



SOA Error Guide

Version 1.0

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eHealth platform

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To the attention of: "IT expert" willing to integrate this web service.



1. Document management

1.1 Document history

Version	Date	Author	Description of changes / remarks
1	10/06/2021	eHealth platform	Initial version

2. Document references

All documents can be found through the internet. They are available to the public, but not supported by the eHealth platform.

2.1 External references

ID	Title	Source	Date	Author
1	Basic Profile Version 1.1	http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html	24/08/2004	Web Services Interoperability Organization

3. Guide

All services use **uniformly defined error codes** to report system errors. An error is reported by means of a SOAP fault.

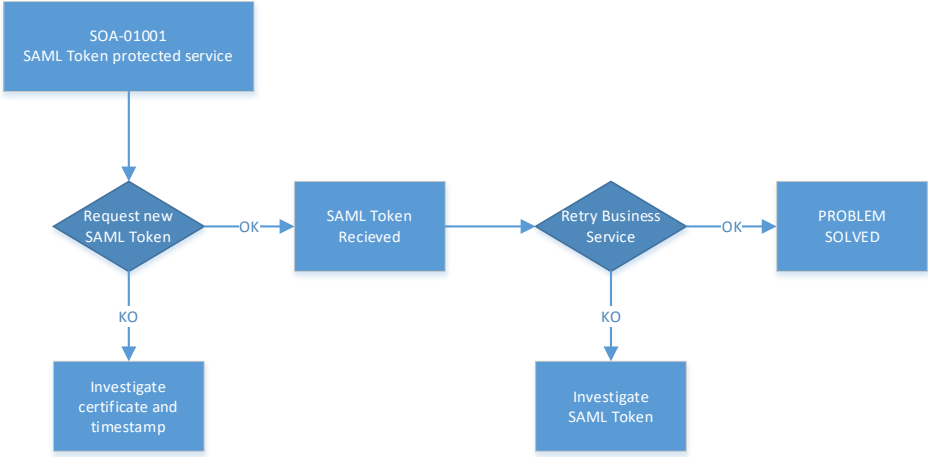
```
<?xml version='1.0' encoding='UTF-8'>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>soapenv:Client</faultcode>
      <faultstring>SOA-01001: Service call not authenticated.</faultstring>
      <detail>
        <urn:SystemError Id="Id-ca02c76045db9773e0a09dc1" xmlns:urn="urn:be:fgov:health:errors:soa:v1">
          <Origin>Consumer</Origin>
          <Code>SOA-01001</Code>
          <Message xml:lang="en">Service call not authenticated.</Message>
          <urn:Environment>Acceptation</urn:Environment>
        </urn:SystemError>
      </detail>
    </soapenv:Fault>
  </soapenv:Body>
</soapenv:Envelope>
```

In addition to an error code and description, each error message also contains a unique identification string (`//SystemError/@Id`) that allows the error to be further analyzed by our support services. It is important that the client application always logs this unique id.

You can find an overview of the possible error messages and their solution in the following table.

SOA-00001	Service error
Reason	This is the default error sent to the consumer in case no more details are known (i.e. unexpected behaviour in API gateway).
Solution	The software package (SP) should contact the eHealth platform to have more details on this error, retry will not solve the problem.

SOA-01001	Service call not authenticated
Reason	<p>From the security information provided, either the consumer could not be identified, the credentials provided are not correct or the technical signature did not match expectations.</p> <p>The most common reasons are for a X509 protected service:</p> <ul style="list-style-type: none"> • Missing signed part (Body/BST/Timestamp) • Timestamp is in past or future (drift of 300000ms possible) • Expired or revoked certificate is used to sign the request • No trusted CA found for the certificate: ACC certificate used in PROD <p>In case of the SAML protected service</p> <ul style="list-style-type: none"> • Missing signed part (Body/BST/Timestamp) • Timestamp is in past or future (drift of 300000ms possible) SAML Token is expired • Origin of SAML Token is not linked with the current environment • Holder of Key certificate is expired or revoked • Holder of key certificate does not match the certificate mentioned in SAML Token • Token is altered

<p>Solution</p>	<p>If the target service is protected with an X509 certificate: <u>Investigate timestamp:</u></p> <ul style="list-style-type: none"> • check that local time with an NTP server is up-to-date <p><u>Investigate the X509 certificate:</u></p> <ul style="list-style-type: none"> • verify that the used certificates are not expired • verify that the used certificates are not revoked by checking the OCSP/CRL list <p>If the target service is protected with a SAML token:</p>  <pre> graph TD Start[SOA-01001 SAML Token protected service] --> Request{Request new SAML Token} Request -- OK --> Recieved[SAML Token Recieved] Request -- KO --> Investigate1[Investigate certificate and timestamp] Recieved --> Retry{Retry Business Service} Retry -- OK --> Solved[PROBLEM SOLVED] Retry -- KO --> Investigate2[Investigate SAML Token] </pre> <p><u>Investigate timestamp:</u></p> <ul style="list-style-type: none"> • check that local time with an NTP server is up-to-date <p><u>Investigate the SAML Token</u></p> <ul style="list-style-type: none"> • verify that the HOK certificate is not expired • verify that the HOK certificate is not revoked by checking OCSP/CRL • the certificate used for signing is mentioned in the SAML Token • the STS is linked with the correct environment. This can be checked by reviewing the common name of the certificate used for SAML token signing(IAM for production – IAMACC for acceptance , ...) <p>the SAML Token is not altered</p>
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SOA-01002	Service call not authorized
Reason	The consumer is identified and authenticated, but is not allowed to call the given service.
Solution	<p>After 10 minutes the software package should retry to invoke the business service again. If the same request is failing for more than 6 times then the software package should investigate. In most cases, the software can verify the SSO specification of the service to determine what went wrong.</p> <p>If the security constraints are not met for the user (example : SAML token contains false value) the software should not send a message to the service.</p> <p>In some cases (Chapter4, Global Medical File, ...), a Therapeutic link (TL) verification call is performed between patient and sender. It may result in SOA-01002 if the TL check fails.</p>

SOA-01003	Too many requests
Reason	The consumer has breached the quota limit.
Solution	The software package should wait for X minutes (the waiting period) to invoke the business services again. More information on the waiting period can be found in the cookbook of the service and also in the response HTTP headers of the service.

SOA-01004	Too many failed requests
Reason	The consumer has breached the error quota limit.
Solution	The software package should wait for 10 minutes to invoke the business services again.

SOA-02001	Service not available
Reason	An unexpected error has occurred. Retries will not work. Service desk may help with root cause analysis.
Solution	The software package should retry after 10 minutes to invoke the business service again. If the same request is failing for more than 6 times then the software package should investigate and contact the service desk.

SOA-02002	Service temporarily unavailable
Reason	An unexpected error has occurred. Retries should work. If the problem persists service desk may help.
Solution	The software package should retry after 10 minutes to invoke the business service again.

SOA-03001	Malformed message
Reason	This is the default error for content related errors in case no more details are known.
Solution	The software package should investigate the request, retry will not solve the problem.

SOA-03002	Message must be SOAP
Reason	Message does not respect the SOAP standard.
Solution	The software package should investigate the request, retry will not solve the problem.

SOA-03003	Message must contain SOAP body
Reason	Message respects the SOAP standard, but body is missing.
Solution	The software package should investigate the request, retry will not solve the problem.



SOA-03004	WS-I compliance failure
Reason	Message does not respect the WS-I standard.
Solution	The software package should investigate the request, retry will not solve the problem.

SOA-03005	WSDL compliance failure
Reason	Message is not compliant with WSDL.
Solution	The software package should investigate the request, retry will not solve the problem.

SOA-03006	XSD compliance failure
Reason	Message is not compliant with XSD.
Solution	The software package should investigate the request, retry will not solve the problem.

SOA-03007	Message content validation failure
Reason	From the message content (conform XSD): extended checks on the element format failed or cross-checks between fields failed.
Solution	The software package should investigate the request, retry will not solve the problem.

SOA-03008	Message size too large
Reason	Message is too large according the specifications.
Solution	The software package should investigate the request, retry will not solve the problem.