# Quick Getting Started Guide for Connext DDS Secure in CloudShare

## Secure Multicast With Access Control using Secure Shapes Demo

RTI Shapes Demo is a training tool to help you develop understanding of the fundamental concepts on the Data Distribution Service (DDS) family of standards. In your pre-configured evaluation environment, you will be working with a secure version of the demonstration application. The following example illustrates how DDS Security supports secure multicast and access control.

In order to start, you must first respond to your email invitation to evaluate the product, by following a link in that email. Once you setup your password, you can login into your pre-configured environment.

1. On your Windows desktop, start two instances by clicking on an icon named "Shapes Demo".
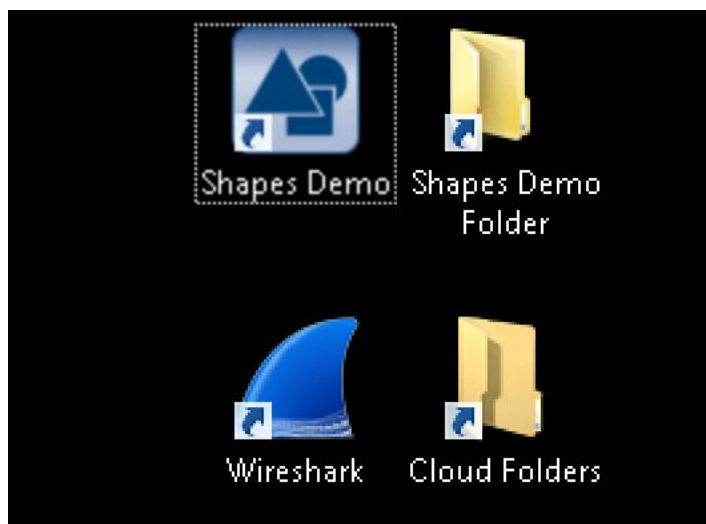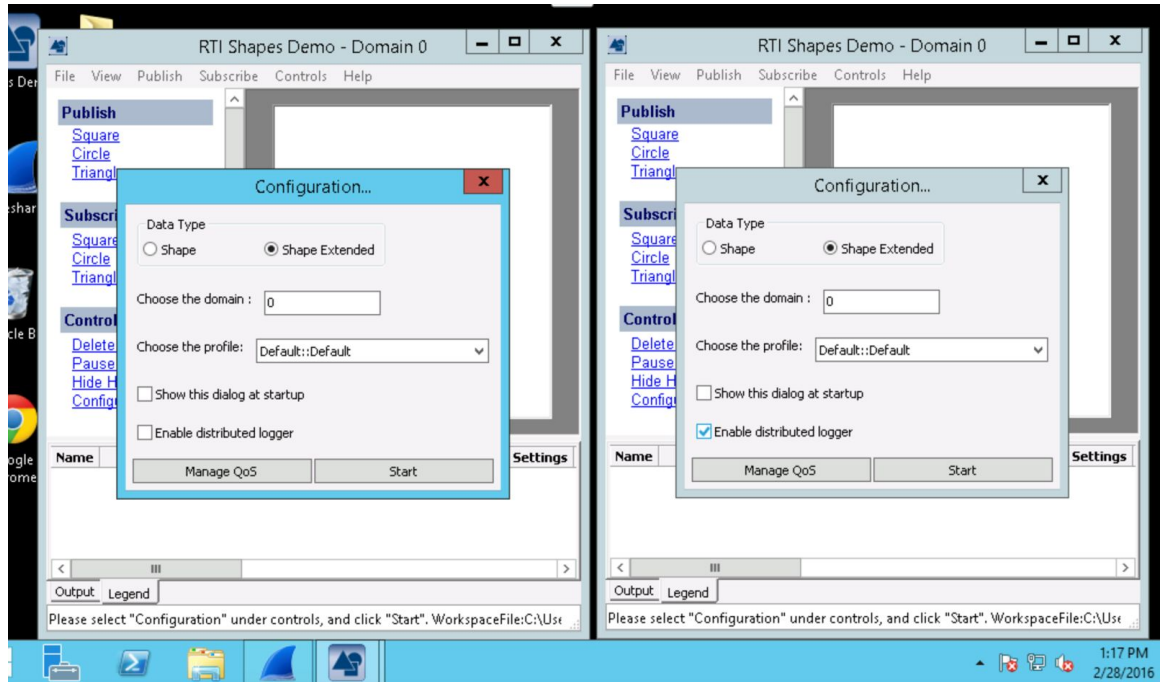

2. **When the applications start, position them side-by-side.**
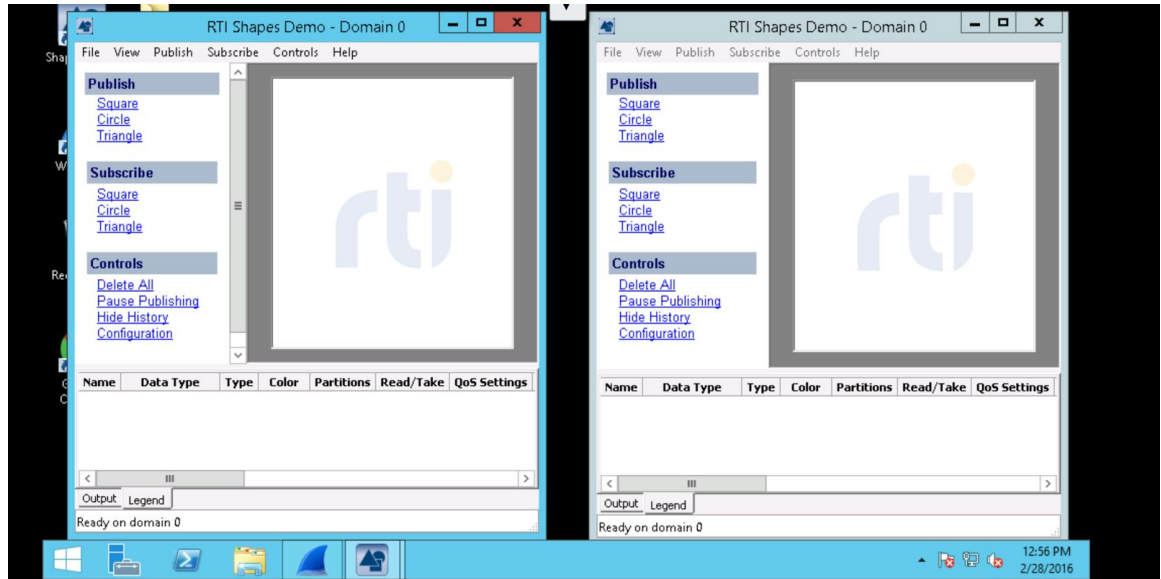
3. In both instances, navigate to Controls -> Configuration. When the configuration dialog box, click "Stop". Make sure to click only once; if you click the button for the second time, it will make the configuration dialog disappear.
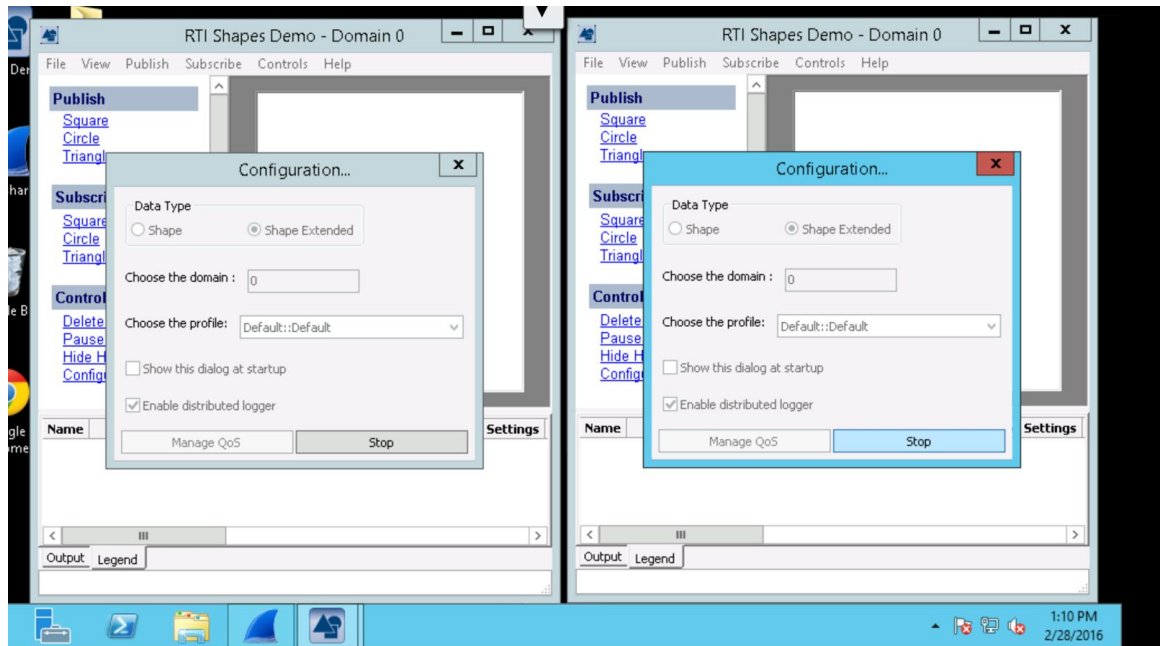

4. Uncheck "enable distributed logger", and make sure the domain is 0.

5. Configure the Shapes Demo app on you left to use "Security::SecureDenySubSquares" profile. Configure the instance on the right to use the "Security::SecureDenyPubCircles" profile. Keep the default settings for rest of the configuration. These two profiles initialize DDS using different identity certificates that are configured with different permissions.
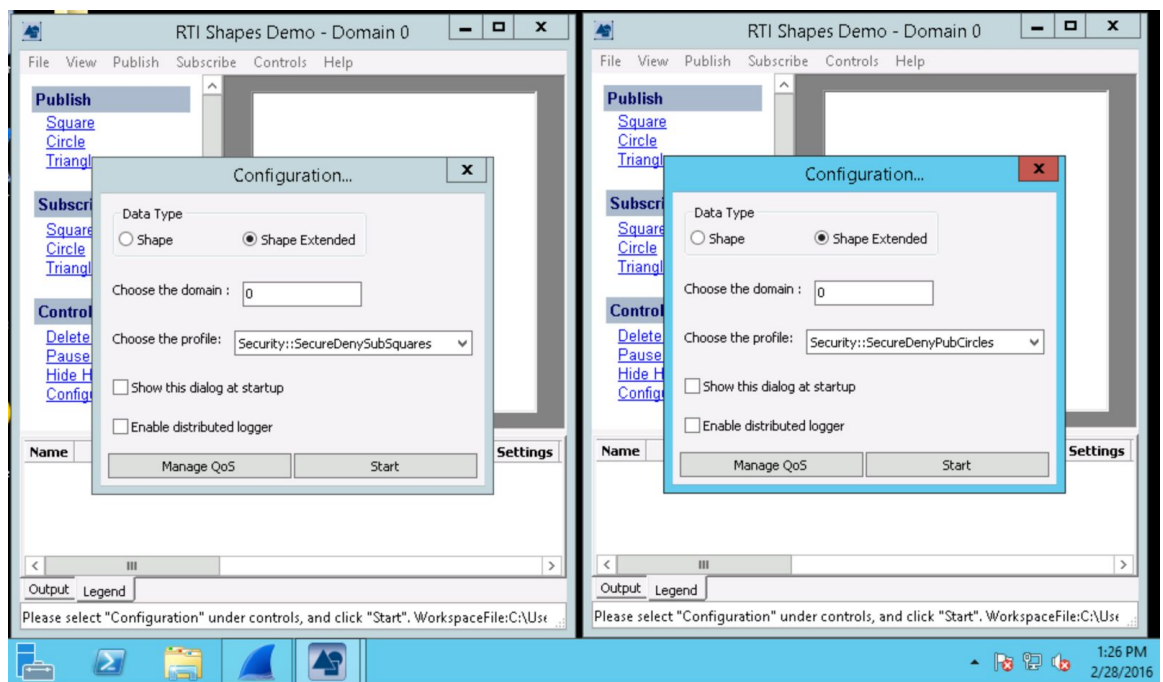
6. Click "Start" in both dialogs to close them.
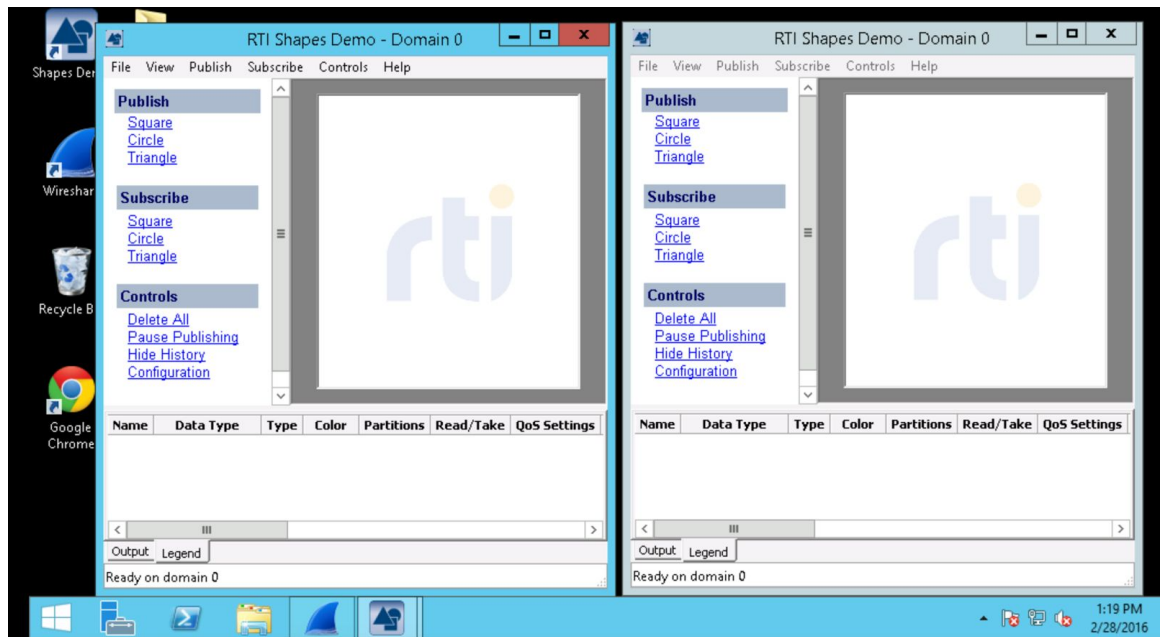
7. In the instance on the left, click on "Square" under "Subscribe". The dialog box "Create new Subscriber" will appear. Accept the default setting by clicking "OK".
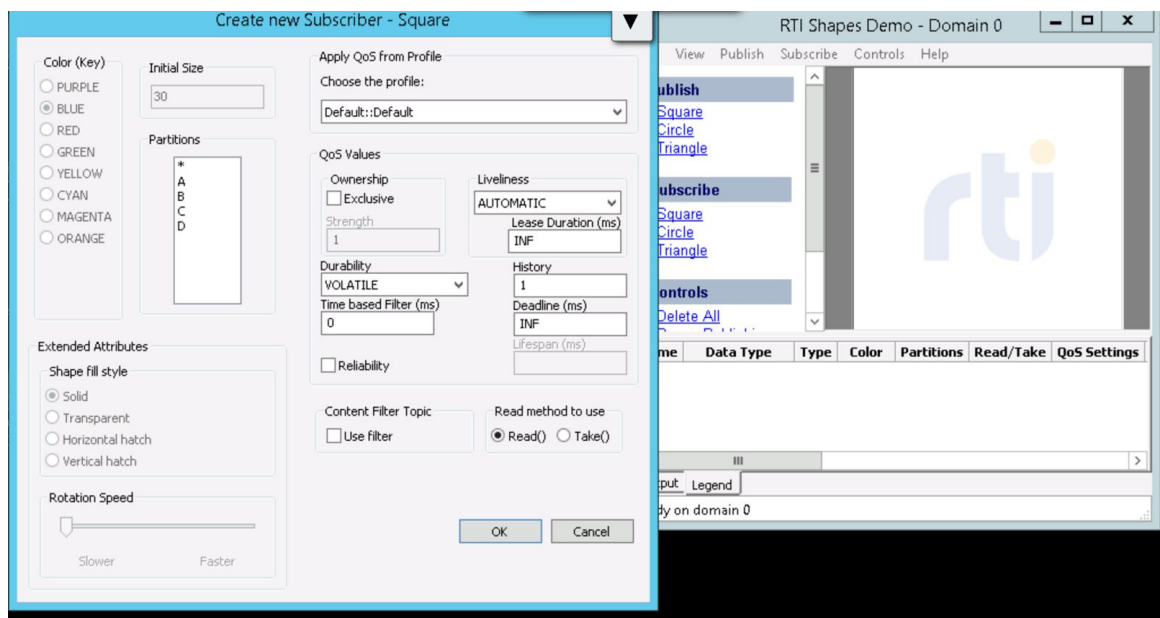
8. Notice the error. The subscriber failed to be created because the profile we configured in this instance does not have permission to subscribe to squares. Close the error by clicking "OK".
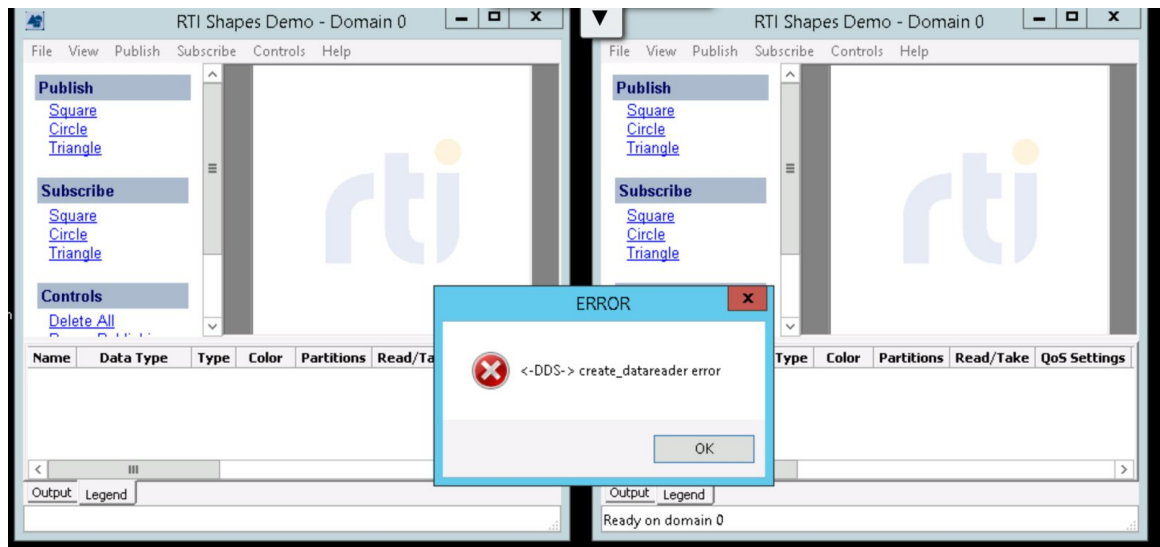

9. In the same instance, click on "Circle" under "Subscribe". Review the default selections. Click OK. There is no error this time because the associated identity has permission to subscribe to circles.
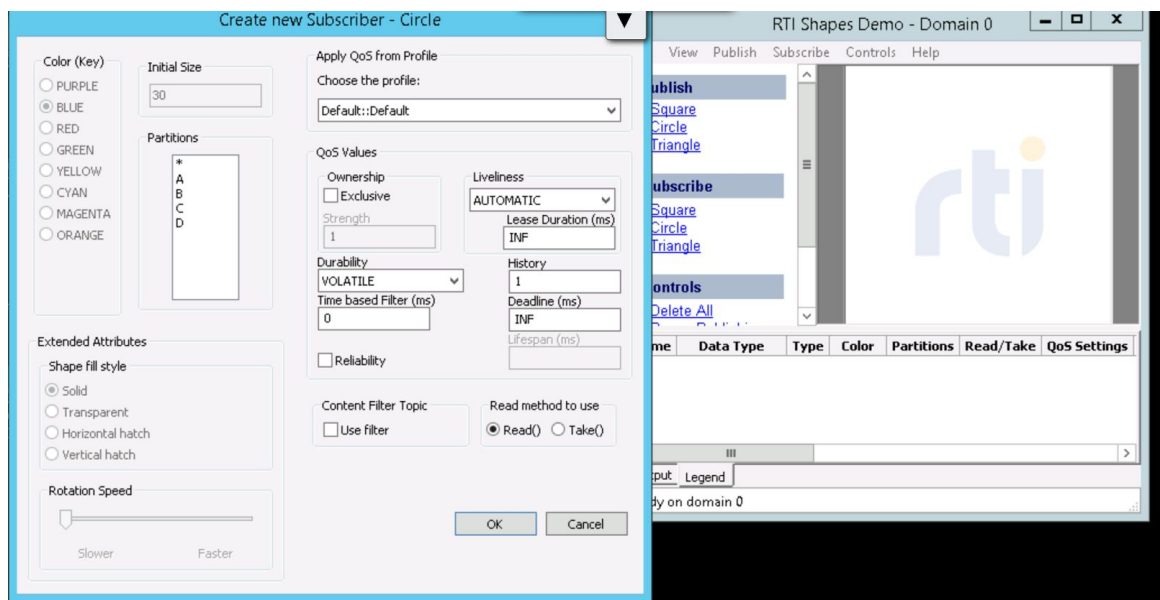

10. Click on "Triangle" under "Subscribe". Review the default selections and click OK. This application is now successfully subscribed to receive information about triangles and circles.
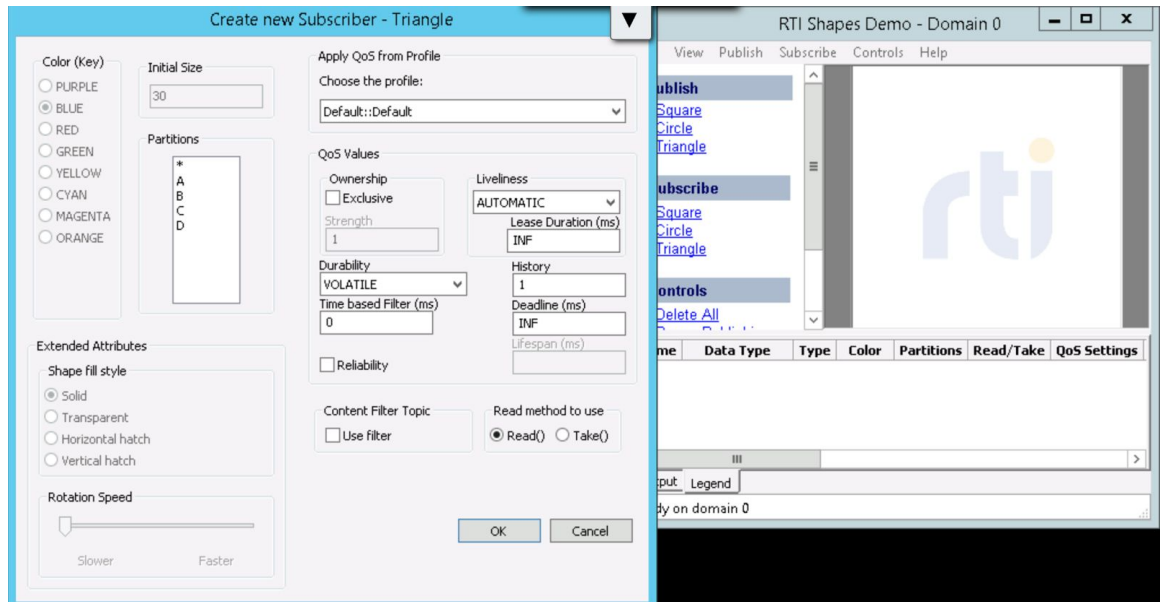
11. In the Shapes Demo on the right, publish a blue circle by clicking on "Circle" then "OK" under "Publish".
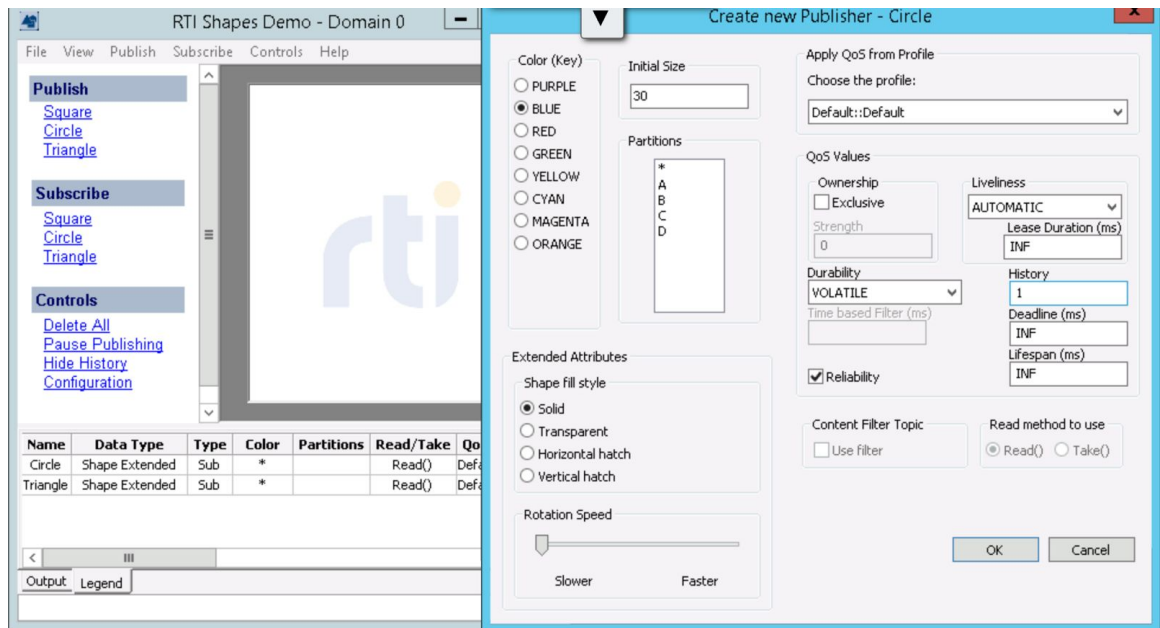
12. Notice the error message that appears in the logger window. The error is coming from the subscriber Shapes Demo on the left after checking the permissions of the publisher, which was earlier set to "Security::SecureDenyPubCircles" in the profile configuration. The subscriber on the left will not receive information about the circle.
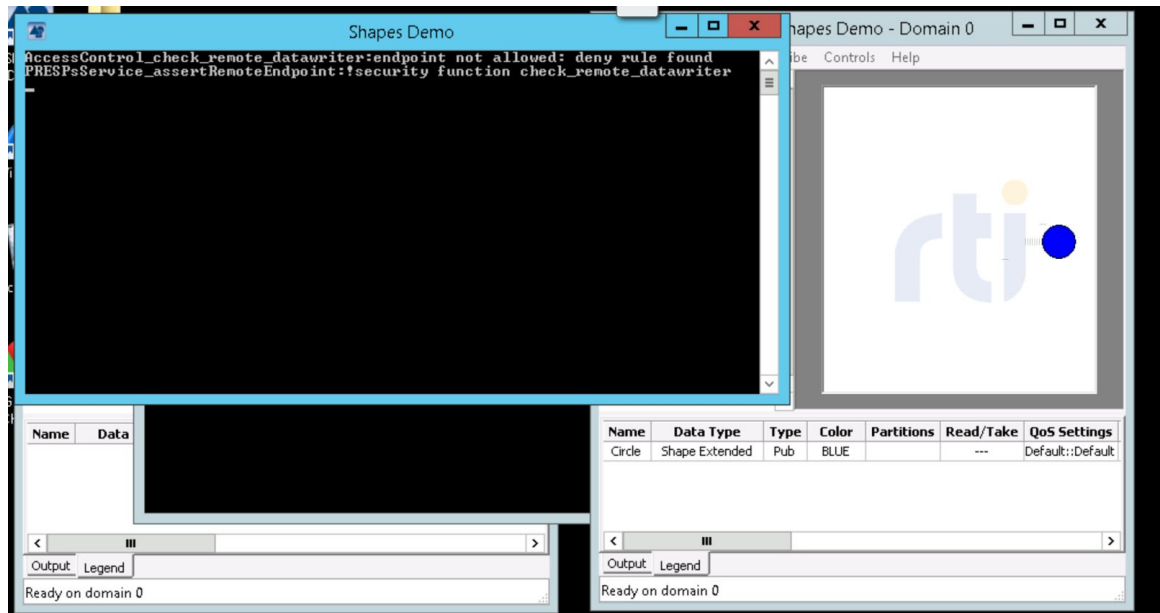
13. In the publisher Shapes Demo app on the right, click "Delete All" under "Controls". Publish a blue triangle by clicking "Triangle" then "OK" under "Publish". Notice the blue triangle appearing in the subscriber instance of the Shapes Demo on the left. The subscriber is now successfully getting information from the publisher about the position of the blue triangle because the permission in the profile selection allows that.
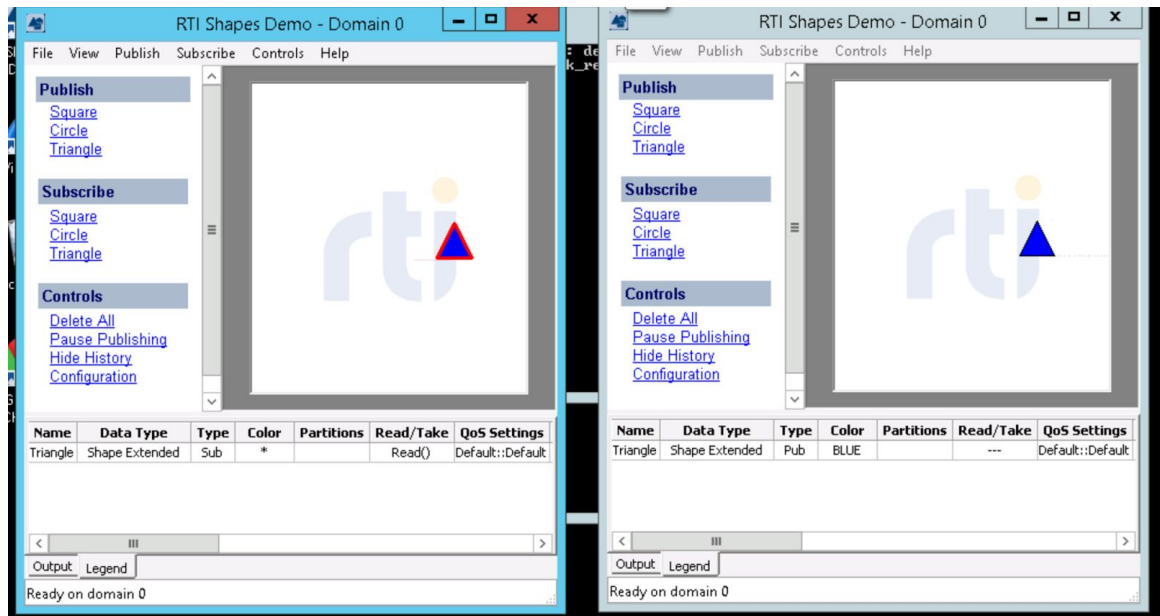
Now you are familiar with the behavior of the Shapes Demo and can play with other setting options to understand how to use Profile settings to control data-in-motion security options for your applications.

How To Learn More

For more information about RTI Connext DDS Pro package for Windows and Linux, visit the [RTI website](#).

To evaluate DDS on your own hardware, you can download and install a [free trial of the RTI Connext DDS](#).