**[MSBuild](https://learn.microsoft.com/en-us/visualstudio/msbuild/build-process-overview?view=vs-2022)**

1. **Startup phase**

* Invoked through MSBuild object model in Microsoft.Build.dll/invoking the executable on CLI…
* During the startup phase, the command-line options or object model equivalents are used to configure MSBuild settings such as configuring loggers. Properties set on the command line using the -property or -p switch are set as global properties, which override any values that would be set in the project files, even though project files are read in later.
* MSBuild interprets the solution file to know all the projects that are required to be built for the given config and platform settings (solution build) – **only applies for MSBuild**

\*\* There are significant differences between VS Build vs invoking MSBuild directly \*\*

* VS manages project build order for VS builds, only calls MSBuild at individual project level.
* Difference lies in referenced objects.
  + MSBuild: when referenced objects are required, a build actually occurs – it runs tasks and tools to generate output.
  + VS Build: when finds a referenced object, MSBuild only returns the expected outputs from referenced project. Visual Studio determines the build order and calls into MSBuild separately (as needed), all completely under Visual Studio's control.

1. **Evaluation Phase**