uSync in an umbraco package that takes the bits of umbraco that are stored in a database and moves them to disk, so you can source control, copy and move your umbraco site between computers and servers.

uSync will read/write:

- Document types
- Media Types
- Data Types
- Macros
- Dictionary Items
- Languages
- Member Types
- Templates
- ~~Stylesheets~~ (no longer stored in the db in umbraco 7.3+)

Source Control

Whenever you make a change usync can write that out to disk, so you can check it in with all your other changes, uSync will also import everything from disk so when you checkout other people's code, their changes will be reflected on your build.

Deployment

uSync isn't a deployment system, but with everything written out to disk, ready for import you can copy the files over to your target systems and run imports to make changes. To run uSync as part of your deployment you will probably want to tweak a few settings.

What uSync Does

uSync gets the bits of umbraco that are stored in the DB and writes them out to disk - any changes it detects are written out in the form of xml files to the uSync/Data folder

if you want to deploy or source control your site you will also need to copy / save the other folders that umbraco writes to, such as the /views/ /css/ and /scripts folders.

uSync Versions

I do try to be good with version control, but it's can get confusing when targeting so many

different versions of umbraco - as of V7.4 of umbraco these are the current editions of uSync for each version.

Umbraco Version	uSync	Download
Umbraco 7.4+	3.1.x.740	uSync.BackOffice.3.x.740.zip
Umbraco 7.3.x	3.0.x	uSync.BackOffice.3.0.x.zip
Umbraco 7.x - 7.2.x	2.5.x	uSync_2.5.0.zip
Umbraco 6.2.5+	2.2.6	uSync2.2.6_Umbraco6.2.5.zip
Umbraco 6.2.x - 6.2.4	2.2.5	uSync2.2.5_Umbraco6.2.zip
Umbraco 6.1.x	1.5.8.2	uSync_1.5.8.2_Umbraco6.zip
Umbraco 6.0.x	No Version	-
Umbraco 4.10+	1.3.3	uSync_1.3.3_Umbraco4.zip

There are so many versions, because as little things change in the core of umbraco how that data is extracted and imported changes, going forward we are trying to keep the minimum umbraco version in the tail of the uSync version you can easily identify a version that works.

Related Packages
- uSync.ContentEdition : Adds the ability to sync content and media items as part of uSync
- uSync.Snapshots: Allows you to take moment in time snapshots of changes you have made
- uSync.Core (below) : The core usync engine & API - allowing you to write your own syncing routines

uSync has a number of options that let you set it up in a way that suits how you and your team work.

Config

the configuration of usync is controlled in the uSyncBackOffice.Config file, which will be in

the config folder of your umbraco installation. uSync primarily has three main configuration options, each one is independent of each other so you can have all three on, one on and two off and all the other options in between

Import

Controls what uSync does on startup of your umbraco site: if Import is set to true then when your site starts (or restarts) uSync will look at the files on disk and apply any changes it identifies to disk.

ExportAtStartUp

Just like import but the other way around, when your site starts up all the umbraco configuration is written out to disk, export at start up will always write the latest version of everything out.

ExportOnSave

If ExportOnSave is set to true, then whenever you save an object - that is being tracked by uSync - inside umbraco uSync will save a copy of the configuration to disk.

Handlers

The handlers do the hard work inside uSync they manage the importing, exporting and saving of all objects. By default uSync comes with the handlers to manage all of the back end objects umbraco stores in the database:

- DataTypes
- Templates
- Content Types (Document Types)
- Media Types
- Languages
- Dictionary Items
- Macros
- MemberTypes

Out-of-the-box uSync doesn't track content or media, however uSync.ContentEdition adds these handlers to uSync to enable you to track content if you wish.

Using uSync in anger

There are quite a few ways uSync can be used, it all depends on the way you have the configuration setup.

Source Control

uSync was primarily developed to help with source control of umbraco both for individual developers and as part of a wider team - the default settings (below) are set up so umbraco automatically keeps in sync as you check your changes in and out.

- Import = True,
- ExportAtStartup = False
- ExportOnSave = true

In this configuration uSync will keep your site in sync every time you start it up, and write any changes you make out to disk. this makes it ideal for source control . as all your changes will be captured and other peoples work will be imported as you checkout the code.

Deployment

uSync was never developed specifically as a deployment tool - it purposely leaves what happens to the files down to the user - but after using uSync to source control their development many people do use it to deploy the changes to servers.

Typically when deploying to a site, people will have a source site and a target (the server), with a different uSync setup for each end.

Source
Either as source control, or

- Import = False,
- Export At Startup = false
- Export On Save = true

The source setup for usync only writes out what you do to disk, it never writes anything back to umbraco. it then becomes your responsibility via the dashboard to make import any changes you want to your site.

Target

The Brave man's target:

- Import = true
- Export at startup = false
- Export On Save = false

whenever your site starts up uSync imports all changes - if you have your continuous integration and testing down, then this is the option you would take, everything happens automatically, if new changes are pushed to the live site, then a site restart will see all of them imported.

The cautious target: (Manual)

- Import = false
- Export at startup = false
- Export on Save = false

If you're CI isn't too hot, and you have to live with the reality of people making quick fixes to the server you will probably want to be a bit less bullish with your updates. setting everything to false on your server - effectively means all imports have to be done by hand via the dashboard. this way you can see what it happening via the reports, and control the timing when you want to make the changes.