Objects include all data structures used within Kentico, for example user accounts, forums, page templates, search indexes, or setting keys. By handling the events that occur during the life cycle of objects, you can add custom functionality to almost any part of the system. In the API, objects are represented by *Info* classes.

Use the following classes to access the object events:

- **ObjectEvents** - events triggered for all object types
- **<name>Info.TYPEINFO.Events** - events triggered only for a specific object type, for example: *UserInfo.TYPEINFO.Events*

See the Global event reference for information about the available events.

> ℹ **Note**: Within the context of event handling, objects do NOT include pages in the website content tree. Use the **Documen tEvents** class to assign handlers to events that the system triggers for pages.

Example

The following example demonstrates how to use event handlers to customize the behavior of a specific type of object.

The sample code extends the functionality of forum groups by creating a handler for the **Insert.After** event of the **ForumGroupI nfo** object type. This event occurs whenever a forum group is created. The custom logic automatically adds an initial child forum for every new forum group.

1. Open your Kentico project in Visual Studio (using the **WebSite.sln** or **WebApp.sln** file).
2. Create a custom module class.
   - Either add the class into a custom project within the Kentico solution (recommended) or directly into the Kentico web project (into a custom folder under the **CMSApp** project for *web application* installations, into the **A pp_Code** folder for *web site* installations).
3. Override the module's **OnInit** method and assign a handler method to the **ForumGroupInfo.TYPEINFO.Events.Insert. After** event.

```
using CMS;
using CMS.DataEngine;
using CMS.Forums;
using CMS.Helpers;

// Registers the custom module into the system
[assembly: RegisterModule(typeof(CustomForumModule))]

public class CustomForumModule : Module
{
        // Module class constructor, the system registers the module under the name
"CustomForums"
        public CustomForumModule()
                : base("CustomForums")
        {
        }

        // Contains initialization code that is executed when the application starts
        protected override void OnInit()
        {
                base.OnInit();

                // Assigns a handler to the Insert.After event for the ForumGroupInfo
object type
                // This event occurs after the creation of every new forum group
                ForumGroupInfo.TYPEINFO.Events.Insert.After +=
ForumGroup_InsertAfterEventHandler;
        }
```

```
        /// <summary>
        /// Automatically creates a child forum for new forum groups
        /// </summary>
        private void ForumGroup_InsertAfterEventHandler(object sender, ObjectEventArgs
e)
        {
                // Checks that the forum group was successfully created
                if (e.Object != null)
                {
                        // Gets an info object representing the new forum group
                        ForumGroupInfo forumGroup = (ForumGroupInfo)e.Object;

                        // Creates the child forum object
                        ForumInfo newForum = new ForumInfo()
                        {
                                // Sets the child forum's properties
                                ForumDisplayName = forumGroup.GroupDisplayName + " -
General",

                                ForumName = forumGroup.GroupName + "_General",
                                ForumGroupID = forumGroup.GroupID,
                                ForumSiteID = forumGroup.GroupSiteID,

                                ForumOpen = true,
                                ForumModerated = false,
                                AllowAccess = SecurityAccessEnum.AllUsers,
                                ForumThreads = 0,
                                ForumPosts = 0
                        };

                        // Saves the child forum to the database
                        ForumInfoProvider.SetForumInfo(newForum);
                }
        }
}
```

To try out the functionality of the custom event handler, create a new forum group on any website:

1. Open the **Forums** application.
2. Click **New forum group**.
3. Type a name into the **Group display name** field of the new forum group.
4. Click **Save**.

The system automatically creates a child forum named after the forum group (with a *" - General"* suffix).