

1. Copyright.

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2. *prt_sr_elements.lex* Grammar.

Layout those elements on the subrule's rhs. Its output is directed to the grammar's index document being generated from the *prt_xrefs_docs.lex* grammar.

3. Fsm *Cprt_sr_elements* class.**4. *Cprt_sr_elements* op directive.**

```
<Cprt_sr_elements op directive 4> ≡
    elem_no_ = 0;
```

5. *Cprt_sr_elements* user-declaration directive.

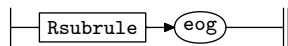
```
<Cprt_sr_elements user-declaration directive 5> ≡
public: char big_buf_[BIG_BUFFER_32K];
        std::ofstream * ow_index_file_;
int elem_no_;
```

6. *Cprt_sr_elements* user-prefix-declaration directive.

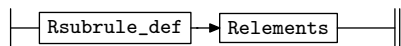
```
<Cprt_sr_elements user-prefix-declaration directive 6> ≡
#include "o2_externs.h"
        extern void XLATE_SYMBOLS_FOR_cweave(const char *Sym_to_xlate, char *Xlated_sym);
```

7. *Rprt_sr_elements* rule.

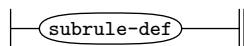
Rprt_sr_elements

**8. *Rsubrule* rule.**

Rsubrule

**9. *Rsubrule_def* rule.**

Rsubrule_def

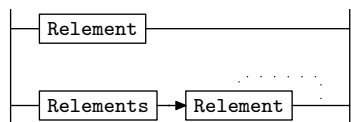


```
<Rsubrule_def subrule 1 op directive 9> ≡
```

```
Cprt_sr_elements * fsm = ( Cprt_sr_elements * ) rule_info...parser...fsm_tbl...;
fsm-elem_no_ = 0;
```

10. *Relements* rule.

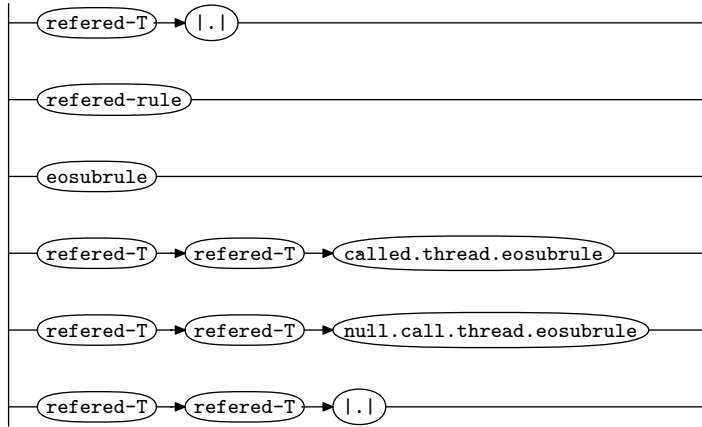
Relements



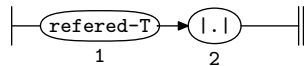
11. Relement rule.

Use of |.| to make grammar lr(1).

Relement



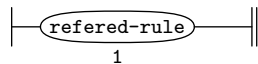
12. Relement's subrule 1.



< Relement subrule 1 op directive 12 > ≡

```
Cprt_sr_elements * fsm = ( Cprt_sr_elements * ) rule_info...parser...fsm_tbl...;
++fsm-elim_no_;
char xlated_sym[Max_cweb_item_size];
XLATE_SYMBOLS_FOR_cweave(sf-p1...its_t_def()-t_name()-c_str(), xlated_sym);
strcat(xlated_sym, "\\_\\_");
*fsm-ow_index_file_ << xlated_sym << endl;
```

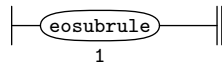
13. Relement's subrule 2.



< Relement subrule 2 op directive 13 > ≡

```
Cprt_sr_elements * fsm = ( Cprt_sr_elements * ) rule_info...parser...fsm_tbl...;
++fsm-elim_no_;
char xlated_sym[Max_cweb_item_size];
XLATE_SYMBOLS_FOR_cweave(sf-p1...its_rule_def()-rule_name()-c_str(), xlated_sym);
strcat(xlated_sym, "\\_\\_");
*fsm-ow_index_file_ << xlated_sym << endl;
```

14. Relement's subrule 3.

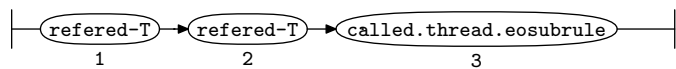


```

⟨ Relement subrule 3 op directive 14 ⟩ ≡
  Cprrt_sr_elements * fsm = ( Cprrt_sr_elements * ) rule_info...parser--fsm_tbl...;
  ++fsm-elem_no_;
  if ( fsm-elem_no_ ≡ 1 ) { /* epsilon */
    KCHARP eps = "$\epsilon$";
    *fsm-ow_index_file_ << eps << endl;
  }

```

15. Relement's subrule 4.

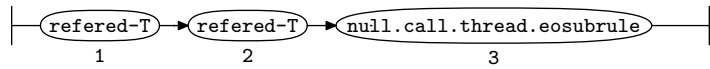


```

⟨ Relement subrule 4 op directive 15 ⟩ ≡
  Cprrt_sr_elements * fsm = ( Cprrt_sr_elements * ) rule_info...parser--fsm_tbl...;
  ++fsm-elem_no_;
  char xlated_sym[Max_cweb_item_size];
  XLATE_SYMBOLS_FOR_cweave(sf-p1--its_t_def()-t_name()-c_str(), xlated_sym);
  strcat(xlated_sym, "\\_\\_");
  *fsm-ow_index_file_ << xlated_sym << endl;
  ++fsm-elem_no_;
  char rtned_xlated_sym[Max_cweb_item_size];
  XLATE_SYMBOLS_FOR_cweave(sf-p2--its_t_def()-t_name()-c_str(), rtned_xlated_sym);
  strcat(rtned_xlated_sym, "\\_\\_");
  *fsm-ow_index_file_ << rtned_xlated_sym << endl;
  ++fsm-elem_no_;
  char thd_xlated_sym[Max_cweb_item_size];
  char full_thd_name[Max_cweb_item_size];
  KCHARP full_thd_name_template = "%s : %s";
  sprintf(full_thd_name, full_thd_name_template, sf-p3--ns()-identifier()-c_str(),
    sf-p3--called_thread_name()-identifier()-c_str());
  XLATE_SYMBOLS_FOR_cweave((const char *) full_thd_name, thd_xlated_sym);
  *fsm-ow_index_file_ << thd_xlated_sym << endl;

```

16. Relement's subrule 5.



⟨ Relement subrule 5 op directive 16 ⟩ ≡

```

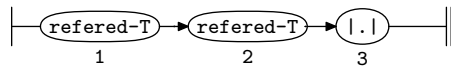
Cprt_sr_elements * fsm = ( Cprt_sr_elements * ) rule_info...parser--fsm_tbl--;
++fsm-elem_no_;

char xlated_sym[Max_cweb_item_size];
XLATE_SYMBOLS_FOR_cweave(sf-p1--its_t_def()-t_name()-c_str(), xlated_sym);
strcat(xlated_sym, "\\_\\_");
*fsm-ow_index_file_ << xlated_sym << endl;
++fsm-elem_no_;

char rtned_xlated_sym[Max_cweb_item_size];
XLATE_SYMBOLS_FOR_cweave(sf-p2--its_t_def()-t_name()-c_str(), rtned_xlated_sym);
strcat(rtned_xlated_sym, "\\_\\_");
*fsm-ow_index_file_ << rtned_xlated_sym << endl;
++fsm-elem_no_;
*fsm-ow_index_file_ << "NULL" << endl;

```

17. Relement's subrule 6.



⟨ Relement subrule 6 op directive 17 ⟩ ≡

```

Cprt_sr_elements * fsm = ( Cprt_sr_elements * ) rule_info...parser--fsm_tbl--;
++fsm-elem_no_;

char xlated_sym[Max_cweb_item_size];
XLATE_SYMBOLS_FOR_cweave(sf-p1--its_t_def()-t_name()-c_str(), xlated_sym);
strcat(xlated_sym, "\\_\\_");
*fsm-ow_index_file_ << xlated_sym << endl;
++fsm-elem_no_;

char xlated_2_sym[Max_cweb_item_size];
XLATE_SYMBOLS_FOR_cweave(sf-p2--its_t_def()-t_name()-c_str(), xlated_2_sym);
strcat(xlated_2_sym, "\\_\\_");
*fsm-ow_index_file_ << xlated_2_sym << endl;

```

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

```
/*
  File: prt_sr_elements.fsc
  Date and Time: Fri Jan  2 15:33:50 2015
*/
transitive      n
grammar-name    "prt_sr_elements"
name-space      "NS_prt_sr_elements"
thread-name     "Cprt_sr_elements"
monolithic      y
file-name       "prt_sr_elements.fsc"
no-of-T         569
list-of-native-first-set-terminals 1
  T_subrule_def
end-list-of-native-first-set-terminals
list-of-transitive-threads 0
end-list-of-transitive-threads
list-of-used-threads 0
end-list-of-used-threads
fsm-comments
"Print the subrule's symbol string."
```

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	Rsubrule_def		3 1 1		subrule-def	1 2 2
c	Rprt_sr_elements		1 1 1		Rsubrule <u>eog</u>	1 3 4
c	Rsubrule		2 1 1		Rsubrule_def <u>Relements</u>	1 5 14
\Rightarrow	<u>subrule-def</u>			State: 2 state type: r		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
t	Rsubrule_def		3 1 2			1 0 2 1
\Rightarrow	<u>Rsubrule</u>			State: 3 state type: s		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
t	Rprt_sr_elements		1 1 2		eog	1 4 4
\Rightarrow	<u>eog</u>			State: 4 state type: r		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
t	Rprt_sr_elements		1 1 3			1 0 4 2
\Rightarrow	<u>Rsubrule_def</u>			State: 5 state type: s		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
c	Relement		5 1 1		referred-T	5 6 7
c	Relement		5 5 1		referred-T	5 6 11
c	Relement		5 6 1		referred-T	5 6 9
c	Relement		5 4 1		referred-T	5 6 10
c	Relement		5 2 1		referred-rule	5 12 12
c	Relement		5 3 1		eosubrule	5 13 13
t	Rsubrule		2 1 2		Relements	1 14 14
c	Relements		4 2 1		Relements <u>Relement</u>	5 14 15
c	Relements		4 1 1		Relement	5 16 16
\Rightarrow	<u>referred-T</u>			State: 6 state type: s		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
t	Relement		5 1 2		.	5 7 7
t	Relement		5 5 2		referred-T	5 8 11
t	Relement		5 6 2		referred-T	5 8 9
t	Relement		5 4 2		referred-T	5 8 10
\Rightarrow	<u> . </u>			State: 7 state type: r		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
t	Relement		5 1 3			5 0 7 3
\Rightarrow	<u>referred-T</u>			State: 8 state type: s		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
t	Relement		5 6 3		.	5 9 9
t	Relement		5 4 3		called thread eosubrule	5 10 10
t	Relement		5 5 3		null call thread eosubrule	5 11 11
\Rightarrow	<u> . </u>			State: 9 state type: r		
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow Brn Gto Red LA
t	Relement		5 6 4			5 0 9 3

\Rightarrow *calledthreadeosubrule*

\leftarrow	rule	\rightarrow	R#	sr#	Po	\leftarrow
t	Relement		5	4	4	

State: 10 state type: r
 subrule element

\rightarrow	Brn	Gto	Red	LA
	5	0	10	3

 \Rightarrow *nullcallthreadeosubrule*

\leftarrow	rule	\rightarrow	R#	sr#	Po	\leftarrow
t	Relement		5	5	4	

State: 11 state type: r
 subrule element

\rightarrow	Brn	Gto	Red	LA
	5	0	11	3

 \Rightarrow *referred-rule*

\leftarrow	rule	\rightarrow	R#	sr#	Po	\leftarrow
t	Relement		5	2	2	

State: 12 state type: r
 subrule element

\rightarrow	Brn	Gto	Red	LA
	5	0	12	3

 \Rightarrow *eosubrule*

\leftarrow	rule	\rightarrow	R#	sr#	Po	\leftarrow
t	Relement		5	3	2	

State: 13 state type: r
 subrule element

\rightarrow	Brn	Gto	Red	LA
	5	0	13	3

 \Rightarrow *Relements*

\leftarrow	rule	\rightarrow	R#	sr#	Po	\leftarrow
t	Rsubrule		2	1	3	
c	Relement		5	1	1	referred-T
c	Relement		5	5	1	referred-T
c	Relement		5	6	1	referred-T
c	Relement		5	4	1	referred-T
c	Relement		5	2	1	referred-rule
c	Relement		5	3	1	eosubrule
t	Relements		4	2	2	Relement

State: 14 state type: s/r
 subrule element

\rightarrow	Brn	Gto	Red	LA
	1	0	14	4
	14	6	7	
	14	6	11	
	14	6	9	
	14	6	10	
	14	12	12	
	14	13	13	
	5	15	15	

 \Rightarrow *Relement*

\leftarrow	rule	\rightarrow	R#	sr#	Po	\leftarrow
t	Relements		4	2	3	

State: 15 state type: r
 subrule element

\rightarrow	Brn	Gto	Red	LA
	5	0	15	3

 \Rightarrow *Relement*

\leftarrow	rule	\rightarrow	R#	sr#	Po	\leftarrow
t	Relements		4	1	2	

State: 16 state type: r
 subrule element

\rightarrow	Brn	Gto	Red	LA
	5	0	16	3

20. Index.

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prt_sr_elements Grammar

Date: January 2, 2015 at 15:38

File: prt_sr_elements.lex

Ns: NS_prt_sr_elements

Version: 1.0

Debug: false

Grammar Comments:

Type: Monolithic

Print the subrule's symbol string.

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