

Calling SharePoint Web Services from Nintex Workflow in forms based authentication.

Background

Calling web services in FBA mode is not as straightforward as Windows authentication. The process is as follows:

1. Make a call to the `_vti_bin/Authentication.asmx` web service to get an authentication token for an FBA user.
2. Use that authentication token in subsequent requests to SharePoint web services to authenticate, instead of providing a username and password.

This blog post has a good description on how to achieve this with C# code (its written for SharePoint 2007 but the process is the same).

<http://www.tonytestasworld.com/post/2009/06/04/How-To-Authenticate-and-Use-SharePoint-Web-Services-in-an-FBA-SharePoint-site.aspx>

To achieve the above in Nintex Workflow requires a bit of work, but it can be done with the 'Web Request' action. The 'Web request' action provides more control over cookies and headers than the regular 'Call Web Service' action.

Nintex Workflow calling a web service in FBA

There is a workflow file available for download that demonstrates the actions required to authenticate a web service in FBA mode. Download the .zip file linked below, then extract the workflow file (`call_web_service.nwf`) and import into your environment.

http://download.nintex.com/sl/supportfiles/FBA/call_web_service.zip

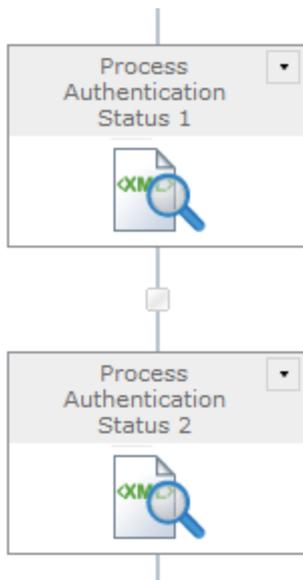
Following is a brief description of what each action does:

The first 'Web Request' action calls `_vti_bin/Authentication.asmx`. As parameters, it passes the FBA user's username and password. The response is stored in the 'Store result in' field - this will tell the workflow if authentication passed or failed. The 'Store response headers in' value is also stored in a variable, which will contain the actual authentication token.

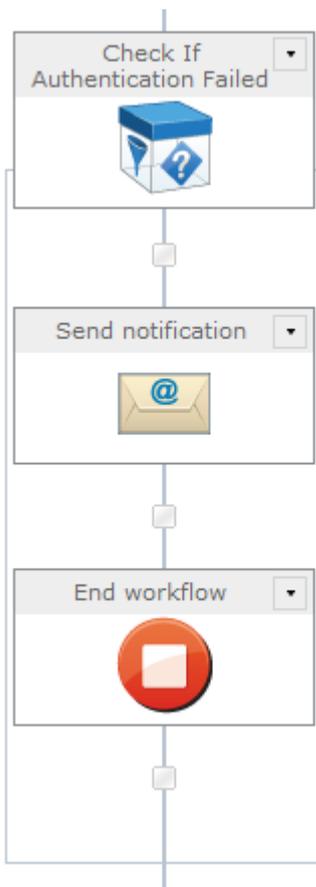
Note this web service call can be made without regular credentials.



The next two actions process the 'Store result in' XML to pull out the actual value that describes if authentication worked. This is done with two XPATH queries.

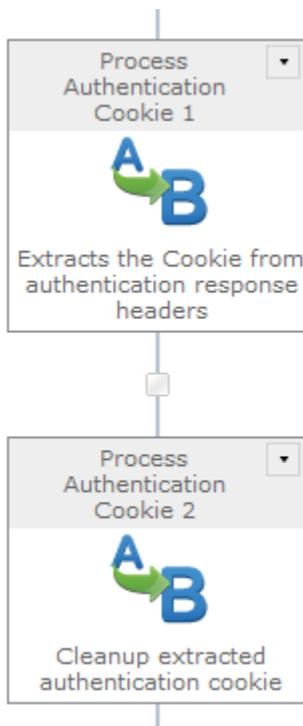


If the result is 'NoError', the authentication passed. Any other value means that authentication did not work. This sample workflow checks for this, and sends an email to notify the initiator before ending the workflow.



Once it is verified that authentication worked, the workflow will process the value from the response header. This value contains a number of items, but the workflow is only interested in the 'Cookie'

value. 'Regular expression' actions are used to extract the data of interest from the response header value.



Finally, with the authentication token extracted from the response header, it can be used to authenticate to the SharePoint web service that the workflow needs to call. Again a 'Web Request' action is used because it has the ability to add a header to the request. This header will contain the authentication token that SharePoint will read. Regular credentials do not need to be provided.

URL *

Username

Password

GET
 POST
 SOAP 1.1
 SOAP 1.2
 Other

Add headers

X Name

Value

[+ Add header](#)

The SOAP message can be added as usual.

Conclusion

This document briefly outlined the steps to call a SharePoint web service in Forms Based Authentication mode from Nintex Workflow. A lot of the 'plumbing' actions would be a great candidate for a User Defined Action.