C++ Mapping for Constants

Slice constant definitions map to corresponding C++ constant definitions. For example:

Slice

```
const bool      AppendByDefault = true;
const byte      LowerNibble = 0x0f;
const string    Advice = "Don't Panic!";
const short     TheAnswer = 42;
const double    PI = 3.1416;

enum Fruit { Apple, Pear, Orange };
const Fruit     FavoriteFruit = Pear;
```

Here are the generated definitions for these constants:

C++

```
const bool          AppendByDefault = true;
const Ice::Byte     LowerNibble =     15;
const std::string   Advice =          "Don't Panic!";
const Ice::Short    TheAnswer =       42;
const Ice::Double   PI =              3.1416;

enum Fruit { Apple, Pear, Orange };
const Fruit         FavoriteFruit =   Pear;
```

All constants are initialized directly in the header file, so they are compile-time constants and can be used in contexts where a compile-time constant expression is required, such as to dimension an array or as the `case` label of a `switch` statement.

See Also

- Constants and Literals
- C++ Mapping for Identifiers
- C++ Mapping for Modules
- C++ Mapping for Built-In Types
- C++ Mapping for Enumerations
- C++ Mapping for Structures
- C++ Mapping for Sequences
- C++ Mapping for Dictionaries
- C++ Mapping for Exceptions