

1. Copyright.

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2. *prefile_inc* Thread.

File name recognizer for includes. It checks the file system to verify that the file exists. Inside the returned “file-inclusion” terminal is the file open findings whether the file name exists. It is up to the caller to check this error status. A null status means it’s okay while “bad filename” error symbol with the extracted filename string is used.

3. Fsm *Cprefile_inc* class.**4. *Cprefile_inc* constructor directive.**

```
<Cprefile_inc constructor directive 4> ≡
  chrs_ = 0;
  error_raised_ = 0;
```

5. *Cprefile_inc* op directive.

```
<Cprefile_inc op directive 5> ≡
  chrs_ = 0;
  error_raised_ = 0;
```

6. *Cprefile_inc* user-declaration directive.

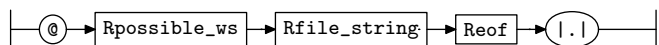
```
<Cprefile_inc user-declaration directive 6> ≡
public: T_c_string * chrs_;
  yacco2 :: CAbs_lr1_sym * error_raised_;
```

7. *Cprefile_inc* user-prefix-declaration directive.

```
<Cprefile_inc user-prefix-declaration directive 7> ≡
#include "ws.h"
#include "eol.h"
#include "c_string.h"
  using namespace NS_yacco2_terminals;
```

8. *Rprefile_inc* rule.

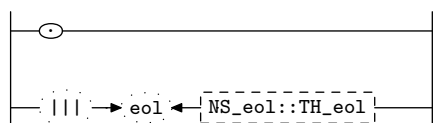
Rprefile_inc

**9. *Rprefile_inc* op directive.**

```
<Rprefile_inc op directive 9> ≡
  Cprefile_inc * fsm = ( Cprefile_inc * ) rule_info__parser__fsm_tbl__;
  T_file_inclusion * typ = new T_file_inclusion(fsm->chrs_, fsm->error_raised_);
  typ->set_rc(*rule_info__parser__start_token__, __FILE__, __LINE__);
  RSVP(typ);
  fsm->chrs_ = 0;
```

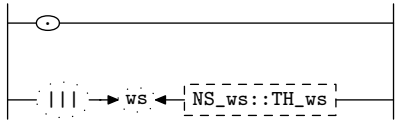
10. *Reof* rule.

Reof



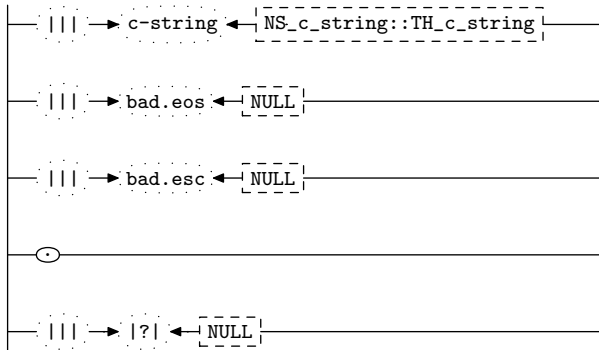
11. *Rpossible_ws* rule.

Rpossible_ws

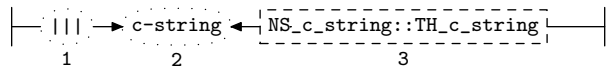


12. *Rfile_string* rule.

Rfile_string



13. *Rfile_string*'s subrule 1.

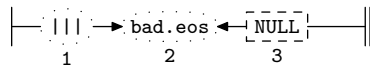


```

⟨Rfile_string subrule 1 op directive 13⟩ ≡
  Cprefile_inc * fsm = ( Cprefile_inc * ) rule_info_.parser_--fsm_tbl_;
  fsm-chrs_ = sf-p2--;
  string * ps_fn = fsm-chrs_-c_string();
  std::ifstream fle_chk;
  fle_chk.open(ps_fn-c_str());
  if (!fle_chk.good()) {
    fsm-error_raised_ = new Err_bad_filename(*ps_fn);
    fsm-error_raised_-set_rc(*rule_info_.parser_--start_token_, __FILE__, __LINE__);
  }
  else {
    fle_chk.close();
  }

```

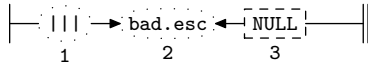
14. *Rfile_string*'s subrule 2.



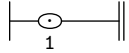
```

⟨Rfile_string subrule 2 op directive 14⟩ ≡
  Cprefile_inc * fsm = ( Cprefile_inc * ) rule_info_.parser_--fsm_tbl_;
  fsm-error_raised_ = sf-p2--;

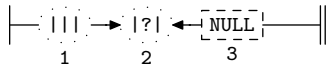
```

15. *Rfile_string*'s subrule 3.

⟨ *Rfile_string* subrule 3 op directive 15 ⟩ ≡
`Cprefile_inc * fsm = (Cprefile_inc *) rule_info...parser--fsm_tbl_;`
`fsm-error_raised_ = sf-p2_;`

16. *Rfile_string*'s subrule 4.

⟨ *Rfile_string* subrule 4 op directive 16 ⟩ ≡
`Cprefile_inc * fsm = (Cprefile_inc *) rule_info...parser--fsm_tbl_;`
`fsm-error_raised_ = new Err_no_filename;`
`fsm-error_raised_-set_rc(*rule_info...parser--current_token(), __FILE__, __LINE__);`

17. *Rfile_string*'s subrule 5.

⟨ *Rfile_string* subrule 5 op directive 17 ⟩ ≡
`Cprefile_inc * fsm = (Cprefile_inc *) rule_info...parser--fsm_tbl_;`
`fsm-error_raised_ = sf-p2_;`

18. First Set Language for O_2^{linker} .

```
/*
  File: prefile_inc.fsc
  Date and Time: Fri Jan  2 15:33:49 2015
*/
transitive      n
grammar-name    "prefile_inc"
name-space      "NS_prefile_inc"
thread-name     "TH_prefile_inc"
monolithic      n
file-name       "prefile_inc.fsc"
no-of-T         569
list-of-native-first-set-terminals 1
  raw_at_sign
end-list-of-native-first-set-terminals
list-of-transitive-threads 0
end-list-of-transitive-threads
list-of-used-threads 3
  NS_c_string::TH_c_string
  NS_eol::TH_eol
  NS_ws::TH_ws
end-list-of-used-threads
fsm-comments
"Preprocessor source file from the 'include file' directive."
```

19. Lr1 State Network.

\Rightarrow		State: 1 state type: s	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
c	Rprefile_inc	1 1 1 @	1 2 6
\Rightarrow	@	State: 2 state type: s/r	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
c	Rpossible_ws	3 1 1 ϵ	2 0 2 1
c	Rpossible_ws	3 2 1 ws NS_ws::TH_ws	2 7 8
t	Rprefile_inc	1 1 2 Rpossible_ws <u>Rfile_stringϵ</u> <u>Reofϵ</u> ...	1 3 6
\Rightarrow	Rpossible_ws	State: 3 state type: s/r	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
c	Rfile_string	4 4 1 ϵ	3 0 3 1
c	Rfile_string	4 2 1 bad eos NULL	3 9 12
c	Rfile_string	4 5 1 ? NULL	3 9 10
c	Rfile_string	4 1 1 c-string NS_c_string::TH_c_string	3 9 11
c	Rfile_string	4 3 1 bad esc NULL	3 9 13
t	Rprefile_inc	1 1 3 Rfile_string <u>Reofϵ</u> .	1 4 6
\Rightarrow	Rfile_string	State: 4 state type: s/r	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
c	Reof	2 1 1 ϵ	4 0 4 2
c	Reof	2 2 1 eol NS_eol::TH_eol	4 14 15
t	Rprefile_inc	1 1 4 Reof .	1 5 6
\Rightarrow	Reof	State: 5 state type: s	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
t	Rprefile_inc	1 1 5 .	1 6 6
\Rightarrow	.	State: 6 state type: r	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
t	Rprefile_inc	1 1 6	1 0 6 3
\Rightarrow	arbitration-code: ϵ	State: 7 state type: s	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
t	Rpossible_ws	3 2 2 ws	2 8 8
\Rightarrow	ws	State: 8 state type: r	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
t	Rpossible_ws	3 2 3	2 0 8 1
\Rightarrow	arbitration-code: ϵ	State: 9 state type: s	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA
t	Rfile_string	4 5 2 ?	3 10 10
t	Rfile_string	4 1 2 c-string	3 11 11
t	Rfile_string	4 2 2 bad eos	3 12 12
t	Rfile_string	4 3 2 bad esc	3 13 13
\Rightarrow	?	State: 10 state type: r	
\leftarrow	rule	\rightarrow R# sr# Po \leftarrow	subrule element \rightarrow Brn Gto Red LA

t Rfile_string	4	5	3					3	0	10	1
⇒ <i>c-string</i>											
← rule	→	R#	sr#	Po	←			→	Brn	Gto	Red LA
t Rfile_string		4	1	3					3	0	11 1
⇒ <i>badeos</i>											
← rule	→	R#	sr#	Po	←			→	Brn	Gto	Red LA
t Rfile_string		4	2	3					3	0	12 1
⇒ <i>badesc</i>											
← rule	→	R#	sr#	Po	←			→	Brn	Gto	Red LA
t Rfile_string		4	3	3					3	0	13 1
⇒ <i> arbitration-code: ε</i>											
← rule	→	R#	sr#	Po	←			→	Brn	Gto	Red LA
t Reof		2	2	2	eol				4	15	15
⇒ <i>eol</i>											
← rule	→	R#	sr#	Po	←			→	Brn	Gto	Red LA
t Reof		2	2	3					4	0	15 2

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|. |: 8.
||| : 10, 11, 12.
|?| : 12.
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prefile_inc Grammar

Date: January 2, 2015 at 15:38

File: prefile_inc.lex Ns: NS_prefile_inc

Version: 1.0 Debug: false

Grammar Comments: Type: Thread

Preprocessor source file from the “include file” directive.

1 element(s) in Lookahead Expression below

eolr

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