

1. Copyright.

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Parse a grammar's rule definition.

Example of a rule definition to parse:

```

/*
file: ruledef.txt
Why: example of text to parse by rule_def_phrase grammar.
*/
Rrule_def_phrase AD AB(
lhs
,parallel-control-monitor{
  arbitrator-code
  ***
}
){
-> |.|
-> ||| "cweb-marker" NS_cweb_marker::TH_cweb_marker {
  rhs-op
  Crule_def_phrase* fsm = (Crule_def_phrase*)parser()->fsm_tbl();
  fsm->rule_def_->add_cweb_marker(sf->p2_->ast());
  ***
}
-> ||| |+| NULL {
  rhs-op
          RSVP(sf->p2_-);
          parser()->set_stop_parse(true);
  ***
}
}

```

2. Fsm Crule_def_phrase class.**3. Crule_def_phrase constructor directive.**

⟨Crule_def_phrase constructor directive 3⟩ ≡
rule_def_- = 0;

4. Crule_def_phrase op directive.

⟨Crule_def_phrase op directive 4⟩ ≡
rule_def_- = 0;

5. Crule_def_phrase user-declaration directive.

⟨Crule_def_phrase user-declaration directive 5⟩ ≡
public: *rule_def_* * *rule_def_-*;

6. Crule_def_phrase user-prefix-declaration directive.

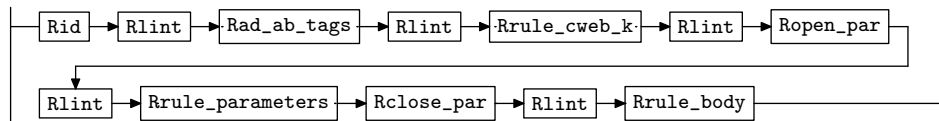
```

< Crule_def_phrase user-prefix-declaration directive 6 > ≡
#include "lint_balls.h"
#include "cweb_or_c_k.h"
#include "identifier.h"
#include "c_string.h"
#include "t_def_delabort_tags.h"
#include "subrules_phrase.h"
#include "rule_lhs_phrase.h"
#include "yacco2_stbl.h"
#include "parallel_monitor_ph.h"

```

7. Rrule_def_phrase rule.

Rrule_def_phrase



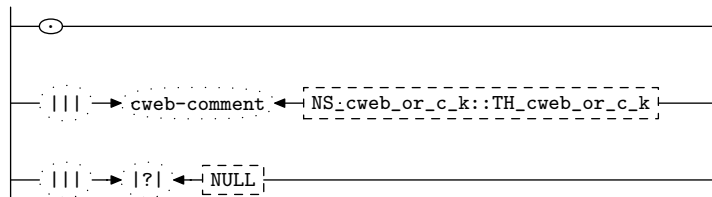
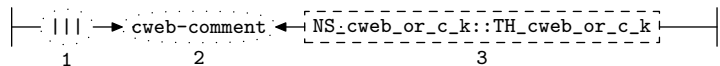
```

< Rrule_def_phrase subrule 1 op directive 7 > ≡
  Crule_def_phrase * fsm = ( Crule_def_phrase * ) rule_info_.parser_--fsm_tbl_;
  fsm->rule_def_-bld_its_tree();
  RSVP(fsm->rule_def_-);
  fsm->rule_def_- = 0;

```

8. Rrule_cweb_k rule.

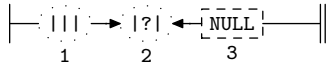
Rrule_cweb_k

**9. Rrule_cweb_k's subrule 2.**

```

< Rrule_cweb_k subrule 2 op directive 9 > ≡
  Crule_def_phrase * fsm = ( Crule_def_phrase * ) rule_info_.parser_--fsm_tbl_;
  T_cweb_comment * k = sf-p2_;
  AST * cwebk_t_ = new AST(*k);
  AST * cweb_t_ = new AST();
  T_cweb_marker * cw = new T_cweb_marker(cweb_t_);
  cw->set_rc(*k, __FILE__, __LINE__);
  fsm->rule_def_-add_cweb_marker(cweb_t_);
  AST::set_content(*cweb_t_, *cw);
  AST::join_pts(*cweb_t_, *cwebk_t_);

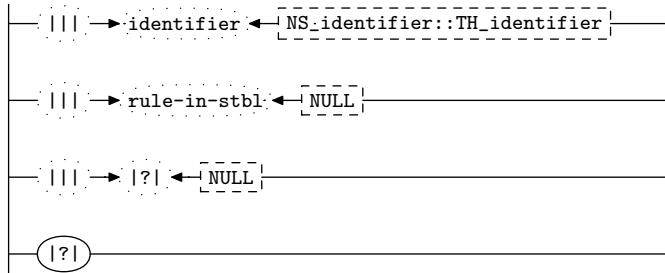
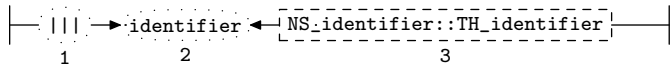
```

10. *Rrule_cweb_k*'s subrule 3.

⟨*Rrule_cweb_k* subrule 3 op directive 10⟩ ≡
 RSVP(*sf*-*p2*-);
rule_info-.*parser*-.*set_stop_parse*(*true*);

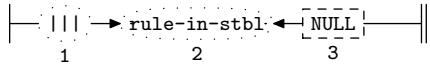
11. *Rid* rule.

Rid

12. *Rid*'s subrule 1.

⟨*Rid* subrule 1 op directive 12⟩ ≡
Crule_def_phrase * *fsm* = (*Crule_def_phrase* *) *rule_info*-.*parser*-.*fsm_tbl*-;
const char **skey* = *sf*-*p2*-*identifier*()-*c_str*();
fsm-*rule_def* = **new** *rule_def*(*skey*);
rule_in_stbl * *ristbl* = **new** *rule_in_stbl*(**fsm*-*rule_def*-);
fsm-*rule_def*-*set_rc*(**sf*-*p2*-, __FILE__, __LINE__);
sf-*p2*-*set_auto_delete*(*true*);
T_sym_tbl_report_card *report_card*;
using namespace *yacco2_stbl*;
add_sym_to_stbl(*report_card*, **skey*, **ristbl*, *table_entry* :: *defed*, *table_entry* :: *rule*);
if (*report_card*.*status*- ≠ *T_sym_tbl_report_card* :: *okay*) {
 report_card.*err_entry*-*set_rc*(**sf*-*p2*-, __FILE__, __LINE__);
 RSVP(*report_card*.*err_entry*-);
 rule_info-.*parser*-.*set_stop_parse*(*true*);
 return;
}
ristbl-*stbl_idx*(*report_card*.*pos*-);
report_card.*tbl_entry*-*defined*- = *true*;

13. Rid's subrule 2.



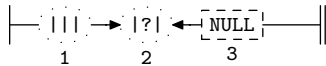
⟨Rid subrule 2 op directive 13⟩ ≡

```

Crule_def_phrase * fsm = ( Crule_def_phrase * ) rule_info_.parser_--fsm_tbl_;
using namespace yacco2_stbl;
T_sym_tbl_report_card report_card;
find_sym_in_stbl(report_card, *sf-p2--r_def()-rule_name()-c_str());
if (report_card.action_ ≡ T_sym_tbl_report_card::not_fnd) {
    CAbs_lr1_sym * sym = new Err_rule_not_in_stbl;
    sym-set_rc(*rule_info_.parser_--start_token_, __FILE__, __LINE__);
    RSVP(sym);
    rule_info_.parser_--set_stop_parse(true);
    return;
}
if (report_card.tbl_entry_--defined_ ≡ true) {
    CAbs_lr1_sym * sym = new Err_rule_already_defined;
    sym-set_rc(*rule_info_.parser_--start_token_, __FILE__, __LINE__);
    RSVP(sym);
    rule_info_.parser_--set_stop_parse(true);
    return;
}
fsm-rule_def_ = sf-p2--r_def();
report_card.tbl_entry_--defined_ = true;

```

14. Rid's subrule 3.



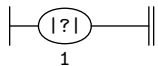
⟨Rid subrule 3 op directive 14⟩ ≡

```

CAbs_lr1_sym * sym = new Err_stble_has_entry_but_not_a_rule;
sym-set_rc(*sf-p2--, __FILE__, __LINE__);
RSVP(sym);
rule_info_.parser_--set_stop_parse(true);
return;

```

15. Rid's subrule 4.



⟨Rid subrule 4 op directive 15⟩ ≡

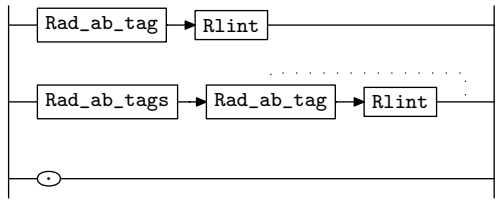
```

CAbs_lr1_sym * sym = new Err_no_rule_name_present;
sym-set_rc(*sf-p1--, __FILE__, __LINE__);
RSVP(sym);
rule_info_.parser_--set_stop_parse(true);

```

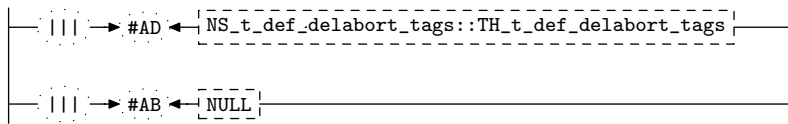
16. *Rad_ab_tags* rule.

Rad_ab_tags

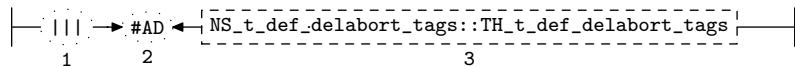


17. *Rad_ab_tag* rule.

Rad_ab_tag



18. *Rad_ab_tag*'s subrule 1.

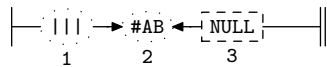


```

<Rad_ab_tag subrule 1 op directive 18> ≡
  Crule_def_phrase * fsm = ( Crule_def_phrase * ) rule_info__parser__fsm_tbl__;
  if (fsm->rule_def->autodelete() ≡ true) {
    CAbs_lr1_sym * sym = new Err_already_defined_AD;
    sym->set_rc(*sf-p2__, __FILE__, __LINE__);
    RSVP(sym);
    rule_info__parser__->set_stop_parse(true);
    return;
  }
  fsm->rule_def->autodelete(true);

```

19. *Rad_ab_tag*'s subrule 2.



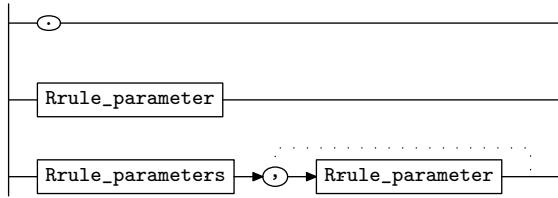
```

<Rad_ab_tag subrule 2 op directive 19> ≡
  Crule_def_phrase * fsm = ( Crule_def_phrase * ) rule_info__parser__fsm_tbl__;
  if (fsm->rule_def->autoabort() ≡ true) {
    CAbs_lr1_sym * sym = new Err_already_defined_AB;
    sym->set_rc(*sf-p2__, __FILE__, __LINE__);
    RSVP(sym);
    rule_info__parser__->set_stop_parse(true);
    return;
  }
  fsm->rule_def->autoabort(true);

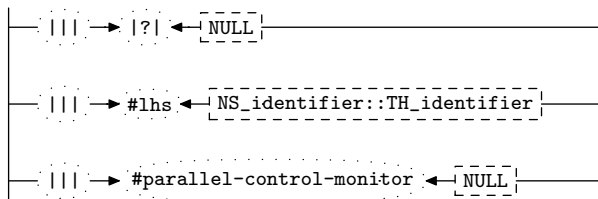
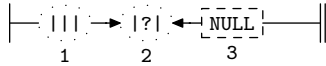
```

20. *Rrule_parameters* rule.

Rrule_parameters

21. *Rrule_parameter* rule.

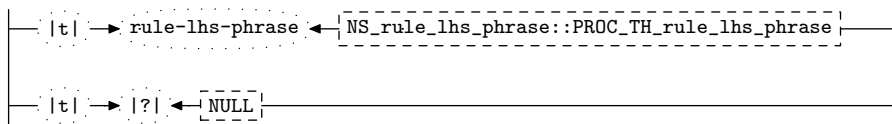
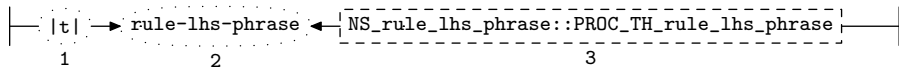
Rrule_parameter

22. *Rrule_parameter*'s subrule 1.

$\langle \text{Rrule_parameter subrule 1 op directive 22} \rangle \equiv$
CAbs_lr1_sym * *sym* = **new** *Err_not_lhs_pcnrl_mntr*;
sym→*set_rc*(**sf*-*p2*_, __FILE__, __LINE__);
RSVP(*sym*);
rule_info→*parser*→*set_stop_parse*(*true*);

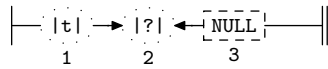
23. *Rlhs_phrase* rule.

Rlhs_phrase

24. *Rlhs_phrase*'s subrule 1.

$\langle \text{Rlhs_phrase subrule 1 op directive 24} \rangle \equiv$
Crule_def_phrase * *fsm* = (*Crule_def_phrase* *) *rule_info*→*parser*→*fsm_tbl*_;
fsm→*rule_def*→*rule_lhs*(*sf*-*p2*_-);

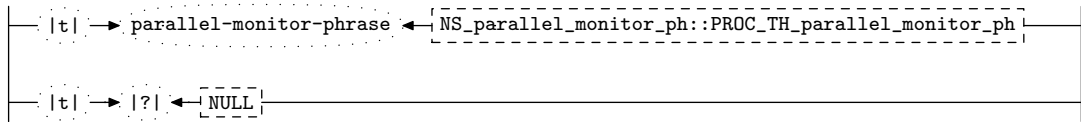
25. Rlhs_phrase's subrule 2.



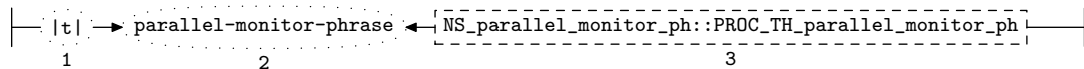
⟨Rlhs_phrase subrule 2 op directive 25⟩ ≡
 RSVP(sf→p2_);
 rule_info_.parser_--set_stop_parse(true);

26. Rparallel_monitor_phrase rule.

Rparallel_monitor_phrase

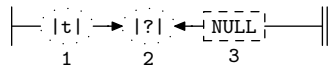


27. Rparallel_monitor_phrase's subrule 1.



⟨Rparallel_monitor_phrase subrule 1 op directive 27⟩ ≡
 Crule_def_phrase * fsm = (Crule_def_phrase *) rule_info_.parser_--fsm_tbl_;
 fsm_rule_def_--parallel_mntr(sf→p2_);

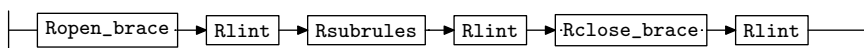
28. Rparallel_monitor_phrase's subrule 2.



⟨Rparallel_monitor_phrase subrule 2 op directive 28⟩ ≡
 RSVP(sf→p2_);
 rule_info_.parser_--set_stop_parse(true);

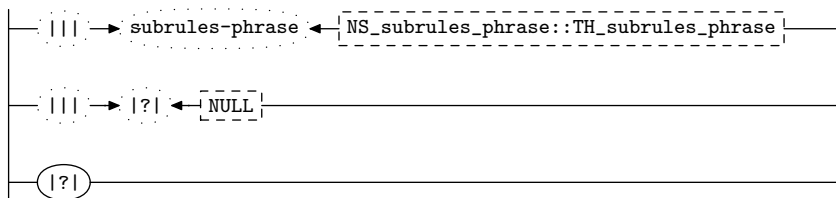
29. Rrule_body rule.

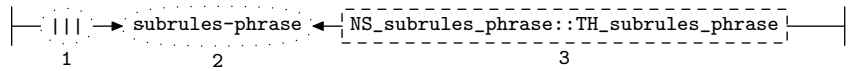
Rrule_body



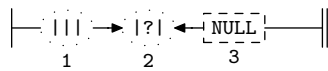
30. Rsubrules rule.

Rsubrules

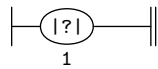


31. *Rsubrules's subrule 1.*

⟨Rsubrules subrule 1 op directive 31⟩ ≡
Crule_def_phrase * *fsm* = (*Crule_def_phrase* *) *rule_info...parser...fsm_tbl...*;
fsm→*rule_def*→*subrules*(*sf*→*p2*...); /* distribute rule def to its subrules */
std::*vector* < *T_subrule_def* * > ::*iterator* *i* = *sf*→*p2*...→*subrules*()→*begin*();
std::*vector* < *T_subrule_def* * > ::*iterator* *ie* = *sf*→*p2*...→*subrules*()→*end*();
for (; *i* ≠ *ie*; ++*i*) {
 T_subrule_def * *srd* = **i*;
 srd→*its_rule_def*(*fsm*→*rule_def*...);
}

32. *Rsubrules's subrule 2.*

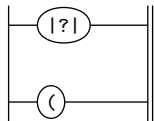
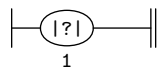
⟨Rsubrules subrule 2 op directive 32⟩ ≡
 RSVP(*sf*→*p2*...);
rule_info...parser...set_stop_parse(*true*);

33. *Rsubrules's subrule 3.*

⟨Rsubrules subrule 3 op directive 33⟩ ≡
CAbs_lr1_sym * *sym* = **new** *Err_no_sub_rule_present*;
sym→*set_rc*(**sf*→*p1*..., __FILE__, __LINE__);
 RSVP(*sym*);
rule_info...parser...set_stop_parse(*true*);

34. *Ropen_par rule.*

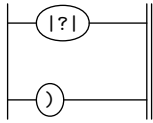
Ropen_par

**35. *Ropen_par's subrule 1.***

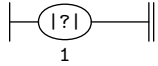
⟨*Ropen_par* subrule 1 op directive 35⟩ ≡
CAbs_lr1_sym * *sym* = **new** *Err_no_open_parenthesis*;
sym→*set_rc*(**sf*→*p1*..., __FILE__, __LINE__);
 RSVP(*sym*);
rule_info...parser...set_stop_parse(*true*);

36. Rclose_par rule.

Rclose_par



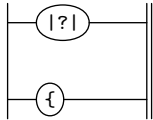
37. Rclose_par's subrule 1.



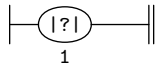
⟨ Rclose_par subrule 1 op directive 37 ⟩ ≡
CAbs_lr1_sym * *sym* = **new** *Err_no_close_parenthesis*;
sym→*set_rc*(**sf*-*p1*__, __FILE__, __LINE__);
 RSVP(*sym*);
*rule_info*__.*parser*__→*set_stop_parse*(*true*);

38. Ropen_brace rule.

Ropen_brace



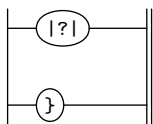
39. Ropen_brace's subrule 1.



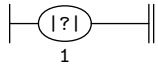
⟨ Ropen_brace subrule 1 op directive 39 ⟩ ≡
CAbs_lr1_sym * *sym* = **new** *Err_no_open_brace*;
sym→*set_rc*(**sf*-*p1*__, __FILE__, __LINE__);
 RSVP(*sym*);
*rule_info*__.*parser*__→*set_stop_parse*(*true*);

40. Rclose_brace rule.

Rclose_brace



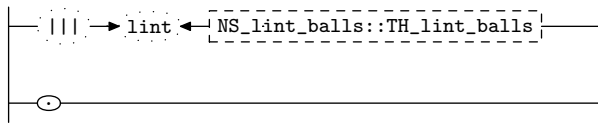
41. *Rclose_brace*'s subrule 1.



$\langle Rclose_brace \text{ subrule } 1 \text{ op directive } 41 \rangle \equiv$
`CAbs_lr1_sym * sym = new Err_no_close_brace;`
`sym->set_rc(*sf->p1--, __FILE__, __LINE__);`
`RSVP(sym);`
`rule_info->parser->set_stop_parse(true);`

42. *Rlint* rule.

Rlint



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

```
/*
  File: rule_def_phrase.fsc
  Date and Time: Fri Jan  2 15:33:53 2015
*/
transitive      y
grammar-name    "rule_def_phrase"
name-space     "NS_rule_def_phrase"
thread-name    "TH_rule_def_phrase"
monolithic     n
file-name      "rule_def_phrase.fsc"
no-of-T        569
list-of-native-first-set-terminals 1
  LR1_questionable_shift_operator
end-list-of-native-first-set-terminals
list-of-transitive-threads 1
  NS_identifier::TH_identifier
end-list-of-transitive-threads
list-of-used-threads 5
  NS_cweb_or_c_k::TH_cweb_or_c_k
  NS_identifier::TH_identifier
  NS_lint_balls::TH_lint_balls
  NS_subrules_phrase::TH_subrules_phrase
  NS_t_def_delabort_tags::TH_t_def_delabort_tags
end-list-of-used-threads
fsm-comments
"Parse a grammar's rule  definition."
```

44. Lr1 State Network.

\Rightarrow					State: 1 state type: s			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
c	Rid		3 4 1	?			1 2 2	
c	Rid		3 1 1	identifier NS_identifier::TH_identifier			1 3 5	
c	Rid		3 2 1	rule-in-stbl NULL			1 3 6	
c	Rid		3 3 1	? NULL			1 3 4	
c	Rrule_def_phrase		1 1 1	Rid <u>Rlint$^{\epsilon}$</u> <u>Rad_ab_tags$^{\epsilon}$</u> ...			1 7 38	
\Rightarrow	?				State: 2 state type: r			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
t	Rid		3 4 2				1 0 2 1	
\Rightarrow	arbitration-code: ϵ				State: 3 state type: s			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
t	Rid		3 3 2	?			1 4 4	
t	Rid		3 1 2	identifier			1 5 5	
t	Rid		3 2 2	rule-in-stbl			1 6 6	
\Rightarrow	?				State: 4 state type: r			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
t	Rid		3 3 3				1 0 4 1	
\Rightarrow	identifier				State: 5 state type: r			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
t	Rid		3 1 3				1 0 5 1	
\Rightarrow	rule-in-stbl				State: 6 state type: r			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
t	Rid		3 2 3				1 0 6 1	
\Rightarrow	Rid				State: 7 state type: s/r			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
c	Rlint		16 2 1	ϵ			7 0 7 1	
c	Rlint		16 1 1	lint NS_lint_balls::TH_lint_balls			7 46 13	
t	Rrule_def_phrase		1 1 2	Rlint <u>Rad_ab_tags$^{\epsilon}$</u> <u>Rlint$^{\epsilon}$</u> ...			1 8 38	
\Rightarrow	Rlint				State: 8 state type: s/r			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
c	Rad_ab_tags		4 3 1	ϵ			8 0 8 1	
c	Rad_ab_tag		5 2 1	# AB NULL			8 48 12	
c	Rad_ab_tag		5 1 1	# AD NS_t_def_delabort_tags::TH_t_def_delabort_tags			8 48 11	
c	Rad_ab_tags		4 2 1	Rad_ab_tags <u>Rad_ab_tag</u>			8 9 50	
t	Rrule_def_phrase		1 1 3	Rad_ab_tags <u>Rlint$^{\epsilon}$</u> <u>Rrule_cweb_k$^{\epsilon}$</u> ...			1 9 38	
c	Rad_ab_tags		4 1 1	Rad_ab_tag <u>Rlint$^{\epsilon}$</u>			8 51 52	
\Rightarrow	Rad_ab_tags				State: 9 state type: s/r			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA	
c	Rlint		16 2 1	ϵ			9 0 9 2	
c	Rad_ab_tag		5 2 1	# AB NULL			9 10 12	
c	Rad_ab_tag		5 1 1	# AD NS_t_def_delabort_tags::TH_t_def_delabort_tags			9 10 11	

c Rlint	16	1	1	lint NS_lint_balls::TH_lint_balls	9	10	13
t Rad_ab_tags	4	2	2	Rad_ab_tag <u>Rlint</u> ^ε	8	49	50
t Rrule_def_phrase	1	1	4	Rlint <u>Rrule_cweb_k</u> ^ε <u>Rlint</u> ^ε ...	1	14	38
⇒ <i>arbitration-code</i> : ε				State: 10 state type: <i>s</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
t Rad_ab_tag	5	1	2	# AD	9	11	11
t Rad_ab_tag	5	2	2	# AB	9	12	12
t Rlint	16	1	2	lint	9	13	13
⇒ #AD				State: 11 state type: <i>r</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
t Rad_ab_tag	5	1	3		9	0	11 1
⇒ #AB				State: 12 state type: <i>r</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
t Rad_ab_tag	5	2	3		9	0	12 1
⇒ lint				State: 13 state type: <i>r</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
t Rlint	16	1	3		9	0	13 2
⇒ Rlint				State: 14 state type: <i>s/r</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
c Rrule_cweb_k	2	1	1	ε	14	0	14 1
c Rrule_cweb_k	2	2	1	cweb-comment NS_cweb_or_c.k::TH_cweb_or_c.k	14	53	55
c Rrule_cweb_k	2	3	1	? NULL	14	53	54
t Rrule_def_phrase	1	1	5	Rrule_cweb_k <u>Rlint</u> ^ε <u>Ropen_par</u>	1	15	38
⇒ Rrule_cweb_k				State: 15 state type: <i>s/r</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
c Rlint	16	2	1	ε	15	0	15 3
c Rlint	16	1	1	lint NS_lint_balls::TH_lint_balls	15	46	13
t Rrule_def_phrase	1	1	6	Rlint <u>Ropen_par</u>	1	16	38
⇒ Rlint				State: 16 state type: <i>s</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
c Ropen_par	12	1	1	?	16	56	56
c Ropen_par	12	2	1	(16	57	57
t Rrule_def_phrase	1	1	7	Ropen_par <u>Rlint</u> ^ε <u>Rrule_parameters</u> ^ε ...	1	17	38
⇒ Ropen_par				State: 17 state type: <i>s/r</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
c Rlint	16	2	1	ε	17	0	17 4
c Rlint	16	1	1	lint NS_lint_balls::TH_lint_balls	17	46	13
t Rrule_def_phrase	1	1	8	Rlint <u>Rrule_parameters</u> ^ε <u>Rclose_par</u>	1	18	38
⇒ Rlint				State: 18 state type: <i>s/r</i>			
← rule	→ R#	sr#	Po	← subrule element	→ Brn	Gto	Red LA
c Rrule_parameters	6	1	1	ε	18	0	18 5
c Rrule_parameter	7	1	1	? NULL	18	21	22
c Rrule_parameter	7	2	1	# lhs NS_identifier::TH_identifier	18	21	32

\Rightarrow #lhs		State: 28 state type: ^s							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
c	Rlhs_phrase		8 1 1	t	rule-lhs-phrase NS_rule.lhs_phrase::PROC_TH_rule.lhs_phrase		28 29 31		
c	Rlhs_phrase		8 2 1	t ?	NULL		28 29 30		
t	Rrule_parameter		7 2 4		Rlhs_phrase		20 32 32		
\Rightarrow t		State: 29 state type: ^s							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Rlhs_phrase		8 2 2	?			28 30 30		
t	Rlhs_phrase		8 1 2		rule-lhs-phrase		28 31 31		
\Rightarrow ?		State: 30 state type: ^r							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Rlhs_phrase		8 2 3				28 0 30 5		
\Rightarrow rule-lhs-phrase		State: 31 state type: ^r							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Rlhs_phrase		8 1 3				28 0 31 5		
\Rightarrow Rlhs_phrase		State: 32 state type: ^r							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Rrule_parameter		7 2 5				20 0 32 5		
\Rightarrow Rrule_parameter		State: 33 state type: ^r							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Rrule_parameters		6 3 4				18 0 33 5		
\Rightarrow Rclose_par		State: 34 state type: ^{s/r}							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
c	Rlint		16 2 1	ε			34 0 34 6		
c	Rlint		16 1 1		lint NS_lint_balls::TH_lint_balls		34 46 13		
t	Rrule_def_phrase		1 1 11		Rlint <u>Rrule_body</u>		1 35 38		
\Rightarrow Rlint		State: 35 state type: ^s							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
c	Ropen_brace		14 1 1	?			35 36 36		
c	Ropen_brace		14 2 1	{			35 37 37		
t	Rrule_def_phrase		1 1 12		Rrule_body		1 38 38		
c	Rrule_body		10 1 1		Ropen_brace <u>Rlint</u> ^ε <u>Rsubrules</u>		35 39 47		
\Rightarrow ?		State: 36 state type: ^r							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Ropen_brace		14 1 2				35 0 36 7		
\Rightarrow {		State: 37 state type: ^r							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Ropen_brace		14 2 2				35 0 37 7		
\Rightarrow Rrule_body		State: 38 state type: ^r							
←	rule	→	R# sr# Po	←	subrule element	→	Brn Gto Red LA		
t	Rrule_def_phrase		1 1 13				1 0 38 2		

\Rightarrow <i>Ropen_brace</i>				State: 39 state type: <i>s/r</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
c	Rlint		16 2 1	ϵ			39 0 39 7
c	Rlint		16 1 1	lint NS_lint_balls::TH_lint_balls			39 46 13
t	Rrule_body		10 1 2	Rlint <u>Rsubrules</u>			35 40 47
\Rightarrow <i>Rlint</i>				State: 40 state type: <i>s</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
c	Rsubrules		11 3 1	?			40 61 61
c	Rsubrules		11 1 1	subrules-phrase NS_subrules_phrase::TH_subrules_phrase			40 62 64
c	Rsubrules		11 2 1	? NULL			40 62 63
t	Rrule_body		10 1 3	Rsubrules <u>Rlint^{ϵ} Rclose_brace</u>			35 41 47
\Rightarrow <i>Rsubrules</i>				State: 41 state type: <i>s/r</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
c	Rlint		16 2 1	ϵ			41 0 41 8
c	Rlint		16 1 1	lint NS_lint_balls::TH_lint_balls			41 46 13
t	Rrule_body		10 1 4	Rlint <u>Rclose_brace</u>			35 42 47
\Rightarrow <i>Rlint</i>				State: 42 state type: <i>s</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
c	Rclose_brace		15 1 1	?			42 43 43
c	Rclose_brace		15 2 1	}			42 44 44
t	Rrule_body		10 1 5	Rclose_brace <u>Rlint^{ϵ}</u>			35 45 47
\Rightarrow <i> ? </i>				State: 43 state type: <i>r</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
t	Rclose_brace		15 1 2				42 0 43 2
\Rightarrow <i>}</i>				State: 44 state type: <i>r</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
t	Rclose_brace		15 2 2				42 0 44 2
\Rightarrow <i>Rclose_brace</i>				State: 45 state type: <i>s/r</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
c	Rlint		16 2 1	ϵ			45 0 45 2
c	Rlint		16 1 1	lint NS_lint_balls::TH_lint_balls			45 46 13
t	Rrule_body		10 1 6	Rlint			35 47 47
\Rightarrow <i> arbitration-code: ϵ</i>				State: 46 state type: <i>s</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
t	Rlint		16 1 2	lint			45 13 13
\Rightarrow <i>Rlint</i>				State: 47 state type: <i>r</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
t	Rrule_body		10 1 7				35 0 47 2
\Rightarrow <i> arbitration-code: ϵ</i>				State: 48 state type: <i>s</i>			
\leftarrow	rule	\rightarrow	R# sr# Po	\leftarrow	subrule element	\rightarrow	Brn Gto Red LA
t	Rad_ab_tag		5 1 2	# AD			8 11 11
t	Rad_ab_tag		5 2 2	# AB			8 12 12

\Rightarrow Rad_ab_tag					State: 49 state type: <i>s/r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
c Rlint	16 2 1 ε						49 0 49 1	
c Rlint	16 1 1 lint NS_lint_balls::TH_lint_balls						49 46 13	
t Rad_ab_tags	4 2 3 Rlint						8 50 50	
\Rightarrow Rlint					State: 50 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Rad_ab_tags	4 2 4						8 0 50 1	
\Rightarrow Rad_ab_tag					State: 51 state type: <i>s/r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
c Rlint	16 2 1 ε						51 0 51 1	
c Rlint	16 1 1 lint NS_lint_balls::TH_lint_balls						51 46 13	
t Rad_ab_tags	4 1 2 Rlint						8 52 52	
\Rightarrow Rlint					State: 52 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Rad_ab_tags	4 1 3						8 0 52 1	
\Rightarrow arbitration-code: ε					State: 53 state type: <i>s</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Rrule_cweb_k	2 3 2 ?						14 54 54	
t Rrule_cweb_k	2 2 2 cweb-comment						14 55 55	
\Rightarrow ?					State: 54 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Rrule_cweb_k	2 3 3						14 0 54 1	
\Rightarrow cweb-comment					State: 55 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Rrule_cweb_k	2 2 3						14 0 55 1	
\Rightarrow ?					State: 56 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Ropen_par	12 1 2						16 0 56 4	
\Rightarrow (State: 57 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Ropen_par	12 2 2						16 0 57 4	
\Rightarrow Rrule_parameter					State: 58 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Rrule_parameters	6 2 2						18 0 58 5	
\Rightarrow ?					State: 59 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	
t Rclose_par	13 1 2						19 0 59 9	
\Rightarrow)					State: 60 state type: <i>r</i>			
← rule	→ R# sr# Po ←				subrule element	→	Brn Gto Red LA	

t Rclose_par	13	2	2				19	0	60	9
⇒ ?										
← rule	→ R#	sr#	Po	←	State: 61 state type: <i>r</i>		→ Brn	Gto	Red	LA
t Rsubrules	11	3	2		subrule element		40	0	61	10
⇒ <i>arbitration-code: ε</i>										
← rule	→ R#	sr#	Po	←	State: 62 state type: <i>s</i>		→ Brn	Gto	Red	LA
t Rsubrules	11	2	2	?	subrule element		40	63	63	
t Rsubrules	11	1	2	subrules-phrase			40	64	64	
⇒ ?										
← rule	→ R#	sr#	Po	←	State: 63 state type: <i>r</i>		→ Brn	Gto	Red	LA
t Rsubrules	11	2	3		subrule element		40	0	63	10
⇒ <i>subrules-phrase</i>										
← rule	→ R#	sr#	Po	←	State: 64 state type: <i>r</i>		→ Brn	Gto	Red	LA
t Rsubrules	11	1	3		subrule element		40	0	64	10

45. Index.

ϵ : 8, 16, 20, 42.
 # AB: 17.
 # AD: 17.
 # lhs: 21.
 # parallel-control-monitor: 21.
 |||: 8, 11, 17, 21, 30, 42.
 |?: 8, 11, 21, 23, 26, 30, 34, 36, 38, 40.
 |t|: 23, 26.
 __FILE__: 9, 12, 13, 14, 15, 18, 19, 22, 33, 35, 37, 39, 41.
 __LINE__: 9, 12, 13, 14, 15, 18, 19, 22, 33, 35, 37, 39, 41.
 action_: 13.
 add_cweb_marker: 9.
 add_sym_to_stbl: 12.
 AST: 9.
 autoabort: 19.
 autodelete: 18.
 begin: 31.
 bld_its_tree: 7.
 c_str: 12, 13.
 CAbs_lr1_sym: 13, 14, 15, 18, 19, 22, 33, 35, 37, 39, 41.
 Crule_def_phrase: 7, 9, 12, 13, 18, 19, 24, 27, 31.
 cw: 9.
 cweb-comment: 8.
 cweb_t: 9.
 cwebk_t: 9.
 defed: 12.
 defined_: 12, 13.
 end: 31.
 Err_already_defined_AB: 19.
 Err_already_defined_AD: 18.
 err_entry_: 12.
 Err_no_close_brace: 41.
 Err_no_close_parenthesis: 37.
 Err_no_open_brace: 39.
 Err_no_open_parenthesis: 35.
 Err_no_rule_name_present: 15.
 Err_no_sub_rule_present: 33.
 Err_not_lhs_pcnrl_mntr: 22.
 Err_rule_already_defined: 13.
 Err_rule_not_in_stbl: 13.
 Err_stble_has_entry_but_not_a_rule: 14.
 find_sym_in_stbl: 13.
 fsm: 7, 9, 12, 13, 18, 19, 24, 27, 31.
 fsm_tbl_: 7, 9, 12, 13, 18, 19, 24, 27, 31.
 identifier: 11.
 identifier: 12.
 ie: 31.
 iterator: 31.
 its_rule_def: 31.
 join_pts: 9.
 lint: 42.
 not_fnd: 13.
 NS_cweb_or_c_k::TH_cweb_or_c_k: 8.
 NS_identifer::TH_identifer: 11, 21.
 NS_lint_balls::TH_lint_balls: 42.
 NS_parallel_monitor_ph::PROC_TH_parallel_monitor_ph: 26.
 NS_rule_lhs_phrase::PROC_TH_rule_lhs_phrase: 23.
 NS_subrules_phrase::TH_subrules_phrase: 30.
 NS_t_def_delabort_tags::TH_t_def_delabort_tags: 17.
 NULL: 8, 11, 17, 21, 23, 26, 30.
 okay: 12.
 parallel-monitor-phrase: 26.
 parallel_mntr: 27.
 parser_: 7, 9, 10, 12, 13, 14, 15, 18, 19, 22, 24, 25, 27, 28, 31, 32, 33, 35, 37, 39, 41.
 pos_: 12.
 p1_: 15, 33, 35, 37, 39, 41.
 p2_: 9, 10, 12, 13, 14, 18, 19, 22, 24, 25, 27, 28, 31, 32.
 r_def: 13.
 Rad_ab_tag: 16.
 Rad_ab_tags: 7, 16.
 Rad_ab_tag: 17, 18, 19.
 Rad_ab_tags: 16.
 Rclose_brace: 29.
 Rclose_par: 7.
 Rclose_brace: 40, 41.
 Rclose_par: 36, 37.
 report_card: 12, 13.
 Rid: 11, 12, 13, 14, 15.
 Rid: 7.
 ristbl: 12.
 Rlhs_phrase: 21.
 Rlhs_phrase: 23, 24, 25.
 Rlint: 42.
 Rlint: 7, 16, 29.
 Ropen_brace: 29.
 Ropen_par: 7.
 Ropen_brace: 38, 39.
 Ropen_par: 34, 35.
 Rparallel_monitor_phrase: 21.
 Rparallel_monitor_phrase: 26, 27, 28.
 Rule_body: 7.
 Rule_cweb_k: 7.
 Rule_parameter: 20.
 Rule_parameters: 7, 20.
 Rrule_body: 29.
 Rrule_cweb_k: 8, 9, 10.
 Rrule_def_phrase: 7.

Rrule_parameter: [21](#), [22](#).
Rrule_parameters: [20](#).
Rsubrules: [30](#), [31](#), [32](#), [33](#).
Rsubrules: [29](#).
RSVP: [7](#), [10](#), [12](#), [13](#), [14](#), [15](#), [18](#), [19](#), [22](#), [25](#), [28](#),
[32](#), [33](#), [35](#), [37](#), [39](#), [41](#).
rule: [12](#).
rule-in-stbl: [11](#).
rule-lhs-phrase: [23](#).
rule_def: [5](#), [12](#).
rule_def_: [3](#), [4](#), [5](#), [7](#), [9](#), [12](#), [13](#), [18](#), [19](#), [24](#), [27](#), [31](#).
rule_in_stbl: [12](#).
rule_info_: [7](#), [9](#), [10](#), [12](#), [13](#), [14](#), [15](#), [18](#), [19](#), [22](#), [24](#),
[25](#), [27](#), [28](#), [31](#), [32](#), [33](#), [35](#), [37](#), [39](#), [41](#).
rule_lhs: [24](#).
rule_name: [13](#).
set_auto_delete: [12](#).
set_content: [9](#).
set_rc: [9](#), [12](#), [13](#), [14](#), [15](#), [18](#), [19](#), [22](#), [33](#), [35](#),
[37](#), [39](#), [41](#).
set_stop_parse: [10](#), [12](#), [13](#), [14](#), [15](#), [18](#), [19](#), [22](#), [25](#),
[28](#), [32](#), [33](#), [35](#), [37](#), [39](#), [41](#).
sf: [9](#), [10](#), [12](#), [13](#), [14](#), [15](#), [18](#), [19](#), [22](#), [24](#), [25](#), [27](#),
[28](#), [31](#), [32](#), [33](#), [35](#), [37](#), [39](#), [41](#).
skey: [12](#).
srd: [31](#).
start_token_: [13](#).
status_: [12](#).
stbl_idx: [12](#).
std: [31](#).
subrules: [31](#).
subrules-phrase: [30](#).
sym: [13](#), [14](#), [15](#), [18](#), [19](#), [22](#), [33](#), [35](#), [37](#), [39](#), [41](#).
T_cweb_comment: [9](#).
T_cweb_marker: [9](#).
T_subrule_def: [31](#).
T_sym_tblreport_card: [12](#), [13](#).
table_entry: [12](#).
tbl_entry_: [12](#), [13](#).
true: [10](#), [12](#), [13](#), [14](#), [15](#), [18](#), [19](#), [22](#), [25](#), [28](#), [32](#),
[33](#), [35](#), [37](#), [39](#), [41](#).
vector: [31](#).
yacco2-stbl: [12](#), [13](#).

- ⟨ Crule_def_phrase constructor directive 3 ⟩
- ⟨ Crule_def_phrase op directive 4 ⟩
- ⟨ Crule_def_phrase user-declaration directive 5 ⟩
- ⟨ Crule_def_phrase user-prefix-declaration directive 6 ⟩
- ⟨ Rad_ab_tag subrule 1 op directive 18 ⟩
- ⟨ Rad_ab_tag subrule 2 op directive 19 ⟩
- ⟨ Rclose_brace subrule 1 op directive 41 ⟩
- ⟨ Rclose_par subrule 1 op directive 37 ⟩
- ⟨ Rid subrule 1 op directive 12 ⟩
- ⟨ Rid subrule 2 op directive 13 ⟩
- ⟨ Rid subrule 3 op directive 14 ⟩
- ⟨ Rid subrule 4 op directive 15 ⟩
- ⟨ Rlhs_phrase subrule 1 op directive 24 ⟩
- ⟨ Rlhs_phrase subrule 2 op directive 25 ⟩
- ⟨ Ropen_brace subrule 1 op directive 39 ⟩
- ⟨ Ropen_par subrule 1 op directive 35 ⟩
- ⟨ Rparallel_monitor_phrase subrule 1 op directive 27 ⟩
- ⟨ Rparallel_monitor_phrase subrule 2 op directive 28 ⟩
- ⟨ Rrule_cweb_k subrule 2 op directive 9 ⟩
- ⟨ Rrule_cweb_k subrule 3 op directive 10 ⟩
- ⟨ Rrule_def_phrase subrule 1 op directive 7 ⟩
- ⟨ Rrule_parameter subrule 1 op directive 22 ⟩
- ⟨ Rsubrules subrule 1 op directive 31 ⟩
- ⟨ Rsubrules subrule 2 op directive 32 ⟩
- ⟨ Rsubrules subrule 3 op directive 33 ⟩

rule_def_phrase Grammar

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Parse a grammar's rule definition.

1 element(s) in Lookahead Expression below

eolr

Copyright	1	1
Fsm Crule_def_phrase class	2	1
Crule_def_phrase constructor directive	3	1
Crule_def_phrase op directive	4	1
Crule_def_phrase user-declaration directive	5	1
Crule_def_phrase user-prefix-declaration directive	6	2
Rrule_def_phrase rule	7	2
Rrule_cweb_k rule	8	2
Rrule_cweb_k's subrule 2	9	2
Rrule_cweb_k's subrule 3	10	3
Rid rule	11	3
Rid's subrule 1	12	3
Rid's subrule 2	13	4
Rid's subrule 3	14	4
Rid's subrule 4	15	4
Rad_ab_tags rule	16	5
Rad_ab_tag rule	17	5
Rad_ab_tag's subrule 1	18	5
Rad_ab_tag's subrule 2	19	5
Rrule_parameters rule	20	6
Rrule_parameter rule	21	6
Rrule_parameter's subrule 1	22	6
Rlhs_phrase rule	23	6
Rlhs_phrase's subrule 1	24	6
Rlhs_phrase's subrule 2	25	7
Rparallel_monitor_phrase rule	26	7
Rparallel_monitor_phrase's subrule 1	27	7
Rparallel_monitor_phrase's subrule 2	28	7
Rrule_body rule	29	7
Rsubrules rule	30	7
Rsubrules's subrule 1	31	8
Rsubrules's subrule 2	32	8
Rsubrules's subrule 3	33	8
Ropen_par rule	34	8
Ropen_par's subrule 1	35	8
Rclose_par rule	36	9
Rclose_par's subrule 1	37	9
Ropen_brace rule	38	9
Ropen_brace's subrule 1	39	9
Rclose_brace rule	40	9
Rclose_brace's subrule 1	41	10
Rlint rule	42	10
First Set Language for O_2^{linker}	43	11
Lr1 State Network	44	12
Index	45	19