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**
char	Char does not have a synonym	Char types are represented as signed char and unsigned char according to the compiler implementation.
int	Signed, signed int, int signed	
double	Double does not have a synonym	
float	Float does not have a synonym	
void	Void does not have a synonym	

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

bool	Bool does not have a synonym
wchar_t	wchar_t does not have a synonym

Related pages

- C++ ANSI Profile
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