

# Managing external authentication

## External authentication services

Kentico supports several external authentication methods out of the box. To use them on your site, you have to configure them first (click on respective links for instructions) and place a corresponding web part on a page in your website.

- [Windows Active Directory](#)
- [Windows Active Directory - mixed mode](#)
- [Facebook](#)
- [Live ID](#)
- [OpenID](#)
- [LinkedIn](#)

## Authenticating users against an external database

You can customize the authentication process to check the submitted user names and passwords against an external database outside of Kentico. For this purpose you can use the **SecurityEvents** class, which provides these events:

- **Authenticate** - fired upon user authentication.
- **AuthorizeResource** - fired upon security check for particular module permission.
- **AuthorizeClass** - fired upon security check for particular object type or document type permission.
- **AuthorizeUIElement** - fired upon permission check for particular UI element.

## Example

Using the *Authenticate* event, you can customize the authentication process by extending the `CMSModuleLoader` partial class:

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```

[CustomHandlerModuleLoader]
public partial class CMSModuleLoader
{
    private class SampleAuthenticationModuleLoader : CMSLoaderAttribute
    {
        public override void Init()
        {
            SecurityEvents.Authenticate.Execute += Authenticate_Execute;
        }

        private void Authenticate_Execute(object sender,
AuthenticationEventArgs e)
        {
            // Check if the user was authenticated by the system
            if (e.User != null)
            {
                return;
            }
            UserInfo externalUser = null;
            string username = SqlHelperClass.GetSafeQueryString(e.
UserName);
            string password = SqlHelperClass.GetSafeQueryString(e.
Password);

            // Path to XML database file
            string xmlPath = HttpContext.Current.Server.MapPath("~/
userdatabase.xml");

            // Read data from external source
            DataSet dset = new DataSet();
            dset.ReadXml(xmlPath);

            // Sample external user credentials
            DataRow[] rows = dset.Tables[0].Select("UserName = '" +
username + "' AND Password='" + password + "'");

            // If external user was found, set the UserInfo parameter
and authenticate the user
            if (rows.Length > 0)
            {
                externalUser = new UserInfo();
                externalUser.IsExternal = true;
                externalUser.UserName = username;
                externalUser.FullName = username;
                externalUser.Enabled = true;
            }
            e.User = externalUser;
        }
    }
}

```

The crucial in this example is the *e.User* parameter, which represents the *UserInfo* parameter of the user being authenticated. Depending on its value, the authentication process can have these outcomes:

- If the user is found in the Kentico database, then the *UserInfo* parameter is not null and the user is authenticated normally.
- If the user is NOT found in the Kentico database (the *UserInfo* parameter is null), then the system looks into the external database. If the user is found there, the system sets the *UserInfo* parameter and authenticates this user.
- If the user is NOT found even in the external database, then the *UserInfo* parameter remains null and the user is not authenticated.

You can find more information about event handlers in the [Global events](#) topic.

## Importing users into Kentico

For importing users from external databases into Kentico, you have these options:

- **Using external authentication**
  - When a user signs in to Kentico using an external authentication service (e.g., Facebook), the system creates their account in the Kentico database and imports their profiles. See the respective links at the beginning of this page.
- **Importing users using Kentico AD Import Utility**

- Using the [Kentico AD Import Utility](#), you can import users and groups (roles in Kentico) from Active Directory into a Kentico database.
- See the [Using the AD import wizard](#) page for instructions.
- **Importing users using the Kentico Import Toolkit**
  - The [Kentico Import Toolkit](#) to import can import various data from external sources. You can also use it to import users from one SQL database into Kentico.
  - See the [Import toolkit initial steps](#) page for instructions.