

## mono-nat - Bug # 696: Unhandled XmlException on invalid XML

<b>Status:</b>	New	<b>Priority:</b>	Normal
<b>Author:</b>	J W	<b>Category:</b>	
<b>Created:</b>	02/22/2012	<b>Assigned to:</b>	
<b>Updated:</b>	02/22/2012	<b>Due date:</b>	
<b>Subject:</b>	Unhandled XmlException on invalid XML		
<b>Description:</b>	<p>I've got this exception:</p> <pre>System.Xml.XmlException was unhandled   Message=An error occurred while parsing EntityName. Line 1, position 459.   Source=System.Xml   LineNumber=1   LinePosition=459   SourceUri=""   StackTrace:     at System.Xml.XmlTextReaderImpl.Throw(Exception e)     at System.Xml.XmlTextReaderImpl.Throw(String res, String arg)     at System.Xml.XmlTextReaderImpl.ParseEntityName()     at System.Xml.XmlTextReaderImpl.ParseEntityReference()     at System.Xml.XmlTextReaderImpl.Read()     at System.Xml.XmlLoader.LoadNode(Boolean skipOverWhitespace)     at System.Xml.XmlLoader.LoadDocSequence(XmlDocument parentDoc)     at System.Xml.XmlLoader.Load(XmlDocument doc, XmlReader reader, Boolean preserveWhitespace)     at System.Xml.XmlDocument.Load(XmlReader reader)     at System.Xml.XmlDocument.LoadXml(String xml)        at Mono.Nat.Upnp.MessageBase.Decode(UpnpNatDevice device, String message) in C:\Projects\mono-Mono.Nat-e03fd86\Mono.Nat\Upnp\Messages\UpnpMessage.cs:line 78</pre> <p>From this XML response:</p> <pre>&lt;s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"   s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"&gt;&lt;s:Body&gt;&lt;u:GetGenericPortMappingEntryResponse   xmlns:u="urn:schemas-upnp-org:service:WANIPConnection:1"&gt;&lt;NewRemoteHost&gt;&lt;/NewRemoteHost&gt;&lt;NewExternalPort&gt;2727&lt;/NewExternalPort&gt;&lt;NewProtocol&gt;UDP&lt;/NewProtocol&gt;&lt;NewInternalPort&gt;0&lt;/NewInternalPort&gt;&lt;NewInternalClient&gt;&lt;/NewInternalClient&gt;&lt;NewEnabled&gt;0&lt;/NewEnabled&gt;&lt;NewPortMappingDescription&gt;AT&amp;T   D-Link   DVG-1402M   ATA [MICROSOFT]&lt;/NewPortMappingDescription&gt;&lt;NewLeaseDuration&gt;0&lt;/NewLeaseDuration&gt;&lt;/u:GetGenericPortMappingEntryResponse&gt;&lt;/s:Body&gt;&lt;/s:Envelope&gt;</pre> <p>The issue definitely seems to be the unescaped '&amp;' in 'AT&amp;T' there. Not a big surprise that bad XML leads to an exception, but I'll see what I can do about fixing it anyway.</p>		

### History

02/22/2012 06:50 PM - J W

Was easy to fix. Added this method to Mono.Nat.Upnp.MessageBase:

```
private static string SanitizeXml( string message )
{
  // Invalid XML will stymie the XmlDocument.Load method, so we'll check for possible problems
  StringBuilder sanitized = new StringBuilder( message );
```

```
for(int i = 0; i < sanitized.Length; ++i)
{
    if (sanitized[i] == '&')
    {
        if (sanitized.ToString( i, 5 ) != "&")
        {
            sanitized.Replace( "&", "&amp;", i, 1 );
        }
    }
}

return sanitized.ToString();
}
```

All references to XmlDocument.LoadXml can be changed like this:

```
System.Xml.XmlDocument doc = new System.Xml.XmlDocument();
doc.LoadXml( SanitizeXml( message ) );
```

And thusly, problem solved.