Authenticating to Social Services using Infragistics

This article explains how to use Infragistics Access Control to authenticate to Twitter, Facebook, LiveID and Google services. '

Introduction

In order to integrate your application with social media, or share your work via social media, you need to authenticate to social media services. Writing the code to do this from scratch can be quite laborious. You can use Infragistics Access Control to do this much more easily.

Obtaining an auth token

Regardless of what tools you use to authenticate, you'll need to obtain an application key for the service you're using before you begin. Each auth token is specific to one application.

The table below lists the URLs where you can obtain a token for the major social media services to register an application.

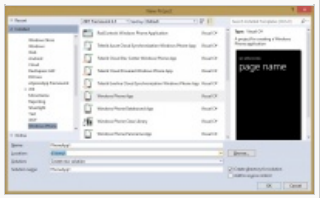
Provider Name	URL
Facebook	https://developers.facebook.com/apps
Twitter	https://dev.twitter.com/apps/new
Live ID	https://manage.dev.live.com/AddApplication.aspx
Google	https://code.google.com/apis/console/?pli=1

Using Infragistics Access Control

Now I will explain how to use the Infragistics Access Control.

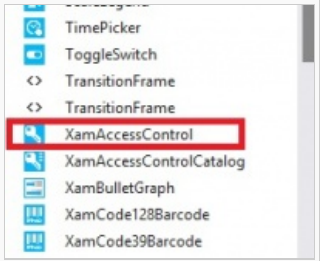
Setting up your project

First, create a new Project, choose **Windows Phone App**, and enter the name of project



Create new project

Find **XamAccessControl** in the toolbox and drag to MainPage.xaml



AccessControl

Setting the control

Set the control as shown below. This example authenticates to Twitter.

```
<ig:XamAccessControl x:Name="accessCtrl" HorizontalAlignment="Left" Height="100"
Margin="37,227,0,0" VerticalAlignment="Top" Width="100">
   <ig:XamAccessControl.AuthenticationService>
      <ig:AuthenticationService
         Provider="Twitter"
         ClientId="xxxxxx"
```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```
        RedirectUri="http://www.dvlup.com"
        ClientSecret="xxxxx"/>
   </ig:XamAccessControl.AuthenticationService>
</ig:XamAccessControl>
```

If you're authenticating to a different service, set the "Provider" property to the appropriate value:

1. Twitter
2. Facebook
3. Live Id
4. Google

Coding the button

Once you've set up the control, drag a button to activate the authentication process and insert the following code:

```
private void Button_Click(object sender, RoutedEventArgs e)
{
    accessTwitter.IsOpen = true;
}
```

Handling authentication events

Next step is "Authentication Event Handling", you can use below code after "InitializeComponent()"

```
public MainPage()
{
   InitializeComponent();

   accessTwitter.AuthenticationCompleted +=
      new
EventHandler<Infragistics.Controls.Authentication.AuthenticationCompletedEventArgs>
      (accessTwitter_AuthenticationCompleted);

   accessTwitter.AuthenticationDenied +=
      new
EventHandler<Infragistics.Controls.Authentication.AuthenticationDeniedEventArgs>
      (accessTwitter_AuthenticationDenied);

   accessTwitter.AuthenticationException +=
      new
EventHandler<Infragistics.Controls.Authentication.AuthenticationExceptionEventArgs>
      (accessTwitter_AuthenticationException);
}

void accessTwitter_AuthenticationException(object sender,
Infragistics.Controls.Authentication.AuthenticationExceptionEventArgs e)
{
   Debug.WriteLine("AUTHENTICATION_EXCEPTION:" + e.Exception.Message);
}

void accessTwitter_AuthenticationDenied(object sender,
Infragistics.Controls.Authentication.AuthenticationDeniedEventArgs e)
{
   Debug.WriteLine("AUTHENTICATION_DENIED:" + e.AuthenticationDeniedResult.Error);
}
```


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```
void accessTwitter_AuthenticationCompleted(object sender,
Infragistics.Controls.Authentication.AuthenticationCompletedEventArgs e)
{
   Debug.WriteLine("AUTHENTICATION_COMPLETED:" +
e.AuthenticationResult.AuthenticationToken);
}
```

That's all you have to do!

Note: Some content for this wiki was taken from the Infragistics Access Control docs

Authenticating to social services

Below is comparison steps between Infragistics Access Control and code that I've use already (you can read from Authenticating_to_social_services)

Infragistics Access Control	Manual Code
Drag Access Control	Create new Page, name it TwitterAuthPage.xaml
Set the provider and App ID and App Secret	Drag the browser to TwitterAuthPage.xaml
Drag a button	Put the code for browser access OnNavigate
	Put the code

```
private void GetTwitterToken()
        {
            var credentials = new OAuthCredentials
            {
                Type = OAuthType.RequestToken,
                SignatureMethod = OAuthSignatureMethod.HmacSha1,
                ParameterHandling =
OAuthParameterHandling.HttpAuthorizationHeader,
                ConsumerKey = TwitterSettings.ConsumerKey,
                ConsumerSecret = TwitterSettings.ConsumerKeySecret,
                Version = TwitterSettings.OAuthVersion,
                CallbackUrl = TwitterSettings.CallbackUri
            };
            var client = new RestClient
            {
                Authority = "https://api.twitter.com/oauth",
                Credentials = credentials,
                HasElevatedPermissions = true,
                          SilverlightAcceptEncodingHeader = "gizp",
                          DecompressionMethods =
DecompressionMethods.GZip,
             };

            var request = new RestRequest
            {
                Path = "/request_token"
            };
            client.BeginRequest(request, new
RestCallback(TwitterRequestTokenCompleted));
        }
```


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```
        private void TwitterRequestTokenCompleted(RestRequest request,
RestResponse response, object userstate)
        {
            _oAuthToken = GetQueryParameter(response.Content,
"oauth_token");
            _oAuthTokenSecret = GetQueryParameter(response.Content,
"oauth_token_secret");

            var authorizeUrl = TwitterSettings.AuthorizeUri + "?
oauth_token=" + _oAuthToken;
            if (String.IsNullOrEmpty(_oAuthToken) ||
String.IsNullOrEmpty(_oAuthTokenSecret))
            {
                Dispatcher.BeginInvoke(() => MessageBox.Show("error
calling twitter"));
                return;
            }
            Dispatcher.BeginInvoke(() => BrowserControl.Navigate(new
Uri(authorizeUrl)));
        }
        private static string GetQueryParameter(string input, string
parameterName)
        {
            foreach (string item in input.Split('&'))
            {
                var parts = item.Split('=');
                if (parts[0] == parameterName)
                {
                    return parts[1];
                }
            }
            return String.Empty;
        }
        private void BrowserControl_Navigated(object sender,
NavigationEventArgs e)
        {
            ProgressBar.IsIndeterminate = false;
            ProgressBar.Visibility = Visibility.Collapsed;
        }
        private void BrowserControl_Navigating(object sender,
NavigatingEventArgs e)
        {
            ProgressBar.IsIndeterminate = true;
            ProgressBar.Visibility = Visibility.Visible;
            if
(e.Uri.AbsoluteUri.CompareTo("https://api.twitter.com/oauth/authorize")
== 0)
            {
                ProgressBar.IsIndeterminate = true;
                ProgressBar.Visibility = Visibility.Visible;
            }
            if
(!e.Uri.AbsoluteUri.Contains(TwitterSettings.CallbackUri))
                return;
            e.Cancel = true;
            var arguments = e.Uri.AbsoluteUri.Split('?');
```

Activate the control "accessTwitter.IsOpen = true;"

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```
            if (arguments.Length < 1)
                return;
            GetAccessToken(arguments[1]);
        }
        private void GetAccessToken(string uri)
        {
            var requestToken = GetQueryParameter(uri, "oauth_token");
            if (requestToken != _oAuthToken)
            {
                MessageBox.Show("Twitter auth tokens don't match");
            }
            var requestVerifier = GetQueryParameter(uri,
"oauth_verifier");
            var credentials = new OAuthCredentials
            {
                Type = OAuthType.AccessToken,
                SignatureMethod = OAuthSignatureMethod.HmacSha1,
                ParameterHandling =
OAuthParameterHandling.HttpAuthorizationHeader,
                ConsumerKey = TwitterSettings.ConsumerKey,
                ConsumerSecret = TwitterSettings.ConsumerKeySecret,
                Token = _oAuthToken,
                TokenSecret = _oAuthTokenSecret,
                Verifier = requestVerifier
            };
            var client = new RestClient
            {
                Authority = "https://api.twitter.com/oauth",
                Credentials = credentials,
                HasElevatedPermissions = true
            };
            var request = new RestRequest
            {
                Path = "/access_token"
            };
            client.BeginRequest(request, new
RestCallback(RequestAccessTokenCompleted));
        }
        private void RequestAccessTokenCompleted(RestRequest request,
RestResponse response, object userstate)
        {
            var twitteruser = new TwitterAccess
            {
                AccessToken = GetQueryParameter(response.Content,
"oauth_token"),
                AccessTokenSecret = GetQueryParameter(response.Content,
"oauth_token_secret"),
                UserId = GetQueryParameter(response.Content,
"user_id"),
                ScreenName = GetQueryParameter(response.Content,
"screen_name")
            };
            if (String.IsNullOrEmpty(twitteruser.AccessToken) ||
String.IsNullOrEmpty(twitteruser.AccessTokenSecret))
            {
                Dispatcher.BeginInvoke(() =>
MessageBox.Show(response.Content));
```


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```
                return;
            }
            Helper.SaveSetting(Constants.TwitterAccess, twitteruser);
            IsolatedStorageSettings mysetting =
IsolatedStorageSettings.ApplicationSettings;
            mysetting.Remove("twitter_token");
            mysetting.Remove("twitter_tokensecret");

            mysetting.Add("twitter_token", twitteruser.AccessToken);
            mysetting.Add("twitter_tokensecret",
twitteruser.AccessTokenSecret);

            mysetting.Save();
           // App.keluar = false;
            sukses = 1;
            Dispatcher.BeginInvoke(() =>
            {
                if (NavigationService.CanGoBack)
                {
                    NavigationService.GoBack();
                }
            });
        }
```

Configure Event Handling	set the event to navigate TwitterAuthPage.xaml
Get the Authentication Token	Drag button to MainPage.xaml
Done	Put event for the button to navigate to TwitterAuthPage.xaml
	Done

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