

# A Preliminary Guide to Creating PIN Registration Transmission Files

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This document describes the procedure for creating a sample PIN Registration transmission file with dummy data.

## Assumptions

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1. The 94x XML Schemas Final Release 2.0 will be used as the base schemas for creating the XML data instances.
2. XML Spy Suite 4.3 is used as the tool for creating and validating XML data instances generated from the aforementioned base schemas.
3. All optional fields will be created to illustrate the widest spectrum of data combinations. The actual definitions of required vs. optional fields can be found in the base schemas.
4. All XML data instances generated are kept in the instances subdirectory directly under the root of the 94x XML schemas package. If placed elsewhere, the xsi:schemaLocation attributes in all data instances generated need to be modified to reflect the location of the XML instance relative to other schemas.

## Step 1 – Create PIN Registration Transmission Envelope

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### ◆ Step 1.1: Create Transmission Envelope Skeleton

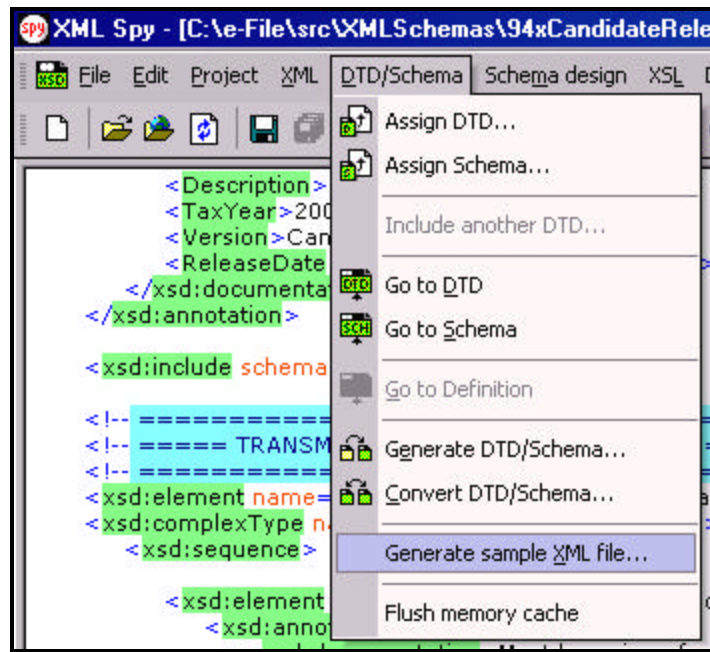
Create the transmission envelope skeleton as outlined below. After filling in the placeholders, it becomes the SOAP Envelope in the transmission file.

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:efile="http://www.irs.gov/efile"
xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/ ../message/SOAP.xsd
http://www.irs.gov/efile ../message/efileMessage.xsd">
  <SOAP:Header>
    Placeholder for TransmissionHeader
  </SOAP:Header>
  <SOAP:Body>
    Placeholder for OriginHeaders
  </SOAP:Body>
</SOAP:Envelope>
```

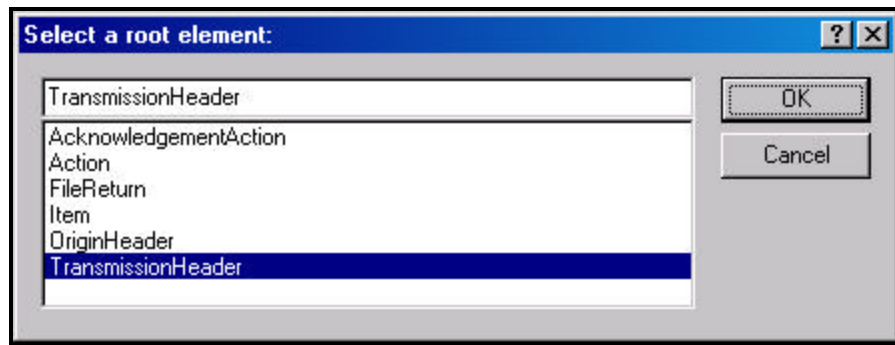
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### ◆ Step 1.2: Create TransmissionHeader

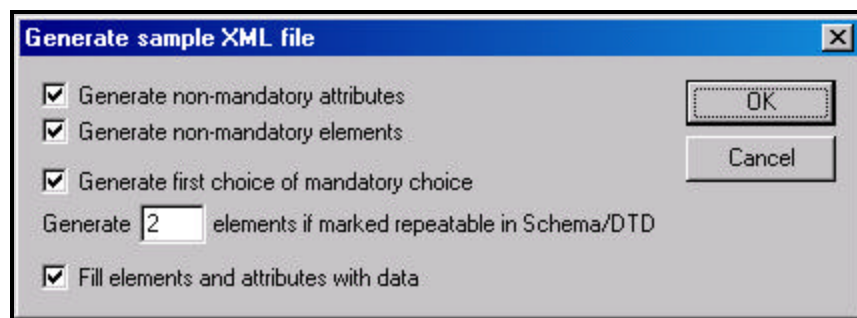
Open message/efileMessage.xsd in XML Spy and select DTD/Schema from the main menu. Next select Generate sample XML file...



Select TransmissionHeader from the pop-up menu shown below:



Check all options in the following pop-up menu and specify 2 (or more) repeatable elements so that repeating structures are illustrated in the sample data.




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You now have an XML Spy generated XML data structure for the TransmissionHeader.

### ◆ Step 1.3: Complete the Placeholder for TransmissionHeader

In the TransmissionHeader data structure:

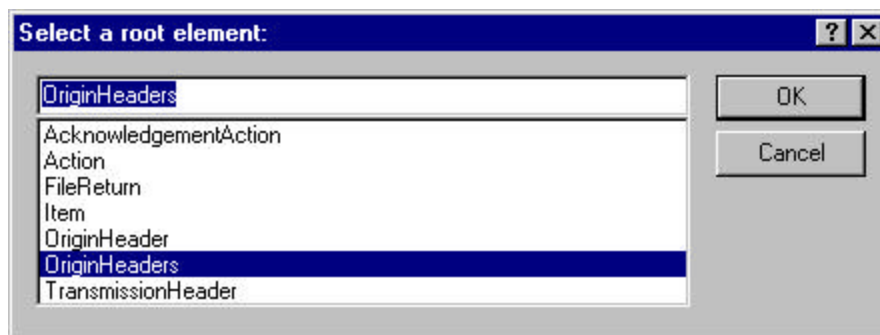
1. Remove all attributes in the TransmissionHeader element and prefix the element name (begin and end tags) with efile:
2. Edit the data as you see fit.
3. Validate the Transmission Envelope in XML Spy by clicking on the  button on the tool bar.

The complete TransmissionHeader is shown below:

```
<efile:TransmissionHeader>
  <TransmissionId>MyTransID20021217T093047</TransmissionId>
  <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
  <Transmitter>
    <ETIN>00200</ETIN>
  </Transmitter>
  <ProcessType>T</ProcessType>
  <TransmissionManifest originHeaderCount="2">
    <OriginHeaderReference originId="MyUniqueOrigID001"/>
    <OriginHeaderReference originId="MyUniqueOrigID002"/>
  </TransmissionManifest>
</efile:TransmissionHeader>
```

### ◆ Step 1.4: Create OriginHeaders

Repeat Step 1.2 but this time select OriginHeaders as the root element:




You now have an XML Spy generated XML data structure for the OriginHeaders with two occurrences of PINRegistrationOriginHeader.

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### ◆ Step 1.5: Complete the Placeholder for OriginHeaders

In the OriginHeaders data structure:

1. Remove all attributes in the OriginHeaders element and prefix the element name (begin and end tags) with efile:
2. Edit the data as you see fit. Make sure all instances of originId and contentLocation are correctly referenced in the manifests. The originId attribute must match the value of the OriginId element in the PINRegistrationOriginHeader, and the contentLocation attribute must match the value of the ContentLocation element in PINData and the Content-Location: line to be generated in Step 3. The OriginId and ContentLocation must be unique within the transmission file.
3. Validate the Transmission Envelope in XML Spy by clicking on the  button on the tool bar.

You now have an XML Spy generated XML data structure for the OriginHeaders that could look like this:

```
<efile:OriginHeaders>
  <PINRegistrationOriginHeader>
    <OriginId>MyUniqueOrigID001</OriginId>
    <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
    <OriginManifest itemCount="2">
      <ItemReference contentLocation="9999999PINData20020617T093047"/>
      <ItemReference contentLocation="9999999PINData20020617T093101"/>
    </OriginManifest>
    <Originator>
      <EFIN>010000</EFIN>
      <Type>ERO</Type>
    </Originator>
  </PINRegistrationOriginHeader>
  <PINRegistrationOriginHeader>
    <OriginId>MyUniqueOrigID002</OriginId>
    <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
    <OriginManifest itemCount="2">
      <ItemReference contentLocation="MyUnique001PINId"/>
      <ItemReference contentLocation="MyUnique002PINId"/>
    </OriginManifest>
    <Originator>
      <EFIN>010000</EFIN>
      <Type>ERO</Type>
    </Originator>
  </PINRegistrationOriginHeader>
</efile:OriginHeaders>
```

### ◆ Step 1.6: Complete the Transmission Envelope

Complete the Transmission Envelope:

1. Plug the TransmissionHeader created in Step 1.3 into the Placeholder for TransmissionHeader defined in Step 1.1
2. Plug the OriginHeaders structure created in Step 1.5 into the Placeholder for OriginHeaders defined in Step 1.1

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The complete Transmission Envelope is shown below:

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:efile="http://www.irs.gov/efile"
xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/ ../message/SOAP.xsd
http://www.irs.gov/efile ../message/efileMessage.xsd">
  <SOAP:Header>
    <efile:TransmissionHeader>
      <TransmissionId>MyTransID20021217T093047</TransmissionId>
      <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
      <Transmitter>
        <ETIN>00200</ETIN>
      </Transmitter>
      <ProcessType>T</ProcessType>
      <TransmissionManifest originHeaderCount="2">
        <OriginHeaderReference originId="MyUniqueOrigID001"/>
        <OriginHeaderReference originId="MyUniqueOrigID002"/>
      </TransmissionManifest>
    </efile:TransmissionHeader>
  </SOAP:Header>
  <SOAP:Body>
    <efile:OriginHeaders>
      <PINRegistrationOriginHeader>
        <OriginId>MyUniqueOrigID001</OriginId>
        <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
        <OriginManifest itemCount="2">
          <ItemReference contentLocation="999999PINData20020617T093047"/>
          <ItemReference contentLocation="999999PINData20020617T093101"/>
        </OriginManifest>
        <Originator>
          <EFIN>010000</EFIN>
          <Type>ERO</Type>
        </Originator>
      </PINRegistrationOriginHeader>
      <PINRegistrationOriginHeader>
        <OriginId>MyUniqueOrigID002</OriginId>
        <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
        <OriginManifest itemCount="2">
          <ItemReference contentLocation="MyUnique001PINID"/>
          <ItemReference contentLocation="MyUnique002PINID"/>
        </OriginManifest>
        <Originator>
          <EFIN>010000</EFIN>
          <Type>ERO</Type>
        </Originator>
      </PINRegistrationOriginHeader>
    </efile:OriginHeaders>
  </SOAP:Body>
</SOAP:Envelope>
```

### ◆ Step 1.7: Validate the Transmission Envelope

1. Edit the dummy data in the Transmission Envelope as you see fit.

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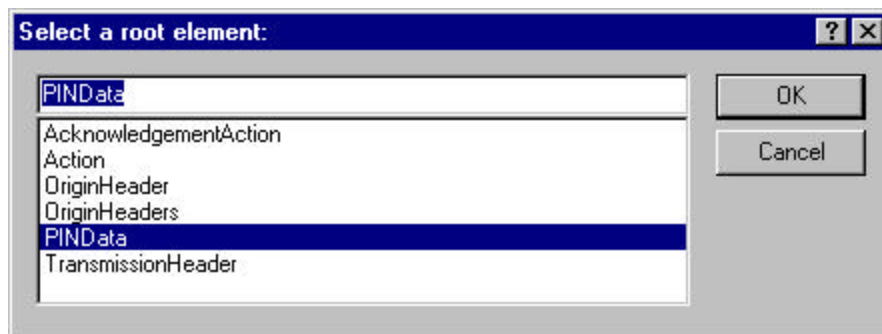
2. Validate the Transmission Envelope in XML Spy by clicking on the  button on the tool bar.
3. Correct the data, if necessary, and re-validate.

### Step 2 – Create PINData MIME Parts

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#### ◆ Step 2.1: Create PINData

Repeat Step 1.2 with the pinreg/PINRegistration.xsd schema file and select PINData as the root element name.



You now have an XML Spy generated XML data structure for PINRegistration under a PINData parent element.

#### ◆ Step 2.2: Validate PINData

1. Edit the dummy data in PINData as below or as you see fit.
2. Validate the PINData in XML Spy by clicking on the  button on the tool bar.
3. Correct the data, if necessary, and re-validate.

You now have an XML Spy generated XML data structure for PINData that could look like this:

```
<?xml version="1.0" encoding="UTF-8"?>
<PINData xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.irs.gov/efile
..\pinreg\PINRegistration.xsd">

  <ContentLocation>MyUnique001PINId</ContentLocation>
  <PINRegistration>
    <EIN>010000000</EIN>
    <EmployerName1>A A</EmployerName1>
    <EmployerName2>A A</EmployerName2>
    <EmployerAddress1>A A</EmployerAddress1>
    <EmployerAddress2>A A</EmployerAddress2>
    <City>A A</City>
    <State>AL</State>
    <ZIPCode>000000000</ZIPCode>
    <ContactName>A A</ContactName>
```

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```
<ContactTitle>! !</ContactTitle>
<ContactPhoneNumber>0000000000</ContactPhoneNumber>
<SignatureName>A A</SignatureName>
<SignatureDate>1967-08-13</SignatureDate>
<EmailAddress1>A@0.0.0.0</EmailAddress1>
<EmailAddress2>A@0.0.0.0</EmailAddress2>
</PINRegistration>
</PINData>
```

### ◆ Step 2.3: Duplicate the PINData

Complete the placeholder for PIN Registration:

1. Duplicate the PINData structure 3 times to create a sequence of 4 separate PINData structures.
2. Make sure all instances of the attribute contentLocation in the OriginManifest of the PINRegistrationOriginHeader match one referenced element ContentLocation in each PINData. The ContentLocation must be unique within the transmission file.

### Step 3 – Create PIN Registration Transmission File

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Now that you have the validated Transmission Envelope and the PINData MIME parts, you are ready to put it all together.

Create the transmission file according to the structure outlined below. Please note the following:

1. Required MIME content headers are **highlighted**.
2. Line spacing is important. There is a blank line between the ends of the MIME content headers and the beginning of the MIME part content itself. Also, there is a blank line between the end of the MIME part content and the beginning of the next MIME part boundary.
3. "MIME-Version: 1.0" must appear as the first line of the MIME message header.
4. The parameters on the "Content-Type: " line in each MIME part are required and must be in the order as shown below.
5. The sample below uses "MIMEPINRegBoundary" as the value for the MIME boundary but an actual transmission file can have any transmitter-defined string as the boundary. The same applies to the Content-Location MIME content header.
6. The **Content-Location:** line must match one of the contentLocation attributes referenced in the OriginManifest of a PINRegistrationOriginHeader and the corresponding element ContentLocation in the PINData.

```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=MIMEPINRegBoundary; type=text/xml;
Content-Description: This is a sample PIN Registration transmission file with most of the XML data generated by
XML Spy.

--MIMEPINRegBoundary
Content-Type: text/xml; charset=UTF-8
Content-Transfer-Encoding: 8bit
Content-Location: EnvelopePINRegistration
```

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The complete PIN Registration transmission file is shown below in its entirety:

```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=MIMEPINRegBoundary; type=text/xml;

--MIMEPINRegBoundary
Content-Type: text/xml; charset=UTF-8
Content-Transfer-Encoding: 8bit
Content-Location: EnvelopePINRegistration

<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:efile="http://www.irs.gov/efile"
xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/
../message/SOAP.xsd
http://www.irs.gov/efile ../message/efileMessage.xsd">
<SOAP:Header>
  <efile:TransmissionHeader>
    <TransmissionId>MyTransID20021217T093047</TransmissionId>
    <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
    <Transmitter>
      <ETIN>00200</ETIN>
    </Transmitter>
    <ProcessType>T</ProcessType>
    <TransmissionManifest originHeaderCount="2">
      <OriginHeaderReference originId="MyUniqueOrigID001"/>
    </TransmissionManifest>
  </efile:TransmissionHeader>
</SOAP:Header>
</SOAP:Envelope>
```



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```
<OriginHeaderReference originId="MyUniqueOrigID002"/>
</TransmissionManifest>
</efile:TransmissionHeader>
</SOAP:Header>
<SOAP:Body>
  <efile:OriginHeaders>
    <PINRegistrationOriginHeader>
      <OriginId>MyUniqueOrigID001</OriginId>
      <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
      <OriginManifest itemCount="2">
        <ItemReference contentLocation="999999PINData20020617T093047"/>
        <ItemReference contentLocation="999999PINData20020617T093101"/>
      </OriginManifest>
      <Originator>
        <EFIN>010000</EFIN>
        <Type>ERO</Type>
      </Originator>
    </PINRegistrationOriginHeader>
    <PINRegistrationOriginHeader>
      <OriginId>MyUniqueOrigID002</OriginId>
      <Timestamp>2001-12-17T09:30:47-05:00</Timestamp>
      <OriginManifest itemCount="2">
        <ItemReference contentLocation="MyUnique001PINId"/>
        <ItemReference contentLocation="MyUnique002PINId"/>
      </OriginManifest>
      <Originator>
        <EFIN>010000</EFIN>
        <Type>ERO</Type>
      </Originator>
    </PINRegistrationOriginHeader>
  </efile:OriginHeaders>
</SOAP:Body>
</SOAP:Envelope>
```

--MIMEPINRegBoundary

Content-Type: text/xml; charset=UTF-8

Content-Transfer-Encoding: 8bit

Content-Location: 999999PINData20020617T093047

```
<?xml version="1.0" encoding="UTF-8"?>
<PINData xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.irs.gov/efile
..\pinreg\PINRegistration.xsd">
  <ContentLocation>999999PINData20020617T093047</ContentLocation>
  <PINRegistration>
    <EIN>010000000</EIN>
    <EmployerName1>A A</EmployerName1>
    <EmployerName2>A A</EmployerName2>
    <EmployerAddress1>A A</EmployerAddress1>
    <EmployerAddress2>A A</EmployerAddress2>
    <City>A A</City>
    <State>AL</State>
    <ZIPCode>000000000</ZIPCode>
    <ContactName>A A</ContactName>
    <ContactTitle>! !</ContactTitle>
    <ContactPhoneNumber>000000000</ContactPhoneNumber>
    <SignatureName>A A</SignatureName>
    <SignatureDate>1967-08-13</SignatureDate>
    <EmailAddress1>A@0.0.0.0</EmailAddress1>
    <EmailAddress2>A@0.0.0.0</EmailAddress2>
```

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```
</PINRegistration>
</PINData>

--MIMEPINRegBoundary
Content-Type: text/xml; charset=UTF-8
Content-Transfer-Encoding: 8bit
Content-Location: 999999PINData20020617T093101

<?xml version="1.0" encoding="UTF-8"?>
<PINData xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.irs.gov/efile
..\pinreg\PINRegistration.xsd">
  <ContentLocation>999999PINData20020617T093101</ContentLocation>
  <PINRegistration>
    <EIN>010000000</EIN>
    <EmployerName1>A A</EmployerName1>
    <EmployerName2>A A</EmployerName2>
    <EmployerAddress1>A A</EmployerAddress1>
    <EmployerAddress2>A A</EmployerAddress2>
    <City>A A</City>
    <State>AL</State>
    <ZIPCode>000000000</ZIPCode>
    <ContactName>A A</ContactName>
    <ContactTitle>! !</ContactTitle>
    <ContactPhoneNumber>000000000</ContactPhoneNumber>
    <SignatureName>A A</SignatureName>
    <SignatureDate>1967-08-13</SignatureDate>
    <EmailAddress1>A@0.0.0.0</EmailAddress1>
    <EmailAddress2>A@0.0.0.0</EmailAddress2>
  </PINRegistration>
</PINData>
```

```
--MIMEPINRegBoundary
Content-Type: text/xml; charset=UTF-8
Content-Transfer-Encoding: 8bit
Content-Location: MyUnique001PINId

<?xml version="1.0" encoding="UTF-8"?>
<PINData xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.irs.gov/efile
..\pinreg\PINRegistration.xsd">
  <ContentLocation>MyUnique001PINId</ContentLocation>
  <PINRegistration>
    <EIN>010000000</EIN>
    <EmployerName1>A A</EmployerName1>
    <EmployerName2>A A</EmployerName2>
    <EmployerAddress1>A A</EmployerAddress1>
    <EmployerAddress2>A A</EmployerAddress2>
    <City>A A</City>
    <State>AL</State>
    <ZIPCode>000000000</ZIPCode>
    <ContactName>A A</ContactName>
    <ContactTitle>! !</ContactTitle>
    <ContactPhoneNumber>000000000</ContactPhoneNumber>
    <SignatureName>A A</SignatureName>
    <SignatureDate>1967-08-13</SignatureDate>
    <EmailAddress1>A@0.0.0.0</EmailAddress1>
    <EmailAddress2>A@0.0.0.0</EmailAddress2>
  </PINRegistration>
```

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```
</PINData>

--MIMEPINRegBoundary
Content-Type: text/xml; charset=UTF-8
Content-Transfer-Encoding: 8bit
Content-Location: MyUnique002PINId

<?xml version="1.0" encoding="UTF-8"?>
<PINData xmlns="http://www.irs.gov/efile"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.irs.gov/efile
..\pinreg\PINRegistration.xsd">
  <ContentLocation>MyUnique002PINId</ContentLocation>
  <PINRegistration>
    <EIN>010000000</EIN>
    <EmployerName1>A A</EmployerName1>
    <EmployerName2>A A</EmployerName2>
    <EmployerAddress1>A A</EmployerAddress1>
    <EmployerAddress2>A A</EmployerAddress2>
    <City>A A</City>
    <State>AL</State>
    <ZIPCode>000000000</ZIPCode>
    <ContactName>A A</ContactName>
    <ContactTitle>! !</ContactTitle>
    <ContactPhoneNumber>000000000</ContactPhoneNumber>
    <SignatureName>A A</SignatureName>
    <SignatureDate>1967-08-13</SignatureDate>
    <EmailAddress1>A@0.0.0.0</EmailAddress1>
    <EmailAddress2>A@0.0.0.0</EmailAddress2>
  </PINRegistration>
</PINData>

--MIMEPINRegBoundary--
```