

When using [Content staging](#), you can use the Kentico API to perform your own synchronization process. There are several methods you can use to work with synchronization.

Namespace	Method	Description
CMS. DocumentEngine	DocumentSynchronizationHelper.LogDocumentChange	Creates synchronization tasks for the specified page, or a set of pages under the specified path. The method returns the resulting tasks in a list.
CMS. Synchronization	SynchronizationHelper.LogObjectChange	Creates synchronization tasks for the specified object under the current site. The method returns the resulting tasks in a list.
CMS. Synchronization	StagingTaskRunner.RunSynchronization	Runs the synchronization of specified tasks. To call the method, you must first create a StagingTaskRunner instance.



Important: The *StagingTaskRunner* class is defined in the **CMS.SynchronizationEngine** assembly. When using the API in a custom project or assembly, you need to add the appropriate reference.

Examples

Pages

The following example shows how to synchronize the content of the page **/Home** to server **Staging.Target1**:



```
using System.Collections.Generic;
using System.Linq;

using CMS.DataEngine;
using CMS.DocumentEngine;
using CMS.Membership;
using CMS.SiteProvider;
using CMS.Synchronization;
// The project/assembly containing the code must also have a reference to the CMS.
// SynchronizationEngine assembly

...

TreeProvider tree = new TreeProvider(MembershipContext.AuthenticatedUser);

// Gets the page (tree node) for synchronization
TreeNode node = tree.SelectSingleNode(SiteContext.CurrentSiteName, "/Home", "en-us",
false, null, false);

if (node != null)
{
    // Gets the target server
    ServerInfo si = ServerInfoProvider.GetServerInfo("Staging.Target1",
SiteContext.CurrentSiteID);

    if (si != null)
    {
        // Logs the synchronization tasks
        List<ISynchronizationTask> tasks = DocumentSynchronizationHelper.
LogDocumentChange(node, TaskTypeEnum.UpdateDocument, true, false, tree, si.ServerID,
null, false);

        // Gets the IDs of the tasks and runs the synchronization
        new StagingTaskRunner(si.ServerID).RunSynchronization(tasks.Select(t
=> t.TaskID));
    }
}
```

Objects

The following example shows how to synchronize an update of the *administrator* user account. Synchronization of any other objects is done the same way using the API.



```
using System.Collections.Generic;
using System.Linq;

using CMS.DataEngine;
using CMS.Membership;
using CMS.SiteProvider;
using CMS.Synchronization;
// The project/assembly containing the code must also have a reference to the CMS.
SynchronizationEngine assembly

...

// Gets the object for synchronization
UserInfo userObj = UserInfoProvider.GetUserInfo("administrator");

if (userObj != null)
{
    // Gets the target server
    ServerInfo si = ServerInfoProvider.GetServerInfo("Staging.Target1",
SiteContext.CurrentSiteID);

    if (si != null)
    {
        // Logs the synchronization tasks
        List<ISynchronizationTask> tasks = SynchronizationHelper.
LogObjectChange(userObj.TypeInfo.ObjectType, 0, userObj.UserLastModified, TaskTypeEnum.
UpdateObject, true, false, false, false, false, SiteContext.CurrentSiteID, si.
ServerID);

        // Gets the IDs of the tasks and runs the synchronization
        new StagingTaskRunner(si.ServerID).RunSynchronization(tasks.Select(t
=> t.TaskID));
    }
}
```