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## Graphviz + Doxygen to generate UML class diagrams

Asked 7 years, 11 months ago    Active 7 months ago    Viewed 63k times

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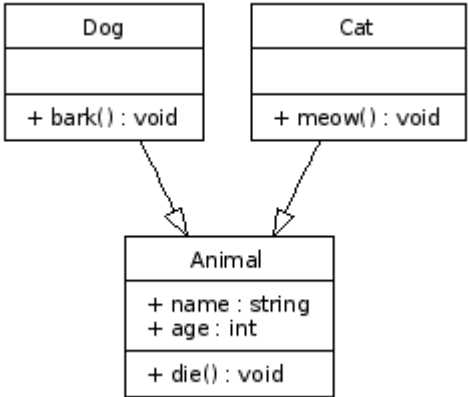
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I want to use [Graphviz](#) + [Doxygen](#) to generate a class diagram based on C++ code. This works already as Doxygen comes with a native DOT support; but is it possible, to produce a **UML-like output** with the corresponding access modifiers (public, 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.

★

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uml

doxygen

graphviz

edited May 23 '17 at 11:54

Community ♦

1 1

asked Feb 28 '12 at 15:36

Eric

1,404 1 15 29

### 4 Answers

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▼

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:
    void meow();
};
```

run `doxygen -g` and change the following options of the generated `Doxyfile` :

```
EXTRACT_ALL           = YES
HAVE_DOT              = YES
UML_LOOK              = YES
```

- 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/...](https://stackoverflow.com/questions/4755913/...) for a more complete answer – King's jester Aug 9 '17 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 "

Hope it helps, Anit


edited Jun 20 '19 at 0:55



Manish Jain514419

answered Sep 4 '13 at 14:04

Ani33959

The link is broken – [portforwardpodcast](#) Mar 5 '17 at 3:15

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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

Lucien4911


This is not an answer of the asked question. You should write this as a comment – [Manish Jain](#) Jun 19 '19 at 9:49 

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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

kikeenrique1,73121937

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