
eInvoice Time Stamping Request Service

The eInvoice Time Stamping Request service timestamps archived invoices with the country code IT (Italy). The following table provides an overview of the eInvoice Time Stamping Request service:

System Name	eInvoiceTimeStampingRequestService
Graphical Process Modeler (GPM) categories)	All Services and e-Invoicing
Description	This service, when invoked, searches for all the invoices that have the supplier or buyer VAT ID equal to IT (Italy) and are not yet timestamped. This service creates a hash XML file of the invoice data and sends it to be timestamped. If there are multiple invoices from the same supplier or buyer (same VAT ID), then those invoices are grouped and a hash XML file is created for such invoices. Each hash XML file has multiple hashes based on the number of invoices having the same VAT ID within the group. The For Each Document service is used to pick up the hash XML files individually, and the TrustWeaver™ e-Invoicing business process is invoked to timestamp the files.
Business usage	Per the directives of the European Council, all archived invoices that are from Italy need to be timestamped (an additional signature). The eInvoice Time Stamping Request service creates hash XML files of the archived invoices to send it to TrustWeaver to be timestamped.
Usage example	If you are using Sterling e-Invoicing, it requires you to send the archived invoices from Italy (IT) to be timestamped. This service is used by the business processes to get the hash XML files of the archived invoices (based on the VAT IDs of the buyer and supplier) and send them to the TrustWeaver server to be timestamped.
Preconfigured?	eInvoiceTimeStampingRequestService
Requires third party files?	No
Platform availability	All supported application platforms.
Related services	This service is used in conjunction with Trustweaver Request service, Trustweaver Response service, eInvoice Archive service, and For Each Document Service.
Application requirements	You must execute the archive install script before using this service. This script creates the necessary configurations to communicate with the archive database and checks in the fact models that are required by the Mapped Extraction service, which is in turn used by the eInvoice Archive service. While the install script is running, you will be asked to provide all information about the database to be used as the e-Invoice Archive database.
Initiates business processes?	No
Invocation	This business process can be scheduled to execute at a particular time. It can also be executed directly by you.
Business process context considerations	This service puts the hash XML files into the workflow.

Returned status values	Success = Successfully created the hash XML file from the invoice data. Error = If there are no invoices to be timestamped or if the service is not able to successfully create the hash XML file from the invoice data.
Restrictions	N/A
Persistence level	N/A
Testing considerations	Debug information for this service is located at: Operations > System > Logs > eInvoicing

How the eInvoice Time Stamping Request Service Works

The eInvoice Time Stamping Request service, when invoked, searches for the archived invoices with the country code IT (Italy) that have not been timestamped. For timestamping, it is not required to send the whole document, so the eInvoice Time Stamping Request service creates a hash of the invoice data, which is a hexadecimal string. This hash is then placed in a hash XML file, where the identifier is the invoice ID and is followed by the hash. If there are multiple invoices from the same supplier or buyer (same VAT ID), then those invoices are grouped and a hash XML file is created for such invoices. Each hash XML file has multiple hashes based on the number of invoices having the same VAT ID within such a group. Thus, the For Each Document service is used to pick up the hash XML files individually, and the TrustWeaver e-Invoicing business process is invoked to timestamp the files.

A predefined business process, EInvoiceTimeStamping is provided for timestamping. When you set up the integrated archive, this business process is automatically scheduled to run every day at midnight.

Implementing the eInvoice Time Stamping Request Service

To implement the eInvoice Time Stamping Request service, complete the following tasks:

1. Install the e-Invoice Archive script. See the *Implementation Guide* for more information. This script creates the necessary configurations to establish communication with the archive database and checks in the fact models that are required by the Mapped Extraction service.
2. While the install script is running, you need to provide all the details about the database that will be used as the e-Invoice Archive database.

Configuring the eInvoice Time Stamping Request Service

1. Select **Deployment > Services > Configuration**.
2. Search for eInvoice Time Stamping Request service or select it from the list and click **Go!**.
3. Click **Edit**.
4. In the Confirm page, verify that the **Enable Service for Business Processes** check box is selected.

Business Process Example

The following example illustrates how the eInvoice Time Stamping Request service can be used in a business process:

```
<sequence name="ForEachHashXML">
  <operation name="For Each Document">
    <participant name="ForEachDocument"/>
    <output message="ForEachDocumentTypeInputMessage">
      <assign to="DOCUMENT_KEY_PREFIX">TS</assign>
      <assign to="ITERATOR_NAME">DocExtract</assign>
      <assign to="." from="*"></assign>
    </output>
    <input message="inmsg">
      <assign to="." from="*"></assign>
    </input>
  </operation>

  <choice name="Choice Start">
    <select>
      <case ref="more_hashfile" activity="SendRequestForTimeStamping"/>
    </select>

    <sequence name="SendRequestForTimeStamping">
      <assign name="Assign" to="Original_Doc" from="PrimaryDocument/@*"></assign>
      <operation name="Invoke Sub-Process">
        <participant name="InvokeSubProcessService"/>
        <output message="InvokeSubProcessServiceTypeInputMessage">
          <assign to="INVOKE_MODE">SYNC</assign>
          <assign to="WFD_NAME">TrustWeaverEInvoicing</assign>
          <assign to="." from="*"></assign>
        </output>
        <input message="inmsg">
          <assign to="." from="*"></assign>
        </input>
      </operation>

      <assign name="Assign" to="Archive_Doc" from="PrimaryDocument/@*"></assign>
      <operation name="eInvoice Archive Service">
        <participant name="eInvoiceArchiveService"/>
        <output message="eInvoiceArchiveServiceInputMessage">
          <assign to="Mode">2</assign>
          <assign to="Type">0</assign>
          <assign to="." from="*"></assign>
        </output>
        <input message="inmsg">
          <assign to="." from="*"></assign>
        </input>
      </operation>

      <repeat name="repeater" ref="ForEachHashXML"/>
    </sequence>
  </choice>
</sequence>
```

</process>

Enabling eInvoice Time Stamping Request Document Tracking

To enable eInvoice Time Stamping Request document tracking in the application, select 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.