Configuring

Preparing to send status to a SOAP web service

You can use notification objects to send status to a SOAP web service for an application. For example, you can create a notification object to monitor when a job enters the **RetainCompletedJobs** step in a workflow that processes orders. When that event happens, the notification object can send the application information about the job, such as the order number and customer name.

To prepare to send status to a SOAP web service:

1. Learn the requirements for communication with the SOAP web service for the application:
   - The values for authenticating with the application
   - The values for requesting data from the SOAP web service
   - The format of the data provided in the response
   Refer to the documentation for the application or consult with the company that hosts the application.

2. To prepare RICOH ProcessDirector to communicate with the application, do these tasks:
   - If the application requires a security certificate, install the certificate on the RICOH ProcessDirector primary computer.
   - If your environment requires a proxy server to communicate with web services, set up the system to use it.
   - Import WSDL files for all the web services that you plan to call.
   RICOH ProcessDirector creates SOAP request objects from SOAP operations in the WSDL file. You specify a prefix that RICOH ProcessDirector adds to the names of the SOAP operations when it creates the objects. A SOAP request object lets RICOH ProcessDirector determine the SOAP version and other information required to make a correct call to the web service.
   For more information, see the related tasks.

3. Run a manual test that authenticates with the application and requests a response from the SOAP web service. Verify that the web service returns the response that you want.
   Many browsers have plug-ins, such as Boomerang for Google Chrome, that test web service calls to SOAP clients.

4. Decide on the event that you want to trigger the notification and the conditions that determine when the notification calls the web service.

   If you want to send a notification for an event that occurs only when a specific workflow processes a job, specify that workflow as a condition.

5. Define a SOAP web service notification:

   1. Click the **Administration** tab.

   2. In the left pane, click **Objects ⇒ Notifications**.

   3. Click **Add ⇒ SOAP Web Service Notification**.

6. On the **General** tab, type a name for the notification.

7. On the **Request** tab:

   1. Set the **Request URL** property to the URL of the web service that you want to notify.

   2. For the value of the **Request payload** property, specify the body of the web services request that the notification submits to the application.

      In this example, the payload contains two XML elements: `<Token>` and `<OrderNumber>`.
      `<Token>${WS.Notification.WebService.Credential}</Token> <OrderNumber>${Job.Info.Attr1}</OrderNumber>`
      The value for each element is a RICOH ProcessDirector symbol containing a property. If you are using a web service to authenticate with the application, include the **WSNotification.WebService.Credential** property in a symbol. Replace the other element and property with the elements and properties that you want to send to the application. The notification resolves the symbols when it sends status to the SOAP web service.

   3. Set the **SOAP request** property to the SOAP request that RICOH ProcessDirector created when you imported the WSDL file.

      For example, you want to use the **CloseoutOrderByNumber** SOAP request. You prepended **PrintShop** to the names of the SOAP requests when you imported them. Select **PrintShop-CloseoutOrderByNumber**.

   4. If your environment requires a proxy server to communicate with web services, set the **Use proxy** property to the correct proxy server.

8. On the **Authentication** tab, specify the values required to authenticate with the application.
   For more information, see the related task about authenticating with a SOAP web service.
   If the application does not require authentication, leave all the Authentication properties blank.

9. On the **Event** tab:

   1. Choose the type of object to be monitored.

   2. Select the property, the action, and the value to monitor.

      3. To define another event, click **+** to the right of any event.

      4. To delete an event, click **-** to the right of the event you want to delete.

    For example, to send a notification when the state of a job changes to **Retained**, select **Current job state**, **Changes to**, and **Retained**.

10. On the **Conditions** tab:

      1. Select the property and the value that must be satisfied before any notifications are sent.

      2. To define another condition, click **+** to the right of any event.
        To specify how the conditions are combined, select **Any**, **All**, or **Custom**.

      3. To delete a condition, click **-** to the right of the condition you want to delete.

    For example, to send a notification only when a child job is in the **ProcessWebOrders** workflow, specify two conditions:
- **Workflow = ProcessWebOrders**
- **Job number like** * . *
To apply the conditions only when a job meets both of them, select **All**.

11. When you finish, click **OK**.

When you finish setting up your input devices, notifications, and workflows, test the exchange of data between RICOH ProcessDirector and the application.

Example
The supplied **RestfulWebServiceSampleNorify** REST web service notification is similar to a SOAP web service notification. The MarcomCentral Connect feature includes a supplied SOAP web service notification.

Parent topic: [Web service notifications](#)