

Another advantage with the XML-based architecture is easier maintenance of consistency throughout the site. Repeated HTML elements such as the top banner, left navigation, and footer can be stored in separate stylesheets and imported into other stylesheets for presentation throughout the Web site. Changes to the banner or footer are made in only one file and propagated throughout all pages on the site. Figure 9 contains an XSL file for the top banner of the **Gateways Guide** pages.

**Figure 9. Sample XSL File for Importing (all code simplified for example)** `<?xml version="1.0"?>  
<xsl:stylesheet version="1.0" xmlns:xsl=""="http://www.w3.org/1999/XSL/Transform"> <xsl:template  
match="banner"> <!-- HTML code for the CTG banner --> <!-- Begin Banner Section --> <div align="left"> <table  
border="0" cellpadding="0" cellspacing="0" width="705"> <tr> <td align="left" valign="top" width="57"  
height="75"> <a href="http://www.ctg.albany.edu/"> </img> </a> </td> <td  
align="left" valign="middle" width="658" class="name" > Center for Technology in Government<br/> <span  
class="univ">University at Albany, State University of New York</span> </td> </tr> </table> </div> <!-- End  
Banner Section --> <!-- Begin Menu Bar Section --> <table border="0" cellpadding="0" cellspacing="0"  
width="705"> <tr> <td width="705" height="20" colspan="2" align="center" valign="top" bgcolor="#2f538a"> <a  
href="http://www.ctg.albany.edu/whatsnew/whatsmn.html"> What's New</a> <a  
href="http://www.ctg.albany.edu/aboutctg/aboutmn.html"> About</a> <a  
href="http://www.ctg.albany.edu/projects/projmain.html"> Projects</a> <a  
href="http://www.ctg.albany.edu/research/researchm.html"> Research</a> <a  
href="http://www.ctg.albany.edu/resources/rptwplst.html"> Reports</a> <a  
href="http://www.ctg.albany.edu/resources/tool.html"> CTG Toolbox</a> <a  
href="http://www.ctg.albany.edu/partners/partnrmn.html"> Partners</a> <a  
href="http://www.ctg.albany.edu/education/edumn.html"> Education</a> <a  
href="http://www.ctg.albany.edu/resources/resorcmn.html"> Resources</a> </td> </tr> </table> </xsl:template>  
</xsl:stylesheet>` Importing the file into another stylesheet is also quite simple, as illustrated in Figure 10. You use an XSL import tag to specify the file to import (such as "`<xsl:import href="banner.xsl"/>`"). Then, you use an apply-imports tag (such as the "`<xsl:apply-imports select="banner"/>`") where you want the imported file to appear. Now your banner exists in a single file used by the entire site. If you change your banner then you only change that one file, and all pages display the same banner. That helps us to maintain consistency throughout our site.

**Figure 10. Importing Another XSL File (all code simplified for example)**

```
<!-- import external xsl files for banner --> <xsl:import href="banner.xsl"/> <!-- Start the HTML Layout here -->  
<xsl:template match="book"> <html> <head> <title> <xsl:value-of select="@bookname"/>: <xsl:value-of  
select="chaptitle"/> </title> <link rel="stylesheet" type="text/css" href="YOUR_CSS.css" title="Style"/> </head>  
<body> <table width="705" cellspacing="0" cellpadding="0"> <!-- Start the the Top section here --> <tr  
width="705"> <td width="705"> <!--PULL IN THE IMPORTED BANNER STYLESHEET HERE-->  
<xsl:apply-imports select="banner"/> </td> </tr> <!-- End the the Top section here --> </table> </body> </html>  
<!-- Use the imported Banner stylesheet for styling--> <xsl:template match="banner"> <xsl:apply-imports/>  
</xsl:template> </xsl:stylesheet>
```

The Web page produced for our sample **Gateways Guide** using the XML and XSL files described in the previous pages is shown in Figure 11.

**Figure 11. Web Page Produced Using XSL Import Files**