

# C++ ANSI Profile

Also in this section:

- [C++ Stereotypes](#)

The ANSI C++ profile is the base for all other C++ profiles. Other specialized C++ profiles must inherit from this profile by creating a generalization in modeling tool.

## Data Types

Fundamental types defined by ANSI are mapped to a UML data type. You can state each fundamental type with a modifier (signed, unsigned, short, long) in a different order, but it is the same type. For example, you can use either short int or int short. Only versions defined as *type* by ANSI simple-type-specifiers are created as datatypes in the profile. If an UML synonym dataType is found during the reverse process, a class is created with this name.

Each fundamental type has 3 corresponding cv-qualified versions: const, volatile, and [Const Volatile qualified type](#).

UML data types defined in the UML profile contain char, int, double, float, or void. We use these datatypes for mapping C++ type.

These datatypes are specific. In UML 2, only Integer, Boolean, String, and UnlimitedNatural are defined; they are not defined as datatypes, but as primitives. Our modeling tool does not define UnlimitedNatural in any profile and Integer and boolean (b is lowercase) are datatypes.

PROFILE: UML Standard Profile. MagicDraw Profile.datatypes		
Data Type	Synonym	Notes
<b>char</b>	Char does not have a synonym	Char types are represented as signed char and unsigned char according to the compiler implementation.
<b>int</b>	Signed, signed int, int signed	
<b>double</b>	Double does not have a synonym	
<b>float</b>	Float does not have a synonym	
<b>void</b>	Void does not have a synonym	

PROFILE: C++ ANSI Profile.datatypes		
Data Type	Synonym	Notes
<b>signed char</b>	Signed char does not have a synonym	Char types are represented as signed char and unsigned char according to the compiler implementation.
<b>unsigned char</b>	Unsigned char does not have a synonym	
<b>unsigned int</b>	unsigned, int unsigned	
<b>unsigned short int</b>	unsigned short, short unsigned, unsigned int short, short unsigned int, short int unsigned, int short unsigned, int unsigned short	
<b>unsigned long int</b>	unsigned long, long unsigned, unsigned int long, long unsigned int, long int unsigned, int long unsigned, int unsigned long	
<b>long int</b>	long, int long, signed lon, long signed, signed long int, signed int long, long signed int, long int signed, int signed long,int long signed	
<b>short int</b>	short, int short, signed short, short signed, signed short int, signed int short, short signed int, short int signed, int signed short, int short signed	
<b>long double</b>	Long double does not have a synonym	

<b>bool</b>	Bool does not have a synonym	
<b>wchar_t</b>	wchar_t does not have a synonym	

#### Related pages

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