

Change the outline of Subscribe to the following:

[Action]

<http://www.w3.org/2009/02/ws-evt/Subscribe>

[Body]

```
<wse:Subscribe ...>
  <wse:EndTo> endpoint-reference </wse:EndTo> ?
  <wse:Delivery ...> xs:any* </wse:Delivery>
  <wse:Format Name="xs:anyURI"? > xs:any* </wse:Format> ?
  <wse:Expires Minimum="(xs:dateTime | xs:duration)"?>
    (xs:dateTime | xs:duration)
  </wse:Expires> ?
  <wse:Filter Dialect="xs:anyURI"? ...> xs:any* </wse:Filter> ?
  xs:any*
</wse:Subscribe>
```

Change the description of /wse:Subscribe/wse:Expires to the following:

[Body]/wse:Subscribe/wse:Expires

This optional element can be used by the Subscriber to negotiate the expiration time of the requested Subscription.

A Subscriber MAY indicate that it is willing to accept a Subscription with any expiration time by omitting this element from the Subscribe request.

A Subscriber MAY request a Subscription with a specific expiration time by including this element in the Subscribe request. If the Event Source creates a Subscription from such a Subscribe request, the expiration time of the Subscription MUST be equal to time indicated by the value of this element, or the Subscription MUST NOT expire. The Subscriber MAY modify its request for a specific expiration time via the inclusion of the optional `wse:Minimum` attribute. The presence of the `wse:Minimum` attribute indicates that the Subscriber is willing to accept a expiration time that is less than the value of the Expires element, but that this expiration time must not be less than the value of the `wse:Minimum` attribute. If the Event Source does not honor the requested expiration time, the request MUST fail, and the Event Source MUST generate a `wse:ExpirationTimeExceeded` fault.

A Subscriber MAY request a Subscription that never expires by including this element with an `xs:duration` value of zero ("P0Y0M0D0H0M0S"). If the Event Source creates a Subscription from such a Subscribe request, the Subscription MUST NOT expire. If the Event Source does not honor a request for a Subscription that does not expire, the request MUST fail, and the Event Source MUST generate a `wse:ExpirationTimeExceeded` fault.

Change the outline of SubscribeResponse to the following:

[Action]

<http://www.w3.org/2009/02/ws-evt/SubscribeResponse>

[Body]

```
<wse:SubscribeResponse ...>
  <wse:SubscriptionManager>
    wsa:EndpointReferenceType
  </wse:SubscriptionManager>
  <wse:Expires>(xs:dateTime | xs:duration)</wse:Expires> ?
  xs:any*
</wse:SubscribeResponse>
```

Change the description of /wse:SubscribeResponse/wse:Expires to the following:

[Body]/wse:SubscribeResponse/wse:Expires

This optional element is used to communicate the assigned expiration time of the newly created Subscription. The absence of this element in a SubscribeResponse indicates that the Subscription will not expire; i.e. the Subscription has an indefinite lifetime.

If the Subscribe request did not contain a wse:Expires element and this element occurs in the SubscribeResponse, it **MUST** have a positive `xs:duration` value.

If the Subscribe request contained a wse:Expires element with a positive `xs:duration` value and this element occurs in the SubscribeResponse, it **MUST** have a `xs:duration` value that is equal to or greater than the request value.

If the Subscribe request contained a wse:Expires element with the a zero value ("P0Y0M0DT0H0M0S"), this element **MUST NOT** appear in the SubscribeResponse.

Note that, regardless of its expiration time, a Subscription **MAY** be terminated by the Event Source at any time for reasons such as resource constraints, or system shut-down.

Fix Example 4-1 and Example 4-2 to use an `xs:duration` value for their respective wse:Expires elements making sure that the above restrictions are adhered to.

Change the outline of Renew to the following:

[Action]

<http://www.w3.org/2009/02/ws-evt/Renew>

[Body]

```
<wse:Renew ...>
  <wse:Expires> xs:duration </wse:Expires> ?
  xs:any*
</wse:Renew>
```

Change the outline of RenewResponse to the following:

[Action]
<http://www.w3.org/2009/02/ws-evt/RenewResponse>

[Body]
<wse:RenewResponse ...>
 <wse:Expires> xs:duration </wse:Expires> ?
 xs:any*
</wse:RenewResponse>

Change the description of /wse:RenewResponse/wse:Expires to the following:

This optional element is used to communicate the assigned expiration time of the newly renewed Subscription. The start of this duration is the time when the Subscription Manager started processing the Renew request.

Fix Example 4-3 and Example 4-4 to use an xs:duration value for their respective wse:Expires elements.

Change the outline of GetStatusResponse to the following:

[Action]
<http://www.w3.org/2009/02/ws-evt/GetStatusResponse>

[Body]
<wse:GetStatusResponse ...>
 <wse:Expires> xs:duration </wse:Expires> ?
 xs:any*
</wse:GetStatusResponse>

Fix Example 4-6 to use an xs:duration value for the wse:Expires element.

Change the schema definition of the "ExpirationType" to the following:

```
<xs:simpleType name="ExpirationType">
  <xs:restriction base="xs:duration">
    <xs:minInclusive value="P0Y0M0DT0H0M0S" />
  </xs:restriction>
```

```
</xs:simpleType>
```

Change the definition of SubscribeResponse to:

```
<xs:element name="SubscribeResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="SubscriptionManager"
        type="wsa:EndpointReferenceType" />
      <xs:element name="Expires"
        type="tns:ExpirationType"
        minOccurs="0" />
      <xs:any namespace="##other" processContents="lax"
        minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
    <xs:anyAttribute namespace="##other" processContents="lax" />
  </xs:complexType>
</xs:element>
```

Add the following fault to Section 6:

6.x ExpirationTimeExceeded

This fault is generated when a Subscribe request specifies a minimum expiration time that exceeds what the Event Source is willing to support. This includes requests that use a zero xs:duration value to specify an infinite expiration time.

[Code]	s12:Sender
[Subcode]	wse:ExpirationTimeExceeded
[Reason]	The requested expiration time exceeds internal limits
[Code]	<i>Optional xs:duration which specified the maximum expiration time supported by the Event Source.</i>

Remove Section 6.2 "InvalidExpirationTime".

Remove Section 6.3 "UnsupportedExpirationType"