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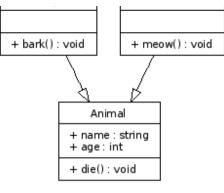
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Graphviz + Doxygen to generate UML class diagrams



I want to use **Graphviz** + **Doxygen** to generate a class diagram based on C++ code. This works already as Doxygen comes with a native DOT support; but is it possible, to produce a **UML-like output** with the corresponding access modificators (public, private etc.), return and parameter types of the class methods, similar to the diagram below?

I'm aware of thread How to use doxygen to create UML class diagrams from C++ source, but it doesn't answer the question, though.



uml doxygen graphviz



asked Feb 28 '12 at 15:36



4 Answers

Create the following source file example.cpp:

```
class Animal
{
  public:
    void die();
    string name;
    int age;
};

class Dog : public Animal
{
   public:
    void bark();
};

class Cat : public Animal
{
   public:
```

run doxygen -g and change the following options of the generated <code>boxyfile</code>:

EXTRACT_ALL = YES HAVE_DOT = YES UML_LOOK = YES

run doxygen and look at the output for the Animal class, it should be the similar as the above picture, although doxygen will not show the return types of the methods and fields.

answered Feb 28 '12 at 19:54



- 3 Is there a way to have the return types displayed? Derek Jan 27 '14 at 18:01
- 1 Did you find a way to display return types, @Derek? UndeadDragon Jun 10 '15 at 9:33

See stackoverflow.com/questions/4755913/... for a more complete answer – King's jester Aug 9 at 12:36

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I had similar problem its successfully solved now.

Following are the steps(assuming that you are using GUI version of Doxygen-Doxywizard)

- 1. Click on Expert button
- 2. Go to Dot tab and select the DOT_PATH. Browse the folder where you have installed the program. e.g., " C:/Program Files (x86)/Graphviz2.32/bin "

For more details, refer the following link http://www.cypax.net/tutorials/doxygen/index? language=en#doxycomment

answered Sep 4 '13 at 14:04



The link is broken – portforwardpodcast Mar 5 at 3:15

Try Doxygraph!

Doxygraph is a collection of tools to automate reverse engineering UML class diagrams from your project's source code, and present them as interactive web apps.

It relies on Doxygen to parse your source code and create an intermediate XML representation of the information it collects, so it supports all the same programming languages that Doxygen supports: C, C++, C#, Objective C, Java, Python, PHP, Tcl, D, IDL, VHDL, and Fortran.

You need to read the README from the cloned Project.

answered Nov 11 '14 at 7:21



A possible solution to achieve your result is to use plantuml, but it requires more work on documentation.

answered Apr 11 '12 at 13:06



² This seems to be the right tool when you do not want to generate generic diagrams from the real code but rather have extra "diagram code" in the documentation that generates hand-crafted diagrams. This is exactly what I was looking for. – Knitschi Mar 9 '16 at 6:45