Syntony

Syntony is the name of the company.

The organization of any Syntony deliverable product looks as follows:

A Company has products. A product contains one or more packages.



A package is a logic unit of one or more assemblies. Usually a Syntony Package has 3 assemblies by default:

1. The base assembly. It’s named like the package.
2. The abstractions assembly, defining all interfaces and abstract base classes.
3. The default assembly, defining the null and default implementation of the abstractions assembly.



So let’s have a look at the naming of each component:

|  |  |
| --- | --- |
| Company | Syntony |
| Package | Syntony.Solutions |
| Assemblies | Syntony.Solutions Syntony.Solutions.Abstractions  Syntony.Solutions.Default |

An assembly can contain multiple modules. In .Net the difference between an assembly and module is that a module does not contain the manifest.

The manifest is another set of metadata tables that basically contain the names of the files that are part of the assembly. They also describe the assembly’s version, culture, publisher, publicly exported types, and all of the files that comprise the assembly.

The CLR operates on assemblies; that is, the CLR always loads the file that contains the manifest metadata tables first and then uses the manifest to get the names of the other files/modules that are in the assembly.

In .Net framework Assembly is the minimum unit of deployment. You cannot deploy anything less than an assembly. To CLR, a type does not exist outside of the context of an assembly.

An Assembly can contain one or more files. The files can be any physical files. They can be a resource file, a netmodule, or native dlls.

An assembly always contains an assembly manifest. Assembly manifest is the metadata of an assembly. It contains assembly definition identity, files in the assembly, type reference information, referenced assemblies, among other things.

Netmodule is a unit of compilation. A compiler may give the option to compile a collection of source files into an assembly, or a netmodule. Netmodule contains type metadata and compiled code. It does not contain an assembly manifest.

A netmodule cannot be deployed alone. It has to be linked into an assembly.

Usually a Syntony assembly / Syntony dll contains one netmodule.