

# Grammar to Syntax Diagram Tool (`grammar2diagram`) – Version 0.9

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May 2013

*(This documentation is still very incomplete!)*

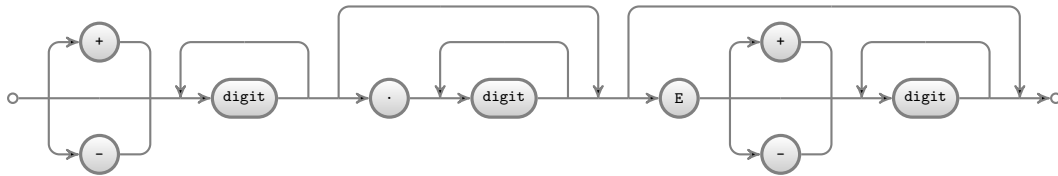
## 1 Introduction

The application `grammar2diagram` is a program for generating syntax diagrams in Tikz using a EBNF based syntax grammar as input.

Consider for example the following floating point number grammar:

```
("+" | "-" | ".") ( "digit" )+ ( "." ( "digit" )+ )? ( "E" ("+" | "-" | ".") ( "digit" )+ )?
```

Running `grammar2diagram` on it will produce the following diagram:



## 2 Installation

The program is completely contained in `jar` file `grammar2diagram.jar`. No other file or library is necessary to execute it.

To easy even further the program's execution, a bash shell script – `grammar2diagram` – is provided (to make it work it is only necessary to redefine the variable to a complete path to the program's `jar` file).

## 3 Input Grammar Specification

The table 1 shows the available EBNF alike rules for grammar specification.






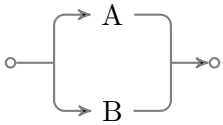
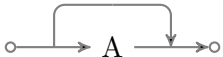

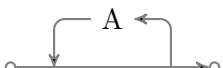
Rule	Syntax	Diagram	Options
Terminal	"T"		
Nonterminal	NT or 'NT'		
Free node	{FN}		
Parenthesized	( A )		
Sequence	A B ...		
Alternative	A   B ...		align="center"   "top"   "bottom"
Optative	( A )?		loop="up"   "down"
One or more	( A )+		loop="up"   "down"
Zero or more	( A )*		loop="up"   "down"

Table 1: Input grammar rules.