TrustWeaver Request Service

The TrustWeaver Request service is used to construct a SOAP request to be sent to the TrustWeaver™ server for the purpose of signing, validating, or performing a validationArchive for an invoice.

The following table provides an overview of the TrustWeaver Request service:

System Name	TrustWeaverRequestService
Graphical Process Modeler (GPM) categories)	All Services
Description	The TrustWeaver Request service is used to construct a SOAP request to be sent to the TrustWeaver server for the purpose of signing, validating, or performing a validationArchive for an invoice. To construct a Trust Weaver SOAP request, the TrustWeaver Request service picks up the invoice from the primary document. The invoice becomes a part of the body of the request. Other TrustWeaver-specific parameters are pulled from your configuration of this service. All the data is then merged together into a single SOAP message, and the resulting SOAP Request is placed in the primary document. The SOAP message is then posted to the TrustWeaver invoice server through the HTTP Client adapter and services.
Business usage	This service can be used to construct a SOAP request to be sent to the TrustWeaver invoice server for the purpose of signing, validating, or performing a validationArchive for an invoice.
Usage example	A user can write a business process to invoke this service to construct a SOAP message to send an invoice to the TrustWeaver server for signing an invoice, validating a signed invoice, or validating an archived invoice. The user then uses the HTTP Client adapters and services (see Related Services below) to post the SOAP request.
Preconfigured?	TrustWeaverRequestService
Requires third party files?	No
Platform availability	All supported application platforms.
Related services	◆ TrustWeaverResponseService ◆ HTTP Client Adapter ◆ HTTP Client Begin Session Service ◆ HTTP Client POST Service ◆ HTTP Client End Session Service
Application requirements	None
Initiates business processes?	No
Invocation	Only by an internal service.

Business process context considerations	The configuration parameters and the outgoing documents are picked up by the service from the workflow.
Returned status values	0 = Success 1 = Error
Restrictions	N/A
Persistence level	N/A
Testing considerations	To test this service, run the TrustWeaver Request service business process and verify that it completes successfully. Debug information for this service is located at: Operations > System > Logs > System

How the TrustWeaver Request Service Works

The TrustWeaver Request service is used to construct a SOAP request to be sent to the TrustWeaver server for the purpose of signing, validating, or performing a validationArchive for an invoice.

To construct a Trust Weaver SOAP request, the TrustWeaver Request service picks up the invoice from the primary document. The invoice becomes a part of the body of the request. Other TrustWeaver-specific parameters are pulled from your configuration of this service. All the data is then merged together into a single SOAP message, and the resulting SOAP Request is placed in the primary document.

The SOAP message is then posted to the TrustWeaver invoice server by the HTTP client adapter and services.

Implementing the TrustWeaver Request Service

To implement the TrustWeaver Request service, complete the following tasks:

1. Create a configuration of the TrustWeaver Request service. For information about the fields specific to this service, see *Configuring the TrustWeaver Request Service* on page 102.

   Note: If you create a new configuration, you must also create a new business process or edit a copy of the appropriate predefined business process to update it to use your service configuration. You do not need to create an instance of the TrustWeaver Request service for every message; you can simply reuse the TrustWeaver Request service instance and pass the parameters that differ from the sample service through the business process.

2. Specify field settings for the service configuration in the GPM as necessary. See *Configuring the TrustWeaver Request Service* on page 102.

Configuring the TrustWeaver Request Service

1. Select **Deployment > Services > Configuration**.

2. Search for TrustWeaver Request service or select it from the list and click **Go!**.

3. Click **Edit**.

4. Specify field settings in the GPM (see the description of parameters on page 103).

5. On the Confirm page, verify that the **Enable Service for Business Processes** check box is selected.

Parameters Passed From Business Process to Service

The following table contains the parameters passed from the business process to the TrustWeaver Request service:

Note: If you need to overwrite the value that you have already configured in the service instance user interface page, you can pass the new value from the business process using the parameters below.

Parameter	Description
Operation	The operation to be performed on the document. Valid values are Sign, Validate, ValidateArchive. Required.
	Note: If this parameter is left blank, a Null Pointer Exception is thrown.
JobType	A string specifying the type of processing the input document requires. If this parameter is set to CADESA the Details element and a CADES-A signature is returned in the response. If the trustweaver-JobType parameter is empty, CADES-T is returned by default (in this case the Details element is not present in the response). If this parameter is set to DETAILS, the Detail elements is present in the response. Optional. Possible values are CADESA (only for Sign and Validate) or DETAILS (only for Validate Archive).
	Note: JobType should be set to DETAIL only if the signature being verified is CADES-A and, therefore, no ValidationResult tag is specified. Also, you should not specify a JobType if the signature being validated is of type XMLSIG.
Sign-InputType	A string specifying the Input Type of the document to be signed. Valid values are PDF, XML, and GENERIC. Required for Sign only.
Sign-OutputType	A string specifying the signature format. The valid values are PKCS7 (default), SMIME, XMLSIG, XMLCON (use the XMLCON format if you need to produce XML signatures that support a double-signature -- for example, signatures for two countries -- we recommend you use XMLCON format instead of XMLSIG), and PDF. The XMLCON signature format is not valid with PDF or GENERIC document formats; it is only valid with XML-formatted documents. Required for Sign only.
Validate-InputType	A string specifying the signature format that applied to the input document. Required for Validate and Validate Archive only.
Validate-OutputType	A string specifying the output format of the document to be validated. Required for Validate and Validate Archive only.
SenderTag	A string representing a sender identifier, that in conjunction with the value in the ReceiverTag parameter, selects the correct signing policy. Valid input is any European country. Required for Validate or Sign.
ReceiverTag	A string representing a recipient identifier, that in conjunction with the value in the SenderTag parameter, selects the correct signing policy. Valid input is any European country. Required for Validate or Sign.
ValidationResult	Specifies the "validationResult" file in the file system. Possible value is any valid filename from the file system. Optional. Only used with Validate Archive.

Business Process Example

Note: For information on how to use the HTTP Client adapter, HTTP Client Begin Session service, HTTP Client POST service, HTTP Client End Session service, and the TrustWeaver Response service in a business process, please see *TrustWeaver Response Service*.

Sign Document Example

The following business process is used to construct a SOAP message to be sent using HTTP for the purpose of signing an invoice. The TrustWeaver Server-specific parameters (such as JobType, SenderTag, ReceiverTag, and so forth) are taken from the business process. Since the JobType is CADESA in this example, the DETAIL document is present in the Process Data.

```
<process name="TrustWeaver_test">
  <sequence>
    <operation name="TrustWeaverService">
      <participant name=" TrustWeaver_Test "/>
      <output message="TrustWeaverserviceInputMessage">
        <assign to=" Sign-InputType">GENERIC</assign>
        <assign to=" Sign-OutputType">SMIME</assign>
        <assign to="JobType">CADESA</assign>
        <assign to="Operation">Sign</assign>
        <assign to="ReceiverTag">PL</assign>
        <assign to="SenderTag">PT</assign>
        <assign to="." from="*"></assign>
      </output>
      <input message="inmsg">
        <assign to="." from="*"></assign>
      </input>
    </operation>

  </sequence>
</process>
```

Validate Document Example

The following business process is used to construct a SOAP message to be sent using HTTP for the purpose of validating an invoice. The Primary Document used for this example must be a signed document. Since the JobType in this example is CADESA, both the DETAILS and ARCHIVE document are present in the Process Data.

```
<process name="TrustWeaver_test">
  <sequence>
    <operation name="TrustWeaverService">
      <participant name=" TrustWeaver_Test "/>
      <output message="TrustWeaverserviceInputMessage">
        <assign to="JobType">CADESA</assign>
        <assign to="Operation">Validate</assign>
        <assign to="ReceiverTag">DE</assign>
        <assign to="SenderTag">EE</assign>
        <assign to=" Validate-InputType">SMIME</assign>
        <assign to=" Validate-OutputType">GENERIC</assign>
```

```
      <assign to="." from="*"></assign>
    </output>
    <input message="inmsg">
      <assign to="." from="*"></assign>
    </input>
  </operation>

  </sequence>
</process>
```

Validate Archive Document Example

The following business process is used to construct a SOAP message. This SOAP message is to be sent using HTTP, for the purpose of validating the signed and archived invoice (primary document) by using the ValidationResult file specified in the ValidationResult Tag.

Note: The **boldface** type indicates what you need to replace with your own server, IP address, and document information.

```
<process name="TrustWeaver_test">
  <sequence>
    <operation name="TrustWeaverService">
      <participant name="TrustWeaver_Test"/>
      <output message="TrustWeaverserviceInputMessage">
        <assign to="Operation">ValidateArchive</assign>
        <assign to="
ValidationResult">/IPaddress/share/servername/documentname.txt.validationresult.xml<
/assign>
        <assign to=" Validate-InputType">SMIME</assign>
        <assign to=" Validate-OutputType">GENERIC</assign>
        <assign to="." from="*"></assign>
      </output>
      <input message="inmsg">
        <assign to="." from="*"></assign>
      </input>
    </operation>

  </sequence>
</process>
```

Process Data

When TrustWeaver Request service configuration parameters are output to process data, they are written in the following format:

```
<ProcessData>
  <TrustWeaver>
  < PrimaryDocument >_ </ PrimaryDocument >
  </ TrustWeaver >
</ProcessData>
```

The following is a sample of the process data created when the TrustWeaver Request service is configured to sign an input document.

Note: The **boldface** type indicates what you need to replace with your own server, IP address, and document information.

```
<?xml version="1.0" encoding="UTF-8"?>
<ProcessData>
    <PrimaryDocument SCIObjectID="servername:00.00.00.00:document:type"/>
</ProcessData>
```

Enabling TrustWeaver Request Document Tracking

When you are creating or editing your TrustWeaver Request business process in the business process text editor, you can easily enable TrustWeaver Request document tracking in the application by selecting the **Document Tracking** check box on the Process Levels page. Set the following options as needed and leave the rest of the business process parameters as the defaults:

✦ On the **Deadline Settings** page, set the deadline and notification options, if necessary.

✦ On the **Life Span** page, set the life span, if necessary.