


```
RRRRRRRR UU UU FFFFFFFF UU UU SSSSSSS RRRRRRR
RRRRRRRR UU UU FFFFFFFF UU UU SSSSSSS RRRRRRR
RR RR RR UU UU FF UU UU SS RRR RR
RR RR RR UU UU FF UU UU SS RRR RR
RR RR RR UU UU FF UU UU SS RRR RR
RRRRRRRR UU UU FFFFFFFF UU UU SSSSSS RRRRRRR
RRRRRRRR UU UU FFFFFFFF UU UU SSSSSS RRRRRRR
RR RR UU UU FF UU UU SS RRR RR
RR RR UU UU FF UU UU SS RRR RR
RR RR UU UU FF UU UU SS RRR RR
RR RR UUUUUUUUUU FF UUUUUUUUUU SSSSSSS RRR RR
RR RR UUUUUUUUUU FF UUUUUUUUUU SSSSSSS RRR RR
```

```
SSSSSSSS DDDDDDD LL
SSSSSSSS DDDDDDD LL
SS DD DD LL
SS DD DD LL
SS DD DD LL
SS DD DD LL
SSSSSS DD DD LL
SSSSSS DD DD LL
SS DD DD LL
SS DD DD LL
SS DD DD LL
SS DD DD LL
SSSSSS DDDDDDD LLLLLLLLLL
SSSSSS DDDDDDD LLLLLLLLLL
```

\$begin RUFUSR,V04-000

```

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```

Facility: Recovery Unit Management Facility

Abstract: This module contains the RU argument list definitions, RU id definitions, and status codes.

Author: Ron Schaefer Creation Date: 24-Oct-1980

Modified By:

- V03-009 PRB0186 Paul R. Beck 2-MAY-1983 17:32:01
Change format of RUID to include CSID, EPID.
Add RUF\$C_PHASE2 code for start-of-phase-2 notification.
- V03-008 PRB0138 Paul R. Beck 8-MAR-1983 11:35:39
Add RUF\$C_RUH.
- V03-007 PRB0117 Paul R. Beck 3-feb-1983
Source merge of all update packets to date.
- V03-006 JAY0006 John A. Ywoskus 24-Aug-1982
Remove error messages (moved to RUFMSG).
- V03-005 JAY0005 John A. Ywoskus 29-Jul-1982
Rename PHASE2 code to PHASE2_END.
- V03-004 JAY0004 John A. Ywoskus 26-Jul-1982
Add RSNCODE RUF field.
- V03-003 JAY0003 John A. Ywoskus 22-Jul-1982

Add the following handler action codes:
PHASE1_END, RESET_END.

V03-002 JAY0002 John A. Ywoskus 30-Jun-1982
Change RUID format.

V03-001 JAY0001 John A. Ywoskus 16-Jun-1982
Fix Idents, comments, etc.

Previously Modified By: John A. Ywoskus

```
{
{ Recovery-unit handler argument list definitions and
{ recovery-unit service codes passed to handlers
{
```

```
module $RUFDEF;
```

```
aggregate RUFDEF structure fill prefix RUF$;
```

```
ARGCOUNT longword unsigned; /* arglist count
PARAM longword unsigned; /* user param ptr
RUID longword unsigned; /* recovery unit id ptr
RUCODE longword unsigned; /* handler's action code ptr
constant MIN_CODE equals 1 prefix RUF tag $C; /* minimum code
constant START equals 1 prefix RUF tag $C; /* start a recovery unit
constant PHASE1 equals 2 prefix RUF tag $C; /* starting phase 1 end
constant PHASE1_END equals 3 prefix RUF tag $C; /* finished phase 1 end
constant PHASE2 equals 4 prefix RUF tag $C; /* starting phase 2
constant PHASE2_END equals 5 prefix RUF tag $C; /* finished phase 2 end
constant MARKPOINT equals 6 prefix RUF tag $C; /* create a markpoint
constant RESET equals 7 prefix RUF tag $C; /* start reset to a markpoint
constant RESET_END equals 8 prefix RUF tag $C; /* reset completed
constant CANCEL equals 9 prefix RUF tag $C; /* terminate a recovery unit abnormally
constant CANCEL_END equals 10 prefix RUF tag $C; /* cancel completed
constant MAX_CODE equals 10 prefix RUF tag $C; /* maximum code
RSNCODE longword unsigned; /* service invocation reason code ptr
constant USER equals 1 prefix RUF tag $C; /* user invoked service
constant RUF equals 2 prefix RUF tag $C; /* RUF invoked service
constant RUH equals 3 prefix RUF tag $C; /* Recovery Unit Handler requested service
MARKPT longword unsigned; /* markpoint value ptr
constant ARGLEN equals . prefix RUF$ tag K;
constant ARGLEN equals . prefix RUF$ tag C;
constant ROLLFWD equals 1 prefix RUF tag $C; /* roll-forward journal entry
constant ROLLBACK equals 2 prefix RUF tag $C; /* roll-back journal entry
constant ROLL_FWD_BACK equals 3 prefix RUF tag $C; /* forward and back entry
end RUFDEF;
```

```
end_module $RUFDEF;
```

```
module $RUIDDEF;
```

```
/*
/* Structure of recovery-unit id
/*
aggregate RUIDDEF structure fill prefix RUIDS;
    TIME quadword unsigned;          /* system time in 10ms. units
    CSID longword unsigned;          /* cluster ID
    EPID longword unsigned;          /* PID of initiating process
    constant 'LENGTH' equals . prefix RUIDS tag K;
    constant 'LENGTH' equals . prefix RUIDS tag C;
end RUIDDEF;
end_module $RUIDDEF;
```


UNLBUFR	R32
UNLDEFINT	SDL
CJFU4	
CJFRUFMAC	SDL
RUFUSR	SDL
UNLFILE	SDL
UPGRADE	LIS
UNLDEF	SDL
BOPTIONS	R32