

# Setting up a Service Metadata Publisher for DE4A – for production

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## 1 Introduction

This document elaborates the steps necessary to deploy and configure a Service Metadata Publisher (SMP) for the use in the DE4A network. The intended audience for this document are technical experts at DE4A pilot partners that want to setup their own SMP.

This document is focused on the application “phoss SMP” which is the recommended application by WP5, because it is the only known Open Source SMP implementation that supports the Business Card feature. This document takes into account different approaches for deploying an SMP, but there might be others ways as well.

This document is meant to be read top to bottom, so it is not recommended to jump between the different chapters, unless you know what you are doing.

### 1.1 Terminology

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [RFC2119].

### 1.2 Bibliography

The following normative references are used in this document:

[CODELIST]	DE4A Code Lists, <a href="https://github.com/de4a-wp5/de4a-codelists">https://github.com/de4a-wp5/de4a-codelists</a>
[PFUOI]	DE4A Policy for the use of identifiers, v1.0.0, 2021-06-23
[RFC2119]	RFC 2119, Key words for use in RFCs to Indicate Requirement Levels, March 1997, <a href="https://datatracker.ietf.org/doc/html/rfc2119">https://datatracker.ietf.org/doc/html/rfc2119</a>
[TRANSSEC]	DE4A Policy for Transport Security, v1.0.0, 2021-04-08

## 2 Prerequisites

This chapter contains the prerequisites that need to be fulfilled to operate an instance of phoss SMP.

### 2.1 Hardware minimum requirements

The hardware requirements are generally low for phoss SMP. The system will idle most of the time, as it is only involved for one request per exchanged message.

- A machine with Windows or Linux on it (Linux is preferred)
- At least 4GB of RAM
- The amount of storage depends on your setup, but assume at least 5 GB for the SMP itself – the exact amount depends on your system
- Internet connectivity

### 2.2 Software minimum requirements

- Java 1.8 or newer – it was tested with AdoptOpenJDK, Open JDK and Oracle JDK
- Tomcat 8.5 or 9.0 is recommended as the JavaEE application server – the SMP also works knowingly with Jetty and WildFly
- httpd or nginx as reverse proxy for TLS handling
- A TLS certificate, following the rules described in [TRANSSEC] – wildcard certificates are okay, as long as they follow the rules.
- Depending on the data storage system that you chose (see below in chapter 3.2) an additional database system might be needed

### 2.3 Certificates (different to test version)

- A specific SMP certificate is needed, that was already obtained from CEF via the T-Systems portal.

- The result is a PKCS12 key store (.p12 or .pfx) with a single entry (alias) that must contain a chain of three certificates:

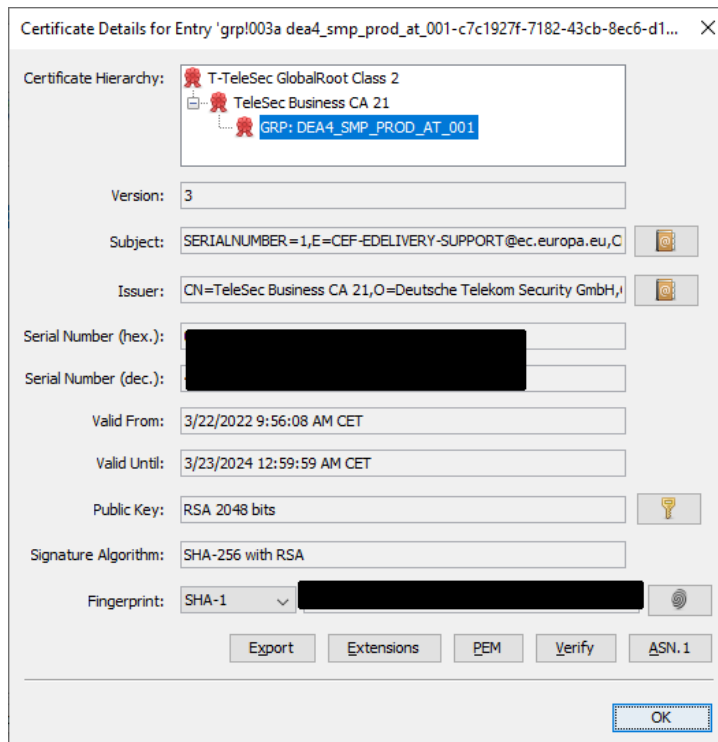


Figure 1: Example screenshot of an SMP production certificate in KeyStore Explorer

- Keep this keystore private and don't share it with anyone.

## 2.4 Monitoring

To include an instance of phoss SMP in your infrastructure monitoring, it is recommended to use the status API for that. See <https://github.com/phax/phoss-smp/wiki/Status-API> for details.

### 3 phoss SMP introduction

phoss SMP is an Open Source SMP application developed by Philip Helger for usage in the Peppol and other eDelivery systems. The project website is <https://github.com/phax/phoss-smp/> and a public Wiki is available at <https://github.com/phax/phoss-smp/wiki>. The application is a multi-user web application that needs to be run in a JavaEE application server. It offers a web-based GUI as well as a REST API for interacting with it. The current version, at the time of writing of this document, is v5.6.2.

#### 3.1 Existing phoss SMP users

If you are already using phoss SMP for a different project, you anyway need to setup a new instance of it, because the DNS zone it needs to serve is specific to the DE4A project and not compatible with other projects like Peppol or TOOP.

#### 3.2 Version/variant selection

phoss SMP supports three different kinds of data storage systems (called “backend” in the documentation):

- The file system (using a built-in XML database)
- A relational database system (MySQL or PostgreSQL)
- A non-relational database system (MongoDB)

For each of these system, different artefacts are available, that indicate the data storage (`xml`, `sql` and `mongodb`). The functionality of the SMP itself is identical, independent of the backend technology used.

For the DE4A project it is recommended to use the “XML” backend, since it is the easiest to setup. Since the amount of data will be quite small, there is (in the author’s opinion) no need for a fully-fledged database system.

The rest of the document assumes you are using the “XML” version and will not mention any database details.

#### 3.3 Installation variants

To operate an instance of phoss SMP, you have basically two options:

- Run it directly in an existing JavaEE application server (like Tomcat or Jetty). In this case you need to download the binary WAR file from <https://github.com/phax/phoss-smp/releases> (pick `phoss-smp-webapp-xml-5.6.2.war` for the XML backend).
- Run it in a Docker container – either directly or as part of a Kubernetes cluster. A description of the coordinates can be found at <https://github.com/phax/phoss-smp/tree/master/docker> (use `phelger/phoss-smp-xml:latest` for the XML backend)

Independent of the deployment option, the SMP needs a writable directory where it stores all its data. When using a JavaEE application, the directory should be outside the JavaEE server directory (e.g. using `/var/smp` would be an option). When running as a Docker image, please make sure that the volume is mounted from the host system (see the Docker related website for details).

Application server specific detail configurations are described in the Wiki at <https://github.com/phax/phoss-smp/wiki/Running>.

Additional documentation on how a system can be hardened can be found at <https://github.com/phax/phoss-smp/wiki/Security>.



### 3.3.1 Path selection

It is highly recommended, to install the SMP as the `ROOT1` application, so that it is accessible via the path `/` on the server.

Please note: versions prior to 5.6.2 had a bug and they must be installed in `ROOT`. Version 5.6.2 can also be installed in a sub path.

### 3.3.2 Integrating with a reverse proxy

When using the phoss SMP with https, it needs to be integrated with a reverse proxy server that needs to handle the TLS termination. Details on how to integrate phoss SMP with a reverse proxy server like httpd, nginx and IIS are also described in the Wiki at <https://github.com/phax/phoss-smp/wiki/Running>.

For the selection of a suitable TLS certificate, please consult [TRANSSEC].

### 3.3.3 Verifying the installation

To verify that the installation was successful, ensure that all necessary components are running (reverse proxy, application server, Docker image, Kubernetes cluster etc.), open a local browser and locate the SMP (e.g. via <https://my-smp.example.org>) – since the exact name is installation dependent, this URL is denoted by the placeholder `{server}` in the rest of the document. If you get redirected to `{server}/public` and see a screen very similar to the one below the installation seems to be okay:

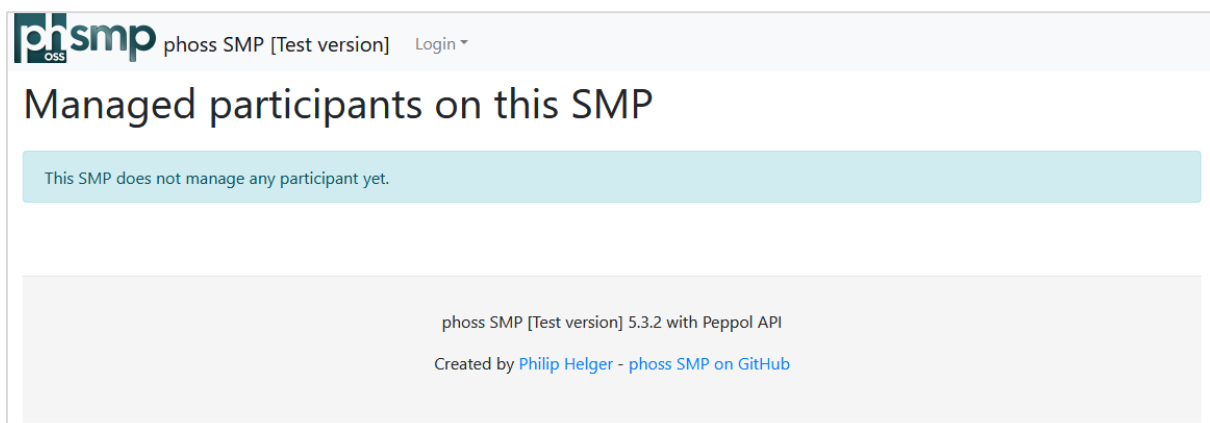


Figure 2: phoss SMP public start screen

Alternatively, you can also open `{server}/secure` in your browser to directly navigate to the management GUI. Then you should see a screen like this:

<sup>1</sup> The name „ROOT“ is standard value in JavaEE application servers as the alias for the root directory of the server.

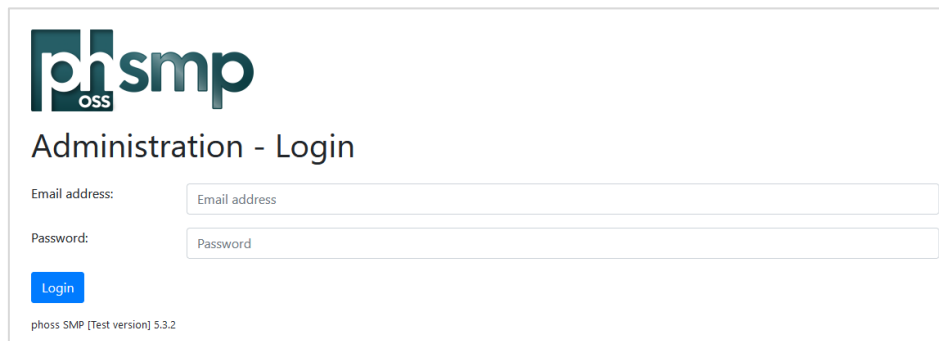


Figure 3: phoss SMP login screen

For error handling, please see the application server log files. For Tomcat these are usually `catalina.out` and `localhost.YYYY-MM-DD.log` (the exact filenames depend on the installation and version of Tomcat used). For the Docker image `docker logs` does not always show the full truth. In case the error is not contained, stepping into the running image (e.g. via `docker exec -it phoss-smp bash`) and then finding the Tomcat log files may be inevitable.

### 3.4 SMP Configuration

The most difficult thing is to configure the SMP properly. The Wiki elaborates extensively about the different configuration files and the potential values: <https://github.com/phax/phoss-smp/wiki/Configuration>. This chapter focuses only on the minimum elements that MUST be changed anyway.

You need to have the SMP JKS key store (see chapter 2.3) to fully finalize the configuration.

Since the phoss SMP configuration mainly consists of three different configuration files, the necessary changes are outlined for each of them separately.

Note: each change to one of the configuration files requires a restart of the application.

Note: placeholders or variables cannot be used in the phoss SMP properties files.

#### 3.4.1 webapp.properties

This file contains settings mainly related to the web frontend.

- `global.debug` SHOULD be set to `false`
- `global.production` SHOULD be set to `true`
- `global.debugjaxws` SHOULD be set to `false`
- `webapp.datapath` MUST be set to the absolute directory, where all data will be stored.

#### 3.4.2 smp-server.properties (different to test version)

This file contains settings mainly related to the SMP functionality itself

- `smp.backend` MUST be set to `xml`
- `smp.keystore.type` MUST be set to `PKCS12` (different to test version)
- `smp.keystore.path` MUST be set to the absolute path where the SMP certificate resides on your server
- `smp.keystore.password` MUST be set to the plaintext password of the keystore. Mind trailing spaces!
- `smp.keystore.key.alias` MUST be set to the name of the entry/alias in the keystore.

- `smp.keystore.key.password` MUST be set to the plaintext password of the key. Usually this is the same as for the full keystore. Mind trailing spaces!
- `smp.truststore.type` MUST be set to `JKS`
- `smp.truststore.path` MUST be set to the absolute path of the file `de4a-truststore-smp-it2-pw-de4a.jks`<sup>2</sup> (different to test version)
- `smp.truststore.password` MUST be set to `de4a`
- `sml.smpid` SHOULD be set to `DE4A-SMP-XX` where `XX` denotes your ISO country code. This ID MUST be unique within the whole DE4A network. If you plan to register multiple SMPs per network just add index numbers to the `XX`-part.
- `smp.publicurl` MUST be set to the public URL of your SMP server (including an eventual application path – e.g. `https://smp.example.org/smp`)
- `smp.identifiertype` MUST be set to `simple`
- `smp.rest.type` MUST be set to `bdxr`

### 3.4.3 `application.properties` (different to test version)

For the SMP this file contains the Directory client configuration. Even though we don't need the Directory at the moment, it is strongly recommended to configure it already. The values in this file are the same as for the SMP in the previous chapter.

Be careful: the names of the Directory client configuration will change for phoss SMP 5.7.0 and onwards. See <https://github.com/phax/phoss-smp/wiki/Migrations#upgrade-from-56-to-57> for details.

- `keystore.type` MUST be set to `JKS`
- `keystore.path` MUST be set to the absolute path where the SMP certificate resides on your server
- `keystore.password` MUST be set to the plaintext password of the keystore. Mind trailing spaces!
- `keystore.key.alias` MUST be set to the name of the entry/alias in the keystore.
- `keystore.key.password` MUST be set to the plaintext password of the key. Usually this is the same as for the full keystore. Mind trailing spaces!
- `truststore.type` MUST be set to `JKS`
- `truststore.path` MUST be set to the absolute path of the file `de4a-truststore-smp-it2-pw-de4a.jks`<sup>3</sup> (different to test version)
- `truststore.password` MUST be set to `de4a`

## 3.5 Initial setup

Once the configuration is finished and the application is running again, it's time to perform the initial setup. Open `{server}/secure` in the browser and login for the first time.

The default username is `admin@helger.com` and the default password is `password`.

### 3.5.1 General user interface elements

After you successfully logged in, the screen looks like depicted in the following figure:

<sup>2</sup> A copy of the truststore can be found at <https://github.com/de4a-wp5/de4a-commons/tree/main/certificates/smp/prod>

<sup>3</sup> A copy of the truststore can be found at <https://github.com/de4a-wp5/de4a-commons/tree/main/certificates/smp/prod>

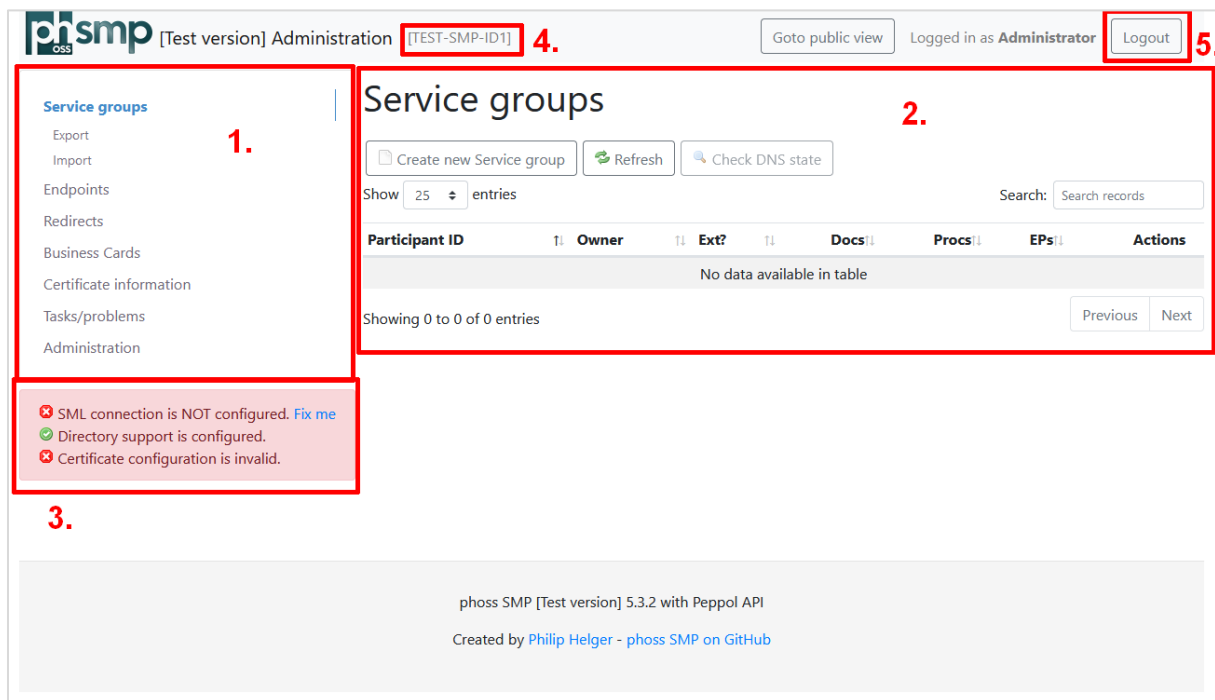


Figure 4: phoss SMP management GUI

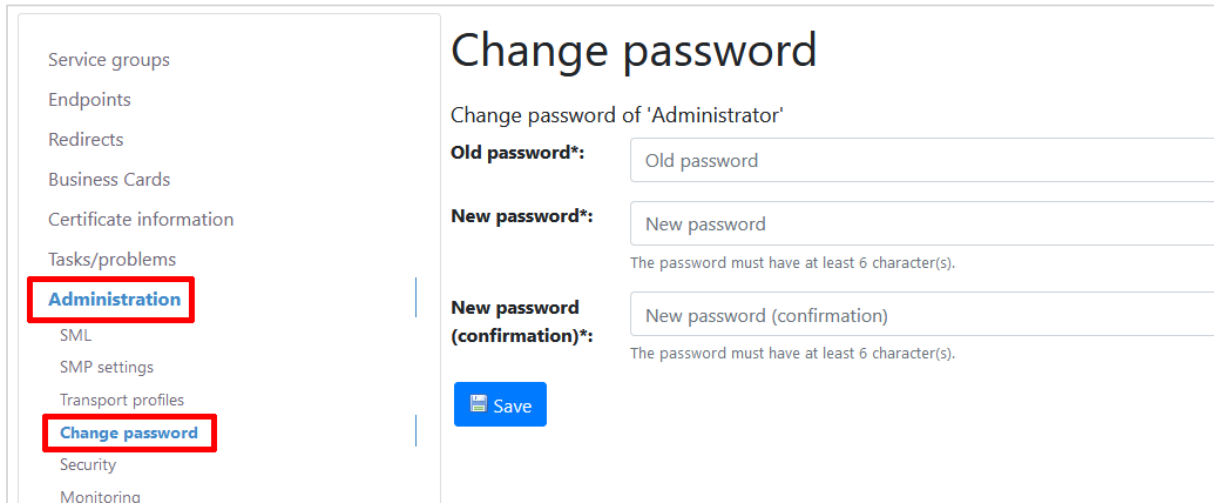
The main layout consists of:

- a menu on the left side (denoted by “1.”) where all the functionalities can be selected
- a content area right of the menu (denoted by “2.”), where the main page content is displayed
- the information area (denoted by “3.”) gives you a brief glimpse, if the key settings are okay (green background) or if actions are needed (red background)
- the small text denoted by “4.” shows the SMP ID as configured – please make sure it is NOT `TEST-SMP-ID1`.
- the logout button (denoted by “5.”) ends the current session for the current user, as each user can only be logged in once. If you forget to logout, the session expires automatically after 30 minutes of inactivity.

Note: some of the screenshots in this document contain a red information area, because no certificate was configured at that point in time. In practise it should be green, once you finished all the necessary steps.

### 3.5.2 Change default password (highly recommended)

The first thing to do is to change the password of the user. The menu item to use is “Administrator | Change password”.



**Change password**

Change password of 'Administrator'

**Old password\*:**

**New password\*:**   
The password must have at least 6 character(s).

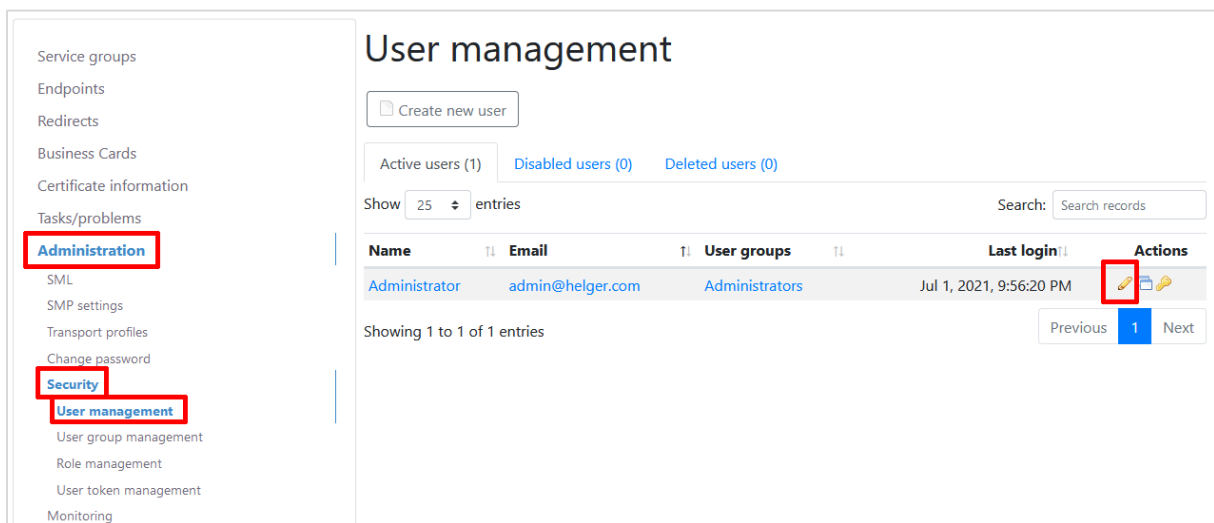
**New password (confirmation)\*:**   
The password must have at least 6 character(s).

Figure 5: Change password

### 3.5.3 Change default email address (optional)

If you optionally also want to change the email address of the Administrator, follow these steps:

- Navigate to the menu item “Administration | Security | User management” and edit the “Administrator” user by clicking on the small pencil icon:



**User management**

Active users (1) Disabled users (0) Deleted users (0)

Show 25 entries Search:

Name	Email	User groups	Last login	Actions
Administrator	admin@helger.com	Administrators	Jul 1, 2021, 9:56:20 PM	<input type="button" value="Edit"/>

Showing 1 to 1 of 1 entries

Previous 1 Next

Figure 6: User management overview

- Change the “Email address” and press “Save”:

## User management

Edit user 'Administrator'

First name:

Last name\*:

Email address\*:

Enabled? Yes

Description:

User groups\*: 

Administrators  
Config user  
Writable REST API users

Figure 7: Edit the Administrator email address

Note: you can also change the name of the user if you like

Note: the “Administrator” user is a special user and modification options are limited compared to other users, to avoid locking him out of the system.

### 3.5.4 Creating the new SML configuration (required) (different to test version)

This step creates the necessary SML configuration that is needed for DE4A. Navigate to “Administration | SML | SML configuration” and copy the existing “SML” node:

Service groups  
Endpoints  
Redirects  
Certificate information  
Tasks/problems  
**Administration**  
**SML**  
**SML configuration**  
SML registration  
SML certificate update  
SMP settings  
Identifier Mappings  
Transport profiles

## SML configuration

This page lets you create custom SML configurations that can be used for registration.

Show 25 entries Search:

Name	DNS Zone	Management Service URL	Client Cert?	Actions
Development	smj.peppolcentral.org.	http://localhost:8080	No	
SMK	acc.edelivery.tech.ec.europa.eu.	https://acc.edelivery.tech.ec.europa.eu/edelivery-sml	Yes	
<b>SML</b>	edelivery.tech.ec.europa.eu.	https://edelivery.tech.ec.europa.eu/edelivery-sml	Yes	

Showing 1 to 3 of 3 entries

Previous 1 Next

Figure 8: Start creating a new SML configuration

In the upcoming form, please change the values as following:

- Name: “SML DE4A”
- DNS Zone: “de4a. edelivery.tech.ec.europa.eu.”

Don’t touch any of the other values, and press “Save” to finalize this step.

Note: “SMK” is the test instance of “SML” – K comes before L in alphabet so it means “test”.

## SML configuration

Create new SML configuration

**Name\*:**

The name of the SML configuration. This is for informational purposes only and has no effect on the functionality.

**DNS Zone\*:**

The name of the DNS Zone that this SML is working upon (e.g. `acc.edelivery.tech.ec.europa.eu`). The value will automatically converted to all-lowercase!

**Management Service URL\*:**












The service URL where the SML management application is running on including the host name. It may not contain the 'manageservicemetadata' or 'manageparticipantidentifier' path elements!

☒ **Client Certificate required?**

Check this if this SML requires a client certificate for access. Both Peppol production SML and SMK require a client certificate. Only a locally running SML software may not require a client certificate.

Figure 9: Details on creating a new SML configuration

Optionally you can delete the unused configuration items “Development”, “SMK” and “SML” afterwards if you like.

Name	DNS Zone	Management Service URL	Client Cert?	Actions
Development	smj.peppolcentral.org.	http://localhost:8080	No	  
SMK	acc.edelivery.tech.ec.europa.eu.	https://acc.edelivery.tech.ec.europa.eu/edelivery-sml	Yes	  
SML	edelivery.tech.ec.europa.eu.	https://edelivery.tech.ec.europa.eu/edelivery-sml	Yes	  
SML DE4A	de4a.edelivery.tech.ec.europa.eu.	https://edelivery.tech.ec.europa.eu/edelivery-sml	Yes	 

Showing 1 to 4 of 4 entries

Previous **1** Next

Figure 10: SML configuration that may be deleted

### 3.5.5 Select the SML for usage

After creating the necessary SML configuration in the previous step, it needs to be selected for usage. Therefore, open the menu item “Administration | SMP Settings” and press the “Edit” button:

- Service groups
- Endpoints
- Redirects
- Business Cards
- Certificate information
- Tasks/problems
- Administration**
- SML
- SMP settings**
- Transport profiles
- Change password
- Security
- Monitoring
- System information
- App information
- System data
- Utilities
- System settings

## SMP settings

REST API	
REST writable API disabled?	No
SMK/SML	
SML connection required?	Yes
SML connection enabled?	No
SML to be used:	none
Peppol Directory	
Peppol Directory integration required?	Yes
Peppol Directory integration enabled?	Yes
Peppol Directory integration automatic update?	Yes
Peppol Directory hostname:	<a href="https://directory.peppol.eu">https://directory.peppol.eu</a>

✗ SML connection is NOT configured. [Fix me](#)  
✔ Directory support is configured.  
✗ Certificate configuration is invalid.

✎ Edit

Figure 11: SMP settings page

Then alter the values like this:

- The checkbox for field “SML connection enabled?” should be enabled (checked)
- For the field “SML configuration:” select the “SML DE4A” that was just created
- Set the field “Peppol Directory hostname” to <https://de4a.simplegob.com/directory> - even though the URL is not yet 100% fixed

Afterwards, press the “Save” button.



## SMP settings

### REST API

☐ REST writable API disabled?

If this checkbox is checked, all non-standard writing REST APIs are disabled.

### SMK/SML

☒ SML connection required?

If this checkbox is checked, warnings are emitted if the SML connection is not enabled.

☒ SML connection enabled?

If this checkbox is checked, service group changes are propagated to the SML.

SML configuration:

[SML DE4A] <https://edelivery.tech.ec.europa.eu/edelivery-sml> (de4a.edelivery.tech.ec.europa.eu.)

Select the SML to operate on. The list of available configurations can be [customized](#).

### Peppol Directory

☒ Peppol Directory connection required?

If this checkbox is checked, warnings are emitted if the Peppol Directory connection is not enabled.

☒ Peppol Directory integration enabled?

If this checkbox is checked, the Peppol Directory integration is enabled.

☒ Peppol Directory integration automatic update?

If the Peppol Directory integration is enabled and this checkbox is checked, all business card creations, modifications and deletions are automatically pushed to the Peppol Directory server.

Peppol Directory hostname:

<https://de4a.simpleglob.com/directory>

The Peppol Directory host where the business cards should be published to. This URL is only used if the Peppol Directory integration (see above) is enabled.



Figure 12: Editing the SMP settings

If you configured everything correctly, the information area should now have turned green:

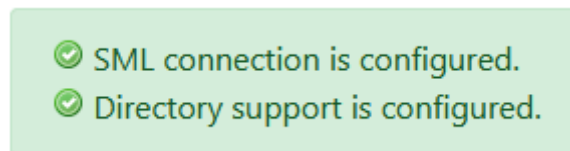


Figure 13: Information area without any issues

### 3.5.6 Verify the configuration

As a last check before finalizing the registration, open the “Tasks/problems” menu item and check, that the page contains no error. The below figure shows three warnings, but no error, meaning we’re good to continue. In general, you can check on this page at any time if there are severe configuration errors identified.

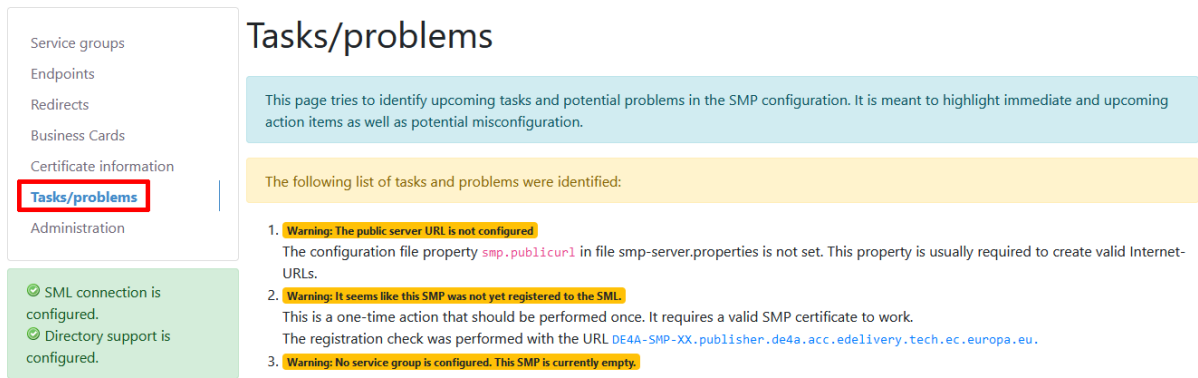


Figure 14: Tasks/problems page

### 3.5.7 Register the SMP to the SML (different to test version)

Now the configuration is completed and the SMP is ready to be registered to the SML. To do this, open the menu item “Administration | SML | SML registration”.

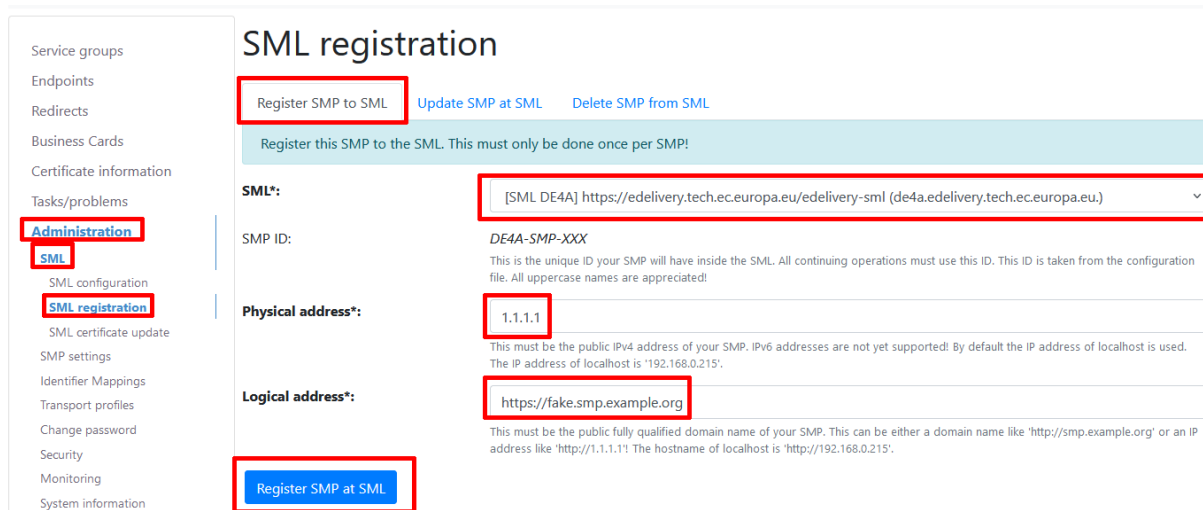


Figure 15: Register SMP to SML

The field “Physical address” SHOULD contain the public IP address of your server. Since this value is not used, if the “Logical address” is provided, it is okay to use the value “1.1.1.1” in here. The field “Logical address” MUST contain the fully qualified URL of the server, including the protocol and an eventually present application path (not present in the above figure).

Afterwards press the “Register SMP at SML” button. If everything works as expected, you should see a screen similar to the following figure:



Figure 16: Successful registration to SML message (screenshot from the test version)

## 4 Operating the SMP

Once the configuration is completed, the regular operations of an SMP starts. The most common things that will be done, is to create “Participants” which are called “Service Groups” in SMP terminology. Each participant is ensured to be registered by exactly one SMP.

This chapter does not explain all the details of operating an SMP as it should be straight forward, it just gives a very brief overview.

### 4.1 Participant / Service Group management

To create a new Service Group, open the menu item “Service groups” and press the button “Create new Service group”.

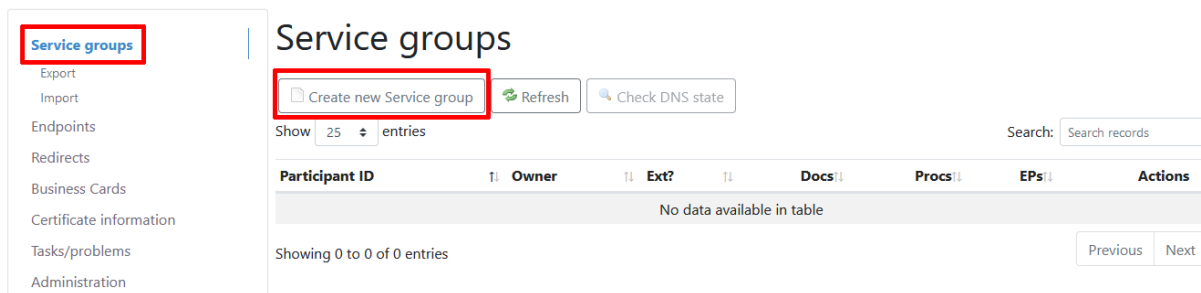


Figure 17: Service Group list

The only relevant field to be filled out is the “Participant ID” field.

- The “Identifier scheme” subfield MUST be set to the value `iso6523-actorid-upis` as specified in [PFUOI].
- The “Identifier value” subfield MUST contain the participant identifier value, also following the rules of [PFUOI].
- The “Extension” field MUST stay empty

Afterwards press the “Save button”.

## Service groups

Create new service group

**Participant ID\*:**

Identifier scheme
Identifier value


The participant identifier for which the service group should be created. The left part is the identifier scheme, the right part is the identifier value (e.g. 9915:test)

**Owning User\*:** Administrator

The user who owns this entry. Only this user can make changes via the REST API.

**Extension:** Extension

Optional extension to the service group. If present it must be valid XML content!






Figure 18: Create a new Service Group

This operations writes into the SML. If everything worked, you see a green success box, if not a red error box is shown. If an error occurred this usually means one of the following:

- that your certificate configuration is invalid
- or that the identifier value is syntactically not according to the rules
- or that the identifier value was already taken by a different SMP in the network

You can also create and delete a Service Group via the REST API – see

<https://github.com/phax/phoss-smp/wiki/REST-API> for details.

## 4.2 Endpoint management

An SMP Endpoint is always linked to a single Service Group. It is identified by the quadruple of Service Group, Document Type identifier, Process Identifier and Transport Profile. To manage Endpoints, open the menu item “Endpoints | Endpoint List”. Use the button “Create new Endpoint” to create a new endpoint.

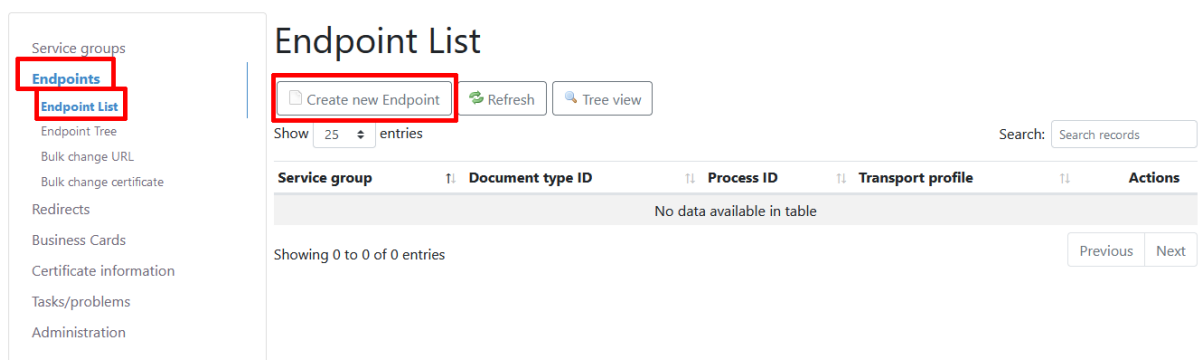


Figure 19: SMP Endpoint list

When creating a new Endpoint, the following fields are relevant:

- The “Service group” MUST be selected from the drop-down select box.
- The “Document type ID” scheme MUST be `urn:de4a-eu:CanonicalEvidenceType` according to [PFUOI]
- The “Document type ID” value MUST be one of the code list values according to [CODELIST]
- The “Process ID” scheme MUST be `urn:de4a-eu:MessageType`
- The “Process ID” value MUST be one of the code lists values according to [CODELIST].
- The “Transport Profile” MUST be one of the code lists values according to [CODELIST]. Currently the only allowed value is `bdxr-transport-ebms3-as4-v1p0` which by default has the name “CEF AS4” in phoss SMP.
- The field “Endpoint Reference” MUST contain the URL of the AS4 endpoint to be used, including the protocol and the path. This is the URL where the AS4 message is send to.
- The field “Certificate” MUST contain the PEM encoded certificate of your AS4 certificate. This must be text content that starts with `-----BEGIN CERTIFICATE-----` and ends with `-----END CERTIFICATE-----`.
- The field “Service Description” MUST be filled – the content is for humans only.
- The field “Technical Contact” MUST be filled – the content is for humans only.

Afterwards press the “Save” button.

## Endpoint List

Create new endpoint

**Service group\*:** iso6523-actorid-upis:9915:test [admin@helger.com (Administrator)]

**Document type ID\*:** urn:de4a-eu:CanonicalEvidenceType CompanyRegistration:1.0

**Process ID\*:** urn:de4a-eu:MessageType Request

**Transport Profile\*:** CEF AS4 (bdxr-transport-ebms3-as4-v1p0)

**Endpoint Reference:** https://my.de4a.example.org/as4


The URL where messages of this type should be targeted to.

☐ Requires Business Level Signature:


Check the box if the recipient requires business-level signatures for the message, meaning a signature applied to the business message before the message is put on the transport. This is independent of the transport-level signatures that a specific transport profile, such as the START profile, might mandate. This flag does not indicate which type of business-level signature might be required. Setting or consuming business-level signatures would typically be the responsibility of the final senders and receivers of messages, rather than a set of APs.

**Minimum Authentication Level:** Minimum Authentication Level

Indicates the minimum authentication level that recipient requires. The specific semantics of this field is defined in a specific instance of the BUSDOX infrastructure. It could for example reflect the value of the "urn:busdox:attribute:assurance-level" SAML attribute defined in the START specification.

**Not before:** 

Activation date of the service. Senders should ignore services that are not yet activated.

**Not after:** 

Expiration date of the service. Senders should ignore services that are expired.

**Certificate\*:** -----BEGIN CERTIFICATE-----  
MIIFdjcCA16gAwIBAgI/CEAcwDQYJKoZIhvcNAQELBQAwajELMAkGA1UEBhMCRVUx  
DzANBgNVBAGyMBKv1cm9wZTENMAAGATUECgwwEREUQTEIMCMGA1UECwwwREU0QS8x  
-----  
Holds the complete signing certificate of the recipient AP, as a PEM base 64 encoded X509 DER formatted value.

**Service Description\*:** DE4A Endpoint

A human readable description of the service.

**Technical Contact\*:** support@de4a.example.org

Represents a link to human readable contact information. This might also be an email address.

**Technical Information:** Technical Information

A URL to human readable documentation of the service format. This could for example be a web site containing links to XML Schemas, WSDLs, Schematrons and other relevant resources.

**Extension:** Extension

Optional extension to the endpoint. If present it must be valid XML content!



Figure 20: Create a new SMP Endpoint

Hint: if you want to create a new Endpoint for the same participant, just for a different document type, it is recommended to use the "Copy endpoint" functionality, instead of entering the data manually over and over again. The "copy" action can be interpreted as "Create a new Endpoint using the data of an existing Endpoint". See the below figure for how to do this.

## Endpoint List

Show 25 entries

Search:

Service group	Document type ID	Process ID	Transport profile	Actions
iso6523-actorid-upis:9915:test	urn:de4a-eu:CanonicalEvidenceType:CompanyRegistration:1.0	urn:de4a-eu:MessageType:Request	CEF AS4	 

Showing 1 to 1 of 1 entries

Previous 1 Next

Figure 21: The "Copy" button

You can also create and delete Endpoints via the REST API – see <https://github.com/phax/phoss-smp/wiki/REST-API> for details.

### 4.3 Maintenance tasks

#### 4.3.1 Change an AS4 endpoint URL

Sometimes it is necessary to change the endpoint URL of the AS4 gateway. To avoid editing all Endpoints manually, a functionality to bulk-change all endpoint URLs in all SMP endpoint can be found at the menu item “Endpoints | Bulk change URL”.

#### 4.3.2 Change an AS4 certificate

If it is necessary to update the public AS4 certificate part, there is also a bulk change functionality available. You can find it at the menu item “Endpoints | Bulk change certificate”.

#### 4.3.3 Change an SMP certificate

If your SMP certificate is expired, multiple activities need to be performed. See [https://peppol.helger.com/public/locale-en\\_US/menuitem-docs-peppol-cert-update#smp](https://peppol.helger.com/public/locale-en_US/menuitem-docs-peppol-cert-update#smp) for a detailed description.

## 5 Taking an SMP offline

If you are sure, that you don't need your SMP anymore, you should unregister it from the SML. This implies, that all participants (Service Groups) that you previously registered are made available for registration by other SMPs.

Note: this action cannot be undone!

To do this, open the menu item "Administration | SML | SML registration", select the "Delete SMP from SML" tab, and press the "Delete SMP from SML" button.

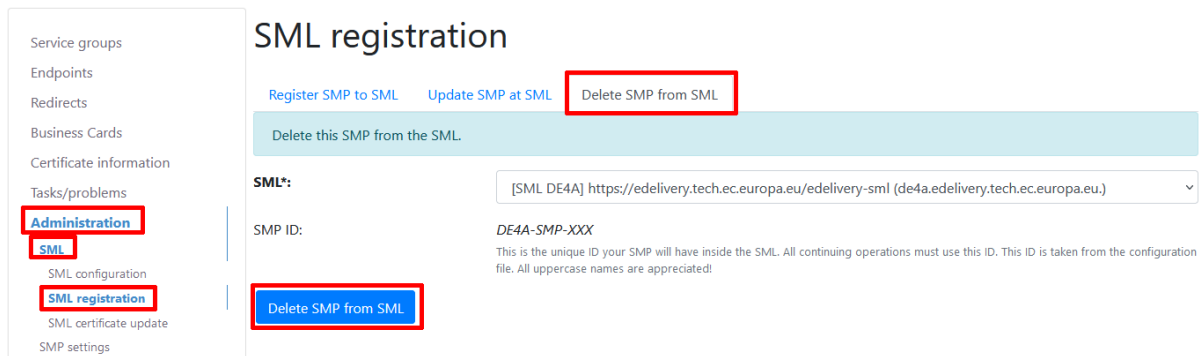


Figure 22: Unregistering an SMP from SML

This should be done at the end of the project to free up the resources if possible.