	Number of results per page.	integer

## Responses

HTTP Code	Description	Schema
200	Details about the requested client.	<a href="#">Response 200</a>
default	Unexpected error.	<a href="#">Response default</a>

### Response 200

Name	Description	Schema
<b>content</b> <i>optional</i>	The array of the clients.	< object > array
<b>number</b> <i>required</i>	Current page number out of a total of 'totalPages'.	integer
<b>size</b> <i>required</i>	Number of elements in this response.	integer
<b>totalElements</b> <i>required</i>	Total number of elements.	integer (int64)
<b>totalPages</b> <i>required</i>	Total number of pages.	integer

### Response default

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string

## Produces

- `application/json`

## Security

Type	Name	Scopes
oauth2	<a href="#">OAuth2</a>	dpod.tenant.appowner, dpod.tenant.api_appowner, dpod.tenant.api_service

## Bind a client to a service

```
PUT /services/{id}/client
```

## Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	The resource ID.	string (uuid)
Body	<b>BindRequest</b> <i>optional</i>	Parameters for creating a new client.	<a href="#">BindRequest</a>

## BindRequest

Name	Description	Schema
<b>name</b> <i>optional</i>	Client name.	string

## Responses

HTTP Code	Description	Schema
200	Returns file.	file
500	Unexpected error.	<a href="#">Response 500</a>

## Response 500

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string



## Consumes

- `application/json`

## Security

Type	Name	Scopes
oauth2	<a href="#">OAuth2</a>	dpod.tenant.appowner, dpod.tenant.api_appowner, dpod.tenant.api_service

## Show client details

```
GET /services/{id}/client/{clientId}
```

## Parameters

Type	Name	Description	Schema
Path	<b>clientId</b> <i>required</i>	Bound client ID.	string (uuid)
Path	<b>id</b> <i>required</i>	The resource ID.	string (uuid)

## Responses

HTTP Code	Description	Schema
200	Details about the requested client.	<a href="#">Response 200</a>
default	Unexpected error.	<a href="#">Response default</a>

## Response 200

Name	Description	Schema
<b>createdAt</b> <i>optional</i>	Date/time the resource was created.	string
<b>created_by</b> <i>optional</i>	ID of the user who created the client.	string (uuid)
<b>created_by_username</b> <i>optional</i>	User name of the user who created the client.	string
<b>id</b> <i>optional</i>	GUID representing the resource.	string (uuid)
<b>name</b> <i>optional</i>	Client name.	string

Name	Description	Schema
<b>updatedAt</b> <i>optional</i>	Date/time the resource was updated.	string

### Response default

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string

### Produces

- `application/json`

### Security

Type	Name	Scopes
<b>oauth2</b>	<b>OAuth2</b>	dpod.tenant.appowner, dpod.tenant.api_appowner, dpod.tenant.api_service

### Unbind a client to a service

```
DELETE /services/{id}/client/{clientId}
```

### Parameters

Type	Name	Description	Schema
<b>Path</b>	<b>clientId</b> <i>required</i>	Bound client ID.	string (uuid)
<b>Path</b>	<b>id</b> <i>required</i>	The resource ID.	string (uuid)

### Responses

HTTP Code	Description	Schema
<b>204</b>	Client unbound.	No Content
<b>default</b>	Unexpected error.	<a href="#">Response default</a>

### Response default

Name	Schema
<b>code</b> <i>required</i>	integer (int32)
<b>message</b> <i>required</i>	string

## Security

Type	Name	Scopes
<b>oauth2</b>	<b>OAuth2</b>	dpod.tenant.appowner, dpod.tenant.api_appowner, dpod.tenant.api_service

# Marketplace API

## List all the tiles available to a tenant

GET /tiles

### Description

Lists the tiles available to the current user, or to the tenant specified in the query parameter.

### Parameters

Type	Name	Description	Schema
<b>Query</b>	<b>page</b> <i>optional</i>	Page number to retrieve. If the size is specified and the page number is not, the page number is set to 0.	integer
<b>Query</b>	<b>size</b> <i>optional</i>	Number of results per page. If the page number is specified and the page size is not, the page size is set to 20.	integer
<b>Query</b>	<b>tenantId</b> <i>optional</i>	ID of the tenant to query for tile availability. Service provider administrators can use this parameter to query the tiles of their child tenants. Other users should not use this parameter; if they do, they must set it to their own tenant's ID.	string (uuid)

### Responses

HTTP Code	Description	Schema
<b>200</b>	An array of available tiles.	<a href="#">Response 200</a>

HTTP Code	Description	Schema
400	The current user is not allowed to search by tenant, the specified page number is less than zero, or the specified page size is less than 1.	No Content
403	The current user does not have access to the specified tenant's tile list.	No Content
default	Unexpected error.	<a href="#">Response default</a>

### Response 200

Name	Description	Schema
<b>content</b> <i>optional</i>	The array of the resources.	< object > array
<b>number</b> <i>required</i>	Current page number out of a total of 'totalPages'.	integer
<b>size</b> <i>required</i>	Number of elements in this response.	integer
<b>totalElements</b> <i>required</i>	Total number of elements.	integer (int64)
<b>totalPages</b> <i>required</i>	Total number of pages.	integer

### Response default

Name	Description	Schema
<b>detail</b> <i>optional</i>	A human readable explanation specific to this occurrence of the problem. <b>Example</b> : "Connection to database timed out"	string
<b>instance</b> <i>optional</i>	An absolute URI that identifies the specific occurrence of the problem. It may or may not yield further information if dereferenced.	string (uri)
<b>status</b> <i>optional</i>	The HTTP status code generated by the origin server for this occurrence of the problem. <b>Minimum value</b> : 100 <b>Maximum value (exclusive)</b> : 600 <b>Example</b> : 503	integer (int32)
<b>title</b> <i>optional</i>	A short, summary of the problem type. Written in English and readable for engineers (usually not suited for non technical stakeholders and not localized); example: Service Unavailable	string

Name	Description	Schema
<b>type</b> <i>optional</i>	An absolute URI that identifies the problem type. When dereferenced, it SHOULD provide human-readable documentation for the problem type (e.g., using HTML). <b>Default</b> : "about:blank" <b>Example</b> : "https://zalando.github.io/problem/constraint-violation"	string (uri)

## Security

Type	Name	Scopes
<b>oauth2</b>	<b>OAuth2</b>	dpod.tenant.spadmin, dpod.tenant.admin, dpod.tenant.appowner, dpod.tenant.api_appowner

## Get details about a specific tile

```
GET /tiles/{id}
```

### Description

Returns detailed information about a specific tile. The tile must be assigned to the tenant that the caller belongs to.

### Parameters

Type	Name	Description	Schema
<b>Path</b>	<b>id</b> <i>required</i>	The ID of the tile to retrieve.	string (uuid)

### Responses

HTTP Code	Description	Schema
<b>200</b>	Information about a valid tile.	<a href="#">Response 200</a>
<b>403</b>	The specified tile cannot be accessed by this user.	<a href="#">Response 403</a>
<b>404</b>	The specified tile does not exist.	<a href="#">Response 404</a>
<b>default</b>	Unexpected error.	<a href="#">Response default</a>

### Response 200

Name	Description	Schema
<b>description</b> <i>optional</i>	A text description of the type of service that can be created with this tile.	string

Name	Description	Schema
<b>enabled</b> <i>optional</i>	If a tile is enabled, a user can create a service with it, or a tenant administrator can enable/disable the tile for their subtenants. <b>Default</b> : <code>false</code>	boolean
<b>id</b> <i>optional</i> <i>read-only</i>	A unique UUID associated with this tile.	string (uuid)
<b>name</b> <i>optional</i>	The name of this tile. Typically this will be the name of the service type it represents.	string
<b>shortCode</b> <i>optional</i> <i>read-only</i>	A short text code that DPoD uses internally to identify the service type. This field is deprecated and should not be used by developers. * <code>key_vault</code> - Key Vault * <code>pk_protection</code> - PKI Private Key Protection * <code>digital_signing</code> - Digital Signing * <code>tde_database</code> - Oracle TDE Database * <code>salesforce_key_broker</code> - Salesforce Key Broker * <code>hyperledger</code> - Hyperledger	enum ( <code>key_vault</code> , <code>pk_protection</code> , <code>digital_signing</code> , <code>tde_database</code> , <code>salesforce_key_broker</code> , <code>hyperledger</code> , <code>protectv</code> )

### Response 403

Name	Description	Schema
<b>detail</b> <i>optional</i>	A human readable explanation specific to this occurrence of the problem. <b>Example</b> : <code>"Connection to database timed out"</code>	string
<b>instance</b> <i>optional</i>	An absolute URI that identifies the specific occurrence of the problem. It may or may not yield further information if dereferenced.	string (uri)
<b>status</b> <i>optional</i>	The HTTP status code generated by the origin server for this occurrence of the problem. <b>Minimum value</b> : <code>100</code> <b>Maximum value (exclusive)</b> : <code>600</code> <b>Example</b> : <code>503</code>	integer (int32)
<b>title</b> <i>optional</i>	A short, summary of the problem type. Written in English and readable for engineers (usually not suited for non technical stakeholders and not localized); example: Service Unavailable	string
<b>type</b> <i>optional</i>	An absolute URI that identifies the problem type. When dereferenced, it SHOULD provide human-readable documentation for the problem type (e.g., using HTML). <b>Default</b> : <code>"about:blank"</code> <b>Example</b> : <code>"https://zalando.github.io/problem/constraint-violation"</code>	string (uri)

### Response 404

Name	Description	Schema
<b>detail</b> <i>optional</i>	A human readable explanation specific to this occurrence of the problem. <b>Example</b> : "Connection to database timed out"	string
<b>instance</b> <i>optional</i>	An absolute URI that identifies the specific occurrence of the problem. It may or may not yield further information if dereferenced.	string (uri)
<b>status</b> <i>optional</i>	The HTTP status code generated by the origin server for this occurrence of the problem. <b>Minimum value</b> : 100 <b>Maximum value (exclusive)</b> : 600 <b>Example</b> : 503	integer (int32)
<b>title</b> <i>optional</i>	A short, summary of the problem type. Written in English and readable for engineers (usually not suited for non technical stakeholders and not localized); example: Service Unavailable	string
<b>type</b> <i>optional</i>	An absolute URI that identifies the problem type. When dereferenced, it SHOULD provide human-readable documentation for the problem type (e.g., using HTML). <b>Default</b> : "about:blank" <b>Example</b> : "https://zalando.github.io/problem/constraint-violation"	string (uri)

### Response default

Name	Description	Schema
<b>detail</b> <i>optional</i>	A human readable explanation specific to this occurrence of the problem. <b>Example</b> : "Connection to database timed out"	string
<b>instance</b> <i>optional</i>	An absolute URI that identifies the specific occurrence of the problem. It may or may not yield further information if dereferenced.	string (uri)
<b>status</b> <i>optional</i>	The HTTP status code generated by the origin server for this occurrence of the problem. <b>Minimum value</b> : 100 <b>Maximum value (exclusive)</b> : 600 <b>Example</b> : 503	integer (int32)
<b>title</b> <i>optional</i>	A short, summary of the problem type. Written in English and readable for engineers (usually not suited for non technical stakeholders and not localized); example: Service Unavailable	string

Name	Description	Schema
<b>type</b> <i>optional</i>	An absolute URI that identifies the problem type. When dereferenced, it SHOULD provide human-readable documentation for the problem type (e.g., using HTML). <b>Default</b> : "about:blank" <b>Example</b> : "https://zalando.github.io/problem/constraint-violation"	string (uri)

## Security

Type	Name	Scopes
oauth2	<a href="#">OAuth2</a>	dpod.tenant.appowner, dpod.tenant.api_appowner