

Proposed Resolution:

Insert the following section after section 5.1 (after line 652)

5.2 Token Issuer and Required Claims

5.2.1 Token Issuer

Any token assertion may also carry an optional `sp:Issuer` element. The schema type of this attribute is `wsa:EndpointReferenceType`. This element indicates the token issuing authority by pointing to the issuer endpoint address. This element is defined as a global element in the WS-SecurityPolicy namespace and is intended to be used by any specification that defines token assertions.

5.2.2 Token Issuer Name

Any token assertion may also carry an optional `sp:IssuerName` element. The schema type of this attribute is `xs:anyURI`. This element indicated the token issuing authority by points to the issuer by using its logical name. This element is defined as a global element in the WS-SecurityPolicy namespace and is intended to be used by any specification that defines token assertions.

It is out of scope of this specification how the relationship between the issuer's logical name and the physical manifestation of the issuer in the security token is defined.

While both `sp:Issuer` and `sp:IssuerName` elements are optional they are also mutually exclusive and cannot be specified both at the same time.

5.2.3 Required Claims

Any token assertion may also carry an optional `wst:Claims` element. The element content is defined in the WS-Trust namespace. This specification does not further define or limit the content of this element or the `wst:Claims/@Dialect` attribute as it is out of scope of this document.

This element indicates the required claims that the security token must contain in order to satisfy the requirements of the token assertion.

Individual token assertions may further limit what claims may be specified for that specific token assertion.

5.2.4 Processing Rules and Token Matching

The sender is free to compose the requirements expressed by token assertions inside the receiver's policy to as multiple tokens as it sees fit. As long as the union of all tokens in the received message contains the required set of claims from required token issuers the message is valid according to the receiver's policy.

For example if the receiver's policy contains two token assertions, one requires IssuedToken from issuer A with claims C1 and C2 and the second requires IssuedToken from issuer B with claims C3 and C4, the sender can satisfy such requirements with any of the following security token decomposition:

- 1) Two tokens, T1 and T2. T1 is issued by issuer A and contains claims C1 and C2 and T2 is issued by issuer B and contains claims C3 and C4.

- 2) Three tokens, T1, T2 and T3. T1 is issued by issuer A and contains claim C1, T2 is also issued by issuer A and contains claim C2 and T3 is issued by issuer B and contains claims C3 and C4.
- 3) Three tokens, T1, T2 and T3. T1 is issued by issuer A and contains claims C1 and C2, T2 is issued by issuer B and contains claim C3 and T3 is also issued by issuer B and contains claim C4.
- 4) Four tokens, T1, T2, T3 and T4. T1 is issued by issuer A and contains claim C1, T2 is also issued by issuer A and contains claim C2, T3 is issued by issuer B and contains claim C3 and T4 is also issued by issuer B and contains claim C4.

Insert the following after lines 685, 802, 879, 963, 1114, 1168 and 1227:

```
(
  <sp:Issuer>wsa:EndpointReferenceType</sp:Issuer> |
  <sp:IssuerName>xs:anyURI</sp:IssuerName>
) ?
<wst:Claims Dialect="...">
  ...
</wst:Claims> ?
```

Insert the following after lines 709, 831, 901, 981, 1136, 1191 and 1241:

`/<token_assertion_element_name>/sp:Issuer`

This optional element, of type `wsa:EndpointReferenceType`, contains reference to the issuer of the `<token_assertion_name>`.

`/<token_assertion_element_name>/sp:IssuerName`

This optional element, of type `xs:anyURI`, contains the logical name of the `<token_assertion_name>` issuer.

`/<token_assertion_element_name>/wst:Claims`

This optional element identifies the required claims that a security token must contain in order to satisfy the token assertion requirements.

Replace the `sp:Issuer` element with the following on lines 743, 928 and 1019:

```
(
  <sp:Issuer>wsa:EndpointReferenceType</sp:Issuer> |
  <sp:IssuerName>xs:anyURI</sp:IssuerName>
) ?
<wst:Claims Dialect="...">
  ...
</wst:Claims>?
```

Insert the following after lines 766, 947 and 1042:

`/<token_assertion_element_name>/sp:IssuerName`

This optional element, of type `xs:anyURI`, contains the logical name of the `<token_assertion_name>` issuer.

`/<token_assertion_element_name>/wst:Claims`

This optional element identifies the required claims that a security token must contain in order to satisfy the token assertion requirements.