

## 4 Publish SOAP Service

### 4.1 Description

This tutorial shows you how to publish a gateway SOAP service (or proxy) for the tutorial Warehouse service deployed in **Tutorial 1 - Deploy Tutorial Services** which in practice would be hosted on an application server behind the gateway. This is one of the most common tasks performed by users of our gateway, and it is the starting point for enforcing additional policy on traffic sent through the gateway to a SOAP service as demonstrated in other tutorials.

### 4.2 Prerequisites

#### 4.2.1 Environment

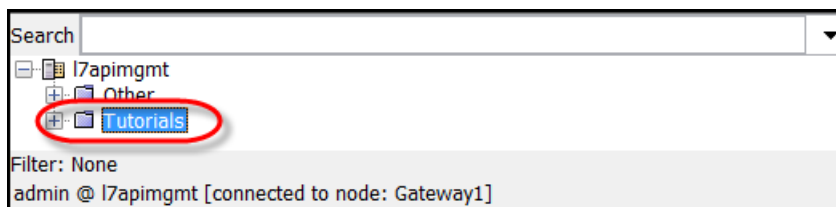
1. Layer 7 SecureSpan Gateway (*this tutorial was designed using a version 7.0 gateway; it may or may not work with earlier versions; it should work with later versions*)
2. Layer 7 Policy Manager (*this tutorial uses the Policy Manager software installation; the software installation version must match 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*)

#### 4.2.2 Tutorials

1. Layer 7 Tutorials - Getting Started
2. Tutorial 1 - Deploy Tutorial Services
3. Tutorial 2 - Test Tutorial SOAP Service

### 4.3 Tutorial Steps

1. Connect to your gateway using Policy Manager (see tutorial **Layer 7 Tutorials - Getting Started**).
2. In the service and policy tree, right click on the new **Tutorials** folder.



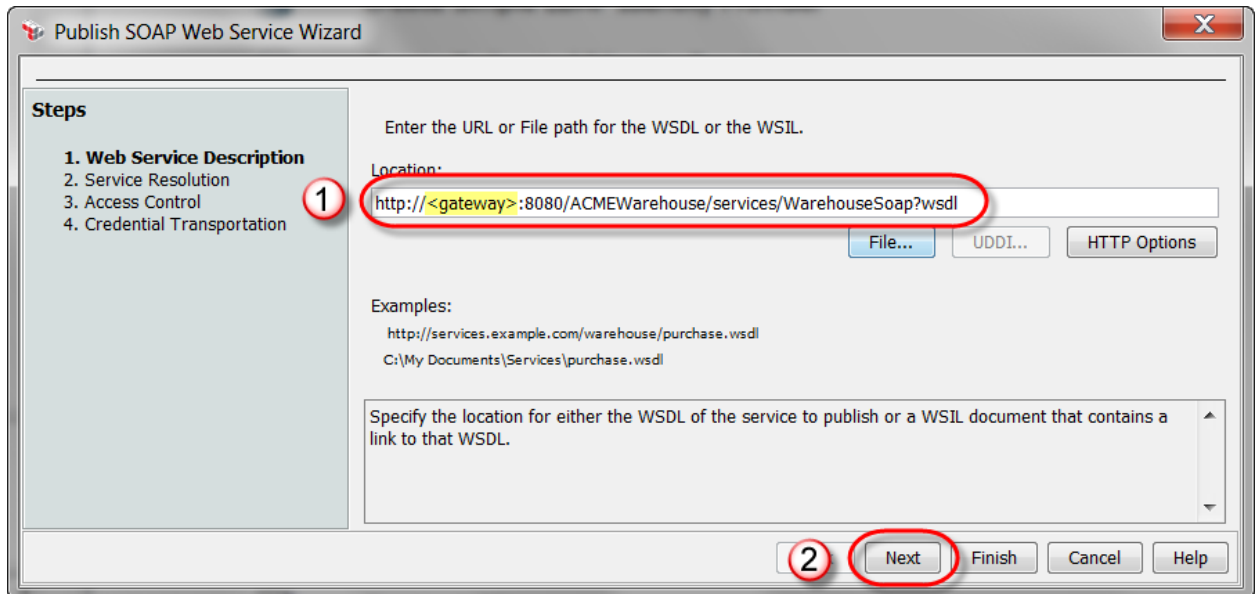
3. In the context menu, select the **Publish SOAP Web Service** context menu item.

*Note: You can also launch the Publish SOAP Web Service wizard from the Policy Manage Home screen and the Tasks menu. However, when starting from those locations, published services are located at the root level of the service and policy tree. When starting from the context menu of a folder in the tree, published services are located in that folder.*

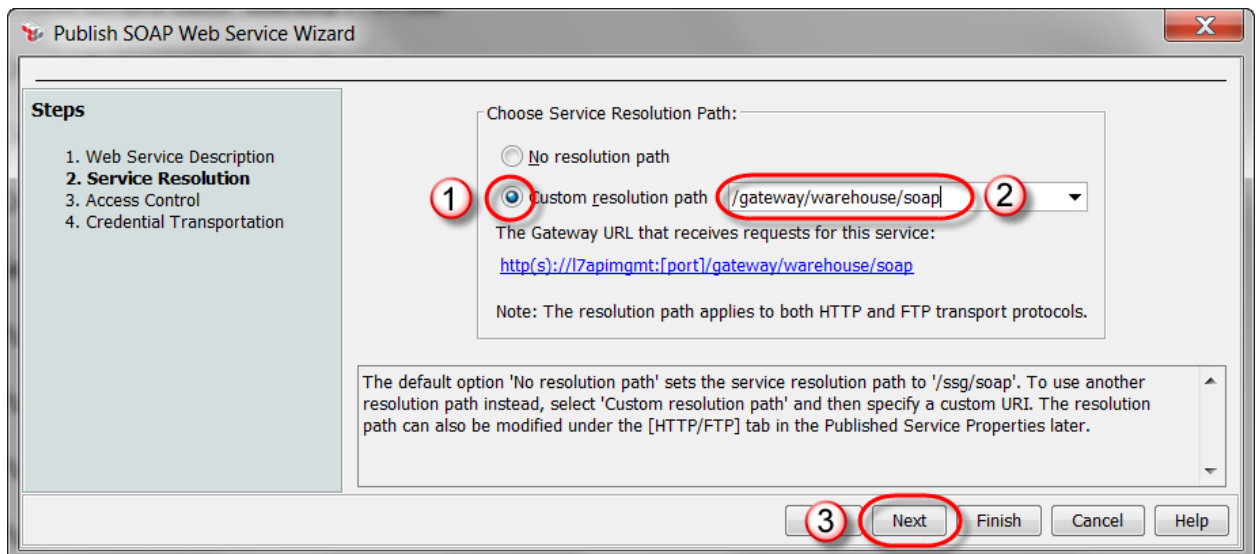
4. In the Publish SOAP Web Service Wizard dialog, copy this URL into the Location field:

**http://<gateway>:8080/ACMEWarehouse/services/WarehouseSoap?wsdl**

Replace <gateway> with the host name or IP address of your gateway, and click the **Next** button.



5. In the Publish SOAP Web Service Wizard dialog, select the **Custom resolution path** option, and type **/gateway/warehouse/soap** into the field to its right. Then, click the **Next** button.



*Note: For SOAP services, the gateway has multiple configurable ways of resolving SOAP requests to specific services on the gateway sent to the same gateway URI. This capability is referred to as service resolution, and more information about service resolution can be found in Layer 7's*

documentation. Many users will still specify a specific gateway URI for the SOAP service they publish to their gateways.

6. In the Publish SOAP Web Service Wizard dialog, click the **Next** button.

The screenshot shows the 'Publish SOAP Web Service Wizard' dialog box, specifically the 'Access Control' step. On the left, a 'Steps' pane lists: 1. Web Service Description, 2. Service Resolution, 3. Access Control (highlighted), and 4. Credential Transportation. The main area contains several options: 'Require SSL/TLS Encryption' (unchecked), 'Allow Anonymous Access' (selected), and 'Require Users to Authenticate' (selected). Below these are dropdowns for 'Authentication Method' (set to 'Encrypted UsernameToken') and 'Identity Provider' (set to 'Internal Identity Provider'). There are two list boxes, 'No Permission' and 'Have Permission', with buttons 'Add', 'Add All', 'Remove', and 'Remove All' between them. A text area at the bottom says 'Specify Web Service access security and permissions.' At the bottom right, a row of buttons includes 'Back', 'Next' (circled in red), 'Finish', 'Cancel', and 'Help'.

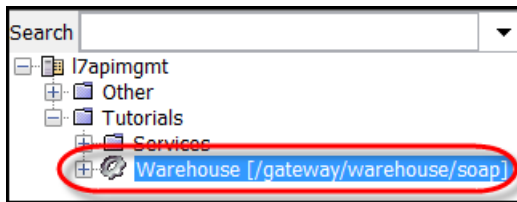
*Note: This step would allow you to select some easy to configure options to require a secure transport (i.e. SSL/TLS) and/or some form of identification, authentication and authorization. Ultimately, selections made here result in more initial policy assertions added to the policy of the service being published. This tutorial will skip this step, and other tutorials will show you how to require these things in many different ways later in policy.*

7. In the Publish SOAP Web Service Wizard dialog, click the **Finish** button.

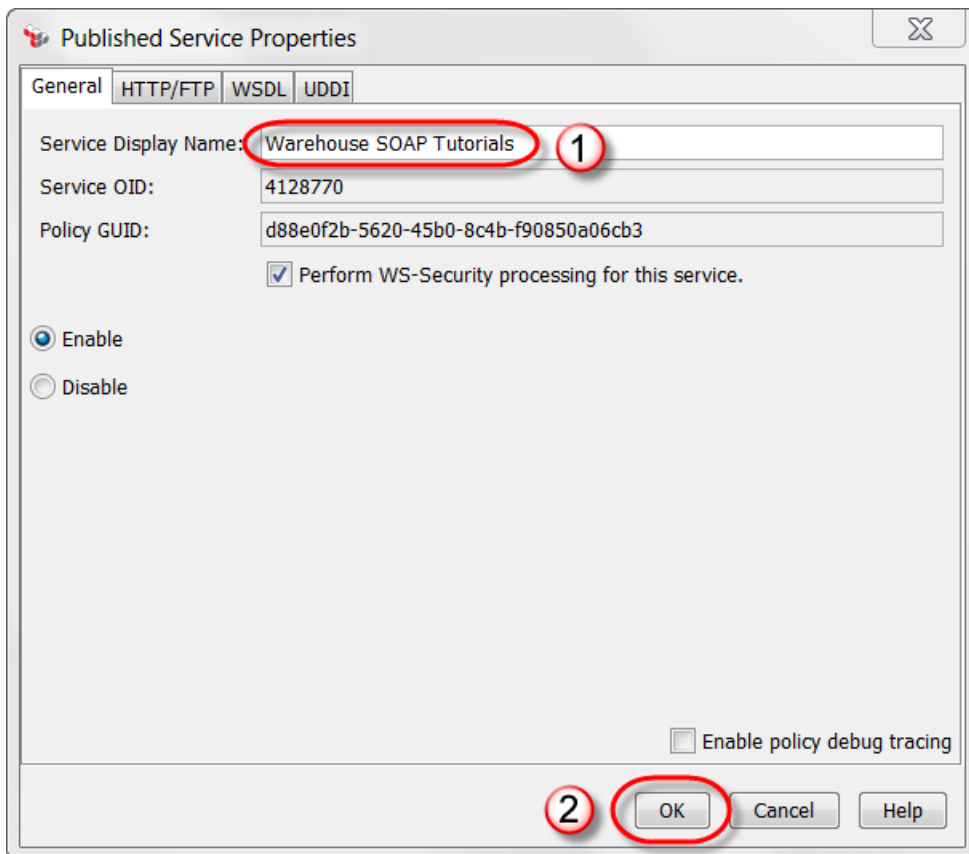
The screenshot shows the 'Publish SOAP Web Service Wizard' dialog box, specifically the 'Credential Transportation' step. On the left, the 'Steps' pane lists: 1. Web Service Description, 2. Service Resolution, 3. Access Control, and 4. Credential Transportation (highlighted). The main area shows the 'Web Service URL' as 'http://l7apimgmt:8080/ACMEWarehouse/services/WarehouseSoap' with a 'Change' button. Below this are two radio buttons: 'The Gateway can access this protected Web service anonymously' (selected) and 'The Gateway will need to provide credentials to access this Web service'. A text area below says 'Specify how the Gateway gains access to the Web service. Include access credentials, if required.' At the bottom right, a row of buttons includes 'Back', 'Next', 'Finish' (circled in red), 'Cancel', and 'Help'.

*Note: This step would allow you to override the URL to the service behind the gateway (pulled from the WSDL by default), and to provide some simple credentials to use to identify the gateway to the backend service. This tutorial will skip this step, and other tutorials will show you how to do these things in many different ways later in policy.*

8. In the service and policy tree, under the Tutorials folder, you should now see a SOAP service named Warehouse. To change the display name of this service (automatically assigned by the Publish SOAP Web Service wizard based on the WSDL), right click on the **Warehouse** service.



9. In the context menu, select the **Service Properties** context menu item.
10. In the Published Service Properties dialog, in the Service Display Name field, type **Warehouse SOAP Tutorials**, and click the **OK** button.



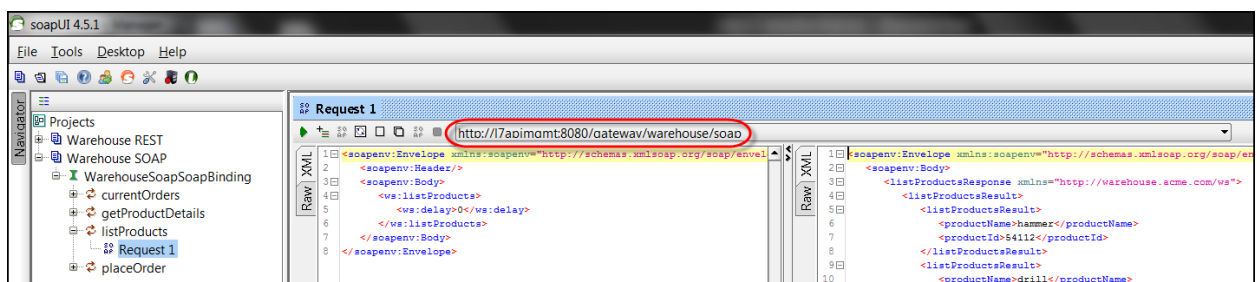
11. In the policy editor, notice the single **Route via HTTP** policy assertion added to the active policy of the new service by the wizard.



12. Test the new Warehouse SOAP Tutorials service using the soapUI project created in **Tutorial 2 - Test Tutorial SOAP Service**. 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):

**http://<gateway>:8080/gateway/warehouse/soap**

For example:



13. 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 4 Complete**.

14. You are done with this tutorial.

## 4.4 Additional Context

In their current state, the Warehouse SOAP Tutorials service and policy are referred to as a pass through proxy and a pass through policy respectively. In other words, they're simply passing through request and response messages. They're not enforcing any more interesting policy.

However, Layer 7 customers already gain some value from pass through services. Namely, pass through services virtualize the actual service input on a secure gateway (possibly deployed in the DMZ) while providing some automatic network layer and message layer protection (without requiring additional policy assertions).

Also, once traffic is routed through a pass through proxy on the gateway, it's easy to begin enforcing additional value added policies upon that traffic as demonstrated by other tutorials in this document.