Zohour Abouakil Sofia BOUTAHAR David COURTINOT Xiaowen Ji Fabien SAUCE

**Reference :** model-checking.design January  $30^{th}$  2015

Signatures

 $\begin{array}{l} \textbf{Quality responsible:} \\ \textbf{Clients:} \end{array}$ 

## Sommaire

### Part I

# AST and CFG representations

#### **I.1**

#### I.1.1 Generation of clang AST

clang -cc1 -ast-dump simple.cpp

I.1.2 Parse the Clang AST file

I.1.3 From ASTNode to ProgramNode

Decl class hierarchy

Partie Stmt

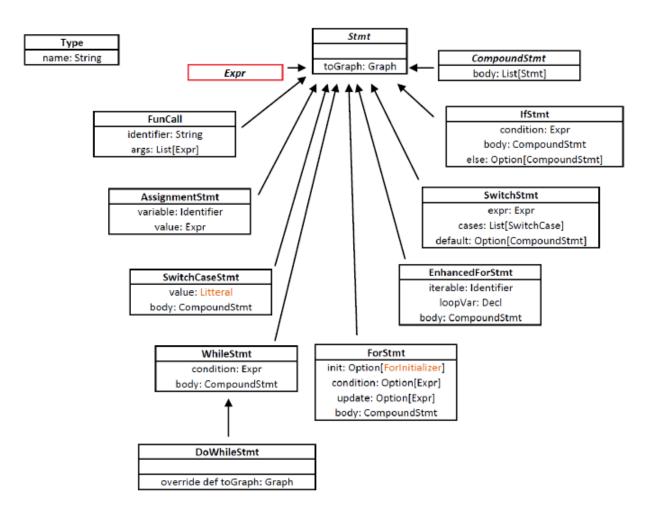


Figure I.1 -

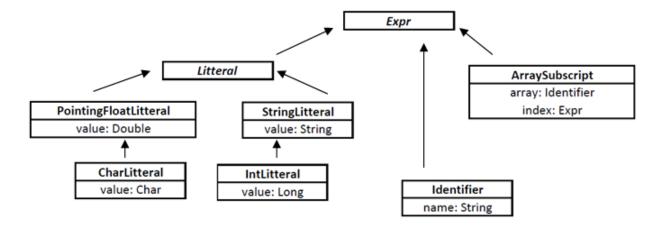


Figure I.2 - Diagramme de classe partiel de la partie  ${\bf Expr}$ 

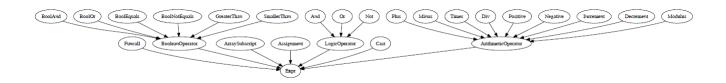


Figure I.3 - Diagramme de classe plus fourni (mais toujours incomplet) de la partie Expr

#### Remarques importantes:

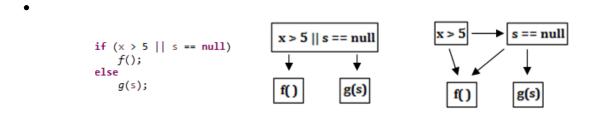


Figure I.4 -

### I.2 AST to CFG

Part II

Model checking