

Simple Data Replicator

(Version 2 Release 0 Build 0727)

SDR INSTALLATION:

Install the SDR software onto the iSeries system using the RSTLIB command. The library was saved to the save media as library XSDR.

In order to configure SDR, it is recommended that you be signed on as QSECOFR. Library XSDR (or whatever library SDR was restored as) must be in the library list. Issue the command SDRCFG to get the following screen:

```
Simple Data Replicator
Software License Agreement

NOTICE: By choosing the "Accept" option, you are accepting two separate
license agreements as a matter of convenience: 1) Software Evaluation
License Agreement ("SELA") for evaluating the software; and 2) End
User License Agreement ("EULA") that applies only if you acquire a
purchased license key for the software. The complete text of each
of these two license agreements are included.

Software Evaluation License Agreement

THIS AGREEMENT REPLACES ANY PRIOR ORAL OR WRITTEN COMMUNICATIONS BETWEEN
YOU AND MIDRANGE RESOURCES, INC. CONCERNING YOUR USE OF THE SOFTWARE.
BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, OR USING THE SOFTWARE YOU
AGREE TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ACCEPTING THESE TERMS ON
BEHALF OF ANOTHER PERSON OR A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT
AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND THAT PERSON, COMPANY, OR
More...

F3=Exit   F6=Print   F12=Cancel
```

Before you can begin to configure and use SDR, you must read and accept the appropriate license agreement (SELA or EULA). You **must** page down through the entire agreements before you are given the following screen to enter the software license key and press the F14 key to accept the license agreement:

Simple Data Replicator
Software License Agreement

License Key: _____

Accepted By: _____

F3=Exit F12=Cancel

You must key in the software license key provided to you, along with your name before you are given the option to use F14 to accept the software license and continue with the configuration of the software. If you find that you entered the license key incorrectly, or you receive an update or upgrade to SDR, you can execute the command SDRWRKLIC to display the license agreements and return to the screen shown above. The configuration screen is shown next:

2.0.0727 Simple Data Replicator MIDRANGE
System Configuration

Install Library: XSDR

Journal Library: XSDRJRN

Journal Receiver - Library: XSDRRCV ASP: 1 Size: 500000

Subsystem: SDRSBS User Profile: SDRUSR

Message Queues:

Break Messages: N (Y/N) N (Y/N) N (Y/N) N (Y/N) N (Y/N)

Journal Both Images: Y (Y/N) Include User & Pgm info in Journal: N (Y/N)

Include Opens & Closes in Journal: N (Y/N)

Minimum # days to keep Journal Entries: 1 # Days to keep logs: 30

Minimum # days to keep save info: _

F3=Exit F12=Cancel

Field descriptions:

- SDR Install Library:* This is the name of the library containing the SDR software from which the SDRCFG command is run from. You should verify this value to insure that you are operating upon the correct copy of the installed SDR software.
- Journal Library:* The name of the library to contain the journals created by SDR for use in replication. This field can be entered only on the initial configuration session.
- Journal Receiver - Library / ASP:* The name of the library to contain the journal receivers created by SDR for use in replication. On older systems, it is recommended by IBM to place journal receivers into a user ASP if possible in order to minimize the impact journaling may have on the performance of a system. This field can be entered only on the initial configuration session.
- Size:* This is the size of the journal receivers in Kbytes which will be created by SDR. According to an IBM redbook on performance tuning for journaling environments, the journal receivers will be spread across 1 drive arm for each 64MB of size specified. Changes to this value take effect for any new journals that SDR creates and does not affect existing journals. NOTE: If you have the available disk space, specifying a larger *Size* will spread the journal entries over a larger number of drives which may help improve journaling performance. On the other hand, if you have limited disk space, you may wish to specify a smaller *Size* in order to keep from filling up your disks.
- Subsystem:* This is the name of the subsystem in which the SDR software will operate in. The subsystem will be created in the *SDR Install Library*. This field can be entered only on the initial configuration session.
- User Profile:* This is the name of the user profile which the SDR jobs will run under. The user profile is created with the following parameters: USRCLS(*SECOFR), INLPGM(*NONE), INLMNU(*SIGNOFF), SPCAUT(*ALLOBJ, *AUDIT, *JOBCTL, & *SPLCTL), and GRPPRF(QSECOFR). It is recommended that the user profile not be changed in any way in order to insure the SDR software functions as designed. This field can be entered only on the initial configuration session.
- Message Queues:* You may specify up to 5 message queues to receive any messages that SDR might issue. All SDR messages are always sent to *SYSOPR message queue. SDR issues messages to notify the user of any errors that might be encountered during the replication process.
- Break Messages:* Specifies whether SDR will send break messages to notify users of the arrival of an SDR message in their message queue. SDR will send break messages to all workstations a user is signed on to if the message queue specified above is a message queue with the name of a user profile.
- Journal Both Images:* This specifies whether the journals created by SDR for use in replication will have the before image included in the journal entries. Having the before images included in the journal entries provides a level of integrity checking. If the before image is present in the journal entries, SDR will compare the before image to the image of the current record of the replicated file to verify that they match and report any discrepancies. Changes to this value take effect for any new journals that SDR creates and does not affect existing journals.

Include User & Pgm info in Journal: This specifies whether the journals created by SDR for use in replication will have job, user profile, and program information included in the journal entries. Omitting this information from your journals will help minimize the impact journaling will have on your system performance. You may want to consider including this information if you plan to implement any kind of auditing software in the future. Changes to this value take effect for any new journals that SDR creates and does not affect existing journals.

Include Opens & Closes in Journal: This specifies whether the journals created by SDR for use in replication will keep record of each file open and close in the journal entries. Omitting this information from your journals will help minimize the impact journaling will have on your system performance. You may want to consider including this information if you plan to implement any kind of auditing software in the future. Changes to this value take effect for any new journals that SDR creates and does not affect existing journals.

Minimum # days to keep Journal Entries: SDR registers an exit program with the system to control the deletion of journal receivers to insure that a journal receiver is not deleted before all of its entries have been processed. If you have a reason to keep journal receivers for a longer period of time than what the system or SDR may require, you may specify that time here.

Days to keep logs: SDR keeps a log of many of its functions. Specify the number of days you wish to keep those logs here.

Minimum # days to keep save info: This specifies the minimum number of days that SDR tracks save information for objects that are not actively being replicated. The save information is used by the SDRRSTOBJ command to restore objects back onto the system and activate replication for them. Note: This value is ignored for save information for LaserVault Backup saves. Only the most recent save from LaserVault Backup is tracked.

Note:

It is recommended that you leave the library names, subsystem name, and user profile at their default values unless they conflict with pre-existing objects on your system. By leaving these fields at their default values, any technical support you may require will go more smoothly.

You may now activate the software by starting the *Subsystem* specified in the configuration.

Note:

If you find the need to uninstall SDR and start from scratch, you may call the program SDRUNINST to accomplish this task. The SDRUNINST program will end journaling on all objects that SDR started journaling for, attempt to delete all journals and receivers, attempt to delete the libraries created to hold the journals and receivers, delete all objects SDR created, and clear all database files used by SDR. SDRUNINST will, with a few exceptions, restore your system to the state it was in immediately after the SDR software was restored onto it. This will allow you to run the SDRCFG command and configure SDR from scratch. You should check to make sure SDRUNINST was able to delete all journals and receivers successfully. If not, you should manually attempt to delete the libraries that were created to contain the journals and receivers.

SDR OPERATION:

To start the SDR software, simply start the subsystem specified in the configuration screen. To end the SDR software, simply end the subsystem. **DO NOT USE OPTION (*IMMED) WHEN ENDING THE SUBSYSTEM AS THIS MAY CAUSE CORRUPTION OF DATA IN THE REPLICATED FILES.** The SDR software is written to respond to the endjob, endsbs, and pwrdwsys commands within 30 seconds of the command being executed.

To control the replication of objects, issue the command SDRWRKLIB to get a screen similar to the following one:

Simple Data Replicator				MIDRANGE
Library Selection				
Type options, press Enter.			Position to:	
1=Select	4=End	7=Suspend	12=Work with	
Opt	Library	Type	Text	
—	BHLIB	PROD		
—	CGIDEV2	PROD	CGI Development Lib. V2; M. Rothman, GB. Perotti	
—	CGIDEV2USP	PROD	User Space library- See pgm CGIDEV2/STATE	
—	CGILIB	PROD		
—	CTTMODULES	PROD		
—	CTTOOLS	PROD		
—	CTTOOLSRC	PROD		
—	ISDDSCCLNT	PROD		
—	ISDDSDTA	PROD		
—	ISDDSDOLD	PROD	Old or replaced objects	
—	ISDDSPTF	PROD		
—	ISDDSRUN	PROD		
—	ISDDSSRC	PROD		
—	LIBTEST	TEST		
—	NATIONAL	PROD		
—	QGPL	PROD	General Purpose Library	
More...				
F3=Exit	F5=Refresh	F12=Cancel	F13=Repeat	
F17=Subset	F18=Options			

The *Library Selection* screen displays the libraries requested from the parameter on the SDRWRKLIB command. A status indicator is displayed between the option field and the library name. A status of "+" indicates that all objects selected for replication within the library are successfully being replicated. A status of "!" indicates that some objects selected for replication are not currently being replicated. You can quickly position to a specific library in the list by specifying all or part of its name in the *Position to* field.

You may specify option 1 to start replication on all eligible objects found within the library selected. Option 4 ends replication on all objects currently being replicated within the library selected, and also ends journaling for all objects that SDR started journaling for. Option 7 suspends replication for all objects currently being replicated within the library selected. Option 7 does NOT end journaling as option 4 does. Option 12, or the SDRWRKOBJ command, allows you to select individual objects within a library as shown in the following screen:

Simple Data Replicator				MIDRANGE
Object Selection				
Type options, press Enter.			Position to: _____	
1=Start	3=Copy	4=End	7=Suspend	Pos to type: _____
Library: ISDDSDTA				
Opt	Object	Type	Text	
—	ADR1	*FILE	RA file	
—	ISDXREF	*FILE	Data Dictionary File	
—	LAPVEND	*FILE	A/P Vendor file	
—	LGLDETL	*FILE	G/L Detail file	
—	LOGICAL	*FILE	Outfile for DSPFD TYPE(*ATR) FILEATR(*LF)	
—	PHYSICAL	*FILE	Outfile for DSPFD TYPE(*ATR) FILEATR(*PF)	
—	QCLSRC	*FILE		
—	QCMSRC	*FILE		
—	QDSSRC	*FILE		
—	QRPGSRC	*FILE		
—	RELATE	*FILE	Outfile for DSPDBR	
—	SAVDETL	*FILE	G/L Detail file	
—	SAVLMST	*FILE	G/L chart of accounts	
—	VAPBCTL	*FILE	A/P Voucher Entry Batch Control file	
—	VAPBDET	*FILE	A/P Voucher Entry Batch detail file	
—	VAPBHED	*FILE	A/P Voucher entry Batch header file	
				More...
F3=Exit	F5=Refresh	F12=Cancel	F13=Repeat	F17=Subset F18=Options

The *Object Selection* screen displays the objects eligible for replication within the library selected. The status of an object is represented by a single letter as shown between the option field and the object name. The status codes and their meanings are shown on the *Subset Object List* screen. You can quickly position to a specific object, or object type in the list by specifying all or part of its name in the *Position to* field, and the object type in the *Pos to type* field.

You may specify option 1 to start replication on the selected object(s). Option 3 copies the selected object(s) to the selected library and activates replication. Option 3 uses the CRTDUPOBJ command to accomplish the copy. Option 4 ends replication on the selected object(s), and also ends journaling for the selected object(s) that SDR started journaling for. Option 7 suspends replication for all selected object(s). Option 7 does NOT end journaling as option 4 does.

You can use F13 to repeat an option to the end of the list on both selection screens.

Note:

The SDRWRKxxx commands can only be executed by one user at a time.

The F18 key from the *Library Selection* and *Object Selection* screens display the following options screen:

Simple Data Replicator Options	MIDRANGE
Start new journal for each selection group: <u>N</u> (Y/N)	
F3=Exit F12=Cancel	

Field descriptions:

Start new journal for each selection group: This option allows you to somewhat control the grouping of objects into different journals. A value of "Y" causes a new journal to be created for each group of objects selected for replication within the same library. The default for this field is "N".

The F17 key from the *Library Selection* screen displays the following screen:

Simple Data Replicator		MIDRANGE
Subset Library List		
Type choices, press Enter.		
Library:	<u>*ALLUSR</u>	*ALL, *ALLUSR, name, generic*, *SDR
Type:	<u>*ALL</u>	*ALL, PROD, TEST
Text:	<u>*ALL</u>	

F3=Exit F12=Cancel

Field descriptions:

Library: Specifies the libraries to be displayed on the *Library Selection* screen. The special value of *SDR will display only those libraries that contain objects that have been selected for replication by SDR.

Type: Specifies the type of libraries to be displayed on the *Library Selection* screen.

Text: Specifying all or part of a library description will determine the libraries to be displayed on the *Library Selection* screen.

The F17 key from the *Object Selection* screen displays the following screen:

```

                                Simple Data Replicator
                                Subset Object List
                                MIDRANGE

Type choices, press Enter.

Object:  *ALL          *ALL, name, generic*
Type:    *ALL          *ALL, *FILE, *DTAARA
Text:    *ALL          _____

Status:  A C D E I R S T _
          A = Actively being replicated
          C = Catch-up phase
          D = Object deleted while being replicated
          E = User ended replication
          I = Object chosen for replication, but not restored to target
          R = Object in process of being restored to target
          S = Object replication suspended due to error
          T = Object replication suspended by user
          blank = Not selected for replication

F3=Exit  F12=Cancel
```

Field descriptions

Object: Specifies the objects to be displayed on the *Object Selection* screen.

Type: Specifies the type of objects to be displayed on the *Object Selection* screen.

Text: Specifying all or part of an object description will determine the objects to be displayed on the *Object Selection* screen.

SDR Status: Specifies which objects are to be displayed on the *Object Selection* screen based upon their status in regards to SDR.

If you are selecting objects for replication through the SDRWRKOBJ command, the confirmation screen will display the SDR created journal that will be used for the selected objects. At that point, you have the option to change the journal to another existing SDR created journal by pressing the F4 key and choosing a journal from the list presented to you.

Once an object has been selected for replication, it gets a status of "I" for inactive. In order to change the status to an "A" for replication to actually begin, the user must restore a known save copy of the object onto the system using the SDRRSTOBJ command, or use option 3 to copy selected objects. Using the Copy method (option 3) is only recommended for use with a few small objects at a time. The Copy function was developed primarily as a means of starting replication on files without members, as a known save copy is not possible to determine. A known save copy is a saved version of the object that has occurred after journaling has begun on the object. You use the command SDRRSTOBJ to restore objects to the system for replication to begin. If SDR

has a record of any object saves, the command SDRRSTOBJ will display a screen similar to the following one:

Simple Data Replicator						MIDRANGE
Restore Objects to target						
Type options, press Enter.				Position to: _____		
4=Remove 10=Restore 12=Work with						
Opt	Library	Redirected	Save Date/Time		Media	Volume ID/Save File
—	BHLIB	_____	08/23/06	19:29:09	TAPE	BACKUP
—	ISDDSDTA	_____	08/23/06	19:29:50	TAPE	BACKUP
—	SRSTEST	_____	08/23/06	19:29:33	TAPE	BACKUP
—	SRSTEST	_____	08/23/06	19:29:33	TAPE	BACKUP

Bottom

F3=Exit F5=Refresh F12=Cancel F17=Subset F18=Options

This *Restore Objects* screen displays the most recent save info for all objects selected for replication, but are not actively being replicated. Each entry on the screen represents the save info for objects within a single journal. An asterisk is displayed between the Opt and Object fields for those entries that have already been selected for restore during the current session. You can quickly position to a specific library in the list by specifying all or part of its name in the *Position to* field.

You **must** specify that the replicated objects be placed into a library with a different name than the original library by specifying the new library name in the *Redirected* field. If the library does not exist on the system, a CRTLIB command will be prompted to the user.
NOTE: The use of the *Redirected* field is mandatory before any options are valid.

You may specify option 10 next to a library entry to restore all file and data area objects found on the save media for that library, and activate replication for the objects associated with that save entry. NOTE: Even though an option 10 that is specified for a library will restore all file and data area objects within that library, it will only activate replication for those objects associated with that save entry. Therefore, this option must be used with care as it may corrupt objects that are currently being actively replicated, or in the catch-up phase of replication. Option 10 may fail due to some errors related to restoring objects that are not selected, or even eligible, for replication. The restore operation must complete successfully for any of the objects associated with the save entry to be actively replicated.

The use of option 10 to restore objects at the library level is not recommended as this would possibly restore logical files that would not be utilized resulting in unnecessary usage of system resources.

Option 4 can be used to clear records of object saves when you do not intend to restore the object anytime soon. By removing the save records, you allow old journal receivers to be removed from your system sooner.

Note:

The SDRRSTOBJ command can only be executed by one user at a time.

You may specify option 12 next to a library entry to select individual objects for restore and activation as shown on the following display:

Simple Data Replicator						MIDRANGE
Restore Objects to target						
Type options, press Enter.			Library: ISDDSDTA		Position to: _____	
4=Remove 10=Restore					Pos to type: _____	
Opt	Object	Type	Save Date/Time		Media	Volume ID/Save File
___	I VPOIDET	*FILE	08/23/06	19:29:50	TAPE	BACKUP
___	I VPOIHED	*FILE	08/23/06	19:29:50	TAPE	BACKUP
___	I VPORECT	*FILE	08/23/06	19:29:50	TAPE	BACKUP
___	I VPORECTOLD	*FILE	08/23/06	19:29:50	TAPE	BACKUP

Bottom

F3=Exit F5=Refresh F12=Cancel F13=Repeat F17=Subset F18=Options

This *Restore Objects* screen displays the objects associated with the save entry selected from the previous screen. The object's SDR status is shown between the option field and the object name. You can quickly position to a specific object, or object type in the list by specifying all or part of its name in the *Position to* field, and the object type in the *Pos to type* field.

You can specify option 10 for each object you wish to restore to the system and activate replication for. You may use F13 to repeat the option for up to 300 more objects in the list.

The restore operation must complete successfully before any of the objects associated with the save entry to be actively replicated. Once the restore operation completes successfully, the objects gain an SDR status of "R" or "C" to indicate they are being restored to the system, or are in the catch-up phase. The catch-up phase is the process in which the journal entries from the save time to the current time are applied to an object. At the end of the catch-up phase, the objects are given an SDR status of "A".

Option 4 can be used to clear records of object saves when you do not intend to restore the object anytime soon. By removing the save records, you allow old journal receivers to be removed from your system sooner.

The F17 key will display Subset screens similar to those found on the SDRWRKOBJ command, only with fewer options available.

The F18 key displays the following screen:

Simple Object Replicator		MIDRANGE
Options		
Run in batch	<u>Y</u> (Y/N)	
Job description	<u>QDFTJOB</u>	
Library	<u>*LIBL</u>	

F3=Exit F12=Cancel

Field descriptions:

Run in batch: Specifies whether the restore operation will run in batch, or interactively in the current job. The default value for this field is "Y".

Job description: Specifies the job description name the batch restore job will run under.

Library: Specifies the library for the job description.

It is recommended that you execute the command SDRDSPSTS TYPE(*LIB), or SDRDSPSTS TYPE(*OBJ) periodically to keep tabs on the status of data objects being replicated. The report can be displayed on a workstation screen, or sent to a printer as a spool file. An example of the TYPE(*OBJ) report is shown next:

08/24/06		Simple Data Replicator					19:59:47	
*SRC Object Status								
Source System: MIDRANGE								
Library	Active	Inactiv	Suspend	Ended	Deleted	Rst/CU	None	
BHLIB	64	0	0	1	0	0	7	
*DTAARA	4	0	0	0	0	0	0	
*DTAQ	0	0	0	0	0	0	7	
*FILE	60	0	0	1	0	0	0	
ISDDSDTA	1204	0	0	0	1	0	0	
*DTAARA	0	0	0	0	0	0	0	
*DTAQ	0	0	0	0	0	0	0	
*FILE	1204	0	0	0	1	0	0	
SRSTEST	12	2	1	0	0	0	2	
*DTAARA	2	2	0	0	0	0	0	
*DTAQ	0	0	0	0	0	0	2	
*FILE	10	0	1	0	0	0	0	

Column descriptions:

Library: Displays a library known to SDR for the purpose of replicating objects located within it. For TYPE(*OBJDTL) output are three lines indented beneath each library name that gives a breakdown by data object type of each column.

Active: Displays the number of data objects actively being replicated by SDR.

Inactiv: Displays the number of data objects chosen for replication but not yet restored or copied. These objects are not yet being replicated.

Suspend: Displays the number of data objects suspended from replication. This count includes objects that have been suspended from replication by SDR due to errors encountered, plus objects that were manually suspended by a user. These objects are no longer being replicated.

Ended: Displays the number of data objects that have been selected by a user to no longer be replicated by SDR.

Deleted: Displays the number of data objects that had been chosen for replication but was later deleted and re-created. These objects are no longer being replicated.

Rst/CU: Displays the number of data objects currently being restored and/or in the catch-up phase of being actively replicated.

None: Displays the number of data objects eligible, but not yet selected, for replication. These objects are not being replicated.

You may want to consider placing the command SDRDSPSTS TYPE(*OBJ) OUTPUT (*PRINT) into the job scheduler to run periodically.

SOFTWARE NOTES:

- 1.** SDR is not written to support DBCS. The software is compiled with the English 2924 language feature.
- 2.** DO NOT MOVE OBJECTS FROM A TARGET LIBRARY. DO NOT RENAME A TARGET LIBRARY.
- 3.** If you use the SAVCHGOBJ command, be aware of the OBJJRN parameter that defaults to *NO. This will prevent production objects on the system from being saved with the SAVCHGOBJ command. Changing the OBJJRN parameter value to *YES will allow the replicated objects to once again be saved with the SAVCHGOBJ command.
- 4.** Numeric data areas are supported up to a maximum length of 15 digits. Of the 15 digits, up to 9 decimal digits are supported.
- 5.** When multiple objects of the same name but different object type exist in the same library, it is recommended that you restore all of the like named objects together, or restore each object individually. This will help to prevent corruption of an object that may already be in the catch-up phase, or even actively being replicated.
- 6.** The SDR software currently only supports the replication of objects using journal entries that contain complete data. This typically means that the size of the data in the journal entry must be approximately 32K in size or less. The exception to this is files that contain a single BLOB or CLOB field. SDR can replicate data for a file so long as it contains only one LOB field in its record format. This is generally not a problem with any object, except for large data queues and IFS objects.
- 7.** You may modify the SDRJOB job description if you do not want full logging to the joblogs of SDR jobs or need specific libraries in the library list for trigger programs to work properly.
- 9.** You may modify the SDRCLS class description if you want the SDR jobs to run at a different priority or timeslice.
- 10.** You may modify the SDR subsystem description specified in the configuration screens if you want to allocate a memory pool specifically for the SDR jobs to run in.
- 11.** You may receive messages in QSYSOPR with MSGID CPI70E6. The message states that a journal or journal receiver is not available; reason code 4. Reason code 4 is: Exit program SDRDJREP in library XSDR stated that receiver was not eligible for deletion. This is a normal message that merely indicates that SDR is not allowing a journal receiver to be deleted before all of its journal entries have been processed by SDR.

12. The use of option 3 in SDRWRKOBJ to copy an object should be limited to a small number of objects that are small in size. The recommended, preferred method for starting replication on the system is through the SDRRSTOBJ command. Option 3 in SDRWRKOBJ was developed primarily as a means of starting replication for physical files that contain no members. A physical file with no members will not show up in SDRRSTOBJ due to the fact that there are no journal entries generated for its save operation since the journal entries are associated with the file at the member level.

13. When saving physical files for the purpose of restoring to the system for replication, you must save all members for each file. At this time, SDR only controls replication at the file level, not at the member level since that is how journaling works. If all of the members are not saved, but the file is restored to the system for replication, an error will likely occur at a later time on a member that was not part of the save, and as a result the entire file will be suspended from replication.

14. Exclude all SDR libraries (XSDR, XSDRJRN, & XSDRRCV) when doing backups unless you end the replication jobs first with ENDSBS SBS(SDRSBS) OPTION(*CNTRLD).

15. Libraries that begin with the letter 'Q' except for QGPL & QS36F are excluded from all replication processes, as well as library SYSIBM.

16. You must end the replication jobs with ENDSBS SBS(SDRSBS) OPTION(*CNTRLD) first before backing up any libraries that contain replicated copies of objects. Otherwise, the backup could cause an I/O error for a replication job and cause it to fail and end abnormally.

17. Do not let the SDR subsystem remain inactive for long periods of time, as data loss or corruption could result.

18. You may want to consider restoring only those objects being actively replicated into the replication libraries. To restore all objects from the original library into the replicated library will only increase your backup times. Also, having logical files attached to replicated files will consume additional system resources in maintaining the access paths.