

# Configuring Build Parameters

Build Parameters provide you with flexible means of sharing settings and a convenient way of passing settings into the build.

Build parameters are name-value pairs, defined by a user or provided by TeamCity, which can be used in a build.

There are three types of build parameters:

- Environment variables (defined using "env." prefix) are passed into the spawned build process as environment
- System properties (defined using "system." prefix) are passed into the build scripts of the supported runners (e.g. Ant, MSBuild) as build-tool specific variables
- Configuration parameters (no prefix) are not passed into the build and are only meant to share settings within a build configuration. They are the primary means for customizing a build configuration which is based on a [template](#) or uses a [meta-runner](#) .

There is a set of [predefined parameters](#) provided by TeamCity and administrators can also add custom parameters.

The parameters can be defined at different levels (in order of precedence):

- in a specific build (via [Run Custom Build](#) dialog)
- Build Configuration settings (the Build Parameters page of Build Configuration settings) or [Build Configuration Template](#)
- Project settings (the Parameters page of the Project settings). These affect all the Build Configurations and Templates found in the project and its subprojects.
- Agent (`<Agent home>/conf/buildAgent.properties` file on agent)

Any textual setting can reference a parameter which makes the string in the format of `%parameter.name%` be substituted with the actual value at the time of build.

If there is a reference to a parameter which is not defined, it is considered an [implicit agent requirement](#) so the build will only run on the agents with the parameter defined.

See more in the corresponding sections: [Defining and Using Build Parameters in Build Configuration](#) and [Project and Agent Level Build Parameters](#).

See also:

[Administrator's Guide: Configuring Agent Requirements | Defining and Using Build Parameters in Build Configuration | Project and Agent Level Build Parameters | Predefined Build Parameters](#)