Ruby - Misc #20035

Command-line settings move from parser to compiler

12/01/2023 06:44 PM - kddnewton (Kevin Newton)

Status:	Closed		
Priority:	Normal		
Assignee:			

Description

Right now, when you pass -n, -p, -l, or -a, these options are all passed to the parser to manipulate the parse tree into giving you the desired behavior. For example:

\$ ruby --dump=parsetree -p -e "foo"

```
## Do NOT use this node dump for any purpose other than ##
## debug and research. Compatibility is not guaranteed. ##
# @ NODE_SCOPE (id: 1, line: 1, location: (1,0)-(1,3))
# +- nd_tbl: (empty)
# +- nd_args:
# |
     (null node)
# +- nd_body:
     @ NODE_WHILE (id: 10, line: 1, location: (1,0)-(1,0))
     +- nd_state: 1 (while-end)
     +- nd_cond:
        @ NODE_FCALL (id: 9, line: 1, location: (1,0)-(1,0))
        +- nd_mid: :gets
        +- nd_args:
#
            @ NODE_LIST (id: 8, line: 1, location: (1,0)-(1,0))
#
#
            +- nd_alen: 1
#
            +- nd_head:
               @ NODE_GVAR (id: 7, line: 1, location: (1,0)-(1,0))
#
#
               +- nd_entry: :$/
     #
            +- nd_next:
     (null node)
     +- nd_body:
         @ NODE_BLOCK (id: 5, line: 1, location: (1,0)-(1,0))
        +- nd_head (1):
            @ NODE_VCALL (id: 0, line: 1, location: (1,0)-(1,3))*
            +- nd_mid: :foo
         +- nd_head (2):
            @ NODE_FCALL (id: 4, line: 1, location: (1,0)-(1,0))
            +- nd_mid: :print
            +- nd_args:
                @ NODE_LIST (id: 3, line: 1, location: (1,0)-(1,0))
                +- nd_alen: 1
                +- nd_head:
                   @ NODE_GVAR (id: 2, line: 1, location: (1,0)-(1,0))
                   +- nd_entry: :$_
                +- nd_next:
                    (null node)
```

Could this mutation be moved into the compiler? That way it could be shared by prism, but also because it would make it less confusing when people are running --dump=parsetree as to why a loop is being inserted.

History

#1 - 12/01/2023 10:49 PM - nobu (Nobuyoshi Nakada)

Moving -n/-p makes impossible to check break/next/redo in parser.

```
$ ruby -c -p -e break < /dev/null
Syntax OK</pre>
```

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```
$ ruby -c -e break < /dev/null
-e:1: Invalid break
break
-e: compile error (SyntaxError)</pre>
```

#2 - 12/04/2023 03:27 PM - kddnewton (Kevin Newton)

I assume in this case that you would still pass the settings into the parser so that it could be aware of it. In looking at parse.y, I think this would amount to calling allow_block_exit at the start.

#3 - 12/12/2023 02:36 AM - nobu (Nobuyoshi Nakada)

Do you mean passing these to both of the parser and the compiler?

#4 - 12/12/2023 01:32 PM - kddnewton (Kevin Newton)

I don't think you would have to pass all of the options, I think the only thing you would need to pass is "this is inside a while loop" in order to set up allow_block_exit properly.

#5 - 02/27/2024 03:17 AM - kddnewton (Kevin Newton)

- Status changed from Open to Closed

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