eInvoice Archive Service

The eInvoice Archive service is used to archive invoices. Depending on the type of archive you select, this service either archives the invoices in a canonical format to a database or provides the archive information to an external system through a business process.

The following table provides an overview of the eInvoice Archive service:

System Name	eInvoiceArchiveService
Graphical Process Modeler (GPM) categories)	All Services and eInvoicing
Description	The eInvoice Archive service is used to archive invoices. Depending on the type of archive you select, this service either archives the invoices to a database or provides the archive information to an external system through a business process.
Business usage	This service is used to store signed and validated invoices received from the buyer or supplier. It is also used to store timestamp information about an invoice and to audit operations performed on the invoices (Signing, Validation, Revalidation, Timestamping).
Usage example	You must execute the e-Invoice archive install script before using this service. This script creates the necessary configuration to connect to the archive database and check in the fact models that are required by the Mapped Extraction service. During the install script execution, you must provide all information about the database that will be used as the e-Invoice archive database.
Preconfigured?	eInvoiceArchiveService
Requires third party files?	No
Platform availability	All supported application platforms.
Related services	Uses the Document Extraction service to split the e-Invoice batch (which contains one or more e-Invoices in canonical format) into individual e-Invoices, and then calls the Mapped Extraction service for each e-Invoice to store it in the archive database.
Application requirements	You must execute the e-Invoice archive install script before using this service. This script creates the necessary configuration to connect to the archive database and check in the fact models that are required by the Mapped Extraction service. During the install script execution, you must provide all information about the database that will be used as the e-Invoice archive database.
Initiates business processes?	No
Invocation	Should only be invoked by the e-Invoice process. The e-Invoice process is a wrapper process that normally invokes either the supplier or buyer process. This buyer or supplier process then invokes the eInvoice Archive service.
Business process context considerations	None

Returned status values	Success = The service successfully processes an e-Invoice in canonical format and then invokes the Mapped Extraction service by passing the e-Invoice document to it.
	Error = If the service fails to process the e-Invoice in canonical format or fails to invoke Mapped Extraction service. For a buyer process only, if there are duplicate invoices or some mandatory data is missing for an e-invoice, the service returns an error but the e-invoice data is written to the archive database.
Restrictions	None
Persistence level	Does not set the persistence level, therefore the persistence level defaults to the workflow.
Testing considerations	Error (log) information for this service is located at: Operations > System > Logs > eInvoicing

How the eInvoice Archive Service Works

The eInvoice Archive service is used to archive invoices. Depending on the type of archive you select, this service either archives the invoices to a database or provides the archive information to an external system through a business process.

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Implementing the eInvoice Archive Service

To implement the eInvoice Archive service, complete the following tasks:

1. Execute the e-Invoice archive install script before using this service. This script creates the necessary configuration to connect to the archive database and check in the fact models that are required by the Mapped Extraction service. During the install script execution, you must provide all information about the database that will be used as the e-Invoice archive database.

2. Specify field settings for the service configuration in the GPM as necessary. See *Setting Up the Service in the GPM* on page 3.

3. Create a business process to supply the appropriate parameters. See *Parameters Passed From Business Process to Service* on page 3.

Configuring the eInvoice Archive Service

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

2. Search for eInvoice Archive 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 3).

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

Setting Up the Service in the GPM

Use the field definitions in the following table to set up the service configuration in the GPM, if necessary:

Parameter	Description
Type	The type of archive to be used. Valid values are: ◆ 0 = internal (integrated) ◆ 1 = external ◆ 2 = custom Required.
Mode	The mode in which the archive functions. Valid values are: ◆ 0 = store ◆ 1 = audit ◆ 2 = timestamp Required.

Parameters Passed From Business Process to Service

The following table contains the parameters passed from the business process to the eInvoice Archive 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
Archive_Role	Whether the archive is done by the buyer or supplier. Valid values are: ◆ Buyer ◆ Supplier Required.
Usage_code	Test or production indicator. Valid values are: ◆ Test ◆ Production Required.
Operation	Whether performing a Signing or Validation operation. Valid values are: ◆ SIGN ◆ VALIDATE Required.
Archive_Doc	The signed or validated e-Invoice that will be archived. Required.

Parameter	Description
Details_Doc	The evidence information received during the signing or validation process. Required.
PrimaryDocument	The e-Invoice in canonical format. Required.
Original_Doc	The original hash file that was sent for timestamping. Required only if the mode is TIMESTAMP.
Buyer_Archive_Doc_ GUID	Preassigned Globally Unique Identifier (GUID) for storing the signed invoice. Required if Archive_Role is Buyer.
Supplier_Archive_Doc_ GUID	Preassigned Globally Unique Identifier (GUID) for storing the validated invoice. Required if Supplier_Role is Supplier.
Buyer_Details_Doc_ GUID	Preassigned Globally Unique Identifier (GUID) for storing evidence information. Required if Archive_Role is Buyer.
Supplier_Details_Doc_ GUID	Preassigned Globally Unique Identifier (GUID) for storing evidence information. Required if Supplier_Role is Supplier.
Reprocess	Specifies whether the e-Invoice must be reprocessed from a jar file. Valid values are: ◆ 0 = false (do not reprocess; this is the default) ◆ 1 = true (reprocess) Optional.

Business Process Example

The following is an example of how the eInvoice Archive service is called to create an external or custom archive:

```
<process name="TestArchiveCreate">
  <sequence>

    <operation name="File System Adapter">
      <participant name="eInvoiceArchive_Test_collecter"/>
      <output message="FileSystemInputMessage">
        <assign to="Action">FS_COLLECT</assign>
        <assign to="attachFile">/eInvoice/canonical.dat</assign>
        <assign to="collectMultiple">false</assign>
        <assign to="deleteAfterCollect">false</assign>
        <assign to="." from="*"></assign>
      </output>
      <input message="inmsg">
        <assign to="." from="*"></assign>
      </input>
    </operation>

    <assign to="OriginalDocument" from="//PrimaryDocument" append="false"></assign>

    <operation name="File System Adapter">
      <participant name="eInvoiceArchive_Test_collecter"/>
```

```
    <output message="FileSystemInputMessage">
      <assign to="Action">FS_COLLECT</assign>
      <assign to="attachFile">/eInvoice/signed_invoice.dat</assign>
      <assign to="collectMultiple">false</assign>
      <assign to="deleteAfterCollect">false</assign>
      <assign to="." from="*"></assign>
    </output>
    <input message="inmsg">
      <assign to="." from="*"></assign>
    </input>
  </operation>

  <assign to="Archive_Doc" from="PrimaryDocument/@SCIObjectID"
append="true"></assign>

  <operation name="File System Adapter">
    <participant name="eInvoiceArchive_Test_collecter"/>
    <output message="FileSystemInputMessage">
      <assign to="Action">FS_COLLECT</assign>
      <assign to="attachFile">/eInvoice/evidence.dat</assign>
      <assign to="collectMultiple">false</assign>
      <assign to="deleteAfterCollect">false</assign>
      <assign to="." from="*"></assign>
    </output>
    <input message="inmsg">
      <assign to="." from="*"></assign>
    </input>
  </operation>
  <assign to="Details_Doc" from="PrimaryDocument/@SCIObjectID"
append="true"></assign>

  <assign to="PrimaryDocument"
from="OriginalDocument/PrimaryDocument/@SCIObjectID"></assign>

   <assign to="Archive_Role">Buyer</assign>
   <assign to="Usage_Code">Test</assign>
   <assign to="Operation">SIGN</assign>
   <assign to="Buyer_Archive_Doc_GUID">test:1180aa8820a:854</assign>
   <assign to="Buyer_Details_Doc_GUID">test:1180aa8820a:855</assign>

  <operation name="eInvoice Archive Service">
    <participant name="eInvoiceArchiveService"/>
    <output message="eInvoiceArchiveServiceInputMessage">
      <assign to="Mode">0</assign>
      <assign to="." from="*"></assign>
    </output>
    <input message="inmsg">
      <assign to="." from="*"></assign>
    </input>
  </operation>
  <assign to="status">Success</assign>
 </sequence>
</process>
```

Enabling eInvoice Archive Document Tracking

When you are creating or editing your eInvoice Archive business process in the business process text editor, you can easily enable eInvoice Archive 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.