

# Securing Designer Services via API Management

xUML services that have been deployed from the Designer as a container are secured by default. However, these services are only usable internally and are not exposed to users outside the company. If you want to make them available to others, you can secure and publish them by creating a new API in API Management.

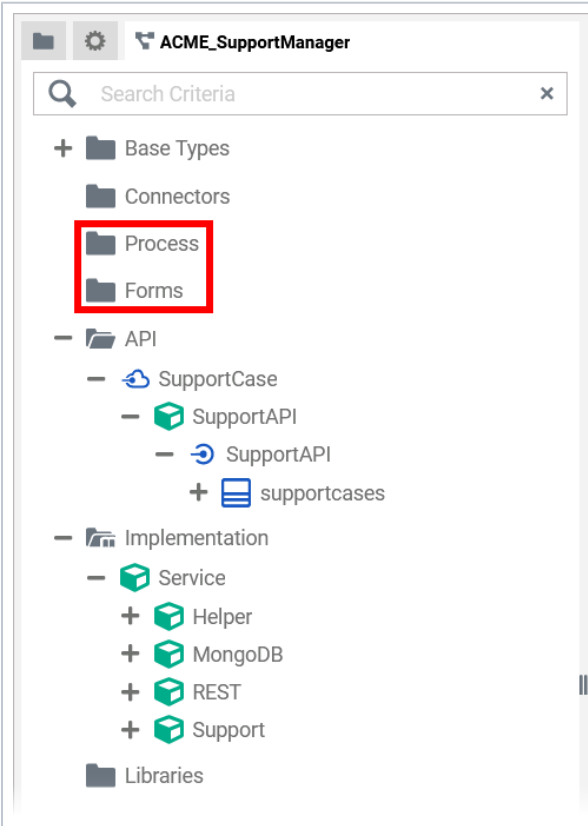


The following explanations apply to xUML services without user context (forms or role check).

### On this Page:

- [Managing the Designer Service](#)
- [Creating the API](#)
- [Securing the API](#)

## Managing the Designer Service

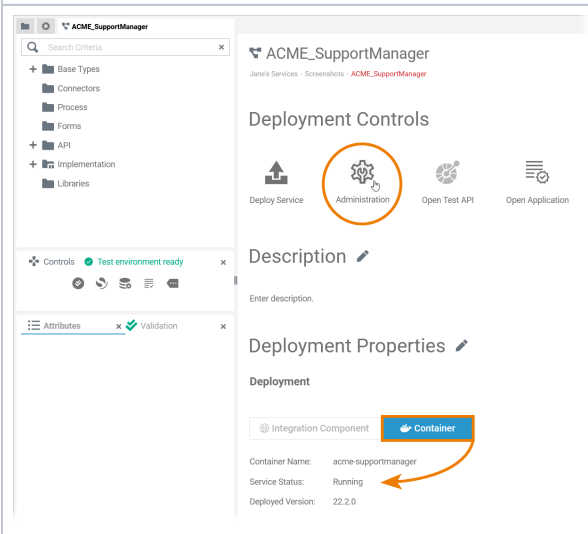


The screenshot shows the 'ACME\_SupportManager' interface. On the left, there is a sidebar with a search bar and a tree view. The tree view includes 'Base Types', 'Connectors', 'Process' (highlighted with a red box), 'Forms' (highlighted with a red box), 'API', 'Implementation', and 'Libraries'. Under 'API', there is a 'SupportCase' folder containing 'SupportAPI' and 'supportcases'. Under 'Implementation', there is a 'Service' folder containing 'Helper', 'MongoDB', 'REST', and 'Support'.

In the Designer, you have created a REST service that contains neither forms nor a process.

**Example:**

We use a REST service named **SupportAPI** that handles support cases which are stored to a MongoDB.



The screenshot shows the 'ACME\_SupportManager' interface with the 'Deployment Controls' section. The 'Administration' icon is highlighted with an orange circle. Below the 'Deployment Controls' section, there is a 'Description' section and a 'Deployment Properties' section. The 'Deployment Properties' section shows the 'Deployment' tab with a 'Container' button highlighted in an orange box. Below the 'Container' button, there is a table with the following information:

Container Name:	acme-supportmanager
Service Status:	Running
Deployed Version:	22.2.0

Choose the deployment target **Container**.


From the Service details page, open the service in the PAS Administration.

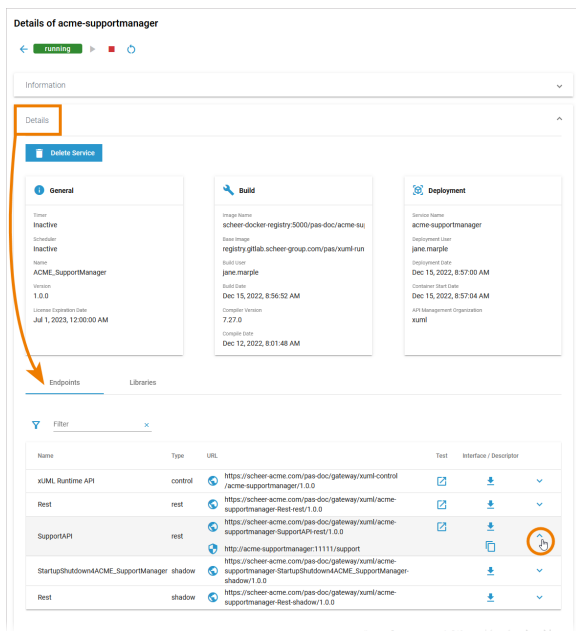
### Related Pages:

- [APIs](#)
  - [Creating an API](#)
  - [Publishing an API](#)
  - [Exposing an API](#)
- [Plans](#)
  - [Creating a Plan](#)

### Related Documentation:

- [Administration Guide](#)
  - [Controlling Containerized xUML Services](#)

In the Administration, you can access the service details, which also contain the information about the service endpoints that you need to create a new API. Use icon  to expand the details of your endpoint:



## Creating the API

Open the API Management and select menu **APIs > New API**.

Enter a name and a description for the new API and create it.

Endpoints					
Libraries					
Filter					
Name	Type	URL	Test	Interface / Descriptor	
XJML Runtime API	control	https://scheer-acme.com/pas-doc/gateway/xjml-control/acme-supportmanager/1.0.0			
Rest	rest	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-rest/rest/1.0.0			
SupportAPI	rest	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-supportAPI-rest/1.0.0			
StartupShutdownACME_SupportManager	shadow	http://acme-supportmanager:11111/support			
StartupShutdownACME_SupportManager	shadow	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-startupShutdownACME_SupportManager-shadow/1.0.0			
Rest	shadow	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-rest-shadow/1.0.0			

The path has been copied to the clipboard

Now you need the information from the service details in the PAS Administration.

To access the internal URL of your REST API, in our example **Support API** in the **Endpoints** tab, you need to expand the entry (see above). Click on the (internal) URL to copy it to the clipboard.

[Home](#) > [ACME Corp.](#) > [ACME Support Manager](#)

### ACME Support Manager

ACME Support Manager API

Created on 2022-12-15  
Created by jane.marple

Status: **CREATED**

Create a new version of

[Publish](#)

[Why can't I publish?](#)

[Overview](#)

[Implementation](#)

[Definition](#)

[Plans](#)

[Developer Portal](#)

[Policies](#)

[Change Log](#)

#### API Implementation

Provide details about the backend API implementation so that the API gateway can successfully proxy API requests. Please include any security you wish to enable between the API gateway and the backend API.

API Endpoint:

API Type:

API Content Type:

☐ Enable stateful request payload inspection

☐ Disable request keys stripping

API Security:

[Save](#) [Cancel](#)

Switch back to API Management and open tab **Implementation** of your new API.

Paste the copied URL in field **API Endpoint** and click **Save**.

Endpoints					
Libraries					
Filter					
Name	Type	URL	Test	Interface / Descriptor	
XJML Runtime API	control	https://scheer-acme.com/pas-doc/gateway/xjml-control/acme-supportmanager/1.0.0			
Rest	rest	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-rest/rest/1.0.0			
SupportAPI	rest	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-supportAPI-rest/1.0.0			
StartupShutdownACME_SupportManager	shadow	http://acme-supportmanager:11111/support			
StartupShutdownACME_SupportManager	shadow	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-startupShutdownACME_SupportManager-shadow/1.0.0			
Rest	shadow	https://scheer-acme.com/pas-doc/gateway/xjml/acme-supportmanager-rest-shadow/1.0.0			

The private descriptor URL has been copied to the clipboard

Open the Administration again and use to copy the URL of the private descriptor.

ACME Support Manager

Version: 1.0

ACME Support Manager API

Create a new version of this API (New Version)

Created on 2022-12-15

Created by jane.marple

Status: CREATED

Publish

Why can't I publish?

Overview

Implementation

Definition

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Developer Portal

Policies

Change Log

API Definition

Optionally, a Swagger or OpenAPI definition about your API can be provided. Adding a definition file will allow consumers to better understand how to use your API. Copy/paste or drag and drop your Swagger API definition into the text area below.

API Definition:  
OpenAPI & Swagger v2/v3 (YAML)

API Definition URL:  
http://acme-supportmanager:11111/v2e rest descriptors/SupportCase.SupportAPI.yaml

Load Definition

```
basePath: /support
consumes:
  - application/json
  - text/xml
definitions:
  SupportCase:
    properties:
      customerID:
        type: string
      customerName:
        type: string
      date:
        format: date-time
        type: string
      id:
        type: string
```

Download Save Cancel

In API Management, open tab **Definition** of your API.

Do the following:

1. Select the **API Definition** source **YAML**.

2. Paste the copied URL of the private descriptor in field **API Definition URL**.

3. Click **Load Definition** and verify that the definition is loaded to the text field.

4. Click **Save**.

## Securing the API

You created a new API, because you want to secure your service. Therefore, you need to create some plans for your API now.

**Example:** Our example service handles support cases. The API should be usable by two groups of users:

- Users with limited permissions who can only create support tickets.
- Support administrators who can create and manage support tickets.

Home > ACME Corp > ACME Support Manager

## ACME Support Manager

### ACME Support Manager API

Created on 2022-12-15

Created by jane.marple

Status: **CREATED**

To create corresponding plans, open your organization. You can use the breadcrumb navigation on top of the API details page.

Home > ACME Corp.

ACME Corp.

APIs Clients **Plans** Members Change Log

Filter by plan name:

Extended  
Consumers are limited to 1,000 requests per client per day.

JAMES PLAN  
JAMES plan for access 94/7

Open tab **Plans** and use button **New Plan**.

### New Plan

Create a new plan within the specified organization, allowing you to assign groups of policies to APIs.

Organization: ACME Corp. / Plan Name: Support Case Creator

Initial Version: 1.0

Description: Allows the creation of support tickets

Create Plan Cancel

Enter a name for your plan and a useful description before you create it.

#### Example:

We create a plan for our first use case (users with limited permissions).

Home > ACME Corp. > Support Case Creator

### Support Case Creator

Version: 1.0

Allows the creation of support tickets

Create a new version of this plan

Created on 2022-12-15  
Created by jane.marple

Lock Plan

Status: **CREATED**

Overview

**Policies**

Change Log

#### Plan Policies

Here is a list of all policies defined for this plan. These policies will be applied to all API invocations made by clients that use this plan in a contract, in addition to whatever policies are defined individually by the client and/or API.

Add Policy

No policies are defined yet. Use the Add Policy button above to define a new policy.

If you want to create plans for users with limited access, you have to assign appropriate policies.

Expert Advice

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Open tab **P**  
**olicies** and  
click the **Ad**  
**d Policy**  
button.

## Add Policy

Adding a policy will allow its specific functionality to be applied to the API invocation as part of the overall policy chain.

### Policy Type

Ignored Resources Policy

### Ignored Resources Policy Configuration

Manage the list of API routes that will be ignored.

Ignore Resources Rule	
Ignored URI	HTTP Method
<input type="text" value="/path/to/*"/>	<input type="text" value="*"/>
<input type="button" value="Add"/>	

### Ignored Resources

Path	Method	
/supportcases/*	DELETE	<input type="button" value="x"/>
/supportcases/*	GET	<input type="button" value="x"/>



Select the **P**  
**olicy Type**  
you want to  
assign and  
configure  
the policy  
according  
to your  
requirement  
s.

### Example:

We choose  
the **Ignored  
Resources  
Policy** and  
configure it  
so that  
support  
case  
creators  
cannot  
receive or  
delete  
support  
requests.

Home > ACME Corp. > Support Case Creator

## Support Case Creator

Version: 1.0

Allows the creation of support tickets

Created on 2022-12-15  
Created by jane.marple

Status: **CREATED**

Create a new version of this plan




### Overview


### Policies

### Change Log

### Plan Policies

Here is a list of all policies defined for this plan. These policies will be applied to all API invocations made by clients that use this plan in a contract, in addition to whatever policies are defined individually by the client and/or API.

**Ignored Resources Policy**  
Policy created by jane.marple on 2022-12-15  
Requests matching any of the 2 regular expressions provided will receive a 404 error code.

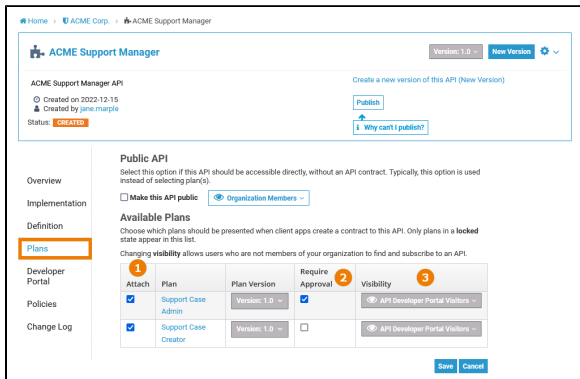
 Only locked plans can be used by APs in the organization. Refer to [Locking a Plan](#) for more information.





In the same way, we create a second plan for support case administrators.

Administrators don't have any restrictions because they should be able to access all support tickets. Therefore, their plan has no policies assigned.



Go to the API details page again and open tab **Plans**.

You have to do the following here:

1. Attach the plans you want to use.
2. Set **Require Approval** for the plans that are not to be available to everyone.
3. Choose the visibility of the plans.

✔ **Expert Advice**

Read more about the visibility concept on page [The Concepts of APIManagement](#).

Example:

1. **Attach:** We want to use both created plans, so both are attached to the API.
2. **Require Approval:** Everyone should be able to use the API for support ticket creation, but we want to approve the users with admin permission. Therefore, the usage of plan [Support Case Admin](#) needs approval.
3. **Visibility:** Both plans should be visible to all visitors of the API Developer Portal.

[Home](#) > [ACME Corp.](#) > [ACME Support Manager](#)

 **ACME Support Manager**

ACME Support Manager API

Created on 2022-12-15

Status: **READY**

Create a new ve



You have completed the necessary steps to secure the service and can now publish your API.

ACME Support Manager

janie.marpleLogout

[Home](#)[Marketplace](#)[My Clients](#)

Version 1.0 of ACME Support Manager [\[latest\]](#)

API Documentation

ACME Support Manager API

Extended Description

No further description has been stored for this API

Plans

Support Case Admin

Administrate open / pending support cases

Rate Limit	Unlimited
Transfer Quota	Unlimited

This plan requires approval

Sign Up

Support Case Creator

Allows the creation of support tickets

Rate Limit	Unlimited
Transfer Quota	Unlimited

Sign Up

The API is available in the API Developer Portal. Users can now sign up for it.