LOG SHIPPING 28-07-16

LOG SHIPPING MEANS SHIPPING THE LOGS.
IT ALL RUNS WITH JOBS,

SO BACKUP JOB WILL BE THERE IN PRIMARY INSTANCE

COPY JOB AND RESTORE JOB WILL BE THERE IN SECONDARY STANDBY INSTANCE.

REQUIREMENT

NODE1(PRIMARY)	10.10.10.1	
NODE2(SECONDARYOR STANDBY)	10.10.10.2	
NODE3 (MONITOR)	10.10.10.2	BKP SHARE.

DON'T KEEP THE SHARED FOLDER FOR LOG BACKUPS IN PRIMARY

SERVICE ACCOUTNS

FOR PRI
KDSSG\SQLPRISRV
KDSSG\SQLPRIAGT

FOR SEC
KDSSG\SQLSECSRV
KDSSG\SQLSECAGT

FOR MONITOR
KDSSG\SQLMONSRV
KDSSG\SQLMONAGT

CREATE THE ABOVE SERVICE ACCUOUNTS IN AD.
OPEN DSA.MSC –GOTO USERS –R.CLICK—NEW—USER, CREATE SERVICE ACCOUNTS SAME AS USERS.
NOW LOGIN AS USER IN NODE1. INSTALL SQL SERVER.
FIRST INSTALL DOTNET 3.5
GOTO SERVER MANAGER ADD ROLES—NEXT—NEXT-NEXT-NEXT-NEXT—IN FEATURES SCREEN U CAN SELECT DOTNET FRAMEWORK 3.5, THE DOTNET WILL NOT COME WITH SERVER, PUT THE WINDOWS OS CD OR BROWSE THE OS. ISO IMAGE. CLICK ON SPECIFY ALTERNATE PATH, GIVE THE PATH AS D:\SOURCES\SxS
NOW INSTALL SQL SERVER, EVERY THING WILL BE OK, BUT WHEN SERVICE ACCOUNTS SCREEN COMES, GIVE THE DOMAIN SERVICE ACCOUNTS AND GIVE THE PASSWORDS.
KDSSG\SQLPRISRV—PWD OF THE SQLPRISRV ACCOUNT USER.

29-08-16

LOG SHIPPING DEMO
INSTALL SQL SERVERS IN ALL THE MACHINES WITH SERVICE ACCOUNTS,
OPEN SSMS CONNECT TO SQL SERVER
CONNECT TO SQL SERVER WHICH IS THERE IN OTHER NODE.
U CAN CONNECT TO THE OTHER NODES of SQL SERVER BY GIVING INSTANCE NAME OR, INSTANCE NAME WITH DOMAIN NAME OR FULLY QULIFIED DOMANIN NAME OR IP ADDRESS.
WE CAN ALSO CONNECT THE SQL SERVER OF OTHER NODES WITH PORT NO. ALSO.
LIKE 10.10.10.3,1433(PORT NO. CONNECTION WILL BE SOME SORT OF SLOW)
--DEFAULT PORT NUMBER OF DEFAULT INTANCE IS 1433, FOR NAMED INSTANCE THE PORT NO WILL BE DYNAMICALLY ALLOCATED.

WE CAN CONNECT SQL SERVER WITH FQDN, LIKE—WIN2012NODE3.KDSSG.COM(SERVERNAME)
CREATE A DATABASE (IT SHOULD BE FULL OR BULK LOGGED RECOVERY MODEL)
CHECK FILES OF NEW DB ARE LOCATED IN WHICH PATH.
CREATE SOME TABLES IN NEW DB,
CREATE A SHARED BACKUP IN THIRD MACHINE.
GO TO C DRIVE, CREATE A FOLDER, GIVE SHARED PERMISSIONS, R.CLICK, PROPERTIES, SHARING, ADVANCE SHARE, CHECK SHARE THE FOLDER, KEEP THE PATH AS IT IS, GIVE PERMISSIONS.
GIVE PERMISSIONS FOR SQLPRISRV –CHANGE AND READ, FOR SECOND MACHINE SERVICE ACCOUNT, SQLSECAGT—ONLY READ PERMISSON, APPLLY APPLY, OK

WIN Run , type SHARED FOLDER \\10.10.10.3\BKPSHARE (HERE BKP SHARE IS THE SHARED FOLDER)
IN THIS WAY WE CAN CREATE SHARED FOLDER.

GO TO SECOND NODE, CREATE A NEW FOLDER AS LOCAL COPY.
LOG SHIPPING .
LOG SHIPPING ENSURES THAT LOG BACKUPS FROM PRIMARY ARE CONTUNUIUSLY APPLIED ON STANDBY.
HOT STAND BY—AUTOMATICALLY COME INTO ONLINE, NO NEED OF DBA
WARM STAND BY—MANUAL LY COME INTO ONLINE, REQUIRES DBA
COLD STAND BY—NEED TO COPY EVERY THING, RESTORE EVERY THING. VERY PAINFULL.
LOG SHIPPING IS A BUDGET FRIENDLY.
MIRRORING, CLUSTERING, ALWAYS ON ARE HOT STANDBY
LOG SHIPPING, REPLICATION – WARM STAND BY

ALL ARE READY,
CONFIGURE LOG SHIPPING
R.CLICK ON DATABASE THAT ARE CREATED FOR LOGSHIPPING, SELECT PROPERTIES, SELECT TRANSACTION LOG SHIPPING PAGE, AT RIGHT SIDE WE CAN SEE, ENABLE THIS AS A PRIMARY DB IN LOGSHIPPING, CHECK IT, CLICK ON BACKUP SETTING, GIVE THE BACKUP SHARE PATH.

IF THE BACKUP FOLDER IS LOCATED ON THE PRIMARY SERVER, THEN GIVE THE LOCAL PATH.
DELETE FILES OLDER THAN :72 HOURS ENOUGH,
ALERTS GIVE THE TIME FOR PRACTICE GIVE 5 MIN. (IF NO BACKUP JOB RUNS MORE THAN 5 MIN, THEN IT WILL ALERT WITH EMAIL.)
GIVE THE JOB NAME :
WHEN WILL THE JOB RUNS, GIVE THE SCHEDULE. OK, OK. FINISH
BACKUP COMPRESSION: COMPRESS THE BACKUP THEN LOG SHIPP WILL BE SPEED. ENBLING COMPRESSION IS BEST PRACTICE.
ADD SECONDARY SERVER,
GIVE THE SEC INSTANCE NAME –CONNECT IT,
SECONDARY DATABASE—U CAN PUT THE SAME DBNAME OR DIFFERENT DB NAME ,
IN THE INITIALIZE SECONDARY DATABASE TAB, IF WE WANT TO TAKE FULL BACKUP MANUALLY THEN AT THE END WE CAN SEE NO… SOMETHING OPTIN SELECT IT. IF WE WANT IT AUTOMATICALLY, SELECT Yes, GENERATE…..OPTION. SELECT COPY FILES TAB, GIVE THE DESTINATION OF SECONDARY DATABSE, GIVE THE TIME, THEN JOB NAME, NO NEED TO CHANGE THE NAME. IT SHOWS THE FIRST INSTANCE NAME, Y BECAUSE COPY WILL BE DONE FROM FIRST INSTANCE, AFTER THAT THE DB NAME IS SECONDARY INSTANCE DATABASE. – IF WE ARE CONFIGURING LOG SHIPPING, REMOVE MANUAL BACKUPS.
THEN RESTORE TAB,
DATABASE STATE – NO RECOVERY MODE.
GIVE THE SCHEDULE, FOR RESTORE JOB. GIVE THE ALERT TIME, THEN PRESS OK. WE CAN ADD MULTIPLE STANDY DATABASES FOR LOG SHIPPING.
WE CAN NEVER DO LOG SHIPPING ON MASTER DATABASE, BECAUST IT IS IN SIMPLE RECOVERY MODEL, SO NO LOG BACKUP WILL BE POSSIBLE.
WE CAN NOT CONFIGURE LOG SHIPPING ON ANY SYSTEM DATABASE, THERE IS NO OPTION TO CONFIGURE LOG SHIPPING IN GUI

CHECK THE OPTION OF MONITER SERVER
CONNECT TO THE MONITOR SERVER FROM THAT WINDOW. ,ALERT JOB NAME, CLICK OK.
--FULL BACKUP FILE WILL BE RESTORE DIRECTLY FROM PRIMARY TO SECONDARY. BUT LOG FILES WILL GO TO SHARED FOLDER,
HOW TO IDENTIFY THE DATABASE IS IN LOG SHIPPING
BY SOME TABLES IN MSDB WE CAN CHECK THE LOG SHIPPING DB,
USE MSDB(EVERY LOG SHIPPING HISTORY WILL BE STORED IN MSDB)
GO
SELECT *FROM
LOG _SHIPPING_PRIMARY _DATABASE
IN THE OUTPUT IF THE LAST BAKCUP FILE AND LAST BACKUP DATE IS SHOWING NULL THAT MEANS THAT INFORMATION IS STORING IN MONITOR SERVER, THAT MEANS WE CAN UNDERSTAND THAT MONITER SERVER IS CONFIGURED FOR THE LOG SHIPPING.
SO GOTO MONITER SERVER AND TYPE THE SAME COMMAND.

WE ARE UNABLE TO SEE THE HISTORY. SO GOTO SECURITY , CREATE PRI, SEC AGTS WINDOWS LOGINS AND GIVE DB OWNER PERMISSION TO READ THE DATA.
** WE CAN CREATE MULTIPLE STANDBYS IN LOG SHIPPING BUT MS RECOMMENDS 10 STANDBYS

IMPLEMENTATION PLAN FOR LOG SHIPPING
VERIFIED ALL THE DEPLOYED SERVERS ARE ABLE TO PING EACH OTHER (PRIMARY, STANDBY AND MONITOR-BS)

2. VERIFIED THAT ALL INSTANCESSERVICE ACCOUNTS

3. CREATE BACKUP SHARE ON A THIRD SERVER AND GRANT SQL SERVER MAIN SERVICE ACOUNTS CHANGE , READ

4.

WHAT ARE THE SECONDARY DATABASE STATES IN LOGSHIPPING?
SECONDARY-RESTORING
IF SECONDARY IS IN STANDBY MODE STANDBY/READ-ONLY

IMP POINT
IF THE SECONDARY DATABASE IS IN STAND BY MODE, CHECK THE OPTION
'DISCONNEC T USERS IN THE DATABASE WHEN RESTORING BACKUPS'
IF THIS OPTION IS UNCHECKED, IF ANY ONE SELECTING THE TABLE IN STANDBY MODE DATABASE, THEN RESTORE JOB WILL FAIL. SO BETTER CHECK THAT OPTION. AT THE SAME TIME IF WE CHECK THIS OPTION IF ANY ONE FIRES SELECT STATEMENT IN THE STANDBY DATABSE IT WILL FAIL
--WE CAN NOT STOP ANY JOB IN LOG SHOPPING, WE CAN DISABLE THE JOBS ONLY

Manual log shipping
Take full backup to the shared folder manully
backup database dbname to disk=N'\\10.10.10.3\bak share\dbname.bak'
Restore fullbackup in the secondary instance with no recovery. This is called initialization of database.
select "no the secondary database in initialized" in the transaction log backup window.
in the monitor server options, we can see by impersonating, this option will inform every thing to the monitor server, if u feel that it Is not safe create your own sql account in monitor server and give here.

**THERE ARE 11 TABLES FOR LOG SHIPPING

Goto secondary instance
use msdb
go
select *from log_shipping_secondary_databases
we can see the restore information in this table
to see the copy job information

select *from log_shipping_secondary
go to primary server and r.click, goto reports select standard log shipping reports, transaction log shipping reports, we can see the reports of log shipping databases,
goto secondary server do the same we can the reports info.
if you feel checking this info. In two places , goto monitor server and check in the same way, there u can see everything regarding log shipping.
go to node1
use msdb
go
select *from log_shipping _primary_secondaries
to see how many primary instances is there in log shipping, and also it will shows u every primary has how many secondareis.
go to node 2
log shipping tables on secondary
1. Select *from log_shipping_secondary_databases
This table gives info about restore job and last restored file and last restored date information
2. Select *from log_shipping_secondary
This table tells info about copy job info. Last copies file and last copied date info.
→ LOG SHIPPING TABLES ON MONITOR

CONNECT TO MONITOR(5 TABLES TO MONITOR)

1. SELECT * FROM LOG_SHIPPING_MONITOR_PRIMARY
   GIVES INFO ABOUT PRIMARY SERVER AND BACKUP JOB INFO
2. SELECT * FROM LOG_SHIPPING_MONITOR_SECONDAY
   GIVES INFO ABOUT SECONDAY SERVER AND COPY AND RESORE JOBS INFO
   THESE 2 TABLES ARE IMPORTANT IN 5 TABLES.

COMMON Errors in log shiiping 14420—ISSUES WITH Backup job, 14421—ISSUES WITH copy job and restore job error
TO SEE THE ENTIRE HISTORY OF LOG SHIPPING DATABASE IN STEP BY STEP. (INFO AVIALABLE DEPENDS ON THE HISTORY CLEANUP TASK.)

SELECT * FROM LOG_SHIPPING_MONITOR_HISTORY_DETAIL

TO SEE THE ERRORS IN LOG SHIPPING
SELECT * FROM LOG_SHIPPING_MONITOR_ERROR_DETAIL

3. SELECT *FROM LOG_SHIPPING_MONITOR_ALERT
   IT WILL JUST SHOWS U ALERT JOB ID. REMEMBER THERE IS ALWAYS ONLY ONE ALERT JOB EVEN WE HAVE CONFIGURED LOG SHIPPING ON ALL THE DATABASES.
- ➔ EVERY TIME WHEN LOG SHIPPING RUNS, SQLLOGSHIP.EXE FILE WHICH IS THERE IN SHARED FOLDER(110 FOR 2012) WILL BE EXECUTE. IF WE CHANGE THE COMPUTER NAME LOG SHIP WILL

NOT WORK. SO GO TO THE BACKUP JOB AND GOTO STEPS , CHANGE THE COMPUTER NAME IN THE STEP. YOU CAN SEE THE SAME COMMAND IN COPY AND RESTORE JOBS STEPS.

--LOG SHIPPING IS NOT A PERFECT HIGHAVIALBILITY OPTION, SOME DATALOSE WILL BETHERE IN THIS MEHTOD.
--WHAT IS WORK FILE, OR .WRK, WHEN COPYING THE BACKUP FILE TO COPY FOLDER IT WILL PUT THE COPY FILE EXTENSION AS .WRK TEMPRORARILY , ONCE IT COPIED SUCCESSFULLY THEN IT WILL CHANGE THE WRK FILE TO .TRN—

__log shipping a uni directional means it will send transactions from primary server to standby.

31-08-2016

--In alert job steps we can see exec sys.sp_check_log_shipping_monitor_alert(it will monitor all the log shipping jobs are going fine or not in primary and standby

LOG SHIPPING SCENARIOS

1. FAIL OVER
   IF SOME THING HAPPENED MY PRIMARY DATABASE.
   FIRST INSERT SOME TRANSACTIONS. ONE COMMITED AND ONE UNCOMMITED TRANSACTIONS. NOW PUT THE DATABASE IN OFFLINE. ALREADY WE HAVE SOME UNCOMMITED TRANSACTIONS. SO STOP THE INSTANCE AND CORRUPT THE LOG SHIPPING PRIMARY DATABASE. NOW CHECK THE BACKUP JOB ONCE WHETHER IT IS RUNNING OR NOT IN BACKJOB HISTORY. AFTER CORRUPTING DATABASE IF U HAVE TIME TO FIX, FIX THE CORRUPTED DATABASE. MEANS IF LOG FILE IS CORRUPTED U CAN FIX IT BY REBUILD LOG. BUT HERE NEW LOG WILL COME, SO AGAIN WE NEED TO CONFIGURE LOG SHIPPING ON THE CORRUPTED DATABASE. IN THIS WE CAN SOLVE. BUTIT IS OPTIONAL STEP. FIRST WE NEED TO BRING THE STANDBY DATABASE TO THE ONLINE. THAT MEANS FAIL OVER.
   1. FIRST DISBLE BACKUP JOB
   2. THEN DISABLE COPY AND RESTORE JOBS
   3. VERIFY WHTHER ALL THE BACKUPS MOVED OR NOT.
      USE MSDB
      GO
      SELECT * FORM LOG_SHIPPING_PRIMARY_DATABASES (IN PRIMARY)
   4. NOW CHECK THE ABOVE THING IN THE SECONDARY DATBASE FOR COPY AND RESTORE JOBS
      SELECT *FROM LOG_SHIPPING_SECONDARY_DATABASES
      SELECT *FROM LOG_SHIPPING_SECONDARY(U CAN SEE SOME TIME DIFFERENCES, IF U R NOT ABLE TO GET ANYTHING FROM THAT, SO BETTER IGNORE IT AND CHECK MANUALLY IN THE FOLDERS.)
   5. OPEN SHARED FOLDER IN NODE 2 AND OPEN LOCAL COPY AND CHECK THE LAST BACKUPS
   6. THEN TAKE THE TAIL LOG BACKUP IN PRIMARY
      BACKUP LOG LSHIPDB TO DISK=n'NETWORK PATH OF BKP SHARE\TAIL.TRN' WITH NO _TRUNCATE.

MOVE THE TAIL LOG BACKUP FILE FROM SHARED FOLDER TO LOCAL COPY MANUALLY IN THE NODE2

7. OPEN SSMS IN NODE2, RESTORE THE TAIL LOG BACKUP WITH RECOVERY.

   RESTORE LOG LSHIPDB FROM DISK=N'LOCALCOPY\LSHIPTAL.TRN' WITH RECOVERY. (HERE WE CAN PUT THE RESTORE PATH FROM BACKUP SAHRE ALSO.

8. THEN AUTOMATICALLY THE DATABASE COMES INTO ONLINE.

IN THIS WAY WE CAN DO FAIL OVER.

9. NOW CHECK THE WHETHER ANY ORPHAN USERS ARE THERE OR NOT IN THE PARTICULAR DB.

   USE PARTICULAR DB

   GO

   SP_CHANGE_USERS_LOGIN REPORT

10. NOW DO REVERSE LOG SHIPPING.

FAIL OVER

TAKE A TAIL LOG BACKUP ON PRIMARY AND RESTORE IT ON SECONDARY WITH RECVOERY.

CONFIGURE REVERSE LOG SHIPPING.

SWITCH OVER.

FIRST TAKE THE LAST LOG BACKUP WITH NORECOVERY IN THE PRIMARY DATABASE. THEN THE PRIMARY DB WILL GO IN TO RESTORE MODE, THEN RESTORE THE LAST LOG BACKUP WITH RECOVERY IN STANDBY DB. SO THE STANDBY DB WILL COME INTO ONLINE AND PRIMARY BECOME STANDBY. THEN CONFIGURE REVERSE LOG SHIPPING. IT WILL DO IN ORG. AS PART OF DR.

--DO NOT TAKE ANY MANUAL LOG BACKUPS ON THE PRIMARY DATABASE IN LOG SHIPPING. THE LOG CHAIN WILL BREAK. HENCE BACKUP JOB WILL STOP.

--THE COPY AND RESTORE JOBS WILL BLINDLY FOLLOWS BACKUP JOB UTC TIME STAMP. IF U TAKE MANUL BACKUP TO THE SHARED FOLDER ON PRIMARY DB WE WILL NOT GET ANY TIME STAMP. SO THE COPY JOB WILL NEVER COPY THE MANUAL BACKUP FILE TO THE COPY FOLDER. –

--IN THE ORG. ONLY ONE SERVICE ACCOUT AND AGT ACCOUNT FOR ALL THE JOBS.

REVERSE LOG SHIPPING

GIVE THE PERMISSIONS ON THE SHARED FOLDER TO SECMAIN SERVICE ACCOUNT.

SQLSECSRV—CHANGE, READ

SQLPRIAGT—ONLY READ PERMISSION.

CREATE A LOCAL COPY IN NODE1.

GOTO NODE1 DELETE THE CORRUPTED DATABASE.

GO TO NEW PRIMARY –DB—PROPERTIES—SELECT TRANSACTION LOG SHIPPING-GIVE THE SAME LOG SHIPPING SETTINGS.

THIS IS CALLED REVERSE LOG SHIPPING, NOW MY OLD PRIMARY BECOMES STANDBY.

SWITCH OVER DEMO.

FIRST DISABLE ALL JOBS.

TAKE THE LOG BACKUP ON PRIMARY DB WITH NORECOVERY

NOW RESTORE THE RECENT LOG BACKUP WHICH U TOOK MANUALLY FROM NETWORK PATH IN SECONDARY. IN THIS WAY WE CAN SWITCH.

--GIVE ONLY 2 SERVICES ACCOUNTS IN AD, GIVE CHANGE, READ PERMISSIONS TO MAIN SERVICE

ACCOUTN AND GIVE ONLY READ PERMISSION TO THE AGT ACCOUNT.

01-09-2016
REASONS FOR LOG SHIPPING FAILURE:
1 JOBS DISABLED CAN BE A CAUSE FOR LS FAILURE
2. BACKUP SHARE PERMISSION ISSUES.
3. SPACE ISSUES IN THE BACKUP SHARE/LOCAL COPY LOCATION.
4. SQL SERVER AGENTS STOPPED AT PRIMARY/STANDBY/MONITOR
5. MANUAL LOG BACKUP CAN CAUSE LS BREAK.
6. RECOVERY MODEL CHANGE FROM FULL/BULK LOGGED TO SIMPLE.
7. BACKUP/COPY/RESTORE JOB OWNER CHANGE CAN CAUSE PERMISSION ISSUES AND BREAK LS.
8. NETWORK ISSUES WITH BACKUP SHARE.
9. WITH RECOVERY STATEMENT FIRED AT STANDBY SERVERC CAN BRING SECONDARY DATABSE ONLINE BREAKING LS.
10.SERVICE ACCOUNT CHANGES CAN LEAD TO PERMISSION ISSUES.
11. LOG BACKUP GETTING CORRUPTED/DELETED.
12. BACKUP SCHEDULE IF CHANGED CAN CAUSE LOT OF DELAY WHICH MIGHT RAISE AN ALERT.
13. LOG SHIPPING MAY FAIL DUE TO TUF FILE CORRUPTION.
14.IF MSDB OF PRIMARY DATABASE CORRUPTED ALSO LOG SHIPPING WILL FAIL.
--ERROR NO 14420- BACKUP JOB FAILED, 14421—COPY OR RESTORE JOB FAILED
TROUBLESHOOT LOG SHIPPING ISSUES
REMOVING LOG SHIPPING IN GUI
GO TO PRIMARY DATABASE R.CLICK GOTO TRANSACTION LOG SHIPPING UN CHECK ENABLE LOG SHIPPING. IN THIS WAY WE CAN REMOVE LOG SHIPPING.
IN CUI ALSO WE CAN REMOVE LOG SHIPPING.
GOTO PRIMARY SERVER
SP_DELETE_LOG_SHIPPING_PRIMARY_SECONDARY
GO TO SECONDARY SERVER
SP_DELETE_LOG_SHIPPING_SECONDARY_DATABASE
ON MONITOR SERVER
REMOVE INFORMATION FROM LOG SHIPPING MONITOR TABLES.
OR WE CAN MANUALLY DELETE THE LOG SHIPPING INFORMATION FROM SOME OF THE 11 LOG SHIPPING TABLES .

03-09-2016
HOW TO REMOVE LOG SHIPPING
GOTO PRIMARY DATBASE.
WHILE REMOVING LOGSHIPPING SOME TIME U MAY GET 8114 ERROR IF U R TRYING TO REMOVE IN GUI THEN FIRE THE FOLLWING COMMAND IN THE PRIMARY SERVER

USE MASTER
GO

SP_DELETE_LOG_SHIPPING_PRIMARY_SECONDARY 'PRILSHIPDBNAME','SECSERVERNAME', 'SECLOGSHIPDBNAME'
AFTER THAT CHECK IN THE PRIMARY TABLE
USE MSDB
SELECT *FROM DBO.LOG_SHIPPING_PRIMARY_DATABASE
IF U ARE ABLE TO SEE THE PRIMARY ID , DELETE THAT FROM TABLE
DELETE FROM LOG_SHIPPING_PRIMARY_DATABASE WHIERE PRIMARY Id=copy from the OUTPUT
JUST CHECK IN THE SECONDARY SERVER
USE MSDB
GO
SELECT *FROM LOG_SHIPPING_SECONDARY_DATABASE

DELETE THE LSHIP INFO FROM MONITOR ALSO
REMOVE PRIMARY AND SECONDARY
GOTO MONITOR SERVER
USE MSDB
GO
SELECT *FROM LOG_SHIPPING_MONITOR _PRIMARY
DELETE FROM LOG_SHIPPING_MONITOR _PRIMARY WHERE PRIMARY ID='COPY FROM THE OUTPUT'
DELETE THE PRIMARY ID OF LOGSHIP DATABASE
DELETE FROM
SELECT *FORM LOG_SHIPPING_MONITOR_SECONDARY
--RESTORE OPTIONS IN LOGSHIPPING, IF WE CONFIGURE LOG SHIPPING BETWEEN TWO NAMED INSTANCES OR ONE DEFAULT AND ONE NAMED INSTANCE THEN AT THE TIME OF RESTORE IT MAY THROUGH ERROR, SO FOR THIS TYPE OF ERRORS WE NEED TO GIVE THE PATH OF THE SECONDARY SERVER LIKE C:\PROGRAME FILES\MSSQLSERVER\MSSQL.NAMEDSERVER\MSSQL\DATA
SAME PATH FOR THE SECOND OPTION ALSO IN RESTORE OPTIONS
NEVER SHRINK A DATA FILE , IT'S A BIG BLUNDER
NOW THE SCENARIO
ADD A DATAFILE TO PIRMAY DATBASE.
IF THE NEW FILE PATH IN PRIMARY, IS SAME AS IN SECONDARY THEN WE WILL NOT GET ANY ERROR.
SO FOR PRACTICE PURPOSE CREATE A FOLDER IN PRIMARY SERVER AND GIVE THAT PATH TO NEW NDF.
THIS PATH DID NOT THERE IN SECONDAY SO WHILE RESTORING IN SECONDARY ERROR WILL COME. IN REAL TIME SOME ONE GAVE PATH TO NEW NDF IN ANOTHER DRIVE.
SHRINKING IN SQL SERVER IS RELEASING THE FREE SPACE TO OS.
GOTO NODE2

DISABLE RESTORE JOB FOR A WHILE
RESTORE THE LAST FAILED LOG WITH MOVE MANUALLY
RESTORE LOG DBNAME FROM DISK='COPY THE BACKUP FILE FROM VIEW HISTORY ERROR LOG.TRN' WITH NO RECOVERY, MOVE 'NEWFILENAME' TO 'GIVE THE PATH OF THE SECONDARY SQLSERVER DATA AND LOG FILES LIKE 'C:\PROGRAM FILE\MICROSOFT SQL

SERVER\MSSQL11.MSSQLSERVER\MSSQL\DATA\NEW FILENAME.NDF'
--IF SOMEBODY TOOK LOG BACKUP MANUALLY AND DELETED THAT LOG BACKUP, THEN THERE IS NO SOLUTION TO SOLVE THIS TYPE OF ISSUE, SIMPLY RECONFIGURE THE LOG SHIPPING.
SCENARIO 2
TAKING MANUAL LOG BACKUP WILL STOP THE BACKUP JOB.

USE MSDB
SELECT *FROM BACKUPSET(COPY THE BACKUPSET ID)
SELECT *FROM BACKUPSET WHERE BACKUP_SET_ ID =SOME NO. (CHECK THE LSN NO.S TO FIND THE BACKUPSETID)
SELECT *FROM BACKUPMEDIAFAMILY WHERE MEDIA_SET_ID=MEDIA SET ID, WITH THIS COMMAND WE CAN FIND THE MANAULLY TOOK BACKUP FILE LOCATION. RESTORE THAT LOG FROM THAT LOCATION. COPY THE MISSED MANUALLY TAKEN LOG BACKUPS FROM THAT PATH TO SHARED FOLDER AND FROM THERE RESTORE IT. OR RESTORE DIRECYLY FROM THAT PATH.
RESTORE LOG DBNAME FROM DISK=N'\\10.10.10.3\BAKPSHARE\BACKUPFILE.TRN' WITH NORECOVERY

STANDBY
GOTO LOGSHIP PRIMARY DATBASE, R.CLICK, GOTO TRANSACTION LOG SHIPPING PAGE, GOTO SECONDAY SERVER, THERE U CAN SEE THREE DOTS, WE CAN CHANGE THE SETTINGS OF SECONDARY SERVER WITH THIS OPTION, THEN GOTO RESTORE TRANSACTION LOG, SELECT STANDBY MODE OPTION. DON'T CHECK 'DISCONNECT USERS IN TH EDATABASE WHEN RESTORING BACKUPS'
U CAN ADD MULTIPLE STANDBY, BEST OPTION IS ONE FOR NO REOVERY MODE, ONE FOR STANDBY.
TUF—TRANSACTION UNDO FILE.
ONCE WE CHANGED THE SECONDARY DATABASE FROM NO RECOVERY MODE TO STANDBY MODE, SOME UNCOMMITED TRANSACTIONS WILL B E THERE, THESE UNCOMMITTED TRANSACTONS WILL BE STORED IN ONE FILE CALLDED TUF. IF TUF FILE CORRUPTED LOG SHIPPING WILL BREAKS.
*BY DEFAULT TUF WILL AUTOMATICALLY CREATED IN DATA FOLDER, WHERE MY MDF, LDF FILES ARE THERE.
CAN WE CHANGE THE LOCATION OF TUF FILE? –YES, BUT AGAIN WHEN RESTORE RUNS ONE MORE TUF FILE WILL BE CREATED IN DATA FOLDER.
--In the add file scenario while restoring the file it is giving the following errors
1. Too rececnt 2. Too late 3. Too large search for the solution. 4. Too early

Stand by mode in log shipping
putting the secondary database into standby mode manually. In this scenario we need to restore the pending log backup files with no recovery, and restore the last log file with standby,

restore log dbname from disk=N'last log file.trn' with standby ='path where to save the tuf file.tuf'

**Transaction undo file (TUF)
we can put the TUF file at any location. If TUF corrupted log shipping will break. Again we need to configure the log shipping.

**before putting the secondary database which is in restoring mode to standby mode first we need to disable restore job.

Once we enable the restore job again the database will goes into restoring mode.