

XSLT for Publishing

6.7.xml: A Brief Procedure Document

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="ex_6.7.xslt"?>
<procedure>
  <title>CNC Router Lubrication</title>
  <author>Don Wallace</author>
  <department>Research & Development</department>
  <revisionDate>2006-04-01</revisionDate>
  <abstract>
    <paragraph>
      The <equipment>Larken&#174; 2424 CNC Router</equipment>
      is a high-speed computer-controlled
      woodworking tool. It was purchased new in 2004 and was fully
      lubricated when purchased. The need for further lubrication
      depends on the number of hours of use as well as the elapsed
      calendar time. With heavy usage, the machine should be
      lubricated every 9 months (lubrication interval should always
      be &lt; 18 months).
    </paragraph>
    <paragraph>
      Each of the three screw drives should be lubricated with a dry
```

6.7.xml: A Brief Procedure Document (cont.)

```
<supply>Teflon spray</supply>. Do not use any wet lubricants,
  as they will
  attract dust and cause fouling. Before applying the lubricant,
  remove dust from screw mechanisms using compressed air
  and a clean brush.
```

```
</paragraph>
```

```
</abstract>
```

```
<details>
```

```
<frequency>Every 9 to 18 months</frequency>
```

```
<duration>1 hour</duration>
```

```
<steps>
```

```
<step name="Determine Need for Lubrication">
```

```
<paragraph>Follow the schedule defined elsewhere in
  this procedure. If the machine should start to make a
  persistent squeaking or howling noise, lubricate the screw
  mechanism causing the noise immediately.</paragraph>
```

```
</step>
```

```
<step name="Procure Supplies">
```

```
<paragraph>Use only dry <supply>Teflon spray</supply>.
```

```
</paragraph>
```

6.7.xml: A Brief Procedure Document (last)

```
</step>
<step name="Clean Machine First">
  <paragraph>Using the shop vac or a fine brush, remove any
  dust or chips from all parts of the router. Pay particular
  attention to removing dust from each screw
  mechanism.</paragraph>
  <paragraph>Take special care not to damage the threads of
  a screw mechanism while cleaning. <warning>Do not use
  any liquid or spray cleaners.</warning>
  </paragraph>
</step>
<step name="Apply Lubricant">
  <paragraph>Spray each screw mechanism lightly with the
  lubricant. Clean any overspray off of visible machine parts
  using a soft damp cloth.</paragraph>
</step>
</steps>
</details>
</procedure>
```

6.7.xslt: Relying On Default Behavior

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  exclude-result-prefixes="xs" version="2.0">

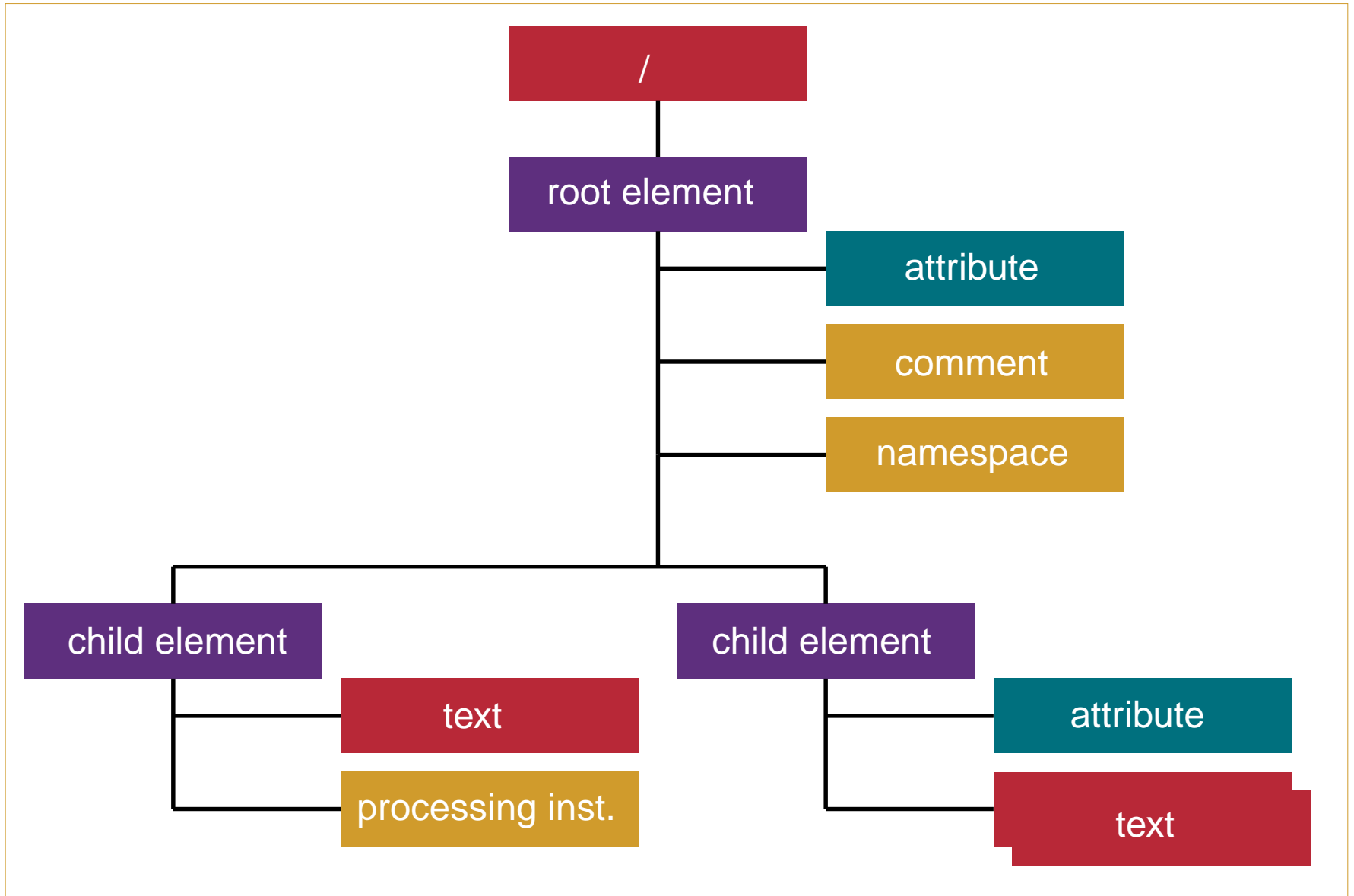
  <xsl:output method="html" encoding="UTF-8"
    omit-xml-declaration="yes" indent="yes" version="5.0"/>

  <xsl:template match="/">
    <html>
      <head>
        <title>Procedure</title>
      </head>
      <body>
        <xsl:apply-templates/>
      </body>
    </html>
  </xsl:template>

</xsl:stylesheet>
```

CNC Router Lubrication Don Wallace Research & Development 2006-04-01 The Larken® 2424 CNC Router is a high-speed computer-controlled woodworking tool. It was purchased new in 2004 and was fully lubricated when purchased. The need for further lubrication depends on the number of hours of use as well as the elapsed calendar time. With heavy usage, the machine should be lubricated every 9 months (lubrication interval should always be < 18 months). Each of the three screw drives should be lubricated with a dry Teflon spray. Do not use any wet lubricants, as they will attract dust and cause fouling. Before applying the lubricant, remove dust from screw mechanisms using compressed air and a clean brush. Every 9 to 18 months 1 hour Follow the schedule defined elsewhere in this procedure. If the machine should start to make a persistent squeaking or howling noise, lubricate the screw mechanism causing the noise immediately. Use only dry Teflon spray. Using the shop vac or a fine brush, remove any dust or chips from all parts of the router. Pay particular attention to removing dust from each screw mechanism. Take special care not to damage the threads of a screw mechanism while cleaning. Do not use any liquid or spray cleaners. Spray each screw mechanism lightly with the lubricant. Clean any overspray off of visible machine parts using a soft damp cloth.

The XSLT Tree Model



About Example 6.7

- Note that the XML document for this example uses an `xml-stylesheet` **processing instruction** that binds the document to its XSLT stylesheet.
- In the Oxygen XML editor, this allows the XML document and the XSLT stylesheet to be paired without having to create an explicit transformation scenario.
- Running transformations without an explicit transformation scenario can prevent some XSLT 2.0 features from working properly.
- Pairing XML documents with XSLT stylesheets in this manner reduces **mix-and-match** flexibility.

About Example 6.7 (cont.)

- This example primarily follows the **rule-based** design pattern for stylesheets.
- In this design pattern, there is a template rule for all or nearly all element types that exist in the input document.
- Actually, this stylesheet is a hybrid of the fill-in-the-blanks design pattern and the rule-based design pattern.
- When following a rule-based design pattern, a stylesheet places content into the output document in the exact same order as it appeared in the input document.

About Example 6.7 (cont.)

- The XSLT processor traverses the tree of the input document using its default navigation behavior.
- As it encounters each element, it fires off the best matched template rule for that element.
- Each template rule that matches an element interrupts the flow of navigation to that element's children.
- To resume navigation to the element's children, the `xsl:apply-templates` element is used.
- This example has a rule that matches the tree root.

About Example 6.7 (last)

- It inserts the template text for the Web page into the output tree and resumes navigation to the children of the tree root.
- During the transformation, text content of all of the elements in the input document is inserted into the output document. All of this text content is inserted into the **body** element of the output HTML page.

6.8.xml: Without Processing Instruction

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<procedure>
```

```
  <title>CNC Router Lubrication</title>
```

```
  <author>Don Wallace</author>
```

```
  <department>Research & Development</department>
```

```
  <revisionDate>2006-04-01</revisionDate>
```

```
  <abstract>
```

```
    <paragraph>
```

```
      The <equipment>Larken&#174; 2424 CNC Router</equipment>
      is a high-speed computer-controlled
      woodworking tool. It was purchased new in 2004 and was fully
      lubricated when purchased. The need for further lubrication
      depends on the number of hours of use as well as the elapsed
      calendar time. With heavy usage, the machine should be
      lubricated every 9 months (lubrication interval should always
      be &lt; 18 months).
```

```
    </paragraph>
```

```
    <paragraph>
```

```
      Each of the three screw drives should be lubricated with a dry
      <supply>Teflon spray</supply>. Do not use any wet lubricants,
```

6.8.xml: Without Processing Instruction (cont.)

as they will attract dust and cause fouling. Before applying the lubricant, remove dust from screw mechanisms using compressed air and a clean brush.

```
</paragraph>
```

```
</abstract>
```

```
<details>
```

```
<frequency>Every 9 to 18 months</frequency>
```

```
<duration>1 hour</duration>
```

```
<steps>
```

```
<step name="Determine Need for Lubrication">
```

```
<paragraph>Follow the schedule defined elsewhere in this procedure. If the machine should start to make a persistent squeaking or howling noise, lubricate the screw mechanism causing the noise immediately.</paragraph>
```

```
</step>
```

```
<step name="Procure Supplies">
```

```
<paragraph>Use only dry <supply>Teflon spray</supply>.
```

```
</paragraph>
```

```
</step>
```

6.8.xml: Without Processing Instruction (last)

```
<step name="Clean Machine First">
  <paragraph>Using the shop vac or a fine brush, remove any
  dust or chips from all parts of the router. Pay particular
  attention to removing dust from each screw
  mechanism.</paragraph>
  <paragraph>Take special care not to damage the threads of
  a screw mechism while cleaning. <warning>Do not use
  any liquid or spray cleaners.</warning>
  </paragraph>
</step>
<step name="Apply Lubricant">
  <paragraph>Spray each screw mechanism lightly with the
  lubricant. Clean any overspray off of visible machine parts
  using a soft damp cloth.</paragraph>
</step>
</steps>
</details>
</procedure>
```

6.8.xslt: The First Batch of Template Rules

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  exclude-result-prefixes="xs"
  version="2.0">

  <xsl:output method="html"
    encoding="UTF-8"
    omit-xml-declaration="yes"
    indent="yes"
    version="5.0"
  />

  <xsl:template match="/">
    <html>
      <head>
        <title>Procedure</title>
      </head>
      <body>
        <xsl:apply-templates/>
      </body>
    </html>
  </template>
</stylesheet>
```

6.8.xslt: The First Batch of Template Rules (cont.)

```
</body>
</html>
</xsl:template>

<xsl:template match="procedure">
  <h2>Procedure</h2>
  <xsl:apply-templates/>
</xsl:template>

<xsl:template match="title">
  <h3><xsl:value-of select="."/></h3>
</xsl:template>

<xsl:template match="author">
  by <xsl:value-of select="."/>
  <xsl:text>, </xsl:text>
</xsl:template>

<xsl:template match="department">
  <xsl:value-of select="."/>
```


6.8.xslt: The First Batch of Template Rules (last)

```
<xsl:text> </xsl:text>
</xsl:template>

<xsl:template match="revisionDate">
  (last revised on <xsl:value-of select="."/>)<br/><br/>
</xsl:template>

</xsl:stylesheet>
```

Procedure

CNC Router Lubrication

by Don Wallace, Research & Development (last revised on 2006-04-01)

The Larken® 2424 CNC Router is a high-speed computer-controlled woodworking tool. It was purchased new in 2004 and was fully lubricated when purchased. The need for further lubrication depends on the number of hours of use as well as the elapsed calendar time. With heavy usage, the machine should be lubricated every 9 months (lubrication interval should always be < 18 months). Each of the three screw drives should be lubricated with a dry Teflon spray. Do not use any wet lubricants, as they will attract dust and cause fouling. Before applying the lubricant, remove dust from screw mechanisms using compressed air and a clean brush. Every 9 to 18 months 1 hour Follow the schedule defined elsewhere in this procedure. If the machine should start to make a persistent squeaking or howling noise, lubricate the screw mechanism causing the noise immediately. Use only dry Teflon spray. Using the shop vac or a fine brush, remove any dust or chips from all parts of the router. Pay particular attention to removing dust from each screw mechanism. Take special care not to damage the threads of a screw mechanism while cleaning. Do not use any liquid or spray cleaners. Spray each screw mechanism lightly with the lubricant. Clean any overspray off of visible machine parts using a soft damp cloth.

About Example 6.8

- The processing instruction has been removed from the XML document.
- In Oxygen XML Editor, transformation now requires an explicit transformation scenario.
- In each template rule, the code places the content for the element into the output tree, having first surrounded it with appropriate HTML markup.
- Note that not all of the required template rules have been added to the stylesheet yet. This is why there still is a big block of unstyled content remaining at the bottom of the browser page.

About Example 6.8 (last)

- If the element has no children, no further action is required within the template rule.
- If the element has children, the template rule must issue an `xsl:apply-templates` in order to resume navigation for the children.
- Since the template rules only fire off when an element matches them, there is no need to make use of `xsl:if` to prevent too much output when processing optional elements.

6.9.xslt: Making <paragraph> Work

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  exclude-result-prefixes="xs"
  version="2.0">

  <xsl:output method="html"
    encoding="UTF-8"
    omit-xml-declaration="yes"
    indent="yes"
    version="5.0"
  />

  <xsl:template match="/">
    <html>
      <head>
        <title>Procedure</title>
      </head>
      <body>
        <xsl:apply-templates/>
      </body>
    </html>
  </template>
</stylesheet>
```

6.9.xslt: Making <paragraph> Work (cont.)

```
</body>
</html>
</xsl:template>

<xsl:template match="procedure">
  <h2>Procedure</h2>
  <xsl:apply-templates/>
</xsl:template>

<xsl:template match="title">
  <h3><xsl:value-of select="."/></h3>
</xsl:template>

<xsl:template match="author">
  by <xsl:value-of select="."/>
  <xsl:text>, </xsl:text>
</xsl:template>

<xsl:template match="department">
  <xsl:value-of select="."/>
```

6.9.xslt: Making <paragraph> Work (cont.)

```
<xsl:text> </xsl:text>
</xsl:template>
```

```
<xsl:template match="revisionDate">
  (last revised on <xsl:value-of select="."/>)<br/><br/>
</xsl:template>
```

```
<xsl:template match="abstract">
  <h3>Abstract</h3>
  <xsl:apply-templates/>
</xsl:template>
```

```
<xsl:template match="paragraph">
  <p>
    <xsl:apply-templates/>
  </p>
</xsl:template>
```

```
<xsl:template match="equipment">
  <span style="color: blue; font-weight: bold;">
```

6.9.xslt: Making <paragraph> Work (last)

```
    <xsl:value-of select="."/>
  </span>
</xsl:template>
```

```
<xsl:template match="supply">
  <span style="color: green; font-weight: bold;">
    <xsl:value-of select="."/>
  </span>
</xsl:template>
```

```
<xsl:template match="warning">
  <span style="color: red; font-weight: bold;">
    <xsl:value-of select="."/>
  </span>
</xsl:template>
```

```
</xsl:stylesheet>
```


Procedure

CNC Router Lubrication

by Don Wallace, Research & Development (last revised on 2006-04-01)

Abstract

The **Larken® 2424 CNC Router** is a high-speed computer-controlled woodworking tool. It was purchased new in 2004 and was fully lubricated when purchased. The need for further lubrication depends on the number of hours of use as well as the elapsed calendar time. With heavy usage, the machine should be lubricated every 9 months (lubrication interval should always be < 18 months).

Each of the three screw drives should be lubricated with a dry **Teflon spray**. Do not use any wet lubricants, as they will attract dust and cause fouling. Before applying the lubricant, remove dust from screw mechanisms using compressed air and a clean brush.

Every 9 to 18 months 1 hour

Follow the schedule defined elsewhere in this procedure. If the machine should start to make a persistent squeaking or howling noise, lubricate the screw mechanism causing the noise immediately.

Use only dry **Teflon spray**.

Using the shop vac or a fine brush, remove any dust or chips from all parts of the router. Pay particular attention to removing dust from each screw mechanism.

Take special care not to damage the threads of a screw mechanism while cleaning. **Do not use any liquid or spray cleaners.**

About Example 6.9

- The mixed content in the `paragraph` element requires special treatment.
- The template rule for a mixed content element forces its own text into the output tree and resumes default navigation to its children by using the `xsl:apply-templates` element.
- Use of `xsl:apply-templates` rather than `xsl:value-of` in this context allows sub-elements within the mixed content to be processed by their own template rules.
- Note the styling that is done with the `span` tags.

6.10.xslt: Finishing Touches

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  exclude-result-prefixes="xs" version="2.0">

  <xsl:output method="html" encoding="UTF-8"
    omit-xml-declaration="yes" indent="yes" version="5.0"/>

  <xsl:template match="/">
    <html>
      <head>
        <title>Procedure</title>
      </head>
      <body>
        <xsl:apply-templates/>
      </body>
    </html>
  </xsl:template>

  <xsl:template match="procedure">
```

6.10.xslt: Finishing Touches (cont.)

```
<h2>Procedure</h2>
  <xsl:apply-templates/>
</xsl:template>
```

```
<xsl:template match="title">
  <h3>
    <xsl:value-of select="."/>
  </h3>
</xsl:template>
```

```
<xsl:template match="author"> by <xsl:value-of select="."/>
  <xsl:text>, </xsl:text>
</xsl:template>
```

```
<xsl:template match="department">
  <xsl:value-of select="."/>
  <xsl:text> </xsl:text>
</xsl:template>
```

```
<xsl:template match="revisionDate"> (last revised on <xsl:value-of
```

6.10.xslt: Finishing Touches (cont.)

```
    select="."/>)<br/><br/>
</xsl:template>
```

```
<xsl:template match="abstract">
  <h3>Abstract</h3>
  <xsl:apply-templates/>
</xsl:template>
```

```
<xsl:template match="paragraph">
  <p>
    <xsl:apply-templates/>
  </p>
</xsl:template>
```

```
<xsl:template match="equipment">
  <span style="color: blue; font-weight: bold;">
    <xsl:value-of select="."/>
  </span>
</xsl:template>
```

6.10.xslt: Finishing Touches (cont.)

```
<xsl:template match="supply">
  <span style="color: green; font-weight: bold;">
    <xsl:value-of select="."/>
  </span>
</xsl:template>
```

```
<xsl:template match="warning">
  <span style="color: red; font-weight: bold;">
    <xsl:value-of select="."/>
  </span>
</xsl:template>
```

```
<xsl:template match="details">
  <h3>Details</h3>
  <xsl:apply-templates/>
</xsl:template>
```

```
<xsl:template match="frequency">
  <p>Frequency: <xsl:value-of select="."/></p>
</xsl:template>
```

6.10.xslt: Finishing Touches (last)

```
<xsl:template match="duration">  
  <p>Duration: <xsl:value-of select="."/></p>  
</xsl:template>
```

```
<xsl:template match="step">  
  <h4>Step <xsl:number/>: <xsl:value-of select="@name"/></h4>  
  <xsl:apply-templates/>  
</xsl:template>
```

```
</xsl:stylesheet>
```

Each of the three screw drives should be lubricated with a dry **Teflon spray**. Do not use any wet lubricants, as they will attract dust and cause fouling. Before applying the lubricant, remove dust from screw mechanisms using compressed air and a clean brush.

Details

Frequency: Every 9 to 18 months

Duration: 1 hour

Step 1: Determine Need for Lubrication

Follow the schedule defined elsewhere in this procedure. If the machine should start to make a persistent squeaking or howling noise, lubricate the screw mechanism causing the noise immediately.

Step 2: Procure Supplies

Use only dry **Teflon spray**.

Step 3: Clean Machine First

Using the shop vac or a fine brush, remove any dust or chips from all parts of the router. Pay particular attention to removing dust from each screw mechanism.

Take special care not to damage the threads of a screw mechanism while cleaning. **Do not use any liquid or spray cleaners.**

Step 4: Apply Lubricant

Spray each screw mechanism lightly with the lubricant. Clean any overspray off of visible machine parts using a soft damp cloth.

About Example 6.10

- Note the use of `xsl:number` to generate the step number from the XSLT.
- This allows the author to insert new steps and have the numbers that come out of the transformation automatically adjusted.
- Note that the rule-based design pattern is particularly effective for publishing applications.
- It is especially effective is generating useful output from mixed content in the input document.

6.11.xml: Adding Namespace to XML Document

```
<?xml version="1.0" encoding="UTF-8"?>
<procedure xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation=
    "http://www.ligent.net/namespaces/examples/procedure_ex_6.11.xsd"
  xmlns="http://www.ligent.net/namespaces/examples/procedure">

  <title>CNC Router Lubrication</title>
  <author>Don Wallace</author>
  <department>Research & Development</department>
  <revisionDate>2006-04-01</revisionDate>
  <abstract>
    <paragraph>
      The <equipment>Larken&#174; 2424 CNC Router</equipment>
      is a high-speed computer-controlled
      woodworking tool. It was purchased new in 2004 and was fully
      lubricated when purchased. The need for further lubrication
      depends on the number of hours of use as well as the elapsed
      calendar time. With heavy usage, the machine should be
      lubricated every 9 months (lubrication interval should always
      be &lt; 18 months).
```

6.11.xml: Adding Namespace to XML Document (cont.)

```
</paragraph>
<paragraph>
  Each of the three screw drives should be lubricated with a dry
  <supply>Teflon spray</supply>. Do not use any wet lubricants,
  as they will
  attract dust and cause fouling. Before applying the lubricant,
  remove dust from screw mechanisms using compressed air
  and a clean brush.
</paragraph>
</abstract>
<details>
  <frequency>Every 9 to 18 months</frequency>
  <duration>1 hour</duration>
  <steps>
    <step name="Determine Need for Lubrication">
      <paragraph>Follow the schedule defined elsewhere in
      this procedure. If the machine should start to make a
      persistent squeaking or howling noise, lubricate the screw
      mechanism causing the noise immediately.</paragraph>
    </step>
```

6.11.xml: Adding Namespace to XML Document (cont.)

```
<step name="Procure Supplies">
  <paragraph>Use only dry <supply>Teflon spray</supply>.
  </paragraph>
</step>
<step name="Clean Machine First">
  <paragraph>Using the shop vac or a fine brush, remove any
  dust or chips from all parts of the router. Pay particular
  attention to removing dust from each screw
  mechanism.</paragraph>
  <paragraph>Take special care not to damage the threads of
  a screw mechism while cleaning. <warning>Do not use
  any liquid or spray cleaners.</warning>
  </paragraph>
</step>
<step name="Apply Lubricant">
  <paragraph>Spray each screw mechanism lightly with the
  lubricant. Clean any overspray off of visible machine parts
  using a soft damp cloth.</paragraph>
</step>
</steps>
```

6.11.xml: Adding Namespace to XML Document (last)

```
</details>  
</procedure>
```

6.11.xsd: Adding Namespace to XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://www.ligent.net/namespaces/examples/procedure"
  xmlns="http://www.ligent.net/namespaces/examples/procedure"
  elementFormDefault="qualified"
  >

<xs:element name="procedure">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="title" type="xs:string"/>
      <xs:element name="author" type="xs:string"/>
      <xs:element name="department" type="xs:string"/>
      <xs:element name="revisionDate" type="xs:date"/>
      <xs:element name="abstract">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="paragraph" type="ParagraphType"
              minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:schema>
```

6.11.xsd: Adding Namespace to XML Schema (cont.)

```
        </xs:complexType>
    </xs:element>
    <xs:element name="details" type="DetailsType"/>
</xs:sequence>
</xs:complexType>
</xs:element>

<xs:complexType name="ParagraphType" mixed="true">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="equipment" type="xs:string"/>
        <xs:element name="supply" type="xs:string"/>
        <xs:element name="warning" type="xs:string"/>
    </xs:choice>
</xs:complexType>

<xs:complexType name="DetailsType">
    <xs:sequence>
        <xs:element name="frequency" type="xs:string"/>
        <xs:element name="duration" type="xs:string"/>
        <xs:element name="steps">
```

6.11.xsd: Adding Namespace to XML Schema (last)

```
<xs:complexType>
  <xs:sequence>
    <xs:element name="step" type="StepType"
      minOccurs="1" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>

<xs:complexType name="StepType">
  <xs:sequence>
    <xs:element name="paragraph" type="ParagraphType"
      minOccurs="1" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attribute name="name" type="xs:string"/>
</xs:complexType>

</xs:schema>
```


6.11.xslt: Adjusting XSLT For Namespace

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  exclude-result-prefixes="xs"
  version="2.0"
  xpath-default-namespace=
  "http://www.ligent.net/namespaces/examples/procedure">

  <xsl:output method="html"
    encoding="UTF-8"
    omit-xml-declaration="yes"
    indent="yes"
    version="5.0"
  />

  <xsl:template match="/">
    <html>
      <head>
        <title><xsl:value-of select="/pressRelease/metadata/title"/></title>
        <link rel="stylesheet" type="text/css" href="press_release_style.cs
```

6.11.xslt: Adjusting XSLT For Namespace (cont.)

```
</head>
<body>
  <xsl:apply-templates/>
</body>
</html>
</xsl:template>

<xsl:template match="procedure">
  <h2>Procedure</h2>
  <xsl:apply-templates/>
</xsl:template>

<xsl:template match="title">
  <h3><xsl:value-of select="."/></h3>
</xsl:template>

<xsl:template match="author">
  by <xsl:value-of select="."/>
  <xsl:text>, </xsl:text>
</xsl:template>
```

6.11.xslt: Adjusting XSLT For Namespace (cont.)

```
<xsl:template match="department">
  <xsl:value-of select="."/>
  <xsl:text> </xsl:text>
</xsl:template>
```

```
<xsl:template match="revisionDate">
  (last revised on <xsl:value-of select="."/>)<br/><br/>
</xsl:template>
```

```
<xsl:template match="abstract">
  <h3>Abstract</h3>
  <xsl:apply-templates/>
</xsl:template>
```

```
<xsl:template match="paragraph">
  <p>
    <xsl:apply-templates/>
  </p>
</xsl:template>
```

6.11.xslt: Adjusting XSLT For Namespace (cont.)

```
<xsl:template match="equipment">  
  <span style="color: blue; font-weight: bold;">  
    <xsl:value-of select="."/>  
  </span>  
</xsl:template>
```

```
<xsl:template match="supply">  
  <span style="color: green; font-weight: bold;">  
    <xsl:value-of select="."/>  
  </span>  
</xsl:template>
```

```
<xsl:template match="warning">  
  <span style="color: red; font-weight: bold;">  
    <xsl:value-of select="."/>  
  </span>  
</xsl:template>
```

```
<xsl:template match="details">
```

6.11.xslt: Adjusting XSLT For Namespace (last)

```
<h3>Details</h3>
  <xsl:apply-templates/>
</xsl:template>

<xsl:template match="frequency">
  <p>Frequency: <xsl:value-of select="."/></p>
</xsl:template>

<xsl:template match="duration">
  <p>Duration: <xsl:value-of select="."/></p>
</xsl:template>

<xsl:template match="step">
  <h4>Step <xsl:number/>: <xsl:value-of select="@name"/></h4>
  <xsl:apply-templates/>
</xsl:template>

</xsl:stylesheet>
```

Each of the three screw drives should be lubricated with a dry **Teflon spray**. Do not use any wet lubricants, as they will attract dust and cause fouling. Before applying the lubricant, remove dust from screw mechanisms using compressed air and a clean brush.

Details

Frequency: Every 9 to 18 months

Duration: 1 hour

Step 1: Determine Need for Lubrication

Follow the schedule defined elsewhere in this procedure. If the machine should start to make a persistent squeaking or howling noise, lubricate the screw mechanism causing the noise immediately.

Step 2: Procure Supplies

Use only dry **Teflon spray**.

Step 3: Clean Machine First

Using the shop vac or a fine brush, remove any dust or chips from all parts of the router. Pay particular attention to removing dust from each screw mechanism.

Take special care not to damage the threads of a screw mechanism while cleaning. **Do not use any liquid or spray cleaners.**

Step 4: Apply Lubricant

Spray each screw mechanism lightly with the lubricant. Clean any overspray off of visible machine parts using a soft damp cloth.

About Example 6.11

- XML content documents that are constrained by an XML schema with a **target-namespace** must include the `xsi:schemaLocation` and the `xmlns` attributes on the root element.
- XML schemas that specify a target-namespace must include the `targetNamespace` attribute, the `xmlns` attribute, and the `elementFormDefault` attribute on the root element.
- XSLT stylesheets that are used to transform XML content documents based upon a target-namespace must include the `xpath-default-namespace` attribute on the root element.