Pregunta

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Error #6454: when trying to setup/connect to ensemble SOAP Service with SSL/Username Policy

Hello Community,

I want to secure a SOAP Webservice (an EnsLib.SOAP.Service one, if that matters) adding a SSL/Username Policy to it. As im not sure how detailed my request here should get, ill try giving a detailed as-is description of my setup, what I've tried, how I tried to test the connection and what problems including some logs I ran into.

As a small foreword: I'm pretty new to the whole security aspect of intersystems and soap itself.

System:

I've tried it on 2 different systems with pretty much the same result:

- 1. IIS Server with a 2 System-Mirror Healthshare 2018.1.2 Installation
- 2. local development environment with an Apache 2.4 (not the limited one delivered with the standard installation of healthshare) and the Healthshare installation on the same machine
 - 1. (i must admit, im not a server administration guy so I am not sure, if that is set up 100% correctly there but anyway the outcome was the same on both systems)

Initial Setup:

I've got a soap service, the ensemble production with the soap service active, the webapplication for it, made some changes to the ^SYS(Security...) global to make it available, created a role and a user and set them up. Without policy and allowing unauthenticated access and the unknown it worked as I had expected.

I had sent my test requests with SoapUI at this stage and got the correct response back from healthshare and the ensemble messages were created as expected, too.

What I have done / tried

- 1. Generated WS-Policy for SSL/Username for my service I unselected everything there in the policy-wizard (like ws-addressing, strict layout and require client certificate) to make it as easy as possible and minimize other error sources that i didn't want to deal with at this stage. I didn't change anything of the generated policy as I couldn't find hints that it would be nessessary.
- 2. changed the webapplication to enforce the use of keyword instead of unauthenticated login, set up my created user with the appropriate role
- 3. on both systems the default communication to the webserver is over https, on the local apache system i tried it with http only too, though
- 4. In SoapUI the only configuration change was to create a outgoing ws-configuration with the username + password and apply it to my requests the resulting request included the needed usernameToken then
- 5. I sent my requests to this address: https://server-domain/webapplicationname/OBG.EnsWSP.EnsBS.TestSoapServic...

After that failed (see below) I wanted to check that the username/login is not the problem, so I edited the policy at this stage, removing the whole "<sp:transportBinding>" block - so that no SSL is required and only the usernameToken is still nessessary.

I also tried various changes to the policy at this stage, as im not sure what I had to do, but that was more like blind guessing.

Questions that I had but couldnt answer myself at this point

If I want to secure the communication with SSL, I expected to have to provide a certificate for it somewhere either in the policy, the webservice class, webapplication or something, but I still don't know how or where to do so, if it is needed. Currently only the webserver itself has a certificate set up for its https communication. for the IIS-Server setup there is also a %superserver %telnet and some mirror ssl-configs configured in healthshare

What were the results?

After the above steps up to 4. the request fails with a soap-fault:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/" xmlns:x
si="http://www.w3.org/2001/XMLSchema-
instance" xmlns:s="http://www.w3.org/2001/XMLSchema">
   <SOAP-ENV:Body>
      <SOAP-ENV: Fault>
         <faultcode>SOAP-ENV:Server</faultcode>
         <faultstring>Serverapplikationsfehler</faultstring>
            <error xmlns="http://soap.test.com/2005/09/outbound">
               <text>FEHLER #6454: Keine unterstützte Richtlinienalternative in Konfi
guration OBG.EnsWSP.EnsBS.TestSoapServiceConfig:service.</text>
            </error>
         </detail>
      </SOAP-ENV:Fault>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
The ISCSOAP-Log:
05/12/2020 16:11:10 **************
Input to Web service with SOAP action = ""
<soapenv:Envelope xmlns:out="http://soap.sforce.com/2005/09/outbound" xmlns:soapenv="</pre>
http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:sobject.enterprise.soap.sfo
rce.com">
   <soapenv:Header>
      <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-</pre>
wss-wssecurity-secext-1.0.xsd" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
         <wsse:UsernameToken wsu:Id="UsernameToken-</pre>
A7D77B4D3793977976158929267071110">
            <wsse:Username>someuser</wsse:Username>
            <wsse:Password Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-</pre>
wss-username-token-profile-1.0#PasswordText">somepassword</wsse:Password>
            <wsse:Nonce EncodingType="http://docs.oasis-open.org/wss/2004/01/oasis-20</pre>
0401-wss-soap-message-security-1.0#Base64Binary">somenonce</wsse:Nonce>
            <wsu:Created>2020-05-12T14:11:10.711Z</wsu:Created>
         </wsse:UsernameToken>
      </wsse:Security>
   </soapenv:Header>
   <soapenv:Body>
      <out:notifications>
            <out:OrganizationId>1234567890ABCDEFGH</out:OrganizationId>
```

```
<out:ActionId>1234567890ABCDEFGH</out:ActionId>
           <out:SessionId>123</out:SessionId>
           <out:EnterpriseUrl>www.test.de</out:EnterpriseUrl>
           <out:PartnerUrl>www.partnertest.de</out:PartnerUrl>
           <out:Notification>
               <out:Id>1234567890ABCDEFGH</out:Id>
               <out:sObject>
                   <urn:Id>1234567890ABCDEFGH</urn:Id>
                   <urn:Name__c>Testington</urn:Name__c>
               </out:sObject>
           </out:Notification>
        </out:notifications>
   </soapenv:Body>
</soapenv:Envelope>
Validate Security header: action=""
Validating security element 1: %SOAP.Security.UsernameToken
Security UsernameToken validated
Validation Policy 2 in OBG.EnsWSP.EnsBS.TestSoapServiceConfig:service for OBG.EnsWSP.
EnsBS.TestSoapService
Headers: Tokens: Signatures: SignatureConfirmations: EncryptedData: Timestamp Id=, po
s= ************
Alternatives Alternative 1
    sp:TransportBinding
        sp:IncludeTimestamp
       sp:AlgorithmSuite=Basic128
    Supporting Tokens
       UsernameToken
           :type=sp:SignedSupportingTokens
           Include=AlwaysToRecipient
           wss=1.1 Supporting Token 1, type=sp:SignedSupportingTokens, tokenType=Use
rnameToken
    Token not found
   Validate of TransportBinding failed.
   No Alternative matches
05/12/2020 16:11:10 **************
Output from Web service with SOAP action = ""
<?xml version='1.0' encoding='UTF-8' standalone='no' ?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV='http://schemas.xmlsoap.org/soap/envelope/' xmlns:x
si='http://www.w3.org/2001/XMLSchema-
instance' xmlns:s='http://www.w3.org/2001/XMLSchema' >
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
      <faultcode>SOAP-ENV:Server</faultcode>
     <faultstring>Serverapplikationsfehler</faultstring>
    <error xmlns='http://soap.test.com/2005/09/outbound'>
     <text>FEHLER #6454: Keine unterstützte Richtlinienalternative in Konfiguration O
BG.EnsWSP.EnsBS.TestSoapServiceConfig:service.</text>
    </error>
</detail>
    </SOAP-ENV:Fault>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

After that - as mentioned above -, I removed the whole transportBinding-part from the policy and tested it again with exactly the same request - then it worked again, as I expected.

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I've sent all requests over https so they were basically encrypted, but as it seems, not like the policy wants me to.

Thanks for any help!

#SOAP #SSL #Control de acceso #Ensemble #HealthShare

URL de fuente: https://es.community.intersystems.com/node/476921