

# Appendix V: Transformations

This section illustrates the transformation to add converters available to the project team. The platform includes the template shown below. The project team must complete the required changes idempotently.

The following template is provided:

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <configSections>
    <!-- Common converter service configuration -->
    <section name="ConversionServer" type="Aras.ConversionFramework.ConversionServer.Configuration.Conver
    <sectionGroup name="ConverterSettings">
      <!-- Place here class configuration section definitions for converters -->
      <section name="ArasCadConverter" type="Aras.ConversionFramework.Converter.Hoops.Configuration.HoopsC
    </sectionGroup>
  </configSections>
  <ConversionServer>
    <InnovatorServer url="" />
    <Converters>
      <Converter name="Aras CAD to PDF Converter" type="Aras.ConversionFramework.Converter.Hoops.HoopsCon
    </Converters>
  </ConversionServer>
  <ConverterSettings>
    <!-- Place here configuration sections for converters -->
    <ArasCadConverter>
      <Application converterPath="{Path.To.Hoops.Converter.Dir}\bin\hoops_converter.exe"/>
      <Command arguments="--input_pdf_template_file '{Path.To.Hoops.Converter.Dir}\templates\Blank_Templ
    </ArasCadConverter>
  </ConverterSettings> </configuration>
```

The project team must provide information in the transformation file to activate conversion according to the project's requirements and entitlements.

Below is an illustration of the desired state.



```

<?xml version="1.0"?>
<configuration xmlns:xdt="http://schemas.microsoft.com/XML/Document-Transform">
  <!-- Section -->
  <configuration xdt:Transform="Replace" xdt:Locator="XPath(/configuration/convertions)>
    <!-- Common converter service configuration -->
    <section name="ConversionServer" type="Aras.ConversionFramework.ConversionServer.Configuration.ConversionServerConfiguration, Conversion.Base" />
    <sectionGroup name="ConverterSettings">
      <section name="ArasCadConverter" type="Aras.ConversionFramework.Converter.Hooks.Configuration.HooksConverterConfiguration, ArasCadConverter" />
      <section name="ArasCadConverterTerms" type="Aras.ConversionFramework.Converter.Hooks.Configuration.HooksConverterConfiguration, ArasCadConverter" />
      <section name="PdfPublishingConverter" type="Aras.Publishing.Configuration.PdfConverterConfig, Aras.Pdf.PublishingConverter" />
    </sectionGroup>
  </configuration>
  <conversionServer xdt:Transform="Replace" xdt:Locator="XPath(/configuration/conversionServer)>
    <InnovatorServer url="{ADT_INNOVATOR_URL}/Server/InnovatorServer.aspx" xdt:Transform="Replace" />
    <Converters>
      <converter name="ArasCadConverter" type="Aras.ConversionFramework.Converter.Hooks.HooksConverter, ArasCadConverter" />
      <converter name="ArasCAD to PDF Converter" type="Aras.ConversionFramework.Converter.Hooks.HooksConverter, ArasCadConverter" />
      <converter name="Aras PRC to SCS Converter" type="Aras.ConversionFramework.Converter.Hooks.HooksConverter, ArasCadConverter" />
      <converter name="Aras Publishing Converter" type="Aras.Publishing.HooksConverter, Aras.Pdf.PublishingConverter" />
      <converter name="Aras Publishing Converter" type="Aras.Publishing.HooksConverter, Aras.Pdf.PublishingConverter" />
      <converter name="PDF Automarking" type="Aras.Pdf.Automarking.PdfAutomarkConverter, Aras.Pdf.Automarking" />
    </Converters>
  </conversionServer>
  <ConverterSettings xdt:Transform="Replace" xdt:Locator="XPath(/configuration/ConverterSettings)>
    <!-- Place here configuration sections for converters -->
    <ArasCadConverter>
      <Application converterPath="{V0005 Converter}/bin/converter.exe" />
      <Command arguments="--sc_compute_bounding_boxes 'All' --input_pdf_template_file '{V0005 Converter}/templates/blank_template_1.pdf' --output_pdf '{filepath}/filename5.pdf'" />
      <Output>
        <uploadDefault>
          <file extension="prc" argsharkers="--output_prc" />
          <file extension="scs" argsharkers="--output_scs" />
          <file extension="pdf" argsharkers="--output_pdf" />
          <file extension="png" argsharkers="--output_png" />
          <file extension="stl" argsharkers="--output_stl" />
          <file extension="xml" argsharkers="--output_xml_assemblytree" />
        </uploadDefault>
      </Output>
      <assemblyCommand dynamicEnabled="True" arguments="--sc_compute_bounding_boxes 'All' --input_pdf_template_file '{V0005 Converter}/templates/blank_template_1.pdf' --output_p" />
    </ArasCadConverter>
    <ArasCadConverterPrc>
      <Application converterPath="{V0005 Converter}/bin/converter.exe" />
      <Command arguments="--output_scs '{filepath}/filename5.scs' --output_xml_assemblytree '{filepath}/filename5.xml' --output_logfile '{filepath}/filename5.log'" />
      <Output>
        <uploadDefault>
          <file extension="prc" argsharkers="--output_prc" />
          <file extension="scs" argsharkers="--output_scs" />
          <file extension="pdf" argsharkers="--output_pdf" />
          <file extension="png" argsharkers="--output_png" />
          <file extension="stl" argsharkers="--output_stl" />
          <file extension="xml" argsharkers="--output_xml_assemblytree" />
        </uploadDefault>
      </Output>
    </ArasCadConverterPrc>
    <PdfPublishingConverter>
      <conversionTool path="{ADT_CONVERSION_INFRASTRUCTURE}/prince/bin/prince.exe" />
    </PdfPublishingConverter>
  </ConverterSettings>
</configuration>

```

For more specific information about a specific converter, refer to the relevant product documentation. This documentation will provide the essential specifications that need to be added.

The steps outlined below demonstrate how to convert the above template into the desired format.

1. Add the namespace specification to the document's top-level element.
2. Use the Match (name) selector and InsertIfMissing transformation for each section element in the section group.

Observe that a Build System parameter is utilized in the ConversionServer element. The Build System generates a comprehensive list of these parameters. Ensure to review this list and use the parameters associated with the current versions.

```

<ConversionServer xdt:Transform="Replace" xdt:Locator="XPath(/configuration/ConversionServer)">
  <InnovatorServer url="{ADT_INNOVATOR_URL}/Server/InnovatorServer.aspx" xdt:Transform="Replace" />

```

### Element InnovatorServer:



"\${ADT\_INNOVATOR\_URL}/Server/InnovatorServer.aspx" consider using the simpler \${ADT\_DATABASE\_INNOVATORSER

## Important

It is important to utilize these parameters, as the location of various servers in the cloud cannot be hardcoded or predetermined.

3. For Section Group, add missing Converter elements to the Converters element.

```
<Converters>
  <Converter name="cmf_ExcelPublishingConverter" type="Aras.Cmf.Publishing.Excel.ExcelExportConverter, Aras.Cmf.Publishing" />
  <Converter name="cmf_XpsPrintingConverter" type="Aras.Cmf.Publishing.Xps.XpsPrintingConverter, Aras.Cmf.Publishing" />
  <Converter name="Aras CAD to PDF Converter" type="Aras.ConversionFramework.Converter.Hoops.HoopsConverter, ArasCadConverter" />
  <Converter name="Aras PRC to SCS Converter" type="Aras.ConversionFramework.Converter.Hoops.HoopsConverterPrc, ArasCadConverter" />
  <Converter name="tp_XmlPublishingConverter" type="Aras.Publishing.XmlPublishingConverter, Aras.TDF.PublishingConverter" />
  <Converter name="tp_PdfPublishingConverter" type="Aras.Publishing.PdfPublishingConverter, Aras.TDF.PublishingConverter" />
  <Converter name="tp_HtmlPublishingConverter" type="Aras.Publishing.HtmlPublishingConverter, Aras.TDF.PublishingConverter" />
  <Converter name="PDF.Watermarking" type="Aras.PDF.Watermarking.PdfWatermarkConverter, Aras.PDF.Watermarking" />
</Converters>
```

4. Add converters if missing for the ConverterSettings element. Notice that these elements have child elements.

```
<ConverterSettings adt:transform="replace" adt:locator="XPath(/configuration/ConverterSettings)">
  <!-- Place here configuration sections for converters -->
  <ArasCadConverter>
    <Application converterPath=".\\tools\\converter\\bin\\converter.exe" />
    <Command arguments="--sc_compute_bounding_boxes 'All' --input_pdf_template_file '.\\tools\\converter\\templates\\blank_template_1.pdf' --output_pdf 'filePath\\filePath\\filename6.pdf'" />
    <Output>
      <uploadToVault>
        <file extension="prc" arguMarkers="--output_prc" />
        <file extension="scs" arguMarkers="--output_scs" />
        <file extension="pdf" arguMarkers="--output_pdf" />
        <file extension="pag" arguMarkers="--output_pag" />
        <file extension="sti" arguMarkers="--output_sti" />
        <file extension="xml" arguMarkers="--output_xml_assemblytree" />
      </uploadToVault>
    </Output>
    <AssemblyCommand dynamicEnabled="true" arguments="--sc_compute_bounding_boxes 'All' --input_pdf_template_file '.\\tools\\converter\\templates\\blank_template_1.pdf' --output_s" />
  </ArasCadConverter>
  <ArasCadConverterPrc>
    <Application converterPath=".\\tools\\converter\\bin\\converter.exe" />
    <Command arguments="--output_scs 'filePath\\filePath\\filename6.scs' --output_xml_assemblytree 'filePath\\filePath\\filename6.xml' --output_logfile 'filePath\\filePath\\filename6.log'" />
    <Output>
      <uploadToVault>
        <file extension="prc" arguMarkers="--output_prc" />
        <file extension="scs" arguMarkers="--output_scs" />
        <file extension="pdf" arguMarkers="--output_pdf" />
        <file extension="pag" arguMarkers="--output_pag" />
        <file extension="sti" arguMarkers="--output_sti" />
        <file extension="xml" arguMarkers="--output_xml_assemblytree" />
      </uploadToVault>
    </Output>
  </ArasCadConverterPrc>
  <PDFPublishingConverter>
    <conversional path="%{ADT_CONVERTER_SETTINGS_PATH}\\tools\\bin\\prince.exe" />
  </PDFPublishingConverter>
</ConverterSettings>
```

