

R\$B-WR – Direct File Access Rewrite from Saved File Address

The R\$B-WR routine is one of a family of sub-routines that are reserved for use by the G-3000 Middleware DLMs. R\$B-WR(ITE) rewrites a Speedbase channel at the last saved file address.

1. Invocation

To rewrite a record in the open BDAM file from a Speedbase channel code:

```
CALL R$B-WR USING channel [file_addr]
```

where *channel* is a Speedbase Record Channel and *file_addr* is an optional PIC 9(9) COMP variable (**not a literal**) which contains the file address of the record to be rewritten.

2. STOP Codes and Exception Conditions

The following STOP codes are generated by R\$B-WR:

STOP code	Description
43 (<i>sic</i>)	The BDAM file was not open; or no File Address has been saved (i.e. R\$B-SA has not been called before the R\$B-WR call).

No EXIT codes are returned by R\$B-WR.

3. Programming Notes

R\$B-WR(ITE) has been derived from a G-3000 Middleware DLM. Consequently, some of the functionality (e.g. the STOP codes) may be non-standard.

The BO\$G3M DLM, rather than the calling program, contains the File Definition (FD) used for the various Direct Access File operations. If the *file_addr* parameter is not supplied the file address of the record is restored from a local field within the DATA DIVISION of the BO\$G3M DLM.

The R\$B-SA routine **must** be called before R\$B-WR to save the address of the (then) current record. If the saved record number is valid R\$B-WR uses the B\$D-WR routine to rewrite the record from the supplied Speedbase record channel. Note that the possible exception code returned by B\$D-WR is **not** trapped by R\$B-WR.

The current file address (at the time of the R\$B-WR call) is saved in a temporary work field before the file address at the time of the R\$B-SA call is used for the B\$D-WR write function. After the B\$D-WR function has completed the current file address (at the time of the R\$B-WR call) is restored.

The R\$B-SA routine either saves the current file address either in a field supplied by the calling program (if the optional single parameter is supplied) or in a local field within the DATA DIVISION of the BO\$G3M DLM (if R\$B-SA is called with no parameters). The saved file address used by R\$B-WR is either restored from a field supplied by the calling program (if the optional third parameter is supplied) or in a local field within the DATA DIVISION of the BO\$G3M DLM (if R\$B-WR is called with just two parameters). No attempt is made to check the calls of R\$B-SA and R\$B-WR are balanced. For example:

```
CALL R$B-SA USING Z-99C          * SAVE FILE ADDRESS IN CALLING
PROGRAM
```

...

CALL R\$B-WR USING REC LENG	* ATTEMPT TO RESTORE FILE ADDRESS
	* FROM FIELD IN BO\$G3M. THIS WILL
	* NORMALLY RESULT IN A STOP 43

Note also that the internal “saved file address” is not invalidated after it has been used by R\$B-WR to call B\$D-WR. Perhaps it should be to detect this potential coding error:

CALL R\$B-SA	* SAVE FILE ADDRESS
...	
CALL R\$B-WR USING REC LENG	* REWRITE FROM SAVED FILE ADDRESS
....	
CALL R\$B-WR USING REC LENG	* 2 ND REWRITE INTENTIONAL?

If the internal “saved file address” was invalidated after the first R\$B-WR call then the subsequent R\$B-WR call, without a previous R\$B-SA, would be detected (by a STOP WITH 43).

4. Examples

[EXAMPLE REQUIRED]

5. Copy-Books

None.

6. See Also

B\$D-2R	Direct File Access Simple Read Next Routine (B\$D-2RNXT)
B\$D-2W	Direct File Access Simple Write Next Routine (B\$D-2WRITE)
B\$D-CH	Direct File Access Check and Close Routine (B\$D-CHK)
B\$D-CL	Direct File Access Close Routine (B\$D-CLOSE)
B\$D-DE	Direct File Access Delete Routine (B\$D-DELETE)
B\$D-IN	Direct File Access Return File Information Routine (B\$D-INFO)
B\$D-OL	Direct File Access Open Old Routine (B\$D-OLD)
B\$D-OP	Direct File Access Open New Routine (B\$D-OPEN)
B\$D-PO	Direct File Access Set Current File Position Routine (B\$D-POSITION)
B\$D-UN	Direct File Access Set Unit Routine (B\$D-UNIT)
B\$D-WR	Direct File Access Write Speedbase Channel (B\$D-WRITE)
B\$E-CL	Direct File Access Extra Close Routine (B\$E-CLOSE)
B\$E-GE	Direct File Access Get Record Length Routine (B\$E-GET-RLEN)
B\$E-RN	Direct File Access Simple Read Block Routine (B\$E-RNXT)
B\$E-SE	Direct File Access Set Record Length Routine (B\$E-SET-RLEN)
B\$E-ZE	Direct File Access Set File Address to Zero Routine (B\$E-ZERO)
R\$B-SA	Direct File Access Save Address of Current Record (R\$B-SAVE)
R\$B2WR	Direct File Access Rewrite from Saved File Address (R\$B2WRITE)
R\$PFSC	Direct File Access Check For Free Space (R\$PFSCCHK)