9 Policy Fragments

9.1 Description

This tutorials demonstrates using a policy fragment to reuse centrally administered policy assertions in multiple service policies.

9.2 Prerequisites

9.2.1 Environment

1. Layer 7 SecureSpan Gateway *(this tutorial was designed using a version 7.0 gateway; it may or may not work with earlier versions; it should work with later versions)*
2. Layer 7 Policy Manager *(this tutorial uses the Policy Manager software installation; the software installation version must match the gateway version; alternatively, users can use the Policy Manager browser-based version which always matches the gateway version that is connected to)*
3. soapUI *(this tutorial was designed using the free soapUI version 4.5.1; it may or may not work with other versions of soapUI; other clients can be used for this and other tutorials, but specific steps will not be provided for those other clients)*

9.2.2 Tutorials

1. Layer 7 Tutorials - Getting Started
2. Tutorial 1 - Deploy Tutorial Services
3. Tutorial 2 - Test Tutorial SOAP Service
4. Tutorial 3 - Test Tutorial REST Service
5. Tutorial 4 - Publish SOAP Service
6. Tutorial 5 - Publish REST Service
7. Tutorial 6 - Basic Authentication

9.3 Tutorial Steps

1. Connect to your gateway using Policy Manager (see tutorial *Layer 7 Tutorials - Getting Started*).
2. Per *Layer 7 Tutorials - Getting Started/Basic Policy Concepts/Policy Authoring/Policy Revisions*, set the active policy version of the *Warehouse SOAP Tutorials* service to the version that has been commented with, **Tutorial 4 Complete**.
3. Per *Layer 7 Tutorials - Getting Started/Basic Policy Concepts/Policy Authoring/Policy Revisions*, set the active policy version of the *Warehouse REST Tutorials* service to the version that has been commented with, **Tutorial 6 Complete**.

4. In the policy editor, select **assertions #2 - #4** (this can be done by left clicking on assertion #2, holding the Shift key down on your keyboard, and then left clicking on assertion #4), right click on the selected assertions, and in the context menu, select the **Create Included Fragment** menu item.
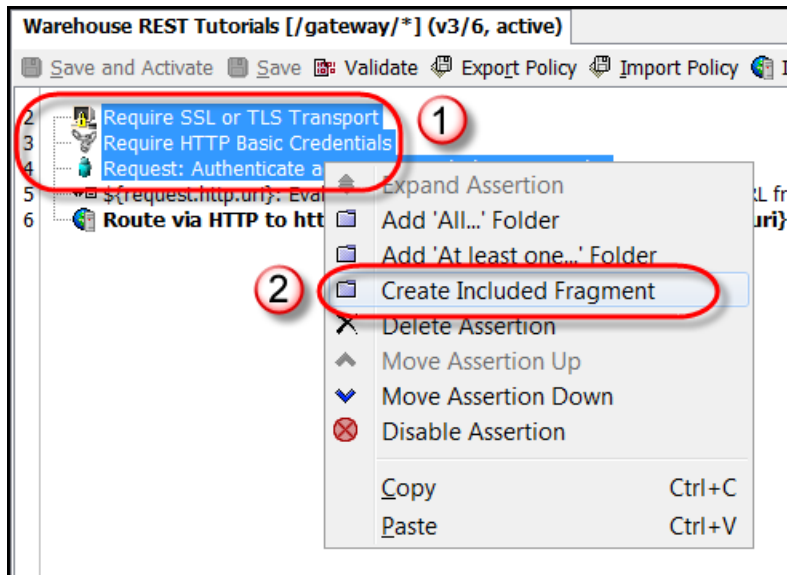
5. In the Fragment Name dialog and field, type **HTTP Basic Authentication using Internal Identity Provider**, and click the **OK** button.
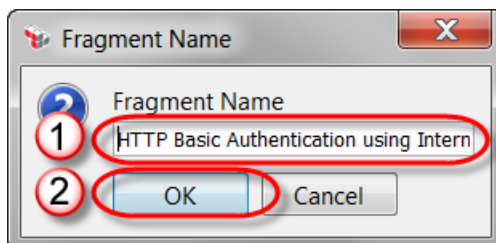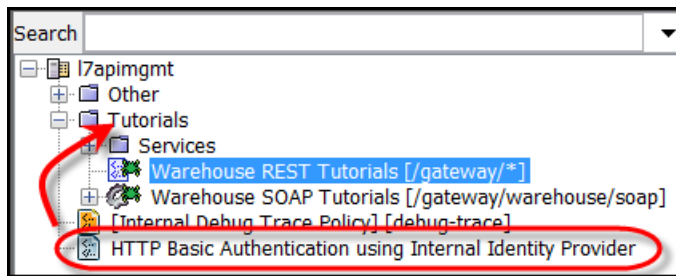

6. In the policy editor, notice that the previously highlighted policy assertions have been replaced by an **Include Policy Fragment** assertion including the new **HTTP Basic Authentication using Internal Identity Provider** policy fragment containing those assertions.
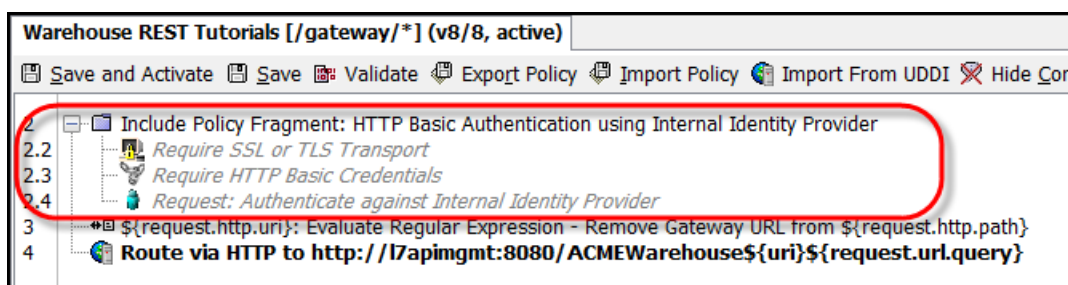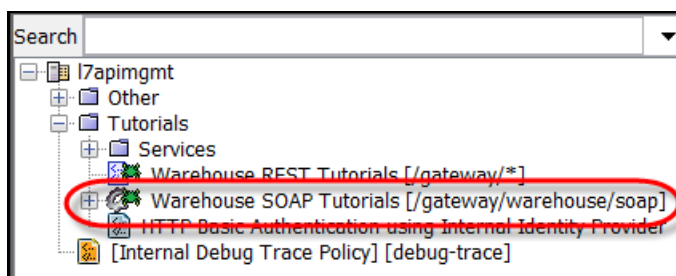

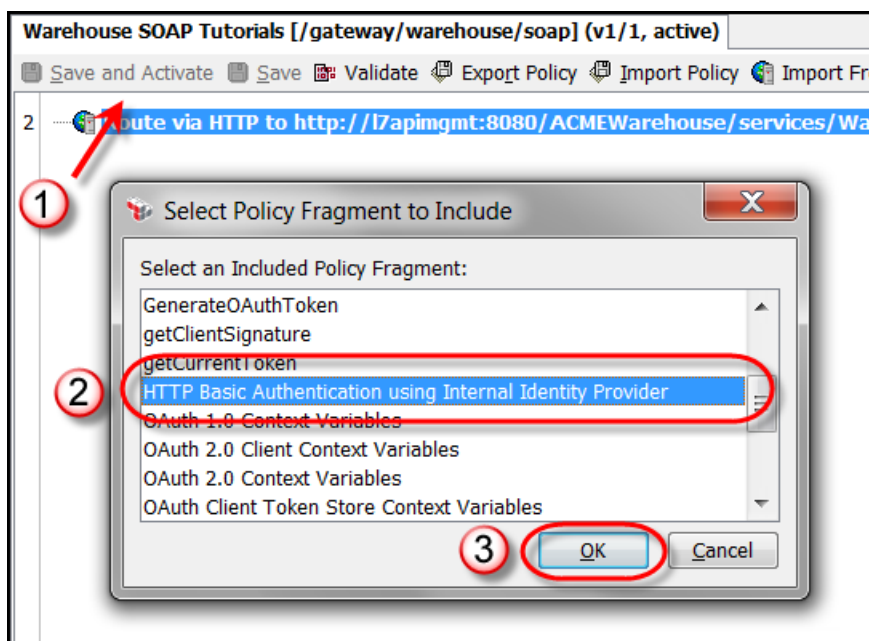7. On the policy editor toolbar, click the **Save and Activate** button.

8. In the services and policies tree, drag and drop the **HTTP Basic Authentication using Internal Identity Provider** policy fragment into the **Tutorials** folder.


9. In the services and policies tree, double-click on the **Warehouse SOAP Tutorials** service.


10. From the policy assertion tree, drag and drop the **Policy Assertions/Policy Logic/Include Policy Fragment** assertion to the top of the policy in the policy editor (so position your mouse above assertion #2, the Route via HTTP assertion). In the Select Policy Fragment to Include dialog, scroll to find and select the **HTTP Basic Authentication using Internal Identity Provider** policy fragment, and click the **OK** button.

11. In the policy editor, at the top of your policy, you should now have and *Include Policy Fragment* assertion including the new *HTTP Basic Authentication using Internal Identity Provider* containing three policy assertions.
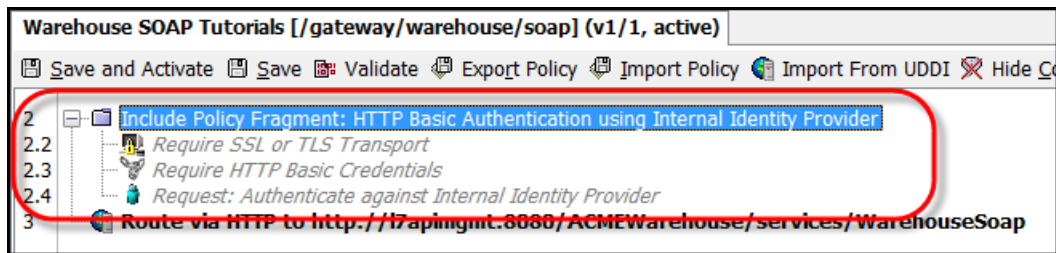

12. On the policy editor toolbar, click the *Save and Activate* button.
13. Open soapUI, and use the *Warehouse REST Tutorials* project created in *Tutorial 5 - Publish REST Service* to test this tutorial's *Warehouse REST Tutorials* policy (ensuring that it still works after having replaced the inline policy assertions with the included policy fragment).
14. Open the *Get Product List* request, select the *HTTPS endpoint* on your gateway, enter the username *testuser1* and corresponding password, and send the message using the *green arrow*. You should receive a successful response. If you like, send the same request with the username *baduser*, and you should get an error response.
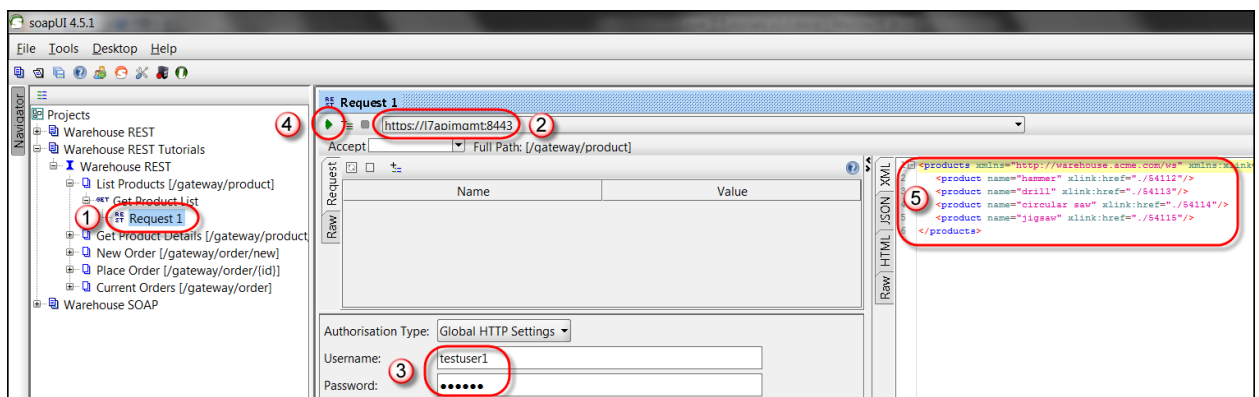
15. Now, use the *Warehouse SOAP* project created in *Tutorial 2 - Test Tutorial SOAP Service* to test this tutorial's *Warehouse SOAP Tutorials* policy (proving that it requires SSL and HTTP Basic credentials for a valid user in the Internal Identity Provider). You will need to add a new endpoint to the soapUI project per the additional context in that tutorial. The endpoint you add should be (with <gateway> replaced by the host name or IP address of your gateway):

   https://<gateway>:8443/gateway/warehouse/soap

16. Open the *listProducts* request, select the new **HTTPS endpoint** on your gateway, select the **Aut** tab, enter the username **testuser1** and corresponding password, and send the message using the **green arrow**. You should receive a successful response. If you like, send the same request with the username **baduser**, and you should get an error response.
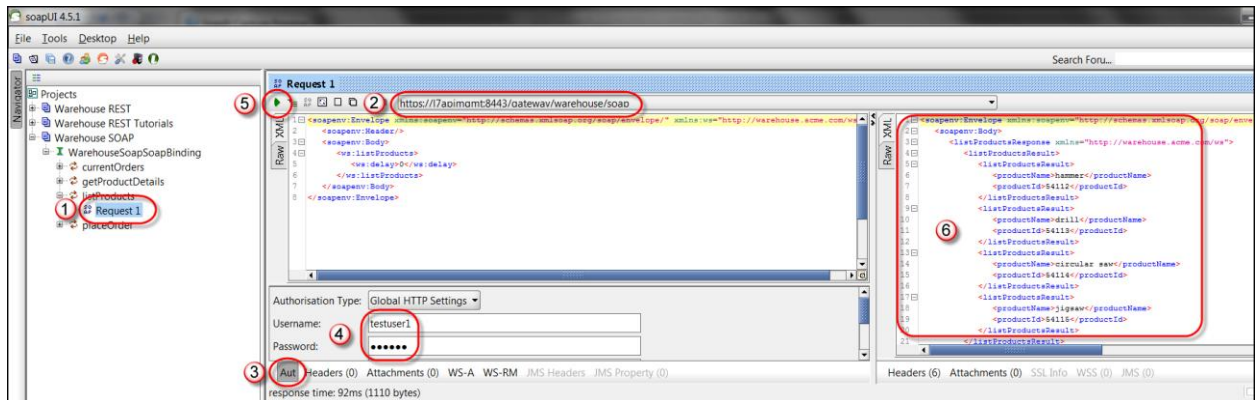
17. Per *Layer 7 Tutorials - Getting Started/Basic Policy Concepts/Policy Authoring/Policy Revisions*, and as demonstrated at the end of *Tutorial 1 - Deploy Tutorial Services*, comment the active policy revision of the **Warehouse REST Tutorials** service with the comment, **Tutorial 9 Complete**.

18. Per *Layer 7 Tutorials - Getting Started /Basic Policy Concepts/Policy Authoring/Policy Revisions*, and as demonstrated at the end of *Tutorial 1 - Deploy Tutorial Services*, comment the active policy revision of the **Warehouse SOAP Tutorials** service with the comment, **Tutorial 9 Complete**.

19. You are done with this tutorial.

9.4   Additional Context
None.