

Handling Enum Values

Variables and constants of enum types can be handled with a dedicated set of API macros. The macros can report enum values using enumeration identifiers, rather than plain integral numbers. The following API macros can be used to handle enum values:

- CPPTTEST_REPORT_ENUM(<scoped enum name>, <txt>, <value>)
- CPPTTEST_POST_CONDITION_ENUM(<scoped enum name>, <value string>, <value>)
- CPPTTEST_ASSERT_ENUM_EQUAL(<scoped enum name>, <expected>, <actual>)
- CPPTTEST_ASSERT_ENUM_EQUAL_MESSAGE(<scoped enum name>, <msg>, <expected>, <actual>)

where:

- <scoped enum name> is full name of enumeration, including all namespace names. (for example: INNER_NS::MyEnumeration, INNER_NS::MyClass::MyEnumeration).
- <value string> is a string that describes the reported value.
- <value> is an integral value or enumerator.
- <txt> is a string that describes the reported value.
- <expected> is an integral value or enumerator.



The API macros presented above require the "Enable enum data autogeneration" test configuration option to be enabled. Go to **Test Configuration > Execution tab > General tab > Instrumentation mode > Edit > Instrumentation features > Advanced options** to configure this option.

Using enum values in Parameters Step and Data Sources

You can specify values inside the Test Case Editor's Parameters table using identifiers of enumerators. Press CTRL+SPACE for a list of known enumerators.

By default, only enumerators defined in the project are shown when CTRL+SPACE is pressed. To show enumerators defined outside of the project, open the project properties, go to **Parasoft > C++test > Other Settings** and provide the advanced option(s): `xharness.dumpEnumsFromFile <PATH>`, where <PATH> is a disk location of sources that define enumerations. Wildcard * can be used while specifying the path. Multiple entries of the `xharness.dumpEnumsFromFile <PATH>` option are allowed.



A simple enumerator name or a full name that includes all name spaces can be used. For example, if the MON enumerator is defined in `::INNER_NS::MyClass::DaysEnumeration`, you can type either MON or `::INNER_NS::MyClass::MON`.