



2nd SSN LRIT Group Meeting

Proposal for monitoring the web services

Agenda item 2.4.6

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- The majority of MS systems perform data buffering during SSN downtime
- The data buffering should be performed in case of:
 - lack of Receipt (time out)
 - HTTP response with code other than 200 or 202
- It may also be performed in case of:
 - Receipt message with `ServerError` status code
- In addition, few MS have been using ad-hoc approaches for monitoring SSN availability in order to inform application administrators

- The following examples of ad-hoc system monitoring approaches were found:
 - calling the SSN XML interface welcome page, which presents the following message:

SSN is up. Post your XML at `"/ssn.do"`
 - sending an empty PortPlus notification

Proposed approach

- Data buffering shall continue to be performed depending on: time out; HTTP response codes other than 200 or 202; eventually ServerError status code of the Receipt message
- Monitoring of the SSN central system should only be used as an auxiliary information mechanism
- The monitoring mechanism chosen attempts to minimize the logging of monitoring messages, not requiring the identification of the calling system
- Monitoring should be aligned with the messaging interface types (XML or SOAP) that are used for sending notifications

Monitoring Guidelines (1/2)

- SSN SOAP interface

- call WSDL URL (using HTTP GET)

- v3: <https://safeseanet-eis.emsa.europa.eu:448/ssn-xmlprotocol-v3-ws/ssnmessageservice/message.wsdl>

- Normal response

- WSDL content
- Check HTTP 200 or 202
- No need to check content

```
-<!--  
    The values of {soap mep default}, {soap mep} and {soap fault subcodes}  
    properties are ignored for SOAP 1.1 binding.  
-->  
-<wsdl:definitions name="MessageService" targetNamespace="https://safeseanet.emsa.europa.eu/ssn-xmlprotocol-ws/messageservice">  
-<!--  
    xmlns:plnk="http://docs.oasis-open.org/wsbpel/2.0/plnktype"  
    xmlns:whhttp="http://www.w3.org/ns/wsdl/http"  
-->  
-->  
-<wsdl:types>  
-<xsd:schema>  
    <xsd:import namespace="urn:eu.emsa.ssn" schemaLocation="ssn.xsd"/>  
-</xsd:schema>  
-</wsdl:types>  
-<!-- Notification Message -->  
-<wsdl:message name="NotificationMessage">  
    <wsdl:part element="ssn:MS2SSN_PortPlus_Not" name="ms_notification"/>  
-</wsdl:message>  
-<wsdl:message name="IncidentReportNotificationMessage">  
    <wsdl:part element="ssn:MS2SSN_IncidentDetail_Not" name="ssn_ir_notification"/>  
-</wsdl:message>  
-<!--  
    ...  
-->
```



- **SSN XML interface**

- send an empty message (using HTTP POST, no content)
 - v3: <https://safeseanet-eis.emsa.europa.eu:448/ssn-xmlprotocol-v3-web/ssn.do>

- **Normal response**

- **Receipt** message with status code InvalidFormat and status message

Empty message received.

- Check HTTP 200 or 202
- No need to check content



- **At current workshop**
 - MS are invited to approve the common guidelines for monitoring web services
- **In following weeks**
 - MS to inform EMSA of any monitoring sensors already in place targeting SSN central system, namely
 - type of sensor
 - frequency
 - check being made
 - MS to indicate feasible date for harmonization



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