

Update for Early Adopter HailStorm

*Version 1.1
1st November 2001*

Why do we need an update?

The .Net My Services project was still at a very early stage during the development of the book. We were therefore using an early alpha release of the SDK. An example of the confusion this can lead to is that the services are now known as .Net Alerts rather than myAlerts etc., but to access the services in the SDK you still call myAlerts.

We have retested the code in the book against the first public beta release that became available during Microsoft's Professional Developers Conference (PDC) 2001. A complete version of the updated code is now available for download from <http://www.wrox.com/>. However we'll go over some of the major changes in bit more detail.

Updates for Chapter 1

Passport 2 SDK is now available and can be downloaded from: <http://msdn.microsoft.com/downloads/>

Note the Passport 2 SDK requires Windows 2000 Server or Windows XP

The .Net Alerts service is now available but despite previous announcements, the MS Alerts SDK is not available yet. It currently seems that the SDK will be released some time after the PDC about the middle of November 2001. Microsoft is currently previewing this technology on several sites including ebay, CNBC and MSN. More information about the eBay .Net Alerts service can be found at: <http://cgi3.ebay.com/aw-cgi/eBayISAPI.dll?SignUpForAlerts>.

Updates for Chapter 2

Microsoft has now included a Visual Studio .Net plug-in for developing .Net My Services code. However as the plug-in only works with the RC 1 version of Visual Studio we have not been able to test it. Numerous examples developed using this plug-in are included with the SDK. Also the XMI manual which was included free with previous version of the software is no longer present. This has now been published in printed form; *Microsoft .NET My Services Specification*, Microsoft Press, ISBN: 073561556X.

Updates for Chapter 3

The Visual Basic Script at the end of the chapter does not work with the latest release of the SDK as Microsoft have subtly altered the way namespaces are handled, again. Here is a working version:

```
' AddNewURI.vbs Option Explicit

Dim Serializer
Dim Reader
Dim Connector

' Create the Connector object, set message properties, and
' start creating the message

Set Connector = CreateObject("MSSOAP.HttpConnector")

Connector.Property("EndPointURL") = "http://localhost:8080/myFavoriteWebSites"

Connector.Property("SoapAction") =
"http://schemas.microsoft.com/hs/2001/10/core#request"
Connector.BeginMessage

' Create Serializer Object and start streaming into the Connector
Set Serializer = CreateObject("MSSOAP.SoapSerializer")
Serializer.Init Connector.InputStream

' Start Building SOAP Message

Serializer.startEnvelope "s", "http://schemas.xmlsoap.org/soap/encoding/", "UTF-8"
Serializer.startHeader

' Start building the path header element
Serializer.startElement "path", "http://schemas.xmlsoap.org/rp/", , "srp"
Serializer.startElement "action", "http://schemas.xmlsoap.org/rp/", , "srp"

Serializer.writeString "http://schemas.microsoft.com/hs/2001/10/core#request"
Serializer.endElement

' Use empty rev element so response comes back the way it came and
' into the reader stream we've set up for it.

Serializer.startElement "rev", "http://schemas.xmlsoap.org/rp/", , "srp"
Serializer.startElement "via", "http://schemas.xmlsoap.org/rp/", , "srp"
Serializer.endElement
Serializer.endElement

Serializer.startElement "to", "http://schemas.xmlsoap.org/rp/", , "srp"
Serializer.writeString "http://localhost:8080"
Serializer.endElement

Serializer.startElement "id", "http://schemas.xmlsoap.org/rp/", , "srp"
Serializer.writeString "177c8982-a133-11d5-8c76-00a0c94515ae"
Serializer.endElement
```

```

Serializer.endElement

'' Start building the licenses header element.

Serializer.startElement "licenses",
"http://schemas.xmlsoap.org/soap/security/2000-12/", , "ss"
Serializer.startElement "identity",
"http://schemas.microsoft.com/hs/2001/10/core", , "hs"
Serializer.startElement "kerberos",
"http://schemas.microsoft.com/hs/2001/10/core", , "hs"

'' Add your temporary puid here
Serializer.writeString "10434"
Serializer.endElement
Serializer.endElement
Serializer.endElement

Serializer.startElement "request",
    "http://schemas.microsoft.com/hs/2001/10/core", , "hs"
Serializer.SoapAttribute "service", , "myFavoriteWebSites"
Serializer.SoapAttribute "document", , "content"
Serializer.SoapAttribute "method", , "insert"
Serializer.SoapAttribute "genResponse", , "always"

Serializer.startElement "key", "http://schemas.microsoft.com/hs/2001/10/core", ,
"hs"
Serializer.SoapAttribute "instance", , "0"
Serializer.SoapAttribute "cluster", , "0"
Serializer.SoapAttribute "puid", , "10434"
Serializer.endElement
Serializer.endElement
Serializer.endHeader

Serializer.startBody
Serializer.startElement "insertRequest",
"http://schemas.microsoft.com/hs/2001/10/core"
Serializer.SoapAttribute "xmlns:m", ,
"http://schemas.microsoft.com/hs/2001/10/myFavoriteWebSites"
Serializer.SoapAttribute "select", , "/m:myFavoriteWebSites"

Serializer.startElement "favoriteWebSite",
"http://schemas.microsoft.com/hs/2001/10/myFavoriteWebSites", , "m"
Serializer.startElement "title",
"http://schemas.microsoft.com/hs/2001/10/myFavoriteWebSites", , "m"
Serializer.SoapAttribute "xml:lang", , "en-us"
Serializer.writeString "ASPToday"
Serializer.endElement
Serializer.startElement "url",
"http://schemas.microsoft.com/hs/2001/10/myFavoriteWebSites", , "m"
Serializer.writeString "http://www.asptoday.com"
Serializer.endElement
Serializer.endElement

```

```
Serializer.endElement
Serializer.endBody
Serializer.endEnvelope

Connector.EndMessage

'' Read in SOAP Response from Hailstorm
Set Reader = CreateObject("MSSOAP.SoapReader")
Reader.Load Connector.OutputStream

'' Display XML (or errors)
If Not Reader.Fault Is Nothing Then
    WScript.Echo "FAULT: " & Reader.faultstring.Text
    WScript.Echo "DESC:  " & Reader.FaultDetail.Text
Else
    WScript.Echo Reader.Envelope.xml
End If
```

Updates for Chapter 4

While Microsoft doesn't seem to have extended the support for XPath in the latest build of the SDK a few things do seem to have changed. Some of the glitches mentioned in the chapter have been fixed but some new ones seem to have been introduced. In this section we'll highlight just the XPath expressions that give different results from the previous build of the SDK. Another thing worth noting is that the documentation for .Net My Services is improving all the time and there is now a section on XPath in the XMI manual.

Due to some changes we need to alter the data we insert into the myFavoriteWebSites little:

```
<myFavoriteWebSites
  xmlns:hs="http://schemas.microsoft.com/hs/2001/10/core"
  xmlns="http://schemas.microsoft.com/hs/2001/10/myFavoriteWebSites">
  <favoriteWebSite id="1">
    <url>http://www.wrox.com</url>
  </favoriteWebSite>
  <favoriteWebSite id="2">
    <url>http://www.asptoday.com</url>
  </favoriteWebSite>
  <subscription id="3">
    <hs:trigger select="/myFavoriteWebSites/favoriteWebSite"
              mode="includeData" />
    <hs:context uri="http://www.wrox.com" />
    <hs:to>hs:myAlerts</hs:to>
  </subscription>
</myFavoriteWebSites>
```

Notice that we have added a <to> element, as it is now compulsory. This can be set to hs:myAlerts or any valid URI. Also we have removed the creator attribute from the <subscription> element as this now generates an error. You still can't add your own ClientIds so the id attributes will be replaced auto-generated ones when the data is inserted.

The attribute axis

The following XPath expression should return all the available attributes of the `<subscription>` element.

```
/myFavoriteWebSites/subscription/attribute::*
```

While this expression worked in previous builds of the SDK it now appears to be broken.

The shortcut expression:

```
//@*
```

which should also return all the attributes in a document appears to be affected by the same bug.

Ancestors and Descendants

The glitch in the previous build of the SDK, which lead to an error when using the descendant axis, has now been fixed.

The following expression:

```
//*
```

which suffered from the same bug now works. This should select all the elements in the document and return them ordered by level:

```
<m:myFavoriteWebSites>
<m:favoriteWebSite id="B75CC036-3E21-46D8-82BF-960D1CD6B629">
<m:url>http://www.wrox.com</m:url>
</m:favoriteWebSite>
<m:favoriteWebSite id="5982BAD8-213F-44EC-90CD-C20AFB2A9880">
<m:url>http://www.asptoday.com</m:url>
</m:favoriteWebSite>
</m:myFavoriteWebSites>

<m:favoriteWebSite id="B75CC036-3E21-46D8-82BF-960D1CD6B629">
<m:url>http://www.wrox.com</m:url>
</m:favoriteWebSite>
<m:favoriteWebSite id="5982BAD8-213F-44EC-90CD-C20AFB2A9880">
<m:url>http://www.asptoday.com</m:url>
</m:favoriteWebSite>

<m:url>http://www.asptoday.com</m:url>
<m:url>http://www.wrox.com</m:url>
```

Updates for Chapter 5

Several services now available are not described in this chapter, as they were not available at the original time of writing. Details of all available service can be found in the XMI manual that is supplied with the SDK.

The `<surName>` element, which appears in several examples in the chapter, has now been renamed to the more logical `<surname>`.

The `insertRequest` examples in this chapter use the attribute `useClientIDs`, this should actually be `useClientId`s. However this feature is still not working in the current build of HailStorm and now generates an error if you attempt to use it.

Updates for Chapter 6

The application developed in this chapter required a few minor alterations to namespaces and element names for the latest build of HailStorm. A fully functioning version of the application is available in the code download. However note that there is a minor bug meaning that when bidding on an item the ASP page does not automatically refresh if there are less than 3 items in the lots table of the auction database. The new bid information is added to the database though.

We'll be updating the auction site case study in this chapter to take advantage of some of the newly available services. In particular, we'll look at subscribing to the .Net Alerts service for updates when you are out bid in an auction. If the .Net Alerts SDK is available in time, we might even be able to generate actual alerts. This update should be available around the first week in November 2001.

Updates for Chapter 7

To get the case study working with the latest version of the SDK you need to make the changes detailed below; a fully amended version of the code is available to download from <http://www.wrox.com/>.

So on to the changes; the following line on page 184:

```
Serializer.startBody("");
```

should be changed to

```
Serializer.startBody(null);
```

This is because passing an empty string as the encoding method does not work any more – a null value has to be passed to specify that we do not require any encoding. This is relevant throughout the SOAP body. The third parameter of any `startElement()` method from this point on should have null passed instead of an empty string.

The following line on page 187:

```
Serializer.startElement("contact", strMyContactsNamespace, "", "mc");
```

apart for the third parameter being changed to null, like every other `startElement()` method, also needs a `SoapAttribute()` method inserting immediately after, as with the newer `myContacts` schema, it requires that a `synchronize` Boolean attribute is added to the element. Insert this line:

```
Serializer.SoapAttribute("synchronize", null, "no", null);
```

The <surName> element, also inserted on page 187, has changed to <surname> in the schema.

In the MailStormClient application, you will need a test machine with possibly 256MB of memory as when testing was undergone here at Wrox, a 128MB PIII 450Mhz, the code would not execute as Windows was constantly swapping to disk. Alternatively, build and deploy the MailStormService on one machine, and the client on another.

