

# Sign interface

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## Introduction

Below will be detailed the SOAP request for sign, change password ecc...

All the methods described are on interface:

```
https://<IP-APPLIANCE>:8080/SignEngineWeb/sign-services?wsdl
```

The SOAP request examples are generated using SoapUI, you can use this [guide](#) to configure SoapUI on your pc.

In this guide will be described the example of Soap Requests.

## Credentials Object

All methods for sign require the object Credentials is used to specify the device signature are you using for sign. This object is composed by this variables:

### SOAP-credentials-object

```
<credentials>
  <username>?</username>
  <password>?</password>
  <idOtp>?</idOtp>
  <otp>?</otp>
  <securityCode>?</securityCode>
  <sessionKey>?</sessionKey>
</credentials>
```

According the device signature (automatic or remote) are you using you should populate different fields.

## Automatic Signature

Below the example of Credentials :

### SOAP-Credentials-object-automatic-signature

```
<credentials>
  <username>AHI123456</username>
  <password>13572468</password>
</credentials>
```

Fields required:

- username
- password

## Remote Signature

If you sign with the remote there are two ways:

- specify "idOtp" and "otp"
- specify the sessionKey

Example with "idOtp" and "otp":

### SOAP-Credentials-object-remote-signature-idotp-otp

```
<credentials>
  <username>RHIP1234567</username>
  <password>13572468</password>
  <idOtp>501719</idOtp>
  <otp>150259</otp>
</credentials>
```

Example with "sessionKey"

### SOAP-Credentials-object-remote-signature-sessionKey

```
<credentials>
  <username>RHIP1234567</username>
  <password>13572468</password>
  <sessionKey>sadli jhdfkjslherpoufdblkhsljherihbfdoihejheroihger</sessionKey>
</credentials>
```

If you decide to sign with idOtp and OTP you must obtain the OTP code for sign (from SMS, App and Token) and idOtp.

## How obtain the idOtp and OTP code

Below will described with SOAP request how obtain idOtp (with method getOtpList) and OTP code.

### Obtain the idOtp

You can obtain the idOtp with method getOtpList. Below the example of SoapRequest. In this example we are using the devicename: "RHIP20102336 019765":

### REQUEST-getOTPList

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getOTPList>
      <credentials>
        <username>RHIPl2345</username>
      </credentials>
    </ser:getOTPList>
  </soapenv:Body>
</soapenv:Envelope>
```

In output the SOAP response will be:

### RESPONSE-getOTPList

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getOTPListResponse xmlns:ns2="http://service.ws.nam/">
      <return>
        <idOtp>501719</idOtp>
        <serialNumber>20210113-091031RJ2L1</serialNumber>
        <type>SMS</type>
      </return>
      <return>
        <idOtp>537430</idOtp>
        <serialNumber>20210305-163726L0PYF</serialNumber>
        <type>OTP GENERATOR</type>
      </return>
      <return>
        <idOtp>537433</idOtp>
        <serialNumber>20210305-163726F0I75</serialNumber>
        <type>OTP PUSH</type>
      </return>
    </ns2:getOTPListResponse>
  </soap:Body>
</soap:Envelope>
```

During the signing process, it is possible to choose between these two idOtps: 501719 (associated with OTP SMS) and the idOTP: 537430 (associated with OTP GENERATOR).

It is not possible to use OTP PUSH, they are used for other purposes, not for signing.

For the signature we can choose two types of idOTP: 501719 or 537430.

### Obtain the OTP code

With OTP SMS we can obtain the code using the method "sendOtpBySMS" like in this SOAP request:

### REQUEST-sendOTPBySMS

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:sendOtpBySMS>
      <credentials>
        <username>RHIPl2345</username>
      </credentials>
    </ser:sendOtpBySMS>
  </soapenv:Body>
</soapenv:Envelope>
```

If everything is ok, in output response will be:

### RESPONSE-sendOTPBySMS

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:sendOtpBySMSResponse xmlns:ns2="http://service.ws.nam/" />
  </soap:Body>
</soap:Envelope>
```

On your mobile phone, you will receive an SMS containing the OTP code (composed of 6 numbers) for signature. Now, for example, we have received the code: "214196".

While with OTP App and Token you don't require the method of SWS because you can read the OTP code on Token display or on your smartphone display (if you are using the App).

## Manage the sessionKey

Below will be describe the SOAP request example for obtain the sessionKey, check if the sessionKey is valid and destroy the sessionKey

### Obtain the sessionKey

Below the SOAP request example for create the openSession:

## REQUEST-openSession

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:openSession>
      <credentials>
        <idOtp>501719</idOtp>
        <otp>150259</otp>
        <password>13572468</password>
        <username>RHIPl2345</username>
      </credentials>
    </ser:openSession>
  </soapenv:Body>
</soapenv:Envelope>
```

In output will obtain the value of sessionKey which will be used for the signature:

## RESPONSE-REMOTE-openSession

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:openSessionResponse xmlns:ns2="http://service.ws.nam/">
      <return>
        f4lf7bq/cCxW6mTgL3iGjFEST5cEAZjgLnXvV3hUFzFHcTvjlH3FOkJy+kv/0Zsv1
        uNK0S7L6jMqHYSspBz+CZl7h3r5IEP2FqrK7WJQTVyrNfyr/trZmDgxYOLuACyoZVUFilnck5Lkjihui
        sv+gZeB68Spwm+cNDdQQdUS3ngzJavHXxo9ADCX6VDIKKMe
        /AY0v+R51XWE90JF5LfKETHlv1OCpQC5nhnW8WKOFOm
        P4vM90d79JhFYGVVSZWtnTQ9Dg8pOMvg9wwxNm3uGkKKaS7oTp1ewd+eCG/uSC9k3H2w9GB6vQLHQEbn6d
        VVMcsIqJ0RMmZ2IgraD+scb4Q==
      </return>
    </ns2:openSessionResponse>
  </soap:Body>
</soap:Envelope>
```

The sessionKey just obtained is valid for three minutes (it is not possible to edit this value!). After it expires, you will need to generate another sessionKey using openSession method and new OTP code (it is not possible to use the same OTP already in use).

## Check the sessionKey status

Below the SOAP request example for check the sessionKey status:

#### REQUEST-remote-getRemainingTimeForSession

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getRemainingTimeForSession>
      <credentials>
        <username>RHIPl2345</username>
        <sessionKey>
          f41f7bq/cCxW6mTgL3iGjFEST5cEAZjgLnXvV3hUFzFHcTvjlH3FOkJy+kv
          uNK0S7L6jMqHYSSpBz+CZl7h3r5IEP2FqrK7WJQTVyrNfyr
          /0Zsvl
          /trZmDgxYOLuACyoZVUFilnck5Lkjihui
          sv+gZeB68Spwm+cNDdQQdUS3ngzJavHXxo9ADCX6VDIKKMe
          /AY0v+R51XWE90JF5LfKEThlv1OCpQC5nhnW8WKOF0m
          P4vM90d79JhFYGVVSZWtnTQ9Dg8pOMvg9wwxNm3uGkKAs7oTplewd+eCG
          /uSC9k3H2w9GB6vQLHQEbn6d
          VVMcsIqJ0RMmZ2IgraD+scb4Q==
        </sessionKey>
      </credentials>
    </ser:getRemainingTimeForSession>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

#### RESPONSE-remote-getRemainingTimeForSession

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getRemainingTimeForSessionResponse xmlns:ns2="http://service.ws.nam/">
      <return>167</return>
    </ns2:getRemainingTimeForSessionResponse>
  </soap:Body>
</soap:Envelope>
```

Where 167 is the seconds until the session is active. After 180 seconds from creation, the session will be automatically deleted, but for good practice, c lose the session before it expires.

You can destroy the session manually before it expires with the method **closeSession**.

Destroy the sessionKey

Below the example of SOAP request for destroy the session:

#### REQUEST-remote-closeSession

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:closeSession>
      <credentials>
        <username>RHIP12345</username>
<sessionKey>f41f7bq/cCxW6mTgL3iGjFEST5cEAZjgLnXvV3hUFzFHcTvjlH3FOkJy+kv
/0ZsvluNK0S7L6jMqHYSSpBz+CZl7h3r5IEP2FqrK7WJQTVyrNfyr
/trZmDgxYOLuACyoZVUFIlncK5Lkjihuisv+gZeB68Spwm+cNDdQQdUS3ngzJavHXxo9ADCX6VDIKKMe
/AY0v+R51XWE90JF5LfkETHlv1OCpQC5nhnW8WKOFOm P4vM90d79JhFYGVVSZWtnTQ9Dg8pOMvg9wwxNm3uGkKKaS7oTplewd+eCG
/uSC9k3H2w9GB6vQLHQEbn6dVVMcsIqJ0RMmZ2IgraD+scb4Q==
      </sessionKey>
    </credentials>
  </ser:closeSession>
</soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be ever like this:

#### RESPONSE-remote-closeSession

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:closeSessionResponse xmlns:ns2="http://service.ws.nam/" />
  </soap:Body>
</soap:Envelope>
```

## Summarize

The credentials object for automatic signature is composed like in this example:

#### REQUEST-AUTOMATIC-Credentials

```
<credentials>
  <username>AHIP12345</username>
  <password>1357268</password>
</credentials>
```

With remote signature if you don't use the sessionKey the object Credentials will be:

#### REQUEST-Credentials-Remote-OTP-SMS

```
<credentials>
  <password>13572468</password>
  <username>RHIP12345</username>
  <idOtp>501719</idOtp>
  <otp>150259</otp>
</credentials>
```

While if you are using the sessionKey the object Credentials will be:

#### REQUEST-Credentials-Remote-OTP-SMS

```
<credentials>
  <password>13572468</password>
  <username>RHIPl2345</username>
<sessionKey>f41f7bq/cCxW6mTgL3iGjFEST5cEAZjgLnXvV3hUFzFhCTvj1H3FOkJy+kv
/0Zsv1uNK0S7L6jMqHYSSpBz+CZ17h3r5IEP2FqrK7WJQTVyrNfyr
/trZmDgxYOLuACyoZVUFilnck5Lkjihuisv+gZeB68Spwm+cNDdQQdUS3ngzJavHXxo9ADCX6VDIKKMe
/AY0v+R51XWE90JF5LfKETHlv1OCpQC5nhnW8WKOFom P4vM90d79JhFYGVVSZWtnTQ9Dg8pOMvg9wwxNm3uGkKKaS7oTp1ewd+eCG
/uSC9k3H2w9GB6vQLHQEbn6dVVMcsIqJ0RMmZ2IgraD+scb4Q==
  </sessionKey>
</credentials>
```

## Methods for sign

Below will be described the SOAP request example for every type of signature:

- Pades
- Cades
- Xades

## SignPades

The SOAP request for create Pades signature:

#### signPades

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:signPAdES>
      <credentials>
        <password>YOUR-DEVICE-PASSWORD</password>
        <username>YOUR-DEVICE-NAME</username>
      </credentials>
      <buffer>BASE64-T0-SIGN</buffer>
      <PAdESPreferences>
        <level>B</level>
        <signerImage>
          <imageVisible>true</imageVisible>
          <image>BASE64-IMAGE-LOGO</image>
          <x>30</x>
          <y>30</y>
          <width>50</width>
          <height>50</height>
          <signerName>Name of Signer</signerName>
        </signerImage>
      </PAdESPreferences>
    </ser:signPAdES>
  </soapenv:Body>
</soapenv:Envelope>
```

At this [link](#) is possible to see the full example (with file to sign and logo image) of signature Pades with appereance.



While at this [link](#) , you can find an example of Level T (signature+timestamp)

## SignPadesMultiFieldName

The SOAP request for create Pades signature using signatures field:

### signPadesMultiFieldName

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:signPAdES>
      <credentials>
        <password>YOUR-DEVICE-PASSWORD</password>
        <username>YOUR-DEVICE-NAME</username>
        <sessionKey>SESSION_KEY_RECEIVED_FROM_OPEN_SESSION</sessionKey>
      </credentials>
      <buffer>BASE64-TO-SIGN</buffer>
      <PAdESPreferences>
        <level>B</level>
        <signerImage>

          <fieldsNameList>SignatureField-1</fieldsNameList>
          <fieldsNameList>SignatureField-2</fieldsNameList>

          <!-- THIS OPTION set to true allow to sign all signatures fields available -->
          <!-- <signAllFields>false</signAllFields> -->

          <signerName>NAME OF SIGNER</signerName>

        </signerImage>
        <withSignatureField>true</withSignatureField>
      </PAdESPreferences>
    </ser:signPAdES>
  </soapenv:Body>
</soapenv:Envelope>
```

At this [link](#) is possible to see the full example (with file to sign and logo image) of signature Pades with appereance.

NOTE: in this example the signatures fields: "SignatureField-1" and "SignatureField-2" already exist in a PDF

The response will be the complex object: "PadesWithMultiFieldName" or generate a `WSEException` if don't sign at least one signature field.

Below the response ok, when all elements of "fieldsNameList" are signed (the file is fully signed):

### SOAP-response-signPadesMultiFieldName-output-fully-signed

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:signPAdESMultiFieldNameResponse xmlns:ns2="http://service.ws.nam/">
      <return>
        <signedContent>BASE-64-OF-PDF-WITH-ELEMENTS-OF-LIST-FIELDSNAMELIST</signedContent>
      </return>
    </ns2:signPAdESMultiFieldNameResponse>
  </soap:Body>
</soap:Envelope>
```

While if the field are signed partially (for example the session key has expired) therefore the file is partially signed, the response will be:

#### SOAP-response-signPadesMultiFieldName-output-partially-signed

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:signPAdESMultiFieldNameResponse xmlns:ns2="http://service.ws.nam/">
      <return>
        <signedContent>BASE-64-OF-PDF-WITH-ELEMENTS-OF-LIST-FIELDSNAMELIST</signedContent>
        <serviceError>
          <code>69</code>
          <message>Session key scaduta</message>
        </serviceError>
        <remainingFieldNames>SignatureField-2</remainingFieldNames>
      </return>
    </ns2:signPAdESMultiFieldNameResponse>
  </soap:Body>
</soap:Envelope>
```

The tag:

- "signedContent" contains the partially signed file, because not all fields in a list have been signed
- "serviceError" contains the details about the cause because all signatures fields have been signed
- "remainingFieldNames" contains the list of field remaining to sign

In this case, the response will be the input of the new "signPadesMultiFieldName" request

While if you insert credentials.password, credentials.sessionKey, signature field not exist. In output will obtain a WSEException like this:

#### SOAP-response-signPadesMultiFieldName-output-partially-signed

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <soap:Fault>
      <faultcode>soap:Server</faultcode>
      <faultstring>Richiesta non valida</faultstring>
      <detail>
        <ns2:WSEException xmlns:ns2="http://service.ws.nam/">
          <error>105</error>
          <message>Richiesta non valida</message>
        </ns2:WSEException>
      </detail>
    </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

## SignCades

The SOAP request for create Cades signature:

## signCades

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:signCAdES>
      <credentials>
        <password>YOUR-DEVICE-PASSWORD</password>
        <username>YOUR-DEVICE-NAME</username>
      </credentials>
      <buffer>VGhpcyBpcyB0aGUGZmlsZSB0byBiZSBzaWduZWQgZm9yIHRlc3Qu</buffer>
      <CAdESPreferences>
        <level>B</level>
      </CAdESPreferences>
    </ser:signCAdES>
  </soapenv:Body>
</soapenv:Envelope>
```

In this example the buffer to sign is "txt" files.

The SOAP response will be:

## SOAP-response-signCades

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:signCAdESResponse xmlns:ns2="http://service.ws.nam/">
      <return>MIIKvWYJKoZIhvcNAQcCoIIKSDCCCkQCAQExDzANBgIghkgBZQMEAgEFADA2BgkqhkiG9w0BBWGGKQQnVGhpcyBpcyB0aGUGZmlsZSB0byBiZSBzaWduZWQgZm9yIHRlc3QuoIIg0DCCBswwggW0oAMCAQICCFzwqTJXlRldMA0GCSqGSIB3DQEBECwUAMH0xJjAkBgNVBAMMHU5hbWlyaWFsIENBIEZpcmlhIFFlYWxpZmljYXRhMSAwHgYDVQQQLDBdDZXJ0aWZpY2F0aW9uIEFldGhvcml0eTEkMCIGA1UECgwBtmFtaXJpYWwgUy5wLkEuLzAyMDQ2NTcwNDI2MQswCQYDVQQGEwJlVDAeFw0xODAxMjMxNjM3MDEBaFw0yNDA0MjMxNjM3MDEBaG1GnMQswCQYDVQQGEwJlVDEVMBMGA1UECgwMTk90IFBFRVNFRTlRFRMRUwEwYDVQQEDAxERU1PIENPR05PTUUXEjAQBgNVBCoMCMURFTU8gTk9NRTEcMBoGA1UEBRMTSVQ6RE1DRE5NM TVUMTBBMjcxTzEfMB0GA1UEAwWwREVNTYBOT01FIERFTU8gQ09HTk9NRTEhMBUAGALUElhMOREVNTzEyMzQ1Njc4OTAwggEiMA0GCSqGSIB3DQEBQUAA4IBDwAwggEKAoIBAQD4i6k2DI5cXUjKDiPfx6qF15kDz+wCpWRfnnWcL137vi4KhupGpcBEkvr298xZp82jFwroQ2I4NukAuGBx7K3XZZwO9mb+qZ2PfiEnZpjHTt/0UOMGe2wP0oEZYlcQdriXpg4tBbv5dPwMrOTrt/OA4
/QuAth5Uekm007OC+CsecfyhklupjFABmjb4CsUIYf1qa4n4SaklE8Rtrbz9PjZxJbK902sTjaQnmK95Yv5ced6TtAniVtMKs
/eLgoEFN8vx62Kh3V+dHHG+4zXfmod3zvlOkVL0KAXIFBShve93ohcr/EhspkR3/YsHWp6y5EwCkhhbGJPM
/SXwDhjdVqAbAgMBAAGjggMjMIIDHxCBogYIKwYBBQUHAQEgZUwgiWVAYIKwYBBQUHMAKGSgh0dHBzOi8vZG9jcy50ZXN0LmZpcmlhY2VydgEuaXQvZG9jdWllbnRzL05hbWlyaWFsQ0FGaXJtYVFlYWxpZmljYXRhLmNydDA6BggrBgEFBQcwAYYuaHR0cDovL29jc3AudGVzdC5maXJtYW
NlcnRhlMlL29jc3AvY2VydhNOYXRlc3AdBgNVHQ4EFgQUvqgGLdh6cX6Usi37YmvetoDUQ+AcwHwYDVR0jBBgwFoAU2zgIULe2L5buO+w+tGZ
UwkqWqd4wLwYIKwYBBQUHAQMEIzAhMAgGBGQAjYkYBATALBgYEAi5GAQMCAQwCAYGBACORgEEMIIBqgYDVR0gBiIBoTCCA0wggGZBgsrcBgEE
AYKaaWBBazCCAYgWMAyIKwYBBQUHAGEWJGh0dHA6Ly93d3cuZmlybWFiZXJXJ0YS5pdC9tYW51YWxpLlU1PLzCCAVIGCCsGAQUFBwIEMiIBRB6CA
UAASQBsACAaCABYAGUAcwBlAG4AdABlACAAyWBlAHIAAdABpAGYAaQBjAGEAdABlACAAAbQBhAHkAIAIABvAG4AbAB5ACAAYgBlACAAdQBzAGUAZAAGAGYAbwByACAAdQBu
AGeAdAB0AGUAbgBkAGUAZAavAGEAdQB0AG8AbQBhAHQAZQAgAGMAbwBuACAACABYAG8AYwBlAGQAdQByAGEAIAbAHUAdABvAG0AYQB0AGkAYwBhAC4
AIABUAGgAaQBzACAAYwBlAHIAAdABpAGYAaQBjAGEAdABlACAAAbQBhAHkAIAIABvAG4AbAB5ACAAYgBlACAAdQBzAGUAZAAGAGYAbwByACAAdQBu
AGEAdAB0AGUAbgBkAGUAZAavAGEAdQB0AG8AbQBhAHQAZQAgAGMAbwBuACAACABYAG8AYwBlAGQAdQByAGEAIAbAHUAdABvAG0AYQB0AGkAYwBhAC4
R8EQjBAMd6gPKA6hjhodHRWoI8vY3JsLnRlc3QuZmlybWFiZXJXJ0YS5pdC9GaXJtYUNlcnRhUXVhbGlmawNhdGEzLmNybDA0BGNVHQ8BAf8EBA
MCBkAwDQYJKoZIhvcNAQELBQADggEBAHnOmp8mICiahhf58HECjzWkjopGyaAERsWfScRBdglk40f3JOqi3QK47F83ai41jRNC+KBKYP
/mUSwEok3dERW7rVh3xKXo7GmCDUm7Hk107B8N+ITlSKniMksvSpkx3GEwedrlVD0Cgqj/MQa8wMP+xoXioBrdIISTshk
/qi5ecrbdFXNhoeA3z0/vOn7WFPFC6xR+LKWnoEHw
/FtcOawcWV8hVnHg77CD+wyOnpypb1HKUOVSwFqDVvX7JF8u2809+m0YsQoZ621ITeTQNCw9km26bMKy7D4VefN3NIQbak8b0ftWzxWsnkgvi
H5MFPsQ5JWI0IZOjOhPiHntksxggMgMIIDHAIbATCBiTB9MSYwJAYDVQQDDb10YWlpcmlhbCBDQSBGaXJtYSBRdWFSaWZpY2F0YTEgMB4GA1U
ECwwXQ2VydgGlmaWNhdGlvbiBBdXRob3JpdHkxJDAiBgNVBAoMG05hbWlyaWFsIFMucC5BLi8wMjA0NjU3MDQyNjElMAkGA1UEBhMCSVQCCCFzw
qTJXlRldMA0GCGWCSAF1AwQCAQUAoIIBZzAYBgkqhkiG9w0BCQMxCwYJKoZIhvcNAQcBMBWGCsqsGSIB3DQEJBTEPFw0yMjA4MTAwODAxNTZaM
C0GCSqGSIB3DQEJNDEgMB4wDQYJYIZIAWUDBAIBBQChDQYJKoZIhvcNAQELBQAwLwYJKoZIhvcNAQkEMSIEIiYS24577o6HAeqQ50U2H1lF5J
MnJRGd8ISguoanmBYMIHMBGsqhkiG9w0BCRACLzGBvDCBuTCBtjCBswQgxbkITFBriuSqr8M6xRqZCQN72rMbhDr7YtuXrw186f4wgY4wgYG
kfzB9MSYwJAYDVQQDDb10YWlpcmlhbCBDQSBGaXJtYSBRdWFSaWZpY2F0YTEgMB4GA1UECwwXQ2VydgGlmaWNhdGlvbiBBdXRob3JpdHkxJDAi
BgNVBAoMG05hbWlyaWFsIFMucC5BLi8wMjA0NjU3MDQyNjElMAkGA1UEBhMCSVQCCCFzwqTJXlRldMA0GCSqGSIB3DQEBECwUABIIBAIgaFNg3
DxOPdOe5QTtftTmV4zU/+cTGLT4xaB2x2/14o3NmkrJHCmq4NBdf8XiF0o8YTrVQYqYNLxDaW5JpJTpqfBwun4wuIdkQqsg6TiRtiY3w
/v01oMk/Xlsj7H+6wSffcRmIV5dwTIIHuXOMRXiPA00OaCsZTO852xwkXUB7z8/jaWfUK4bLoz
/ckgFmV3YhRLhth7sLWzVjgUELd6ukCiwCftP9R4KEwXEYU4YmBW9pknFDrDGZgTTYChsITLtlJkNarz1/4JtxXcA7
/FALCxyuOHcnYnta+iCW4N3I/E0PIVzQ5XibNraAF01ulJizAlyC+hU4IjADJEaPoEE=</return>
    </ns2:signCAdESResponse>
  </soap:Body>
</soap:Envelope>
```

## SignCades Detached

If you want make the Cades detached signature, SWS not require all files to sign, but only the hash. The tag "buffer" will be the hash of the file.

For example if we want the cades detached signature of this [PDF](#) the procedure is:

1) Calculate the hash of this file, for example with the openssl:

```
openssl dgst -sha256 -binary FILE_TO_BE_SIGN | openssl enc -a
```

And in output will obtain the hash to sign, will be:

```
HASH TO SIGN = msj3f4hJCSELbMkWjkFwNrf0XhkebtNAKaKhx4686DY=
```

2) Now can execute the method signCades, using the field "cadesPreferences.detached=true":

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:signCAdES>
      <credentials>
        <username>YOUR-DEVICE-USERNAME</username>
        <password>YOUR-DEVICE-PASSWORD</password>
      </credentials>
      <buffer>msj3f4hJCSELbMkWjkFwNrf0XhkebtNAKaKhx4686DY=</buffer>
      <CAdESPreferences>
        <detached>true</detached>
      </CAdESPreferences>
    </ser:signCAdES>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:signCAdESResponse xmlns:ns2="http://service.ws.nam/">
<return>MIIKKQYJKoZIhvcNAQcCoIIKgjCCChYCAQExDzANBgIghkgBZQMEAgEFADALBgkqhkiG9w0BBWgggga2MIIGsjCCBJqgAwIBAgIIIf15W0
/FI108wDQYJKoZIhvcNAQELBQAQWgYcxITAFBgNVBAMMGE5hbWlyYWVsIEVVFIFlYWxpZml1ZCBQDQTEfMB0GA1UECwwVWHJlc3QgU2VydmljZS
BQcm92aWRlcjEyYmBYGA1UECgwPTmFtaXJpYWwgUy5wLkEuMR0wGAYDVQRhDBFwQVRJVC0wMjA0NjU3MDQyNjEELMAkGA1UEBhMCsVQwHhcNMTk
wODA1MDc0NjA1WWhcNMjUwODA1MDc0NjA1WWhcBmMQ0wCwYDVQQwEwRJRDRkYMRUwEYwYDVQQDDAx0ZXN0IGF6aWVuZGEwFTATBgNVBAoMDHRlc3Qg
YXppZW5kYTEaMBGGA1UEYQwRVkFUSVQtdMDAwMDAwMDAwMDAxZAJBgNVBAYTAklUMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA4
TXG/VhgZhtRf8HkRmLa2NDEfG5CnloPR5yowp66oqQTovMqF
/nbvY+wTOIXwWHYbAl1mTeEqwNTWBwKrGDFe3JP3EJSAnRa8BMUJI5B2JUfud4fSZSaeJkoCu2gggZ3/64kFdC2yxPlpwn
/oKSNJGiPyvhNW2JJV9NtIsUDDVOMHug5uFTQoo423CvmcRSz6kYhrWBKyQ9TGGPwukDqpKHiB+
/01pL7DVI4X4gN1gnFQoBbBRG2rSAB8xLXxYP
/aWiMF8c3VZX5xELIGumQEfXoQRJ07kr1Q1h1MXFWwadRa8lZnQpg5vMajthXxnr0GyPJcim5xOrbCRwG1hVsQIDAQABo4ICQDCCAjwwgYcGC
CsGAQUFBwEBBHsweTA+BgggrBgEFBQcwAoYyaHR0cHM6Ly9kb2NzLm5hbWlyYWVsZHNwLmNvbS9vY3NwL2N1cnRzdGF0dXMwHQYDVDR0BBYEFBT3hX0qb5n0V7hKLCuE5QNZCI1
1MB8GA1UdIwQYMBaAFG04zbhJUuXnCXtXjPt6QQ5BqnhZMIHNBgggrBgEFBQcBAwSBwDCBvTAIBgYEAISGAQEWcWYGBACORgEDAgEUMAgGBgQA
jkYBBDATBgYEAISGAQYwCQYHBAcORgEGAjCBhAYGBACORgEFMHowOxY1aHR0cHM6Ly9kb2NzLm5hbWlyYWVsZHNwLmNvbS9kb2N1bWVudHMvU
ERTL1BEU191bi5wZGYTAmVumDsWNWh0dHBzOi8vZG9jcy5uYW1pcmlhbHRzcC5jb20vZG9jdW11bnRzL1BEUy9QRfNfaXQucGRmEwJpdDBaBg
NVHSAEUzBRMDoGCysGAQQBgpprAQIDMCswKQYIKwYBBQUHAgEWHWh0dHBzOi8vZG9jcy5uYW1pcmlhbHRzcC5jb20vMAkGBwQAI+xAQMwCAY
GBACPEGECMDQGA1UdHwQtMCswKaAnoCWGI2h0dHA6Ly9jcmwubmFtaXJpYWw0c3AuY29tL0NBNEsuY3JsMA4GA1UdDWEB
/wQEAWIGQDANBgkqhkiG9w0BAQsFAAOCAgEAhlPP1QdsAqYEemj8MbHbF8a
/rAG4op1CbP4YsPr4Y5YKxr2Truf4L4KcbFH8KpLPiXzw+2CvzeB2IGc00Ahs10s0dlhQimLKL6SEkS3uN3sxq6f
/i2dMS9IuCLcwyn8ZpCmvp2bqqj
/fCqZdoiOIF1WIOuqRUfLSc95M+FmrWXzDovQS9Y8IerHiwbng3fI3VuYdvKhx0Lr1l7Vcpmvk5zfXxgsE9FmmH
/aJvdcrjPAjI8SjzzlvsB74MmgtFFk5Pnd1NlOHGW8KaTeELpuGlmxsz2qPF07inoSBuKMEFz3W3IvB3UnKuRbFEutjyFYgYTPPTQcsX0kaJM
u/S76hRLTPvZ5zs+3AFgfCGbph7kTCW1MTNT4oYlWEXYctF4Mqg8giMaBetf06zB954Qqu3eqFv1DZOHC1RbL
/F2at61rmnSXsBzRkev+VevKUGjIqThMq5loQSP8mxCquUvaa4epJ
/tDzmLYdYwnoN7fzofA4ZkAQPLvt4Kv4IML612CM0kK+1mkEuhcTJN0h816Kax40q+Ld8qjgmVGAImE
/28dfkIpQS7gm70NlnCcKdKMngcQ881LWYnbyY
/ba5BBcWxegWKpl+oqorrqFYiWONSH9SmNfIOgG6leEjL5k8nArkKtNefScw5tv1LZXAC4uaZjD++iJ8jVMPn7khf9qKR8xggM3MIIDMwIBAT
CB1DCBhzEhMB8GA1UEAwYTMftaXJpYWwgRVUgUXVhbGlmaWVkiENBMR8wHQYDVQQLDBZUcnVzdCBTZXJ2aWN1IFByb3ZpZGVyMRGwFgYDVQQ
KDA9OYw1pcmlhbCBTLnAuQS4xGjAYBgNVBGEtVZBVElULTAyMDQ2NTcwNDI2MQswCQYDVQQGEwJJVAIIIf15W0
/FI108wDQYJYIzIAWUDBAIBBQCgggFzMBGCGSsGSIB3DQEJAzelBgkqhkiG9w0BBWewHAYJKoZIhvcNAQkFMQ8XDTIzMMDzMDA3NTA0MVowLQ
YJKoZIhvcNAQk0MSAwHjANBgIghkgBZQMEAgEFAKENBgkqhkiG9w0BAQsFADAvBgkqhkiG9w0BCQQxIgQgmsj3f4hJCSELbmKwjkfWNrF0Xhk
ebTnAKaKhx4686DYwgdgCqyGSIB3DQJEJAIVMYHIMIHFMIHCMIG/BCADIK96sQnXsO113GxGXQqxA66Ryjjv45gg1ab
/b9RM4PjCBmjCBjASBi jCBhzEhMB8GA1UEAwYTMftaXJpYWwgRVUgUXVhbGlmaWVkiENBMR8wHQYDVQQLDBZUcnVzdCBTZXJ2aWN1IFByb3Zp
pZGVyMRGwFgYDVQQKDA9OYw1pcmlhbCBTLnAuQS4xGjAYBgNVBGEtVZBVElULTAyMDQ2NTcwNDI2MQswCQYDVQQGEwJJVAIIIf15W0
/FI108wDQYJKoZIhvcNAQELBQAEGgEAqEnv3NnVlrlLivnjrNyI85MjqZbaS3bt6FcfzREP+hmBSQ7DhXXqsZru2vJ+IkYod
/MhovvTwb2s6Y2uczugkVN3Jc
/uswUf61l1CQn8F6bsDt15xatDZY75hu6mm8SJdNGyrTto7Zwf19vm3yTgt5Z3M+ORM4aHqsBYHVZW1qTyXR58uz8udSMznN2Cfrk+JCbmGiv
TCTMhuJCFLySocON/ZWB1KOEKG
/m7Ook9qZ4Ow9VQJOBBWEVLU4A2FhNsnJtnqky6jPEhnAZ9ssazJ4fhT8o4fUbs71AUnBz8A02BV5AcgK9pXvlrcx8pOwGEyaxo26RFs9Aoc
pNhhE3rA==</return>
    </ns2:signCAdESResponse>
  </soap:Body>
</soap:Envelope>

```

In the tag "return" there is the cades detached signature, you MUST decode the content of this tag and will obtain this file: [Cades\\_detached\\_PDF\\_SampleHelloWorld.p7s](#)

3) Finally we have the cades detached signature and we ready to verify the signature at this [link](#):

- field "signed file" upload the detached signature
- field "original file" upload the file "FILE\_TO\_BE\_SIGN"

And the output will be:

e-Signature

Sign a document

Sign a digest

Sign a PDF

Sign with JAdES

Sign multiple documents

Counter sign a signature

Standalone application

REST/SOAP WebServices

Server side

Extend a signature

Timestamp document(s)

Validate a signature

Validate a certificate

SSL-certificate validation

Replay Diagnostic Data

Merge containers

Export

Validation results

Simple Report

Detailed Report

Diagnostic tree

ETSI Validation Report

Validation Policy: QES AdESQC TL based

Print

Download as PDF

Validate electronic signatures and indicates whether they are Advanced electronic Signatures (AdES), AdES supported by a Qualified Certificate (AdES/QC) or a Qualified electronic Signature (QES). All certificates and their related chains supporting the signatures are validated against the EU Member State Trusted Lists and third country Trusted Lists with voluntary-based AdES recognition (this includes signer's certificate and certificates used to validate certificate validity status services - CRLs, OCSP, and time-stamps).

Signature SIGNATURE\_test-azienda\_20230330-0750

Qualification:

Signature format:

Indication:

Certificate Chain:

On claimed time:

Best signature time:

Signature position:

Signature scope:

QESal

CADES-BASELINE-B

100%\_PASS

test azienda

Namirial EU Qualified CA

2023-03-30 07:50:41 (UTC)

2023-03-30 07:58:17 (UTC)

1 out of 1

PDF\_Sample\_HelloWorld.pdf (FULL)

Full document

Document Information

Signatures status:

Document name:

1 valid signatures, out of 1

Cades\_detached\_PDF\_SampleHelloWorld.p7s

## SignXades

The SOAP request for create Xades signature:

### SOAP-request-signXades

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:signXAdES>
      <credentials>
        <username>YOUR-DEVICE-NAME</username>
        <password>YOUR-DEVICE-PASSWORD</password>
      </credentials>
      <buffer>PD944bWwgdmVyc2lvcj0iMS4wIiBlbmNvZGluZz0iVVRGLTgiPz4NCjxUZWxlbWFO
aWNvPg0KCTx0bz5Ub3ZlPC90bz4NCgk8ZnJvbT5KYW5pPC9mcm9tPg0KCTxoZWFK
aW5nPlJlbWluzGVyPC9oZWFKaW5nPg0KCTxib2R5PkRvbid0IGZvcmdldCBtZSB0
aGlzIHdlZWt1bmQhPC9ib2R5Pg0KPC9UZWxlbWFOaWNvPg==</buffer>
      <XAdESPreferences>
        <level>B</level>
      </XAdESPreferences>
    </ser:signXAdES>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

## SOAP-response-signXades

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:signCADesResponse xmlns:ns2="http://service.ws.nam/">

<return>MIiKVwYJKoZIhvcNAQcCoIIKSDCCCkQCAQExDzANBglghkgBZQMEAGEFADA2BgkqhkiG9w0BBwGgKQqnVGhpcyBpcyB0aGUgZmlsZSB0byBiZSBzaWduZWQgZm9yIHRlc3QuoIIg0DCCBswwggW0oAMCAQICCFzwqTjXlRldMA0GCSqGSib3DQEBcWUAMH0xJjAkBgNVBAMMHU5hbWlyYWFSIENBIEZpcmlhIFFlYWxpZmljYXRhMSAwHgYDVQQLDBdDZXJ0aWZpY2F0aW9uIEFlbGhvcml0eTEkMCIGAlUECgwBtmFtaXJpYWwgUy5wLkEuLzAyMDQ2NTcwNDI2MQswCQYDVQQGEWJlVDAeFw0xODAxMjMxNjM3MDEBaFw0YNDAMjMxNjM3MDEBaMIgnMQswCQYDVQQGEWJlVDEVMBMGAlUECgwMTk90IFBRSRVNFTlRFRMRUwEwYDVQQEDAxERUlpIENPR05PTUUXeJjAQBgNVBComCURFTU8gTk9NRTEcMBoGAlUEBRMTSVQ6RElDRE5NM TVUMTBBMjcxTzEfMB0GAlUEAwWVRENTYtY010FIERFTU8gQ09HTk9NRTEcXMBUAGAlUELhMOREVNTzEyMzQ1Njc4OTAwggEiMA0GCSqGSib3DQEBQUAA4IBDwAwggEKAoIBAQQD4i6k2DI5cXUjKDiPfx6qF15kDz+wCpWRfnnWcL137vi4KhupGpcBEkvr298xZp82jFwroQ2I4NUKAuGBx7K3XZZw09mb+qZ2PfiEnZpJHTt/0UOMGe2wP0oEZYlcQdriXpg4tBbv5dPwMrOTrt/OA4
/QuAth5Uekm0070C+Csecfyhklupjfabmb4CsUIYf1qa4n4SaklE8Rtrbz9PjZxJbK902stjaQnmK95Yv5ced6TtAniVtMKs
/eLgoEFN8vx62Kh3V+dHHG+4zXfmod3zvlOkVL0KAXIFBSHve93ohcr/EhspkR3/YsHWp6y5EwCkhhGJPM
/SXwDhjdvqAbAgMBAAGjggMjMIIDHzCBogYIKwYBBQUHAQEgZUwGZiWVAYIKwYBBQUHMAKGSgh0dHBzOi8vZG9jcy50ZXN0LmZpcmlhY2VydGEuaXQvZG9jdWl1bnRlLz05hbWlyYWFSQ0FGaXJtYVYlYWxpZmljYXRhLmNyNDABGgRBgEFBQcwAYYuaHR0cDovL29jc3AudGVzdC5maXJtYWNIcnRhLm10L29jc3AvY2VydHNOYXRlc3AdBgNVHQ4EFgQUvvggLDh6cX6U5i37Ymvet0DUQ+AcwHwYDVR0jBBgwFoAU2zgIULe2L5bu0+w+tGZUwkqWqd4wLwYIKwYBBQUHAQMEIzAhMAgGBgQAjkyBATALBgYEAi5GAQMCAQcWCAyGBACORgeEEMIIBqgYDVDR0gBIIBoTCCA20wggGZBgSRBgEEAYKaawEBaZCCAYgWMAyIKwYBBQUHAGEWJGh0dHA6Ly93d3cuZml5bWJfjZXXJ0YS5pdC9tYW51YWxpLlPLzCCAIVGCCsGAQUFBWICMIIBRB6CAUAAASQBsACAACABYAGAcwBLAG4AdABlACAAyWbLAIAdABpAGYAAQJBjAGEAdABvACAA6AAgAHYAYQBsAGkAZABvACAacwBvAGwAbwAgAHAAZQByACAAZgBpAHIAbQBlACAAyQBwAHAAbwBzAHQAZQAgAGMAbBuACAACABYAG8AYwBLAGQAdQByAGEAIAbAHUAdABvAG0AYQB0AGkAYwBhAC4AIABUAGgAaQBzACAAYwBIAHIAdABpAGYAAQJBjAGEAdABlACAAbQBhAHkAIAIBvAG4AbAB5ACAAYgBLAGAAdQBzAGUAZAAGAGYAbwByACAAdQBuAGEAdAB0AGUAbgBkAGUAZAaVAGEAdQB0AG8AbQBhAHQAZQBgkACAAZABpAGcAaQB0AGEAbAAGAHMAaQBnAG4AYQB0AHUAcgBLAGMALjBjBgNVHR8EQjBAMDE6gPKA6hjhodHRWoI8vY3JsLnRlc3QuZmlybWJfjZXXJ0YS5pdC9GaXJtYUNlcnRhUXVhbGlmawNhdGExLmNybdAObGNVHQ8BAf8EBAACBkAwDQYJKoZIhvcNAQELBQADggEBAHnOmp8mICiahhf58HEcCjzWkjopGyaAERsWFSrBdglk4Of3JOqi3QK47F83ai41jRNC+KBKYP
/mUSwEok3dERW7rVH3xKXo7GmCDUm7Hk107B8N+ITlSKniMksvSpkx3GEwedrlVD0Cgqj/MQa8wMP+xoXioBrdIISTShk
/qi5ecrdbfXNhoeA3zo/vOn7WFFFC6xR+LKWnOEHW
/Ftc0awcWV8hVnHG77CD+wyOnpypblHKUOVSwFqDvVx7Jf8u2809+m0ySgoZ621IteTQNCw9km26bMKy7D4VefN3NIQbak8b0ftWzxWsnqkviH5MFPsQ5JWI0IZOjOhPiHntksxggMgMIIDHAIBATCBITB9MSYwJAYDVQQDDb10YwlpcmllhbCBDQSBGAXJtYSBRdWFSaWZpY2F0YTEgMB4GA1UECwwXQ2VydGlmawNhdGlvbiBBdXRob3JpdHkxJDAiBgNVBAOMG05hbWlyYWFSIFMucC5BLi8wMjA0NjU3MDQyNjEjLMAkGAlUEBhMCSVQCCFzwqTjXlRldMA0GCGWCSAFlAwQCAQUAoIIBZzAYBgkqhkiG9w0BCCMxwYwYJKoZIhvcNAQcBMbWGCsQGSib3DQEBJTEPFw0Ymja4MTAwODAxNTZaMCOGCSqGSib3DQEJNDEgMB4wDQYJYIZIAWUDBAIBBQChDQYJKoZIhvcNAQELBQAwLwYJKoZIhvcNAQkEMSIEIiYs24577o6HAeqQ5OU2H1lF5JMnJaRgd8ISguoanmBYMIHMBgsqhkig9w0BCRACLzGBvDCBuTCBtjCBswQgxbkITFBriuSqr8M6xRqCQN72rMbhdR7YtuXrw186f4wgY4wgYGkfzB9MSYwJAYDVQQDDb10YwlpcmllhbCBDQSBGAXJtYSBRdWFSaWZpY2F0YTEgMB4GA1UECwwXQ2VydGlmawNhdGlvbiBBdXRob3JpdHkxJDAiBgNVBAOMG05hbWlyYWFSIFMucC5BLi8wMjA0NjU3MDQyNjEjLMAkGAlUEBhMCSVQCCFzwqTjXlRldMA0GCSqGSib3DQEBcWUABIIBAIgaFfXNG3DxOPdOe5QTtftTmV4zU/+cTGLT4xaB2x2/14o3NmkrjHCMq4NBDf8XiF0o8YTrVQYqYNlxDaW5JpjTpqfbWun4wuIdkQqsg6TiRTiy3w
/v01oMk/X1s7H+6wSffCRmIV5dwTIIHUx0MRXiPA000aCsZTO852xwXUB7z8/jawfUK4bLoz
/ckgFmV3YhRLhth7sLWzVjgUELd6ukCiwCftP9R4KEwXEYu4YmBW9pknFDrDGZgTTYChsITLJkNarz1/4JtxXcA7
/FALCxyuOHcnYNta+iCW4N3I/EOPIVzQ5XibNraAF01ulJIzAlyC+hU4IjADJEApoEE=</return>
    </ns2:signCADesResponse>
  </soap:Body>
</soap:Envelope>
```

Below is the example of Xades Signature Level B:

[signXadesList-Level-B.txt](#)

Below, there is an example of Xades using the preferences:

- signElement
- signatureId

We sign the XML parts with "Id=tagToSign" specified on Soap request by:

<signElement>tagToSign</signElement>

And we set the id of the digital signature to:

<signatureId>idOfSignature</signatureId>

The full example:

[signXadesList-on-specifiedTagId.xml](#)

## SignPkcs1

The SOAP request for create raw signature (PKCS1):

### SOAP-request-signPkcs1

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:signPkcs1>
      <credentials>
        <password>YOUR-DEVICE-PASSWORD</password>
        <username>YOUR-DEVICE-NAME</username>
      </credentials>
      <hash>c1fbd2b034abaea9ec99535394f21bb556edcf1833c680ebdfcc76e1e635844b</hash>
      <preferences>
        <hashAlgorithm>SHA256</hashAlgorithm>
      </preferences>
    </ser:signPkcs1>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

### SOAP-response-signPkcs1

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:signPkcs1Response xmlns:ns2="http://service.ws.nam/">
      <return>plkGoLorh0dG XKOFV4NAAZSsFxEl3YEbSXS18tlWCSkoDwKLN9wHeKaosAuuJMuL6Vl6lAxiEoBFgh5
/ufQLFKWaiMqvB5VYD62yXdp8f2dtMeCfqZGwLEV4ci/kdliMvE2eYiGornXk9NoF+eg/+h6W8TZWSnYrjp0YlFloJxOG1
/r5qr+OVvWQ7n73fo3Qe6Rjw
/TuSI5V+WDaboctuCIwlK5gM8R4cT552PrNLsnVYmwR4epSUTx5VYwag6IhEHYPUtUkbMGpvN+0C0cZY7NqOHPfqgrqks0HkMr4Z99DQAKOqS
ZHg+h4AIGvgqFGsLxSRWCbT2G7ve+qX7IVgg==</return>
    </ns2:signPkcs1Response>
  </soap:Body>
</soap:Envelope>
```

## Manage signer device

In this section you can find the example of SOAP request associated to the information about signer device, timestamp, errors

## Method change password on automatic/eseal signature

Below an example of change password on automatic signer device (AHIP22021318589386):



#### REQUEST-AUTOMATIC/ESEAL-changePassword

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:changePassword>
      <credentials>
        <password>13572468</password>
        <securityCode>8214260012</securityCode>
        <username>AHIP12345</username>
      </credentials>
      <newPassword>NEWPASSWORD123</newPassword>
    </ser:changePassword>
  </soapenv:Body>
</soapenv:Envelope>
```

After this execution, the password/PIN of the device signature will be changed from "13572468" (old password) to "NEWPASSWORD123".

## Method change password on remote signature

Below an example of change password on remote signer device (RHI3644468199007):

#### REQUEST-AUTOMATIC/ESEAL-changePassword

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:changePassword>
      <credentials>
        <username>YOUR-DEVICE-NAME</username>
        <password>YOUR-DEVICE-PASSWORD</password>
        <idOtp>YOUR-ID-OTP</idOtp>
        <otp>876321</otp>
      </credentials>
      <newPassword>NEWPASSWORD123</newPassword>
    </ser:changePassword>
  </soapenv:Body>
</soapenv:Envelope>
```

After this execution the password/PIN of the device signature will be changed from "847291742" (old password) to "NEWPASSWORD123".

## Method getCertificate

Below the SOAP request example for obtain the certificate associate to signer device: "SHI7493852568871"

### SOAP-request-getCertificate

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getCertificate>
      <credentials>
        <username>SHI12345</username>
      </credentials>
    </ser:getCertificate>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

### SOAP-response-getCertificate

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getCertificateResponse xmlns:ns2="http://service.ws.nam/">
      <return>MIIG1jCCBL6gAwIBAgIIKSO
/4EWMpWgWdQYJKoZIhvcNAQELBQAwGyYwxJjAkBgNVBAMMHVRLc3QgTmFtaXJpYWwgRVUgUXVhbGlmaWVkaIENBMR8wHQYDVQQLEDBZUcnVzdCBT
ZXJ2aWNlIFByb3ZpZGVyMRgwFgYDVQQKDA90YWlpcmlhbCBTlnAuQs4xGjAYBgNVBGEtZBVElULTAyMDQ2NTcWNDI2MQswCQYDVQGEWJVV
DAeFw0xNzExMjQwOTAwMDBaFw0yMzExMjQwOTAwMDBaMG0xCzAJBgNVBAYTAklUMRowGAYDVQRhDBFWQVRJVC0wMjaONju3MDQyOTEYMBYGA1
UECgWPTmFtaXJpYWwgcy5wLmEuMRgwFgYDVQQDDA9uYWlpcmlhbCBzLnAuYS4xZDjAMBgNVBC4TBULEMTMzMIIBIjANBgkqhkiG9w0BAQEFAAO
CAQ8AMIIBCgKCAQEApgHu87UKgtDTBTy13rv9GKZk1+YUfuHPGJxFI3TxZrimmDtyM0hu11400Y1mMLE5DZVgFXkRFlw0+Gk0ZLJYkG4FvTo5
khqu+vsd0wyh/Hkpei0wLfnKhChWhYOpmlwahn3a31U1qFV1ZJNulybRRf8N4+yAQQ2D1NL7
/B1VAgg1gVt1uXjxvas8MAUjjDbg3eQYXkSn2FJbveDRs127eeXUu+uabqt/GU/Y77Rvd7IKW6aH+dOF0oU/s7
/dto7q393rPU3OpWfvA3A1107C/jwFaSgIDdYhtGvIT6Jbakk
/SM26QfKnQShrHsS9S9hCn3DZUfg53I4YGnOhtjFntKwIDAQABO4ICWDCCAlQwgZQGCCsGAQUFBwEBBIGHMIGEMEMGCCsGAQUFBzAchjdodHR
wcZovL2RvY3MudGVzdC5uYWlpcmlhbHRzcC5jb20vZG9jdW1lbnRzL05hbUNBNesuy3J0MD0GCCsGAQUFBzABhjFodHRwcZovL29jc3AudGVz
dC5uYWlpcmlhbHRzcC5jb20vb2NzcC9jZXJ0c3RhdmVzMBOGA1UdDgQWBWRM2g4FW+kgJ7XcAbdsY2fK3wqG8TafBgNVHSMEGDAWgBT8Hvd
/XQEv+XufwSmAJOaalhw+njCBzgYIKwYBBQUHAQMEgcEwgb4wCAYGBACORgEBMAsGBgQAjkYBAwIBFDATBgYEAi5GAQYwCQYHBACORgEGAjCB
jwYGBACORgEFMIGEMEAOWmh0dHBzOi8vZG9jcy50ZXN0Lm5hbWlyaWFSdHNwLmNvbS9kb2N1bWVudHMvUERTL1BEU191bi5wZGYTAuMEAWO
mh0dHBzOi8vZG9jcy50ZXN0Lm5hbWlyaWFSdHNwLmNvbS9kb2N1bWVudHMvUERTL1BEU19pdC5wZGYTAml0MF8GA1UdIARyMFYwPwYlKwYBBA
GCmmsBAgEwMDAuBggrBgEFBQcCARYiaHR0cHM6Ly9kb2NzLnRlc3QubmFtaXJpYWx0c3AuY29tLzAjBgCEAIvsQAEbMAGBgQAj3oBATA5BgN
VHR8EMjAwMc6gLKAqhiodHRwOi8vY3JsLnRlc3QubmFtaXJpYWx0c3AuY29tL0NBNEsuY3JsMA4GA1UdDwEB
/wQEAwIGQDANBgkqhkiG9w0BAQsFAAOCAgEAE2+uvSjsQZwx2R+tH76IfRcPwFguJYlFAh044gu7evJ6
/h7EQc0Y6wSzMHM9lmfOpnuHD2BP9NftA+qBqqZnwpCLn3S+3WiM7L7wBG0LJE20Ji
/fw0JUzTojtdQ24h64kQUv+u9cygB4JtFWAZ74WbmjmeG15WtBbo9zUx5Z59qsM1+BuXUW23u71bzIyZLKAL6w5qSrBJhafBuKtwNIYfMoJtW
K3kOSikhktoA1K/s74xp9ofUpM4EhtjXhkQXN754dUbxh2zYtDC4qw7LvKUnx2y2Yh8tOsv+N0c5kRMHvr0IjMzUuY7
/Eu00ivR7ncUg5ABJA9TQ8RA7pNw9ID+t9MhrsBEMGLYRWAsylARVbXpDpgZcCZxas6HE+JJWgn+LEBFDJiEPdSuvYY/bLML3G5wan
/cTYic0TK/HGJxzqoAxUB1gks3eUmvstxzOzyTmJxjJBBWSTU5ulrjK
/oexLEjYprXeipjx0gB6J+2+LoXsBAj1KMgHLWZ9NBAqZ7EvvZi3SDcOAljtdRRNBhVi1naV3e
/1W1YLEJaAUghNQBYzf2hyv8ikDv1Wb3YGM2ruu5BDAn7YpM0+smFMmcjU/ImN64Ll0LYJJ8d79UqJ0AS5bc+OzbncpTtd5sncvCKWh
/xg5Qnc2ZY9djDgk/HhDUqTVRkGLua8gN4=</return>
    </ns2:getCertificateResponse>
  </soap:Body>
</soap:Envelope>
```

In the tag "return" there is the base64 associated to the signer device.

## Method getAvailableSignatures

Below the SOAP request example for obtain the certificate associate to signer device: "SHI7493852568871"

#### SOAP-request-getAvailableSignatures

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getAvailableSignatures>
      <credentials>
        <username>SHI12345</username>
      </credentials>
    </ser:getAvailableSignatures>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

#### SOAP-response-getAvailableSignatures

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getAvailableSignaturesResponse xmlns:ns2="http://service.ws.nam/">
      <return>996413</return>
    </ns2:getAvailableSignaturesResponse>
  </soap:Body>
</soap:Envelope>
```

In the tag "return" there is the number of signatures available.

## Method getSignatures

Below the SOAP request example for obtain the certificate associate to signer device: "SHI7493852568871"

#### SOAP-request-getSignatures

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getSignatures>
      <credentials>
        <username>SHI12345</username>
      </credentials>
    </ser:getSignatures>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

#### SOAP-response-getSignatures

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getSignaturesResponse xmlns:ns2="http://service.ws.nam/">
      <return>3587</return>
    </ns2:getSignaturesResponse>
  </soap:Body>
</soap:Envelope>
```

In the tag "return" there is the number of signatures apposed since the device has been created.

# Manage errors in SWS

In this section will be described how manage the errors in SWS and obtain the info about errors.

If the SOAP request is not correct in output will obtain the SOAP response with this structure:

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <soap:Fault>
      <faultcode>soap:Server</faultcode>
      <faultstring>Codice OTP errato, riprovare con il prossimo codice</faultstring>
      <detail>
        <ns2:WSEException xmlns:ns2="http://service.ws.nam/">
          <error>44</error>
          <message>Codice OTP errato, riprovare con il prossimo codice</message>
        </ns2:WSEException>
      </detail>
    </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

This SOAP response contains:

- error code = 44
- error message = "Codice OTP errato, riprovare con il prossimo codice"

By default SOAP response on SWS contains the error message in italian, but is possible to obtain the error message in other different languages using the method "getErrors".

## Method getErrors

This method permits to obtain the list of all errors in a specified language or all languages.

For example if we want obtain the list of all errors in english language the SOAP request will be:

### SOAP-request-getErrors

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getErrors>
      <lang>EN</lang>
    </ser:getErrors>
  </soapenv:Body>
</soapenv:Envelope>
```

In output will obtain a list of all errors in a specified language:

### SOAP-response-getErrors

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getErrorsResponse xmlns:ns2="http://service.ws.nam/">
      <return>
        <errorCode>0</errorCode>
        <errorLanguage>EN</errorLanguage>
        <errorLanguage2>ENG</errorLanguage2>
        <errorText>No errors found</errorText>
      </return>
      <return>
        <errorCode>1</errorCode>
        <errorLanguage>EN</errorLanguage>
        <errorLanguage2>ENG</errorLanguage2>
        <errorText>Generic error</errorText>
      </return>
      .....
      .....
      .....
      <return>
        <errorCode>1007</errorCode>
        <errorLanguage>EN</errorLanguage>
        <errorLanguage2>ENG</errorLanguage2>
        <errorText>The OTP device was not activated</errorText>
      </return>
      <return>
        <errorCode>1009</errorCode>
        <errorLanguage>EN</errorLanguage>
        <errorLanguage2>ENG</errorLanguage2>
        <errorText>Unavailable attempts for the OTP device</errorText>
      </return>
      <return>
        <errorCode>1016</errorCode>
        <errorLanguage>EN</errorLanguage>
        <errorLanguage2>ENG</errorLanguage2>
        <errorText>The OTP device was not associated to the holder</errorText>
      </return>
    </ns2:getErrorsResponse>
  </soap:Body>
</soap:Envelope>
```

With this method is possible to obtain the description associated to a specified error code (in this example 44). Below the example:

### SOAP-request-getErrors-on-specific-errorCode

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getErrors>
      <lang>EN</lang>
      <errorCode>44</errorCode>
    </ser:getErrors>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will be:

#### SOAP-request-getErrors-on-specific-errorCode

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getErrorsResponse xmlns:ns2="http://service.ws.nam/">
      <return>
        <errorCode>44</errorCode>
        <errorLanguage>EN</errorLanguage>
        <errorLanguage2>ENG</errorLanguage2>
        <errorText>Wrong OTP code, try again with the next code</errorText>
      </return>
    </ns2:getErrorsResponse>
  </soap:Body>
</soap:Envelope>
```

## Methods for timestamp

Below the SOAP request for apply timestamp and get the timestamps available

### Apply timestamp

Below an example of SOAP request for apply timestamp. In output will have the timestamp in TSD format

#### SOAP-request-timestamp

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:timestamp>
      <content>BASE64-FILE-TO-APPLY-TIMESTAMP</content>
      <preferences>
        <outputAsTSD>true</outputAsTSD>
        <timestampHashAlgo>SHA-256</timestampHashAlgo>
        <timestampUrl>TSA-URL</timestampUrl>
        <timestampUsername>TSA-USERNAME</timestampUsername>
        <timestampPassword>TSA-PASSWORD</timestampPassword>
      </preferences>
    </ser:timestamp>
  </soapenv:Body>
</soapenv:Envelope>
```

In output will obtain the TSD.

NOTE:

The TSA-URL for PROD environment is:

#### tsa-url-prod

<https://timestamp.namirialtsp.com>

While the TSA-URL for TEST environment is:

#### **tsp-url-test**

https://timestamp.test.namirialtsp.com

## Method getAvailableTimestamps

This method permits to obtain the timestamp available. Below an example:

#### **SOAP-request-getAvailableTimestamps**

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.namirialtsp.com/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getAvailableTimestamps>
      <preferences>
        <timestampUrl>https://timestamp.test.namirialtsp.com/enquiry</timestampUrl>
        <timestampUsername>TSA-USERNAME</timestampUsername>
        <timestampPassword>TSA-PASSWORD</timestampPassword>
      </preferences>
    </ser:getAvailableTimestamps>
  </soapenv:Body>
</soapenv:Envelope>
```

The SOAP response will contain the number of timestamp available associate to TSA-USERNAME.

NOTE: if you are checking the PROD TSA account the timestampURL will be:

#### **timestampUrl-PROD**

https://timestamp.namirialtsp.com/enquiry

## Methods for utilities

Below the utilities to extract info about file

## Method getAllSignatureFieldsWithPreferences

This method permits to obtain the extract all info about signature fields of a PDF document available. Below an example:

### SOAP-request-getAllSignatureFieldsWithPreferences

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam
/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getAllSignatureFieldsWithPreferences>
      <buffer>BASE64-FILE-TO-EXTRACT-INFO</buffer>
      <preferences>
        <encryptionPassword>string</encryptionPassword>
        <withCertificate>boolean</withCertificate>
        <withDetails>boolean</withDetails>
      </preferences>
    </ser:getAllSignatureFieldsWithPreferences>
  </soapenv:Body>
</soapenv:Envelope>
```

The response will be:



```

SOAP-response-getAllSignatureFieldsWithPreferences

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getAllSignatureFieldsWithPreferencesResponse xmlns:ns2="http://service.ws.nam/">
      <return>
        <identifier>SignatureField-1</identifier>
        <signed>false</signed>
      </return>
      <return>
        <identifier>SignatureField-2</identifier>
        <signatureDetails>
          <appearance>
            <height>50.0</height>
            <width>200.0</width>
            <x>100.0</x>
            <y>100.0</y>
          </appearance>

          <certificate>MIIGzDCCBbSgAwIBAgIIXPCpMlEvGV0wDQYJKoZIhvcNAQELBQAwfTEEMCQGA1UEAwwdTmFtaXJpYWwgQ0EgRmlybWEGUXVh
          bGlmaWNhdGEyIDAeBgNVBAsMF0NlcnRpZmljYXRpb24gQXV0aG9yaXR5MSQwIgYDVQQKDBt0YWlpcmlhbCBTlnAuQs4vMDIwNDY1NzAOMjYx
          CzAJBgNVBAYTAklUMB4XDTE4MDEyMzE2MzcwMFoXDTI0MDQyMzE2MzcwMFowgacxCzAJBgNVBAYTAklUMRUwEwYDVQQKDAxOT04gUFJFU0VOVE
          UxFTATBgNVBAQMDERFTU8gQ09HTk9NRTE5SMBAGAlUEKgwJREVNTYBOT01FMRwwGgYDVQQFEeXNjVDpETUNETk0xNVQxMEEyNzFPMR8wHQYDVQQ
          DDBZERU1PIE5PTUUGREVNTYBDT0dOT01FMRcwFQYDVQQQUeW5ERU1PMTIzNDU2Nzg5MDCCASiWdQYJKoZIhvcNAQELBQADggEPADCCAQoCggEB
          APiLqTYMjlxdsMoOI9/HqoWxmQPP7AKlZEWedZwvXfu+LggG6kalwESS+vb3zFmnzaMXCuhDYjg1SQc4YHHSrddlnA72Zv6pnY98h43M+MdO3
          /RQ4wz7ba/SgR1jVxB2uJemDiOFu/109Yys5Ou384Dj9C4C2H1R6SbQ7s4L4Kx5x
          /KGSW6mN8AGaNgvKxQhgXWprifhJqSUTxG2tvP0+NNelSr3TaxONpCeYr3li/lwQpp00A2JW0wqz94uCGQU3y/HrYqHdX50ccb7jNd+ah3fO
          /U6RUvQoBcgUFG9773eiFyv8SGymRHF9iwdanrLkTAKSFsYk8z9JfAOGN1WoBsCAwEAAAOCAyMwggMfMIGiBggrBgEFBQcBAQSB1TCBkjbUBG
          grBgEFBQcAwAoZiAHR0cHM6Ly9kb2NzLnRlc3QuZmlybWFWjzXJ0YS5pdC9kb2N1bWVudHMvTmFtaXJpYWwDQUZpcmlhUXVhbGlmaWNhdGEuY3J
          UMDoGCCsGAQUFBzAbhi5odHRwOi8vb2NzcC50ZXN0LmZpcmlhY2VydGEuaXQvb2NzcC9jZXJ0c3RhZHVzMB0GAlUdDgQWBBS+qAt2HpxfpSyL
          ftgy962gNRD4BzAfBgNVHSMEGDAWgBTb0AhQt7Yvlu477D60Z1TCSpap3jAvBggrBgEFBQcBAwQjMCEwCAYGBACORgEBMASgBGAjkYBAWIBF
          DAIBgYEAi5GAQQWggGqBgNVHSAEggGhMIIbNtCCAZkGCysGAQQBgpprAQEDMIIbIDAuBggrBgEFBQcCARYkaHR0cDovL3d3dy5maXJtYWNlcn
          RhLm10L2lhbzVhbGktTU8vMIIbIBUgYIKwYBBQUHAgIwggFEHoIBQABJAGwAIAbWAHIAZQBzAGUAbgB0AGUAIABjAGUAcgB0AGkAZgBpAGMAYQB
          0AG8AIADoACAAdgBhAGwAAQkBkAG8AIAABzAG8AbABvACAACABLAHIAIAbMAgkAcgBtAGUAIABhAHAACABvAHMAAdABLAACAAyWbVAG4AIAbWAHIA
          bwBjAGUAZABLAHIAYQAGAGEAdQB0AG8AbQBhAHQAaQBjAGUALGAgAFQAaABpAHMAIAbJAGUAcgB0AGkAZgBpAGMAYQB0AGUAIABTAGEAeQAgA
          G8AbgBsAHkAIAbiAGUAIABLAHMAZQBkACAAZgBvAHIAIAbLAG4AYQB0AHQAZQBzAGUAcgB0AGkAZgBkAC8AYQB1AHQAbwBtAGEAdABLAGQAIABkAGkAZW
          BpAHQAYQBsACAACwBpAGcAbgBhAHQAdQBvYAGUAACwAuMEkGAlUdHwRCMEAwPqA8oDqGOGh0dHA6Ly9jcmwudGVzdC5maXJtYWNlcnRhLm10L0Z
          pcmlhQ2VydGFRdWFSaWZpY2F0YTEuY3JzSMA4GAlUdDwEw/wQEAWIGQDANBgkqhkiG9w0BAQsFAAOCAQEAc6anyYgKJqGf
          /nwcRwKPNaSOikbJoARGxYVJxEF2DWTg5/ck6qLdArjsXzdqLjWNE0L4oEPg
          /+ZRLASiTD0RfbutUffEpejsaYINSbseTU7sHw34h0VIqeIySy9KmtHCYTb52vVUPQKCqP8xBrzAw
          /7GheKgGt0gixNKGt+qLl5ytt0Vc2Gh4DfM7+86ftYU8ULrFH4spac4Qdb8Wlw5rBxZXyFU2EbvsIP7DI6enKlvUcpQ5VLAWoNW9fskXy7bzT
          36bTJkqhnrUhn5NAOLD2SbbpswrLsPhV583c0hBtqTxvR1lbPfayeCS+IfkwU9KrklYjQhk6M6E+Iee2Sw==</certificate>
        </signatureDetails>
        <signed>true</signed>
      </return>
      <return>
        <identifier>SignatureField-3</identifier>
        <signed>false</signed>
      </return>
    </ns2:getAllSignatureFieldsWithPreferencesResponse>
  </soap:Body>
</soap:Envelope>

```

## Method getAvailableSignatureFields

This method permits to obtain the extract all info about signature fields of a PDF document available. Below an example:

#### SOAP-request-getAvailableSignatureFields

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ser="http://service.ws.nam/">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:getAvailableSignatureFields>
      <buffer>BASE64-FILE-TO-EXTRACT-INFO</buffer>
      <encryptionPassword>string</encryptionPassword>
    </ser:getAvailableSignatureFields>
  </soapenv:Body>
</soapenv:Envelope>
```

The response will be:

#### SOAP-response-getAvailableSignatureFields

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:getAvailableSignatureFieldsResponse xmlns:ns2="http://service.ws.nam/">
      <return>SignatureField-1</return>
      <return>SignatureField-3</return>
    </ns2:getAvailableSignatureFieldsResponse>
  </soap:Body>
</soap:Envelope>
```

For example, you can test this request using this [pdf](#)

## Examples (source code)

Below will find the links contains the source code with examples.

Java:

**To add on CMS repo**

Php:

C#: [https://cms.firmacerta.it/download/sws\\_cnet.zip](https://cms.firmacerta.it/download/sws_cnet.zip)

C# (for SaaS instance): <https://cms.firmacerta.it/download/SignEngineWebClientSaaS.zip>