

RS/1-IDM INTERFACE INSTALLATION MANUAL

Copyright 1985, ALL RIGHTS RESERVED
Alternative Technologies
Santa Cruz, California

I. BASIC INTERFACE INSTALLATION: RELINKING

In order to install the RS/1-IDM Interface, you must have:

- (1). RS/1 v12a or v12b with the Oracle Interface Option or (preferably) the Britton Lee Interface Option when this becomes available.
- (2). The RS/1 binary build files must be on the system.
- (3). The VAX/VMS version of IDMLIB for which the Interface binary distribution was prepared must be installed.

Perform the following steps:

- (1). Follow the instructions for a normal installation of RS1 up until the point at which you would run RS1BLD.
- (2). Copy the RS/1-IDM Interface binary code, .COM files, and SYSORACLE.OPT from the distribution media to rslv1200.build.
- (3). Edit the file RS1BLD.COM: modify the LINK command by appending ",IDMLIB/options" to the end. This must be the last options file referenced.
- (4). Make certain that the newest version of SYSORACLE.OPT is the one copied from the distribution tape, then run \$@RS1BLD.
- (5). Follow the procedure outlined below for installing the interface site-specific public procedures.
- (6). Check that the build was successful by logging into RS1 and trying the procedure CALL \$IDL.

NOTES: (1) You must reinstall the interface whenever you install either a BBN RS/1 new release or a BLI IDM Host Software new release.

(2) The distribution tape should contain the following files:

OLON.OBJ,	RELINK.COM
OOPEN.OBJ,	SYSORACLE.OPT
OSQL.OBJ,	MANUAL.RS1
OSQL3.OBJ,	INSTALL.RS1
OEXEC.OBJ,	
ODSC.OBJ,	
ONAME.OBJ,	
OCMN.OBJ,	
OCOF.OBJ,	
OCON.OBJ,	
OCOM.OBJ,	
OROL.OBJ,	
OBIND.OBJ,	
OBINDN.OBJ,	
OERMSG.OBJ,	
OCLOSE.OBJ,	
OLOGOF.OBJ,	
ODFINN.OBJ,	
OFETCH.OBJ,	
OBNDRV.OBJ,	
OBNDRN.OBJ,	
ORES.OBJ,	
OOPT.OBJ,	
CNVDBTYP.OBJ,	
MOVERR.OBJ,	
SETPEO.OBJ	
ATHANDLE.OBJ	
ATWHANDL.OBJ	
ATMSG.OBJ	
OKBUFL.OBJ	
OKTARG.OBJ	
OKTYPE.OBJ	
STRNG.OBJ	

II. INSTRUCTIONS TO INSTALL RS/1-IDM INTERFACE PUBLIC PROCEDURES

The RS/1-IDM Interface distribution tape contains four files which must be installed as site-specific procedures. The names of these files are:

- 1) IDL2TABL.PRC
- 2) REL2TABL.PRC
- 3) TABL2REL.PRC

and

- 4) IDL.PRC

These procedures are an integral part of the interface. Listings of the procedures are provided as examples of how to write interface procedures. These procedures are installed by following the steps in this section.

(1). Log into the account in which the site-specific public procedures will reside. We refer to this as the maintenance account below. This account should have the same privileges as any RS/1 user account, and it should have a disk quota of 10000 blocks plus whatever you need for your site specific tables. Copy the files from the distribution media to this account.

(2). Run RS/1 and use the RS/1 system function

```
DEF of $procedure = GETFILE('filename')
```

to read the definition of each procedure from the files. By convention, the name of each of these procedures should start with a dollar sign (\$).

(3). Compile all the procedures in the account by using the public procedure \$CPROCS:

```
# CALL PUBLIC $CPROCS <RET>
```

(4). Log out of RS/1 and, while still in the account, copy the collection of tables (including public procedures) from PUBHOME:*.PTB to the maintenance account's RS1HOME with this command:

```
$ COPY PUBHOME:*.PTB RS1HOME:
```

(5). Run RS/1 and type all of the following RS/1 commands:

```
# TERMINAL = EMPTY <RET>
# CALL PUBLIC $ACCESS_PUBLIC <RET>
# SORT TABLE('PROCS') BY COL 0 <RET>
# P2 = $TN(32772) <RET>
# DELETE TABLE(P2) <RET>
# MAKE TABLE(P2) FROM TABLE('PROCS') <RET>
# CALL REMEASURE(P2) <RET>
# FREEZE TABLE(P2) <RET>
# LOGOUT <RET>
```

(6). WHILE NO ONE IS USING RS/1, delete the old copies of the public tables by typing:

```
$ DELETE PUBHOME:*.PTB;* <RET>
```

(7). Now, copy the new collection of these tables into the directory where they will reside. The commands that you give depend on whether or not [RS1V1200] is on the same disk and has

the same UIC as your maintenance account.

If these two accounts are on the same disk with the same UIC, you can give the commands when you are logged into the maintenance account:

```
$ RENAME RSLHOME:*.PTB PUBHOME: <RET>
```

If these two accounts are on different disks, or have different UICs in different groups, log in to RSLV1200 and give these commands:

```
$ COPY mdisk:[maint.RSLHOME]:*.PTB PUBHOME <RET>
$ SET PROTECT=WORLD:R PUBHOME:*.PTB <RET>
$ DELETE mdisk:[maint.RSLHOME]*.PTB;* <RET>
```

where "mdisk" is the disk that the maintenance account is on and "maint" is the user name of the maintenance account. The last DELETE command may have to be done from the maintenance account.

Step 9: Install Site-Specific Procedures in RS/1 (Optional)

This is an optional step that you normally perform only after writing, compiling and testing a procedure that is to be made public. You do not usually perform this step at the same time that you install RS/1.

If your system contains site-specific public procedures from a previous version of RS/1, you should re-install them by following the steps in this section.

- (1). Create a "maintenance" account in which the sources of the site-specific procedures will be stored. This account should have the same privileges as any RS/1 user account, and it should have a disk quota of 10000 blocks plus whatever you need for your site-specific tables. This maintenance account does not need to be on a permanently mounted disk. The best approach (for protection reasons) is to give this account the same UIC as you gave RS1V1200 -- just remember to increase the disk quota. But you may use a different UIC if you prefer. (6) below provides instructions on how to proceed with both kinds of UICs.

The account used for site-specific procedures can be the same as the account used for site-specific public tables (see Step 8).

- (2). Copy the procedures you wish to be site-sharable into the maintenance account as described below.

You can use the RS/1 system function

```
CALL PUTFILE(DEF of procedure,'filename')
```

to put the definition of a procedure into a text file. Be sure to do this in the account where the procedure currently resides.

You can use the RS/1 system function

```
DEF of $procedure = GETFILE('filename')
```

to read the definition of a procedure from a file. You should use this in the maintenance account for site-specific procedures. By convention, the name of each of these procedures should start with a dollar sign (\$). (There is one exception: PUBLIC_RS1_INITIALIZATION should not have a \$.)

- (3). Log in to the maintenance account, run RS/1, and if necessary, compile all the procedures in the account by using the public procedure \$CPROCS:

```
# CALL PUBLIC $CPROCS <RET>
```

- (4). Log out of RS/1 and, while still in the maintenance account, copy the collection of tables (including public procedures) from PUBHOME:*.PTB to the maintenance account's RS1HOME with this command:

```
$ COPY PUBHOME:*.PTB RS1HOME:
```

- (5). Run RS/1 and type all of the following RS/1 commands:

```
# TERMINAL = EMPTY <RET>
# CALL PUBLIC $ACCESS_PUBLIC <RET>
# SORT TABLE('PROCS') BY COL 0 <RET>
# P2 = $TN(32772) <RET>
# DELETE TABLE(P2) <RET>
# MAKE TABLE (P2) FROM TABLE('PROCS') <RET>
# CALL REMEASURE(P2) <RET>
# FREEZE TABLE (P2) <RET>
# LOGOUT <RET>
```

The public procedure \$ACCESS_PUBLIC tells RS/1 to look in the user's RS1HOME directory for the "public" tables and procedures and it allows writing of this private copy. The other commands prepare the procedures table in this RS1HOME to be the public site-defined procedures table.

- (6). (This step must be performed when no one is using RS/1.) Delete the old copies of the public tables by typing:

```
$ DELETE PUBHOME:*.PTB;* <RET>
```

- (7). Now, copy the new collection of these tables into the directory where they will reside. The commands that you give depend on whether or not [RS1V1200] is on the same disk and has the same UIC as your maintenance account.

If these two accounts are on the same disk with the same UIC, you can give the commands when you are logged into the maintenance account:

```
$ RENAME RS1HOME:*.PTB PUBHOME <RET>
```

If these two accounts are on different disks, or have different UICs in different groups, log in to RS1V1200 and give these commands:

```
$ COPY mdisk:[maint.RS1HOME]:*.PTB PUBHOME <RET>
$ SET PROTECT=WORLD:R PUBHOME:*.PTB <RET>
$ DELETE mdisk:[maint.RS1HOME]:*.PTB;* <RET>
```

where "mdisk" is the disk that the maintenance account is on and "maint" is the user name of the maintenance account. The last DELETE command may have to be done from the maintenance account.

- (8). You now have a new set of site-specific public procedures.

Step 10: Set up GROUPTHOMES for RS/1 Users (Optional)

This is an optional step that you normally perform only after deciding to set up group homes for RS/1 users at your site. You do not usually perform this step before installing RS/1 for the first time.

Grouphomes are a way for users to share tables and procedures. The grouphome is the file directory where these tables and procedures will reside.

To set up a grouphome, first choose one of the users in the group to be the "owner" of the grouphome. Log in as that user and set up the VMS subdirectory that will hold the files with the CREATE/DIRECTORY command. For example, if user SMITH is to be the owner, log in as SMITH and type:

```
$ CREATE/DIRECTORY [SMITH.GROUPHOME] <RET>
$ SET PROTECT=GROUP:RWE [SMITH]GROUPHOME.DIR <RET>
```

(Doing these commands from SMITH's account ensures that the sub-directory has the correct UIC and that it is on the correct disk.)

Now all you have to do is put the correct ASSIGN command into the LOGIN.COM file of each user who will use the grouphome. For users to use the grouphome created above, they would have to have the following line in their LOGIN.COM:

```
$ ASSIGN disk:[SMITH.GROUPHOME] GROUPHOME <RET>
```

where "disk" is the actual name of the disk that SMITH's files are on.

RESTRICTIONS:

- . All users of a particular grouphome MUST be in the same VMS group. RS/1 Version 12.00 now enforces this restriction.
- . All users of a particular grouphome must use an IDENTICAL assignment statement to set up the logical name GROUPHOME. For example, you cannot have one user's assignment statement use the disk name SYS\$SYSDEVICE and the other use DRA0 even if they are the same disk. One way to assure this is to put the ASSIGN command into a command file in that directory and have the users execute it to do their assign command for that grouphome.
- . You CAN certainly have more than one rs1 grouphome within one VMS group if you want.
- . The subdirectory can be called anything you like, not just GROUPHOME, but the logical name used as the last word in the ASSIGN command MUST be GROUPHOME