MobileFirst Platform {dev}

Adapter-based authentication in native Windows Phone 8 applications

Relevant to:

Native Windows Phone 8

Overview

This tutorial illustrates the native Windows Phone 8 client-side authentication components for adapter-based authentication.
Prerequisite: Make sure that you read [Adapter-based authentication](#) first.

Creating the client-side authentication components

Create a native Windows Phone 8 application and add the MobileFirst native APIs as explained in the documentation.

CustomAdapterChallengeHandler

Create a `CustomAdapterChallengeHandler` class as a subclass of `ChallengeHandler`.
Your `CustomAdapterChallengeHandler` class must implement the `isCustomResponse` and `handleChallenge` methods.

- The `isCustomResponse` method checks every custom response received from MobileFirst Server to verify whether this is the expected challenge.

```
public override bool isCustomResponse(WLResponse response)
{
    if (response == null ||
        response.getResponseJSON() == null ||
        response.getResponseText() == null ||
        response.getResponseJSON()["authRequired"] == null ||
        String.Compare(response.getResponseJSON()["authRequired"].ToString(),
"false", StringComparison.OrdinalIgnoreCase) == 0)
    {
        return false;
    }
    return true;
}
```

- The `handleChallenge` method is called after the `isCustomResponse` method returns `true`.
  Use this method to present the login form. Different approaches are available.

```
public override void handleChallenge(JObject challenge)
{
    Deployment.Current.Dispatcher.BeginInvoke(() =>
    {
        MainPage._this.NavigationService.Navigate(new Uri("/LoginPage.xaml",
UriKind.Relative));
    });
}
```

From the login form, credentials are passed to the `CustomAdapterChallengeHandler` class. The `submitAdapterAuthentication()` method is used to send input data to the authenticator.

```
public void submitLogin(string userName, string password)
```

```
{
    object[] parameters = new object[] { userName, password };
    WLProcedureInvocationData invocationData = new
  WLProcedureInvocationData("AuthAdapter", "submitAuthentication");
    invocationData.setParameters(parameters);
    WLRequestOptions options = new WLRequestOptions();
    submitAdapterAuthentication(invocationData, options);
}
```

MainPage

Within the `MainPage` class, connect to MobileFirst Server, register your `challengeHandler`, and invoke the protected adapter procedure.

The procedure invocation triggers MobileFirst Server to send a challenge that will trigger the challenge handler.

```
WLClient client;
client = WLClient.getInstance();
challengeHandler = new WindowsChallengeHandler();
client.registerChallengeHandler((BaseChallengeHandler<JObject>)challengeHandler);
client.connect(new MyConnectResponseListener(this));
```

Because the native API is not protected by a defined security test, no login form is presented during server connection.

Invoke the protected adapter procedure. The login form is presented by the `challengeHandler`.

```
WLProcedureInvocationData invokeData = new
 WLProcedureInvocationData("AuthAdapter", "getSecretData");
WLRequestOptions options = new WLRequestOptions();
client.invokeProcedure(invokeData, new MyResponseListener(this), options);
```

Sample application

[Click to download](#) the MobileFirst project.

[Click to download](#) the Native project.

- The `AdapterBasedAuth` project contains a MobileFirst native API that you can deploy to your MobileFirst server.
- The `AdapterBasedAuthWP8` project contains a native WP8 application that uses a MobileFirst native API library.
- Make sure to update the `worklight.plist` file in the native project with the relevant server settings.

adapter base

Invoke Procedure

Logout

AUTHENTICATION
adapter based

username

mobilefirst

password

•••••

Login

based auther
Console

Connecting...
Connected SuccessfullySuccessfully invoked
/*-secure-
{"isSuccessful":true,"secretData":"A very very
very secret data"}*/