

Re: XPath Filter 2.0 Support? (XML Digital Signatures)

Source:

<http://www.derkeiler.com/Newsgroups/microsoft.public.dotnet.framework.aspnet.security/2007-09/msg00086.html>

- *From:* "clintonG" <nobody@xxxxxxxxxxxx>
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I'm in the same boat Tim trying to get working on a fillable forms project. I'm still in the "where's our proposal" stage and no previous experience in this niche trying to figure out what to do without any requirements to speak of. After three weeks in and I finally learn I'm expected to work with digitized signature capture using a SignatureGem LCD 1x5 signature pad integrated using Topaz [1] that is supposed to result in a digital signature when using Acrobat Reader as the fillable forms client.

I wish there were something I could add to bring insight to your dilemma but I'm still several steps behind and hope you let us know what if anything you've figured out.

<%= Clinton Gallagher

[1] <http://www.topazsystems.com/>

"Tim Davis" <tdavis34@xxxxxxxxxxxx> wrote in message [news:46faaa9d\\$0\\$11000\\$4c368faf@xxxxxxxxxxxxxxxxxxxx](news:46faaa9d$0$11000$4c368faf@xxxxxxxxxxxxxxxxxxxx)

Hello all,

I am working with Adobe LiveCycle Designer 8.1 to create forms that the user will sign with their X.509 Certificate and submit electronically to a generic .NET HTTP handler (ASHX). I have done some work in both creating and verifying digital signatures, but I have run into an issue that I'm hoping someone else has seen. Adobe's XML Digital Signatures seem to use the XML-Signature XPath Filter 2.0 (<http://www.w3.org/TR/2002/PR-xmldsig-filter2-20020827/Overview.html>), but there doesn't seem to be a corresponding .NET Framework class to support this transform, and the SignedXml.LoadXml() call fails when I try to specify an XML element containing a Transform with the Algorithm ID "<http://www.w3.org/2002/06/xmldsig-filter2>."

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Does anyone know where I can get a class that will support this transformation, such that I can check Adobe-generated XML Digital Signatures? It's also fine if someone knows a way to instruct Adobe not to use this Transform when creating the Signature. Least desirable but also a last-resort option is for someone to provide guidance on "rolling my own" such Transform.

TIA.

Tim

Here's what I'm getting:

```
<Signature xmlns="http://www.w3.org/2000/09/xmldsig#  
Id="datasignature_1">  
<SignedInfo>  
<CanonicalizationMethod  
Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#WithComments"/>  
<SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1"/>  
<Reference URI="#idb88862c-6627-11dc-8d00-000c6e541685"  
Type="http://www.w3.org/2000/09/xmldsig#SignatureProperties>  
<Transforms>  
<Transform  
Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#WithComments"/>  
</Transforms>  
<DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>  
<DigestValue>CP/cXdv2OcTnq7bKaWOgOSR9N8g=</DigestValue>  
</Reference>  
<Reference URI="">  
<Transforms>  
<Transform Algorithm="http://www.w3.org/2002/06/xmldsig-filter2>  
<XPath xmlns="http://www.w3.org/2002/06/xmldsig-filter2  
xmlns:dsig="http://www.w3.org/2000/09/xmldsig#  
Filter="intersect">here()/ancestor::dsig:Signature[1]/../form1[1]/|. |  
here()/ancestor::dsig:Signature[1]/../form1[1]/@* |  
here()/ancestor::dsig:Signature[1]/../form1[1]/namespace::*</XPath>  
</Transform>  
<Transform  
Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#WithComments"/>  
</Transforms>  
<DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>  
<DigestValue>IiJsLFvk2HvWO+roUQwC0P/ODw=</DigestValue>  
</Reference>  
</SignedInfo>  
<SignatureValue>
```

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