



# PAI AGENCIES TIR INTEGRATION

User Guide

## ABSTRACT

This document describes the way external agencies need to integrate with the PAI Provided Web Services to pass the information stored at the Agency Side.

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## 2 Environment

Any Details mentioned in this document is related to **PAI's Test Environment**. Once the Agency has Tested the below Integration Strategy in co-ordination with PAI Team, the same solution will be applied to PAI Production Environment.

Hence, Any specifics (like URLs, Key, etc.) will be provided for each Agency **through Email per environment**.

## 3 Web Services Layer

This Layer is purely presented to Pass in the "TIR" Metadata stored at the agency level to PAI.

Dev / Staging	<a href="https://ksmservicesdev.pai.gov.kw/">https://ksmservicesdev.pai.gov.kw/</a>
Production	Will be provided after Testing Phase

**Note:** Replace accordingly in Web Services Call based on Environment

### 3.1 Data Transfer Format

The Web Service Layer provided by PAI supports both XML and Json format. Mentioned below are the details of the Agreed structure for the TIR MetaData that needs to be passed by each Agency.

#### 3.1.1 XML Sample Format – WITH BASE 64

This is the Sample XML Structure format to which all agencies will need to comply prior to sending the Data for PAI to Store it in their Backend.

```
<TIRDATA_Base64 xmlns="http://schemas.datacontract.org/2004/07/WebAPI.Models">
  <HEADER>
    <SUBMITTER>AGENCY</SUBMITTER>
    <TIRNUMBER>AE2223127</TIRNUMBER>
    <PORTNAME>SHUAIBA PORT, KUWAIT</PORTNAME>
    <SUPPLYCOUNTRY>UNITED ARAB EMIRATES</SUPPLYCOUNTRY>
    <CONTACTPERSON>JANET ENCARNACION</CONTACTPERSON>
    <EXPORTERCOMPANY>BISSELL MIDDLE EAST FZE</EXPORTERCOMPANY>
    <INSPECTIONDATE>2019-04-12</INSPECTIONDATE>
    <COUNTRYOFFICE>DUBAI, UNITED ARAB EMIRATES</COUNTRYOFFICE>
    <OFFICERNAME>JANET ENCARNACION</OFFICERNAME>
    <APPROVALDATE>2019-04-21</APPROVALDATE>
  </HEADER>
  <DOCUMENTS>
    <DOCUMENT>
      <TYPE>INVOICE</TYPE>
      <FileName>ORD1923535.pdf</FileName>
      <FileBase64String>UESDBBQABgAIAAAAIQAYkW9XZgEAAKUFAAATAAgCW0NvbnRlbnRfVHlw
ZXNdLnhtbCCiBAlOOAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAC0IMtqwzAQRfeF/oPRtthKuiilxMmij2UbaPoBijROR
PVC07z+vuM4MaUkMTTJxiDP3HvPCDGD0dqabAkRtXcl6xc9loGTXmk3K9nX5C1 =</FileBase64String>
    </DOCUMENT>
  </DOCUMENTS>
</TIRDATA_Base64>
```

```

<TYPE>INVOICE</TYPE>
  <FileName>ORD1923534.pdf</FileName>
  <FileBase64String>UEsDBBQABgAIAAAAIQAYkW9XZgEAAKUFAAATAAgCW0NvbnRlbnRfVHlw
ZXNdLnhtbCCiBAloooAACAAAAAASDFSDFSDFSDFSDC0IMtqwzAQRfeF/oPRtthKuiilxMmij2UbaPoBijRO
RPVCo7z+vuM4MaUkMTTJxiDP3HvPCDGD0dqabAkRtXcl6xc9loGTXmk3K9nX5C1 =</FileBase64String>

  </DOCUMENT>
</DOCUMENTS>
<ITEMS>
  <ITEM>
    <SERIALNUMBER>1</SERIALNUMBER>
    <ORIGINCOUNTRY>CHINA</ORIGINCOUNTRY>
    <INVOICENUMBER>ORD1923534</INVOICENUMBER>
    <INVOICEDATE>2019-04-19</INVOICEDATE>
    <QUANTITY>30</QUANTITY>
    <CATEGORY>II-23</CATEGORY>
    <PRODUCTDESCRIPTION>10N4K LIFT OFF DEEP
CLEANER</PRODUCTDESCRIPTION>
    <LICENCETERREF>N/A</LICENCETERREF>
  </ITEM>
  <ITEM>
    <SERIALNUMBER>2</SERIALNUMBER>
    <ORIGINCOUNTRY>CHINA</ORIGINCOUNTRY>
    <INVOICENUMBER>ORD1923535</INVOICENUMBER>
    <INVOICEDATE>2019-04-19</INVOICEDATE>
    <QUANTITY>30</QUANTITY>
    <CATEGORY>II-23</CATEGORY>
    <PRODUCTDESCRIPTION>10N4K LIFT OFF DEEP
CLEANER</PRODUCTDESCRIPTION>
    <LICENCETERREF>N/A</LICENCETERREF>
  </ITEM>
</ITEMS>
</TIRDATA_Base64>

```

**Note:**

1. **"SUBMITTER"** value to be in Capitals & should be same for all TIR Data being passed per Agency.
2. Web Service API Key will be Generated based on the **"SUBMITTER"** value, hence this needs to be provided to PAI in advance.
3. <FileName> </FileName> attribute should contain filename with extension.

### 3.1.2 XSD Structure with BASE 64

The XSD structure was generated using the above XML data.

```
<?xml version="1.0" encoding="Windows-1252"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
targetNamespace="http://schemas.datacontract.org/2004/07/WebAPI.Models"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="TIRDATA_Base64">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="HEADER">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="SUBMITTER" type="xs:string" />
              <xs:element name="TIRNUMBER" type="xs:string" />
              <xs:element name="PORTNAME" type="xs:string" />
              <xs:element name="SUPPLYCOUNTRY" type="xs:string" />
              <xs:element name="CONTACTPERSON" type="xs:string" />
              <xs:element name="EXPORTERCOMPANY" type="xs:string" />
              <xs:element name="INSPECTIONDATE" type="xs:date" />
              <xs:element name="COUNTRYOFFICE" type="xs:string" />
              <xs:element name="OFFICERNAME" type="xs:string" />
              <xs:element name="APPROVALDATE" type="xs:date" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="DOCUMENTS">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="DOCUMENT">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="TYPE" type="xs:string" />
                    <xs:element name="FileName" type="xs:string" />
                    <xs:element name="FileBase64String" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="ITEMS">
          <xs:complexType>
            <xs:sequence>
              <xs:element maxOccurs="unbounded" name="ITEM">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="SERIALNUMBER" type="xs:positiveInteger" />
                    <xs:element name="ORIGINCOUNTRY" type="xs:string" />
                    <xs:element name="INVOICENUMBER" type="xs:string" />
                    <xs:element name="INVOICEDATE" type="xs:date" />
                    <xs:element name="QUANTITY" type="xs:positiveInteger" />
                    <xs:element name="CATEGORY" type="xs:string" />
                    <xs:element name="PRODUCTDESCRIPTION" type="xs:string" />
                    <xs:element name="LICENCETERREF" type="xs:string" />
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

```

    </xs:complexType>
  </xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>

```

### 3.1.3 JSON Sample Format with BASE 64

```

{
  "header": {
    "submitter": "AGENCY",
    "tirnumber": "AE2223127",
    "portname": "SHUAIBA PORT, KUWAIT",
    "supplycountry": "UNITED ARAB EMIRATES",
    "contactperson": "JANET ENCARNACION",
    "exportercompany": "BISSELL MIDDLE EAST FZE",
    "inspectiondate": "2019-04-12T00:00:00",
    "countryoffice": "DUBAI, UNITED ARAB EMIRATES",
    "officename": "JANET ENCARNACION",
    "approvaldate": "2019-04-21T00:00:00"
  },
  "documents": [
    {
      "type": "INVOICE",
      "filename": "ORD1923534.pdf",
      "filebase64string": "AASDFSDFSDEFSDZFZCVXCVSDFSDFS"
    },
    {
      "type": "INVOICE",
      "filename": "ORD1923534.pdf",
      "filebase64string": "AASDFSDFSDEFSDZFZCVXCVSDFSDFS" }
  ],
  "items": [
    {
      "serialnumber": 1,
      "origincountry": "INDIA",
      "invoicenum": "ORD1923534",
      "invoicedate": "2019-04-19T00:00:00",
      "quantity": 30,
      "category": "II-23",
      "productdescription": "10N4K OFF DEEP CLEANER",
      "licenceterref": "N/A"
    },
    {
      "serialnumber": 2,
      "origincountry": "INDIA",
      "invoicenum": "ORD1923535",
      "invoicedate": "2019-04-19T00:00:00",
      "quantity": 30,

```

```
    "category": "II-23",
    "productdescription": "10N4K OFF DEEP CLEANER",
    "licenceterref": "N/A"
  }
]
}
```

### 3.1.4 JSON Schema – With Base 64

```
{
  "title": "TIRDATA_Base64",
  "type": "object",
  "properties": {
    "header": {
      "required": true,
      "type": [
        "object",
        "null"
      ],
    },
    "properties": {
      "submitter": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "tirnumber": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "portname": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "supplycountry": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      },
      "contactperson": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      }
    }
  }
}
```

```
]
},
"exportercompany": {
  "required": true,
  "type": [
    "string",
    "null"
  ]
},
"inspectiondate": {
  "required": true,
  "type": "string"
},
"countryoffice": {
  "required": true,
  "type": [
    "string",
    "null"
  ]
},
"officename": {
  "required": true,
  "type": [
    "string",
    "null"
  ]
},
"approvaldate": {
  "required": true,
  "type": "string"
}
},
"documents": {
  "required": true,
  "type": [
    "array",
    "null"
  ],
  "items": {
    "type": [
      "object",
      "null"
    ],
    "properties": {
      "type": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      }
    }
  },
  "filename": {
```



```

    "required": true,
    "type": [
      "string",
      "null"
    ]
  },
  "filebase64string": {
    "required": true,
    "type": [
      "string",
      "null"
    ]
  }
},
"items": {
  "required": true,
  "type": [
    "array",
    "null"
  ],
  "items": {
    "type": [
      "object",
      "null"
    ],
    "properties": {
      "serialnumber": {
        "required": true,
        "type": "integer"
      },
      "origincountry": {
        "required": true,
        "type": [
          "string",
          "null"
        ]
      }
    },
    "invoicenumber": {
      "required": true,
      "type": [
        "string",
        "null"
      ]
    },
    "invoicedate": {
      "required": true,
      "type": "string"
    },
    "quantity": {
      "required": true,
      "type": "integer"
    }
  }
}

```

```

    },
    "category": {
      "required": true,
      "type": [
        "string",
        "null"
      ]
    },
    "productdescription": {
      "required": true,
      "type": [
        "string",
        "null"
      ]
    },
    "licenceterref": {
      "required": true,
      "type": [
        "string",
        "null"
      ]
    }
  }
}
}
}
}

```

## 3.2 Web Service Methods

### 3.2.1 POST: TIR DATA WITH BASE 64

<b>Title</b>	<i>The name of the API call</i> <b>Method to “POST” TIR DATA (INSERT Mode)</b>
<b>URL</b>	<i>The URL structure</i> <code>&lt;https://PAIPublishedURL&gt;/api/TIR/InsertTIRData_Base64</code>  <i>Note: PAI Published URL will be provided per environment.</i>
<b>Method</b>	<i>The request type</i> <b>POST</b>
<b>URL Params</b>	<i>If URL params exist, specify them in accordance with name mentioned in URL section. Separate into optional and required.</i>  <b>Required:</b> N.A

	<p><b>Optional</b> N.A</p>
<b>Data Params</b>	<p>When making a post request, the body payload should comply to:</p> <p><b>REQUIRED:</b> Data As per XML or Json Format Specified <a href="#">Section 3.1</a></p>
<b>Request Headers</b>	<p>All Below are <b>REQUIRED Request Header</b> Parameters</p> <ol style="list-style-type: none"> <li>1) <b>APIKey:</b> &lt;Encrypted Key with Agency + PAI Keyword&gt; per Agency</li> <li>2) If XML Format, <b>Accept:</b> application/xml <b>Content-Type:</b> application/xml; charset=utf-8</li> <li>3) If JSON Format <b>Accept:</b> application/json <b>Content-Type:</b> application/json; charset=utf-8</li> </ol>
<b>Success Response</b>	<p>The status code be on success and the any returned data: <b>Code:</b> HTTP/1.1 201 Created</p> <p><b>Transport Location:</b> &lt;https://PAIPublishedURL&gt;/api/TIR/?pTIRNumber=&lt;TIRNumber value&gt;</p> <p>Ex: &lt;https://PAIPublishedURL&gt;/api/TIR?pTIRNumber=AE12314</p> <p><b>Content:</b> <i>Ex if JSON:</i> JSON=Created a TIR Details having TIR Number AE12314 <i>Ex if XML:</i> Created a TIR Details having TIR Number AE12314</p>
<b>Error Response</b>	<p>The status code be on Error,Failure, etc. and if there is any returned data:</p> <p><b>Response Codes:</b></p> <ol style="list-style-type: none"> <li>1. If "APIKey" is not Passed <b>Code:</b> HTTP/1.1 401 Unauthorized</li> <li>2. If "APIKey" is invalid or Incorrect <b>Code:</b> HTTP/1.1 403 Forbidden <b>Content:</b> <i>If JSON Format:</i> JSON=Invalid API KEY!!! <i>If XML Format:</i> Invalid API KEY!!!</li> <li>3. If Data Format non-Confirming to Structure <b>Code:</b> HTTP/1.1 500 Internal Server Error</li> </ol>

<b>Notes</b>	<i>To be added as per Testing &amp; confirmation</i>
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### 3.2.2 GET: TIR Data

<b>Title</b>	<i>The name of the API call</i> <b>Method to “GET” TIR DATA (SELECT Mode)</b>
<b>URL</b>	<i>The URL structure</i> <https://PAIPublishedURL>/api/TIR/?pTIRNumber=<TIRNumber value>  Ex: <https://PAIPublishedURL>/api/TIR?pTIRNumber=AE12314  <i>Note: PAI Published URL will be provided per environment.</i>
<b>Method</b>	<i>The request type</i> <b>GET</b>
<b>URL Params</b>	<i>If URL params exist, specify them in accordance with name mentioned in URL section. Separate into optional and required.</i>  <b>Required:</b> pTIR_IDs=<Comma separated Ids depending on number of Items per TIR Number>  <b>Optional</b> N.A
<b>Data Params</b>	<i>When making a post request, the body payload should comply to:</i> <b>REQUIRED: N.A</b>
<b>Request Headers</b>	<i>All Below are <b>REQUIRED Request Header</b> Parameters</i>  1) <b>APIKey:</b> <Encrypted Key with Agency + PAI Keyword> per Agency  2) <i>If XML Format,</i> <b>Accept:</b> application/xml <b>Content-Type:</b> application/xml; charset=utf-8  3) <i>If JSON Format</i> <b>Accept:</b> application/json <b>Content-Type:</b> application/json; charset=utf-8
<b>Success Response</b>	<i>The status code be on success and the any returned data:</i> <b>Code:</b> HTTP/1.1 200 OK <b>Content:</b> As mentioned in Data Response

<b>DATA Response</b>	Data As per XML or Json Format Specified <a href="#">Section 3</a>
<b>Error Response</b>	<p><i>The status code be on Error,Failure, etc. and if there is any returned data:</i></p> <p><b>Response Codes:</b></p> <p>4. If “APIKey” is not Passed <b>Code:</b> HTTP/1.1 401 Unauthorized</p> <p>5. If “APIKey” is invalid or Incorrect <b>Code:</b> HTTP/1.1 403 Forbidden <b>Content:</b> <i>If JSON Format:</i> JSON=Invalid API KEY!!! <i>If XML Format:</i> Invalid API KEY!!!</p> <p>6. General Error <b>Code:</b> HTTP/1.1 500 Internal Server Error</p>
<b>Notes</b>	<i>To be added as per Testing &amp; confirmation</i>

### 3.3 Data Type, Sizes, Format

Property Name	Data Type	Length	Format
TIRNumber	string	250	
PortName	string	250	
SupplyCountry	string	250	
ContactPerson	string	300	
ExportedCountry	string	250	
InspectionDate	date		yyyy-MM-dd
CountryOffice	string	250	
OfficerName	string	300	
ApprovalDate	date		yyyy-MM-dd
Company	string	300	
SerialNumber	int		
OriginCountry	string	250	
InvoiceNumber	string	100	
InvoiceDate	date		yyyy-MM-dd
Quantity	int		
Category	string	100	
Description	string	250	
LicensetRef	string	250	