Subject: Re: Another XML Question Posted by JD Smith on Thu, 24 Mar 2005 17:21:16 GMT

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On Thu, 24 Mar 2005 09:19:39 -0700, Karl Schultz wrote:

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> On Wed, 23 Mar 2005 19:44:03 -0800, kuyper wrote:
>
>> Michael Wallace wrote:
>>> Oh, of course. Now what the hell is a DTD again?
>>>
>>> Document Type Definition.
>>> ...
>>> [Lots of good general-purpose information about DTDs]
>>
>> David's questions got me curious, so I spent a lot of time this
>> afternoon wading through the IDL documentation for it's XML objects. At
>> the end of that survey, I still couldn't figure out how to use a DTD in
>> connection with those objects. There's lots of things that say "if a
>> DTD is provided", but I couldn't find anything that indicated how to
>> provide a DTD. Could someone give some actual IDL code for this?
>
  It is actually rather automatic and you don't really need IDL code for it.
>
> DTD's are actually "provided" by the XML doc itself referencing a DTD. If
> it does so and the VALIDATION MODE keyword to IDLffXMLDOMDocument::Init or
> Load is set to 1, then the parser will validate the document using the
> DTD, if one is available.
>
> In the example below, note the DOCTYPE element. It refers to a file named
> slideshow.dtd that contains the DTD, also shown below. The DTD info can
> actually be in the XML file itself, within the DOCTYPE element, but it is
  common to put the DTD in a different file for easier reuse.
>
> When VALIDATION_MODE is 1, the parser will check the XML against the DTD
> and throw a parse error if the XML does not conform to the DTD. This is a
 HUGE deal when writing IDL code to parse the XML. If you know the XML doc
```

- > passed the validation step, you can make tons of safe assumptions in your
- > parser code and get to the job at hand. If you don't validate, your
- > parser needs to be robust enough to deal with what might be a totally
- > random XML file. Like, I could pass an XML file describing the channel
- > lineup for my PVR to David's app that is expecting some special type of
- > configuration data. It would be easier to let the parser throw a parse
- > error than to write IDL code to discover the mistake.

I can't help but wonder here how much more quickly David would have progressed if his input file had been a simple text file like:

## file config.txt

-----

CAMPAIGN ID: 0 SPAM\_WAIT: 60

**HEARTBEAT\_TIME: 60** 

\_\_\_\_\_

I bet he could have had that file parsing in 10 seconds or less. XML is nice. Overusing XML to be buzzword compliant, not so nice.

JD

```
> +++++
> Here is the example :
>
>
  <?xml version='1.0' encoding='us-ascii'?>
  <!-- A SAMPLE set of slides -->
  <!DOCTYPE slideshow SYSTEM "slideshow.dtd">
> <slideshow
    title="Sample Slide Show"
>
    date="Date of publication"
>
    author="Yours Truly"
>
>>
    <!-- PROCESSING INSTRUCTION -->
>
    <?my.presentation.Program QUERY="exec, tech, all"?>
>
    <!-- TITLE SLIDE -->
>
    <slide type="all">
>
      <title>Wake up to WonderWidgets!</title>
>
    </slide>
>
    <!-- OVERVIEW -->
>
    <slide type="all">
>
      <title>Overview</title>
>
      <item>Why WonderWidgets are great</item>
>
     <item/>
>
     <item>Who buys WonderWidgets</item>
>
    </slide>
>
    <slide type="exec">
```

```
<title>Financial Forecast</title>
>
     <item>Market Size &It; predicted!</item>
>
     <item>Anticipated Penetration</item>
>
     <item>Expected Revenues</item>
>
     <item>Profit Margin </item>
>
    </slide>
>
>
  </slideshow>
  The DTD (in file slideshow.dtd):
>
  <?xml version='1.0' encoding='us-ascii'?>
>
  <!--
>
    DTD for a simple "slide show".
>
>
> <!ELEMENT slideshow (slide+)>
> <!ATTLIST slideshow
         title
              CDATA
                       #REQUIRED
         date
                CDATA
                         #IMPLIED
>
         author CDATA
                         "unknown"
>>
> <!ELEMENT slide (image?, title, item*)>
  <!ATTLIST slide
         type (tech | exec | all) #IMPLIED
>
>>
> <!ELEMENT title (#PCDATA)>
> <!ELEMENT item (#PCDATA | item)* >
> <!ELEMENT image EMPTY>
> <!ATTLIST image
         alt CDATA
                      #IMPLIED
>
         src CDATA #REQUIRED
>
         type CDATA "image/gif"
>>
```