



WS-Trust Implementation

[Developer Documentation]

List of Modules

1) CXF Dependencies Module (`org.wso2.carbon.sts.cxf`)

All cxf dependencies are embedded within this bundle in order to be used by other modules.

2) STS Resource Module (`org.wso2.carbon.sts.resource`)

This module provides the endpoint to Security Token Service and use WS-Security Policy to secure the endpoint.

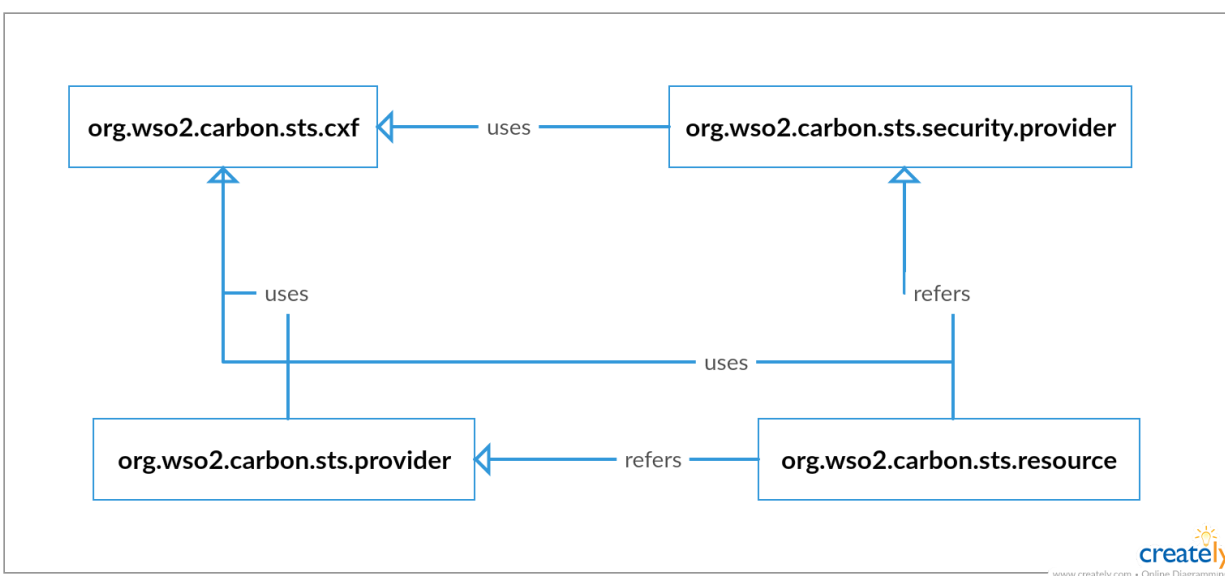
3) STS Provider Module (`org.wso2.carbon.sts.provider`)

This module wraps the CXF Security Token Service Provider and register as a OSGI service.

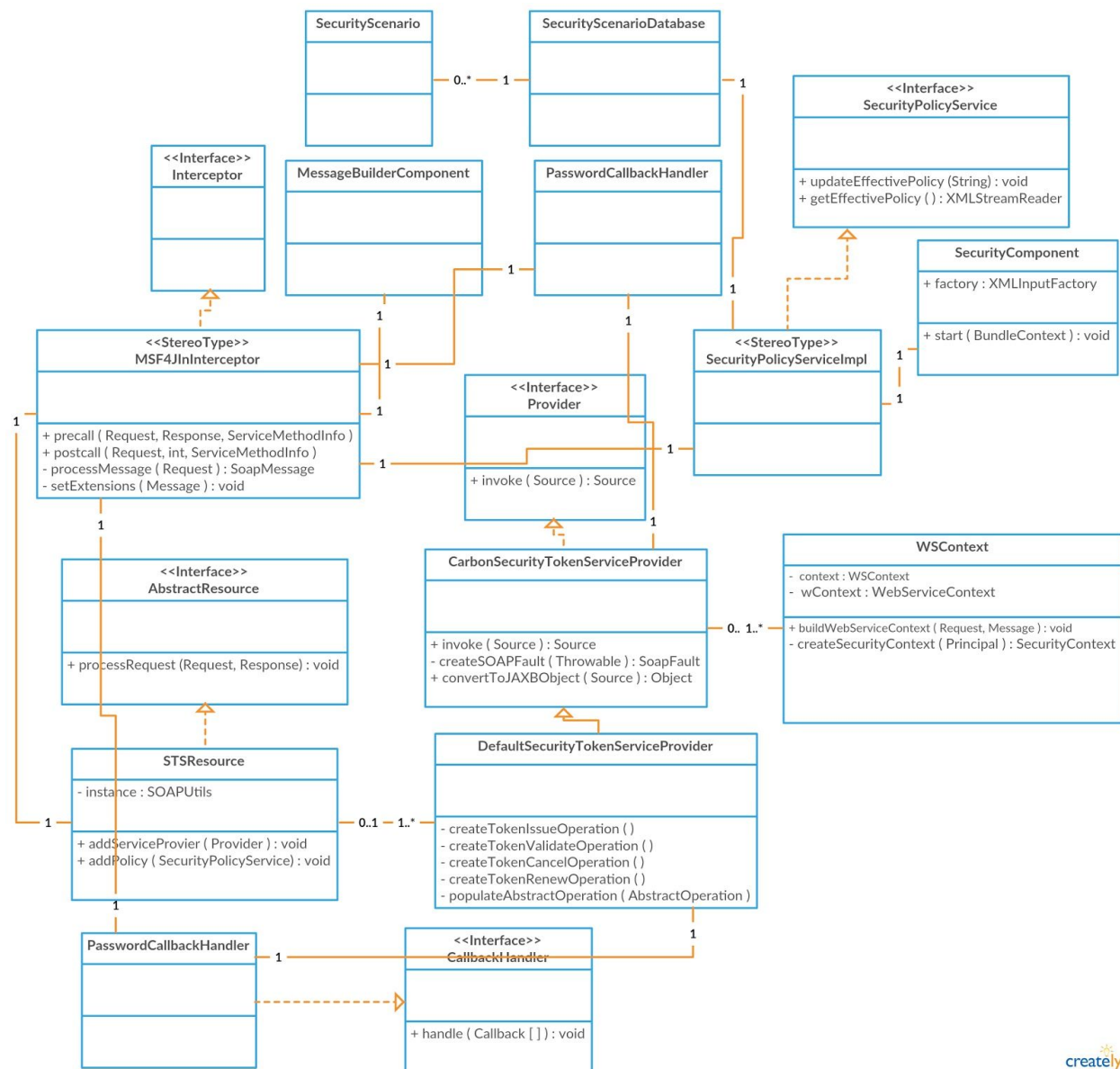
4) Security Policy Provider Module (`org.wso2.carbon.sts.security.provider`)

This module parse the security policies defined in the security policy repository and build an in-memory database consist of Apache Neethi objects related to each security policy.

Bundle Dependency Diagram



Class Diagram



Developing a New Extension

1) Add new ClaimsHandler (Optional)

In order to add a new claim handler which fetch and process claims you need to implement ClaimsHandler Interface provided by `org.apache.cxf.sts.claims.ClaimsHandler`

Sample Implementation can be found here

[1] <https://gist.github.com/IsurangaPerera/9efd9753f072f0fe425c0db4a8e44e95>

SPI : `org.apache.cxf.sts.claims.ClaimsHandler`

Cardinality : Optional

2) Add new PasswordCallbackHandler (Mandatory)

Adding a CallbackHandler is mandatory. CallbackHandler is used when authenticating the user with UsernameToken authentication as well as it is used by STS. In order to implement the PasswordCallbackHandler `javax.security.auth.callback.CallbackHandler` interface should be implemented.

Sample Implementation can be found here

[1] <https://gist.github.com/IsurangaPerera/0911feae2c2236a5775bb0907b28f7f5>

SPI : `javax.security.auth.callback.CallbackHandler`

Cardinality : Mandatory

3) Add Static Properties (Mandatory)

Static Properties such as crypto, issuer, passwordCallbackHandler should be provided to STS via static properties.

Sample Implementation can be found here

[1] <https://gist.github.com/IsurangaPerera/e2d6aacd14a41876e0daf1fad39da3b1>

SPI : org.apache.cxf.sts.STSPropertiesMBean

Cardinality : Mandatory