If the selection of builtin indexing analyzers is insufficient, you can specify customwritten or thirdparty analyzers for search indexes. Custom analyzers allow you to perform text tokenization according to any requirements. You can use custom analyzers with any type of smart search index.

To use a custom analyzer, you need to create and add the appropriate code files to your web project. Classes defining custom analyzers must:

- inherit from the **Lucene.Net.Analysis.Analyzer** class
- implement the **CMS.Search.ISearchAnalyzer** interface

Example

The following example demonstrates how to assign a custom analyzer to a smart search index. The sample analyzer divides text into tokens at non-letter characters and is case insensitive.

Adding the custom analyzer project

1. Open your Kentico solution in Visual Studio.
2. Add a new **Class Library** project to the Kentico solution, for example named *CustomSearchAnalyzer*.
3. Add references to the required Kentico libraries (DLLs) for the new project:
    a. Right-click the project and select **Add -> Reference**.
    b. Select the **Browse** tab of the **Reference manager** dialog, click **Browse** and navigate to the *Lib* folder of your Kentico web project.
    c. Add references to the following libraries:

       - **CMS.Base.dll**
       - **CMS.Core.dll**
       - **CMS.DataEngine.dll**
       - **CMS.Helpers.dll**
       - **CMS.Search.dll**
       - **Lucene.Net.v3.dll**
4. Reference the *CustomSearchAnalyzer* project from the Kentico web project *(CMSApp or CMS)*.
5. Open your Kentico program files directory (by default *C:\Program Files\Kentico\<version>*) and expand the *CodeSamples\ CustomizationSamples\CustomSearchAnalyzer* subfolder.
6. Copy the following files into the *CustomSearchAnalyzer* directory in your web project:
    - **CustomSearchAnalyzer.cs**
    - **SpaceTokenizer.cs**
7. Include the new files into the *CustomSearchAnalyzer* project in Visual Studio:
    a. Expand the *CustomSearchAnalyzer* project in the Solution Explorer.
    b. Click **Show all files** at the top of the Solution Explorer.
    c. Select the new files while holding the **Ctrl** key.
    d. Right-click one of the files and select **Include in Project**.
8. Build the **CustomSearchAnalyzer** project (Build the entire solution on web application projects).

Assigning the custom analyzer to a search index

1. Sign in to the Kentico administration interface and open the **Smart search** application.
2. Open the **Local indexes** tab.
3. Click **New Index**. Fill in the following properties:
    - **Display name**: Space analyzer page index
    - **Index type**: Pages
    - **Analyzer type**: Custom
    - **Analyzer class - Assembly name**: CustomSearchAnalyzer
    - **Analyzer class - Class**: CMS.CustomSearchAnalyzer.CustomSearchAnalyzer
4. Click **Save**.
5. Switch to the **Indexed content** tab and click **Add allowed content**.
6. Type */%* into the **Path** field to index all pages and click **Save**.
7. Switch over to the **Cultures** tab and add the cultures used by your website.
8. Go to the **General** tab and **Rebuild** the index.

You can test the index and its analyzer by switching to the **Search preview** tab and searching for words from the content of the website's pages.