Appendix #2 to the Testing Procedure to Certify an IPS Participant

Validating XML in a bank participating in the IPS

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1.1 Brief information

This document describes the XML message validation method using SOAP UI and a tool provided by BPC. The validation is required to make sure that the structure of XML messages comply with the IPS API specification.

1.2 The purpose and goals of the document

The goal of the document is to describe the XML message validation method using SOAP UI and a tool provided by BPC.

1.3 Installing the validation tool

The **svip-tests-1.0-SNAPSHOT.jar** application is passed to the Participant together with this document. The application must be saved in any directory on a workstation with Java 8 installed.

Using the command line, go to the directory with the executable file and run it using the command below (see the example in Figure 1):

java -jar svip-tests-1.0-SNAPSHOT.jar

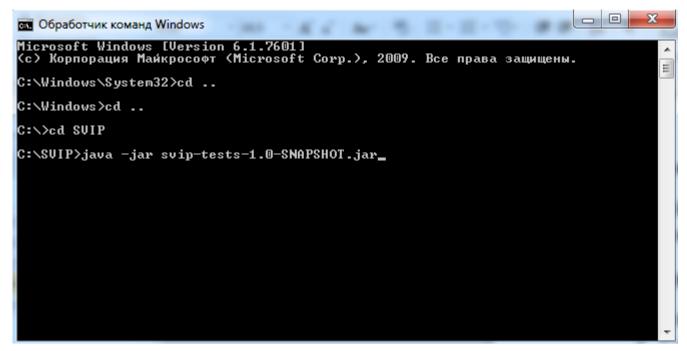


Figure 1 - Installation of the XML validation tool

1.4 Installing SOAP UI

Visit https://www.soapui.org to get the latest version and additional info. The SoapUI Open Source version is sufficient to perform validation. Do the installation in the standard way without specifying any additional parameters.

After you have installed SOAP UI, run it and create a project to test the validation process. Step-by-step instructions on how to create a project and use it for testing is provided below.

1) Create a new REST project (the project creation example is given in Figure 2), name it (for example, "Testing validation process"):

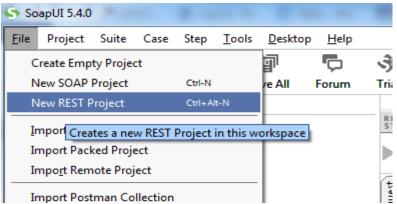


Figure 2 - Creating a REST project

2) The created project will be displayed on the left. It will have the method and the request embedded in it, as shown in Figure 3:

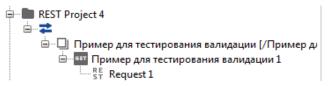


Figure3 - Project structure

- 3) Set up the request by double-clicking it. A window with the request settings will open on the right.
- 4) In the opened window, change the *Method* setting to *POST*. See Figure 4:

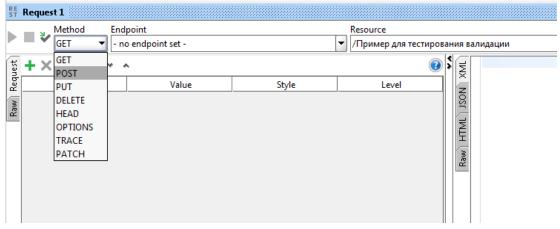


Figure 4 Selecting POST for the Method setting

- 5) In the *Endpoint* field, specify the application address http://localhost:8085/validate, if SOAP UI and the application are running on the same workstation. Otherwise, specify the IP-address of the workstation where the application is running.
- 6) The Resource and Parameter fields must remain empty.
- 7) In the *Media Type* field, specify *application/xml* and insert an XML message to check it (examples are provided to the Participant separately).

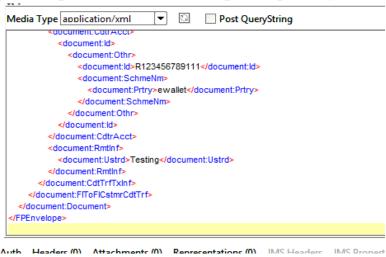


Figure 5 - Specifying a value for the Media Type field

8) After that, you can send the message and check if it is valid.

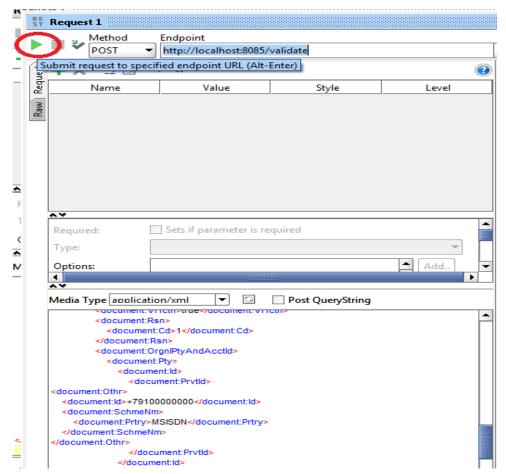


Figure 6 - Checking an XML message

A response received from the application will be displayed on the right. If the message is invalid, the application sends a negative response and the error message is displayed on the right. In addition, incorrect lines are highlighted in the window that contains the message that was validated.

Examples of response messages coming from the application are given below:

a) Successful validation:

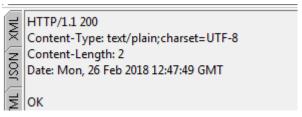


Figure 7 - Successful XML validation

b) Unsuccessful validation – no data in a field that, according to the specification, must not be empty:

HTTP/1.1 200
Content-Type: text/plain;charset=UTF-8
Content-Length: 129
Date: Mon, 26 Feb 2018 12:49:12 GMT

Exception: cvc-minLength-valid: Value " with length = '0' is not facet-valid with respect to minLength '1' for type 'M.

Figure 8 - Unsuccessful XML validation

c) Unsuccessful validation – field uses unexpected data format. An error message will be received. For example, when the allowed length is exceeded:

Figure 9-Unsuccessful XML validation + error description