Graphviz subgraph doesn't get visualized

Asked 13 years, 2 months ago   Modified 12 years, 5 months ago

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I'm trying to create a graph with two subgraphs in dot. The code is as follows:
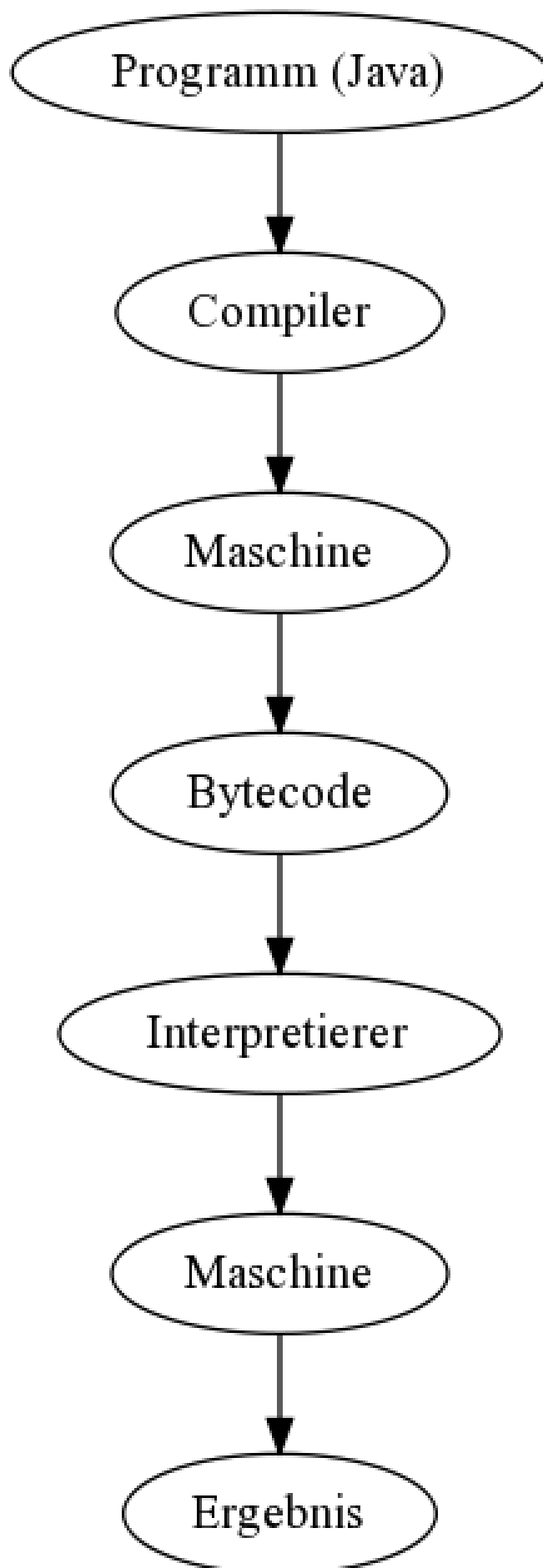
```
digraph G {
        subgraph step1 {
                style=filled;
                node [label="Compiler"]
step1_Compiler;
                node [label="Maschine"]
step1_Maschine;
                color=lightgrey;
        }

        subgraph step2 {
                style=filled;
                color=lightgrey;
                node [label="Interpretierer"]
step2_Interpretierer;
                node [label="Maschine"]
step2_Maschine;
                label="Virtuelle Maschine";
        }

        "Programm (Java)" -> step1_Compiler;
        step1_Compiler -> step1_Maschine;
        step1_Maschine -> "Bytecode";
        "Bytecode" -> step2_Interpretierer;
        step2_Interpretierer -> step2_Maschine;
        step2_Maschine -> "Ergebnis";
}
```

The result I am getting looks like the following:

Programm (Java)

↓

Compiler

↓

Maschine

↓

Bytecode

↓

Interpretierer

↓

Maschine

↓

Ergebnis

I expected to see a box around both subgraphs. What am I missing here?

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You'll have to prefix the name of your subgraphs with *cluster*:

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```
subgraph clusterstep1 {
```

and

```
subgraph clusterstep2 {
```

in order to get the style and label.

From the [graphiz documentation, section "Subgraphs and Clusters"](#):

> The third role for subgraphs directly involves how the graph will be laid out by certain layout engines. **If the name of the subgraph begins**

> **with cluster, Graphviz notes the subgraph as a special cluster subgraph**. If supported, the layout engine will do the layout so that the nodes belonging to the cluster are drawn together, with the entire drawing of the cluster contained within a bounding rectangle. Note that, for good and bad, cluster subgraphs are not part of the DOT language, but solely a syntactic convention adhered to by certain of the layout engines.

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answered Sep 28, 2011 at 17:01

[marapet](#)
56.4k ● 13 ● 175 ● 186

So will subgraph and subgraph cluster* both result in a visual grouping under the layout algorithms? – Chris Nov 24, 2013 at 11:29

21   Prefixing the name with `cluster` is such a stupid design choice... Why isn's keyword `subgraph` enough??? – 71GA Apr 11, 2021 at 18:12

@71GA: You are absolutely right, but why ask this here? File a bug against graphviz. – einpoklum Feb 3, 2022 at 13:17

4   @71GA: Filed it myself... gitlab.com/graphviz/graphviz/-/issues/2187 – einpoklum Feb 3, 2022 at 13:40

2   Thank you for this! I had a file with two subgraphs, one of which *happened to be called* `cluster` and I couldn't figure out why only one of them was visible ... – Joachim Sauer Mar 2, 2022 at 16:47