

The default installation of Kentico provides a sample integration connector. The connector implements **two subscriptions for outgoing tasks**:

- Synchronization of user objects
- Synchronization of all pages on all websites in the system

The connector's purpose is purely demonstrative – it only logs events in the **Event log** application for each creation, modification or deletion of a user or page.

## Adding the sample connector to your web project

1. Open your Kentico installation directory (by default `C:\Program Files\Kentico\<version>`).
2. Expand the `CodeSamples\CustomizationSamples\Classes\` sub-directory.
3. Copy the **SampleIntegrationConnector.cs** file into the **CMS\App\_Code** folder of your web project.

### Information for web application projects

If your Kentico project was installed as a web application, copy the sample file into the **Old\_App\_Code** folder instead.

You must also manually include the sample class files into the project:

1. Open your application in Visual Studio.
2. Click **Show all files** at the top of the Solution Explorer.
3. Expand the `Old_App_Code` folder, right-click the new file and select **Include in Project**.

## Viewing the connector code

To see how the sample connector is implemented:

1. Open your web project in Visual Studio.
2. Expand the `~/App_Code/` folder and edit the `SampleIntegrationConnector.cs` class.



```

public class SampleIntegrationConnector : BaseIntegrationConnector
{
    #region "Initialization (subscribing)"

    /// <summary>
    /// Initializes the connector name and registers subscriptions.
    /// </summary>
    public override void Init()
    {
        // Initializes the connector name (must match the code name of the
connector object in the system)
        ConnectorName = GetType().Name;

        // Creates subscription for all user objects (predefined method)
        SubscribeToObjects(TaskProcessTypeEnum.AsyncSnapshot, UserInfo.
OBJECT_TYPE);

        // Create subscription for all pages on all sites (predefined method)
        SubscribeToAllDocuments(TaskProcessTypeEnum.AsyncSimpleSnapshot,
TaskTypeEnum.All);

        // Demonstrates how to create subscriptions manually
        // ObjectIntegrationSubscription objSubscription = new
ObjectIntegrationSubscription(ConnectorName, TaskProcessTypeEnum.AsyncSnapshot,
TaskTypeEnum.All, null, PredefinedObjectType.USER, null);
        // SubscribeTo(objSubscription);

        // DocumentIntegrationSubscription pageSubscription = new
DocumentIntegrationSubscription(ConnectorName, TaskProcessTypeEnum.
AsyncSimpleSnapshot, TaskTypeEnum.All, null, null, null, null);
        // SubscribeTo(pageSubscription);
    }

    ...
}

```



To be functional, every connector must have the **ConnectorName** property initialized in the *Init()* method. The value must match the code name of the connector object registered in the system. The sample connector uses the name of the ConnectorName – *SampleIntegrationConnector*.

The sample connector is defined in the App\_Code folder, so the file contains code that allows the system to load the class when working with the connector — the **RegisterCustomClass** assembly attribute declared above the *SampleIntegrationConnector* class. See [Loading custom classes from App\\_Code](#) for more information.

```

[assembly: RegisterCustomClass("SampleIntegrationConnector", typeof
(SampleIntegrationConnector))]

```

The *RegisterCustomClass* attribute accepts two parameters:

- The first parameter is a string identifier representing the name of the connector class. The name must match the value of the **Class name** field specified for the given connector object in the system (*SampleIntegrationConnector* in this example).
- The second parameter specifies the type of the class as a **System.Type** object.

## Registering the connector

1. Open the **Integration bus** application in the Kentico administration interface.
2. Select the **Connectors** tab.
3. Click **New connector**.
4. Fill in the following properties:
  - **Display name:** Sample integration connector
  - **Provider class - Assembly name:** (custom classes)
  - **Provider class - Class:** SampleIntegrationConnector
  - **Enabled:** Yes (selected)
5. Click **Save**.

## Testing the connector

1. Open the **Settings** application.
2. Select the **Integration -> Integration bus** category.
3. Adjust the **settings** as follows:
  - **Enable system integration bus:** Yes (selected)
  - **Enable logging of outgoing tasks:** Yes (selected)
  - **Enable processing of outgoing tasks:** No (cleared)



The sample connector only generates outgoing tasks, so you can leave the handling of incoming tasks disabled. Disabling processing of outgoing tasks allows you to see the integration tasks in the user interface. If you enable processing, the system executes the tasks immediately, and you only see the results in the [event log](#).











4. Click **Save**.
5. Try creating and modifying some pages and [user accounts](#).
6. Open the **Integration bus** application. On the **Outgoing tasks** tab, you can see a list of tasks logged for your actions. The **Synchronize** (↻) action is grayed out since processing of tasks is disabled in the system settings.

Outgoing tasks

Incoming tasks

Connectors

Connector: (all)

| <input type="checkbox"/> Actions   | Task title                                    | Task type | Task time            | Connector name               | Result |
|--|---|-----------|----------------------|------------------------------|--------|
| <input type="checkbox"/>   | Update document Operating System Installation | UPDATEDOC | 3/3/2014 11:35:03 AM | Sample Integration Connector |        |
| <input type="checkbox"/>   | Create User 'Jane Doe'                        | CREATEOBJ | 3/3/2014 11:36:35 AM | Sample Integration Connector |        |
| <input type="checkbox"/>   | Add User 'Jane Doe' to site                   | ADDTOSITE | 3/3/2014 11:36:47 AM | Sample Integration Connector |        |
| <input type="checkbox"/>   | Update User 'Andrew Jones'                    | UPDATEOBJ | 3/3/2014 11:37:59 AM | Sample Integration Connector |        |
| <input type="checkbox"/>   | Update document Web Development               | UPDATEDOC | 3/3/2014 11:38:19 AM | Sample Integration Connector |        |

Items per page 25

Selected tasks

(select an action)

OK

7. Go back to **Settings -> Integration -> Integration bus**, check **Enable processing of outgoing tasks** and click **Save**.
8. Return to **Integration bus -> Outgoing tasks**. The **Synchronize** (↻) action is now enabled.
9. To execute all tasks:
  - a. Select **All tasks** in the first selector below the list.
  - b. Choose the **Synchronize** action.
  - c. Click **OK**.

You can see the events logged by the integration tasks in the **Event log** application.



[Clear log](#)Select site: (all) ▼

Type: (all) ▼

Source: Contains ▼

Event code: Contains ▼

Time between:  [Now](#) and  [Now](#)

[Advanced search](#) [Reset](#) [Search](#)

| Actions | Type | Event time           | Source                     | Event code           | User name     | IP address | Document name                 | Site           | Machine name |
|---------|------|----------------------|----------------------------|----------------------|---------------|------------|-------------------------------|----------------|--------------|
|         | I    | 3/3/2014 11:44:26 AM | Integration bus            | SYNCALLTASKSMULTIPLE | administrator | ::1        |                               | Corporate Site | AA-15-PC     |
|         | I    | 3/3/2014 11:44:26 AM | SampleIntegrationConnector | UPDATEDOCUMENT       | administrator | ::1        | Web Development               | Corporate Site | AA-15-PC     |
|         | I    | 3/3/2014 11:44:26 AM | SampleIntegrationConnector | UPDATEOBJECT         | administrator | ::1        |                               | Corporate Site | AA-15-PC     |
|         | I    | 3/3/2014 11:44:25 AM | SampleIntegrationConnector | CREATEOBJECT         | administrator | ::1        |                               | Corporate Site | AA-15-PC     |
|         | I    | 3/3/2014 11:44:25 AM | SampleIntegrationConnector | UPDATEDOCUMENT       | administrator | ::1        | Operating System Installation | Corporate Site | AA-15-PC     |
|         | I    | 3/3/2014 11:43:19 AM | Settings key               | UPDATEOBJ            | administrator | ::1        |                               | Corporate Site | AA-15-PC     |