Configuring an SMP for the DE4A IAL

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1   Introduction

This document elaborates the steps necessary to configure a Service Metadata Publisher (SMP) for the use with the central DE4A IAL component. The intended audience for this document are technical experts at DE4A pilot partners that already operate an SMP.

This document builds on top of the document "Setting up a Service Metadata Publisher for DE4A – for production" and assumes, that an SMP is already up and running. If not, it's hard to fully follow the steps in this document.

This document does not deal with querying the IAL - this only needs to be done by a DE4A Connector.

This document is only applicable as a preparation for "Iteration 2" of DE4A. It has no effect on "Iteration 1" exchanges.

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:

[IAL]   DE4A IAL Technical Design v1.1, 2022-04-01

[RFC2119]   RFC 2119, Key words for use in RFCs to Indicate Requirement Levels, March 1997, https://datatracker.ietf.org/doc/html/rfc2119

2   IAL

DE4A needs to operate a central component called "IAL" that corresponds to the "DSD" (Data Service Directory) of the SDG-OOP sphere and offers a centralized query facility to find Data Owners (DOs). Please see the [IAL] document for the technical design and big picture.

The IAL service has been implemented and the central instance is available at https://de4a.simplegob.com/ial/. The source code of the IAL service is available on GitHub at https://github.com/de4a-wp5/ial-service.

This document focuses solely on the part of the DE4A pilot partners, that need to fill the IAL with data. The scope of this document is shown in the following figure by the grey box labelled "SMP Providers".
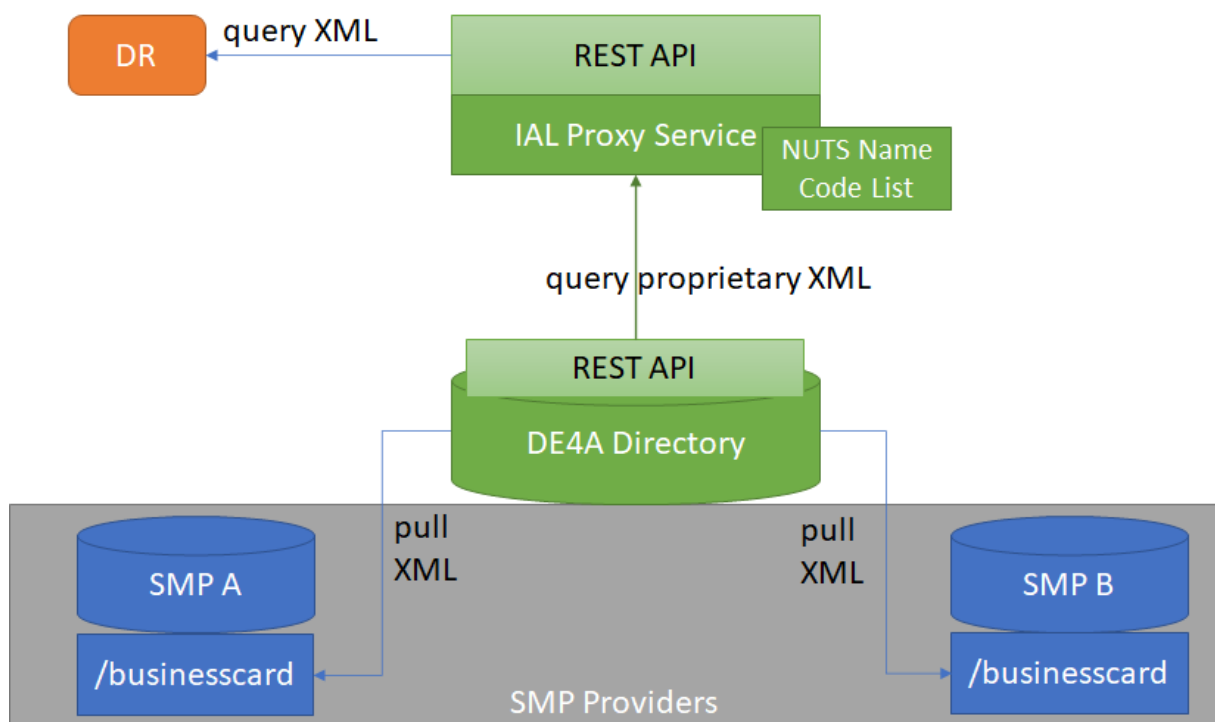

Figure 1: IAL Big Picture with scope

3   SMP Configuration

The process of configuring the SMP is split into two parts:

- The one-time action to connect to the DE4A Directory and
- The per-participant action to maintain the so-called Business Cards

3.1   Connecting to the Directory

To connect an SMP to the Directory, login into the administration GUI of the SMP at the URL

https://smp.example.org/secure

Username and password should have been set on initialization.

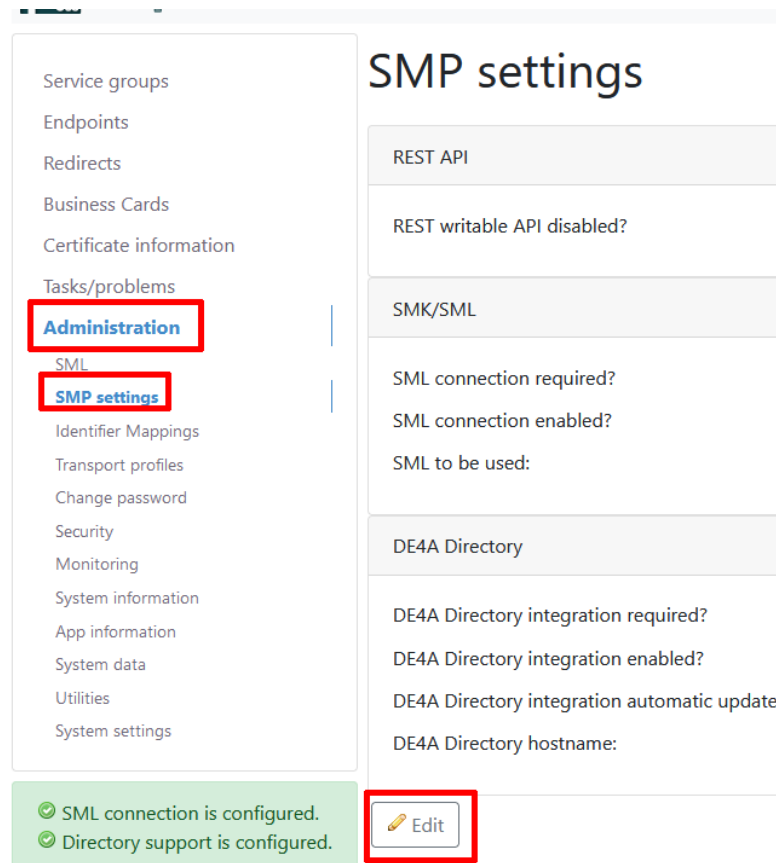Navigate to "Administration | SMP Settings" and press the "Edit" button:

Figure 2: Navigate to the SMP Setting

Within the SMP Settings, the "DE4A Directory" needs to be configured. The "DE4A Directory" is a standard software component that will take all the Business Cards (see below) and offer searching functionality over it. Make sure that all the three checkboxes are checked, and the field "DE4A Directory hostname"[1] has the value https://de4a.simplegob.com/directory/.

Press the "Save" button and we're done with step 1.

Figure 3: Editing the SMP Settings

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[1] The field may be called "Peppol Directory hostname" in your setup – don't worry it will still work. It's just a label.

After saving, as a quick check, the box underneath the menu on the left of every SMP page should be green and look like this, if configuration was successful:

Figure 4: SMP quick confirmation

3.2   Maintaining Business Cards

For every DO that is registered in the SMP, a "Business Card" needs to be created. A Business Card holds additional information for a participant, that are not relevant for technical routing. Below figures guide you through the creation of one Business Card and that needs to be repeated for all of them.

Make sure you are logged into the administration UI of the SMP.

To get started, a new Business Card needs to be created, by selecting the top-level menu item "Business Cards" and clicking "Create new Business Card".
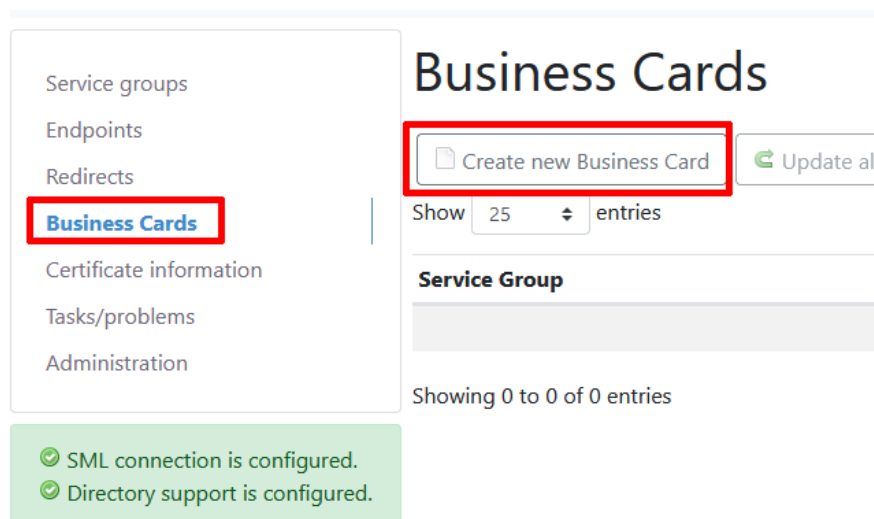

Figure 5: Start creating a new Business Card

On the screen for creating a new Business Card, you need to select the matching Participant Identifier and press the "Add Entity" button:
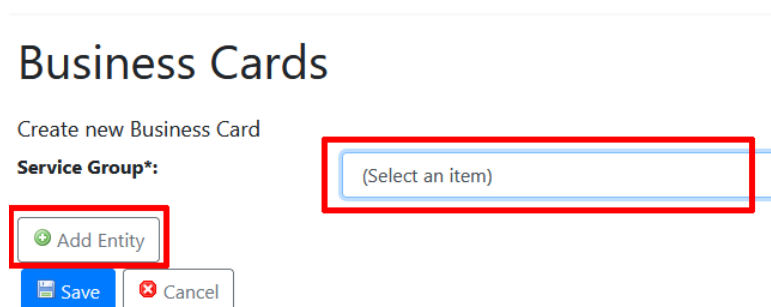

Figure 6: Getting started with a new Business Card

Every Participant (aka Service Group) can have maximum one Business Card. If, however a Participant represents multiple entities (e.g. linked third parties) you can create separate "Business Entities" via the "Add Entity" button within the single Business Card. The example in this document only uses a single "Business Entity" per "Business Card".

The required fields for a Business Entity are "Name" and "Country" – the content of the fields should be self-descriptive. If the scope of the Business Entity is narrower that country-wide, you can define a separate ATU code by pressing the "Add Identifier" button in the "Identifiers" row. In the appearing table, the value of the "Scheme" column MUST be set to `atuCode` (case sensitive) and the "Value" column MUST contain the NUTS or LAU code[2].

You may fill the other fields as well, but it will have no impact on the IAL. Press the "Save" button when done.

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[2] If you need to use a LAU code, make sure that it is prefixed with the respective NUTS3 code. No separator character is needed.

Figure 7: Filling in Business Card data

Note: In the above figure, I added the ATU code "AT130" which means Vienna, even though this would not be needed for Austria in practise. It is only contained for demonstrational purposes.

Note: the supported document types (evidence types) are questioned via the existing SMP API and don't need to be configured again.

That's it. You have created your first Business Card. If you have configured the SMP correctly, and if the SMP can establish a network connection to the Directory server, it will immediately push the Business Card to the Directory.

To test if the Business Card was accepted by the Directory (and later by the IAL) open https://de4a.simplegob.com/directory in your browser and search for the name of the Business Entity you provided previously ("Bundesrechenzentrum GmbH" in the example above).

Note: Searching for "Austria" will not work, because only the country code "AT" is indexed. This is a known issue in the Directory.

If you find the Business Card in the Directory, you can continue and add Business Cards for all other participants that should be found.

3.2.1 Special case: parameter list

In very rare cases, it might be needed to configure "parameters" onto a Business Card. If you need to do this, please contact the author by email.