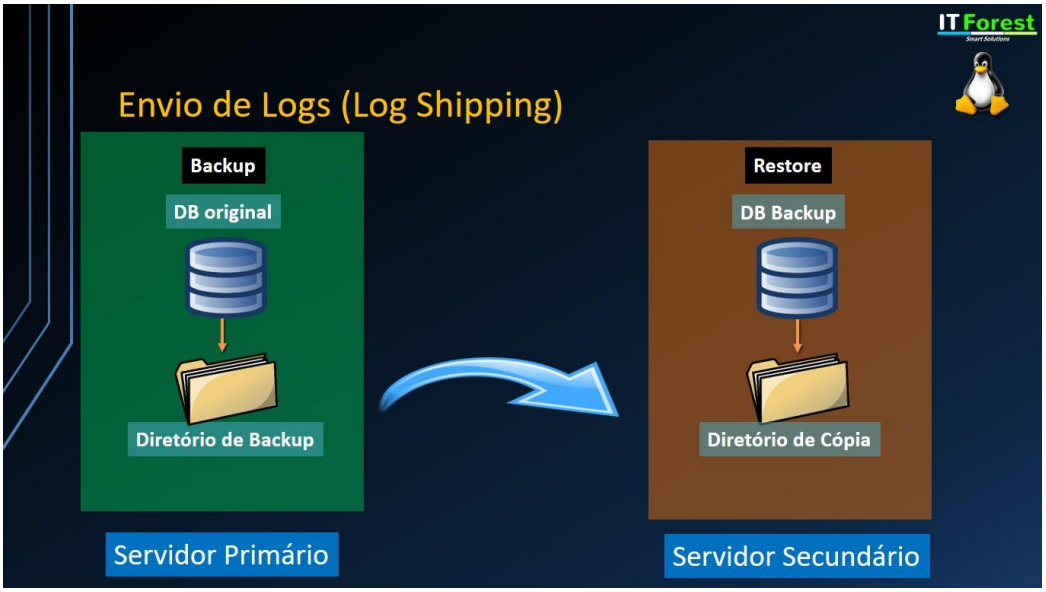

Pré-Requisitos

Agent Instalado

Realizar clone de servidor SQL-LNX-01 para SQL-LNX-02 Configurar o servidor Secundário, pós clone

No SQL Server Management Studio, alterar nome do servidor SQL Server

```
sp_dropserver 'SQL-LNX-01';
GO
sp_addserver 'SQL-LNX-02', local;
GO
--reinicia o banco e verifica novamente
--no linux
sudo systemctl restart mssql-server

--SSMS
select @@SERVERNAME
```

No linux

Alterar IP

sudo vim /etc/network/interfaces

alterar ip de 192.168.0.100 para 192.168.0.200

Alterar arquivos host e hostname

sudo vim /etc/hosts

Artigo: Envio de Logs

Alterar SQL-LNX-01 para **SQL-LNX-02**

sudo vim /etc/hostname

Alterar SQL-LNX-01 para **SQL-LNX-02**

Alterar Porta SQL Server primário

--Use mssql conf para alterar o diretório de dados padrão com o definir comando:

sudo /opt/mssql/bin/mssql-conf unset network.tcpport

--Use mssql conf para alterar o o limite de memória:

sudo /opt/mssql/bin/mssql-conf set memory.memorylimitmb 2048

--Reinicie SQLserver

sudo systemctl restart mssql-server

Alterar Porta SQL Server Secundário

--Use mssql conf para alterar o diretório de dados padrão com o definir comando:

sudo /opt/mssql/bin/mssql-conf unset network.tcpport

--Use mssql conf para alterar o o limite de memória:

sudo /opt/mssql/bin/mssql-conf set memory.memorylimitmb 2048

--Reinicie SQLserver

sudo systemctl restart mssql-server

Configurar o servidor primário

Instalar Samba (OBS Já instalado) apenas configurar

```
sudo apt-get install samba
```

Crie um diretório para armazenar os logs de envio de logs e dê mssql as permissões necessárias

Artigo: Envio de Logs

mkdir /datafiles/tlogs

sudo chown mssql:mssql /datafiles/tlogs

sudo chmod 0700 /datafiles/tlogs

Edite o arquivo /etc/samba/smb.conf (você precisa de permissões de raiz para que) e adicione a seção a seguir:

sudo vim /etc/samba/smb.conf

[tlogs]

path=/datafiles/tlogs

available=yes

read only=yes

browsable=yes

public=yes

writable=no

Criar um usuário mssql para Samba

sudo smbpasswd -a mssql

Reinicie os serviços Samba

sudo systemctl restart smbd.service nmbd.service

--Verificar compartilhamento

testparm

Configurar o servidor Secundário

Instalar o cliente CIFS (Protocolo de compartilhamento)

```
sudo apt-get install cifs-utils
```

Artigo: Envio de Logs

Crie um arquivo para armazenar suas credenciais. Use a senha que recentemente definida para sua conta Samba mssql

```
sudo vim /var/opt/mssql/.tlogcreds
#copie abaixo no arquivo .tlogcreds

username=mssql
domain=<domain>
password=<password>
```

Execute os seguintes comandos para criar um diretório vazio para a montagem e definir a propriedade e permissão corretamente

```
sudo mkdir /datafiles/tlogs
sudo chown root:root /datafiles/tlogs
sudo chmod 0550 /datafiles/tlogs
sudo chown root:root /var/opt/mssql/.tlogcreds
sudo chmod 0660 /var/opt/mssql/.tlogcreds
```

Adicione a linha ao etc/fstab para manter o compartilhamento

sudo vim /etc/fstab

Exemplo

//<ip_address_of_primary_server>/tlogs /datafiles/tlogs cifs credentials=/var/opt/mssql/.tlogcreds,ro,uid=mssql,gid=mssql 0 0

Configuração

//192.168.0.100/tlogs /datafiles/tlogs cifs credentials=/var/opt/mssql/.tlogcreds,ro,uid=mssql,gid=mssql 0 0

Montar os compartilhamentossudo

sudo mount -a

df -h

Instalação via T-SQL de envio de logs (servidor primário)

Criar um banco de dados

```
--servidor Primario
--cria database
CREATE DATABASE homolog

go
```

Artigo: Envio de Logs

```
USE homolog

go

--cria tabela
CREATE TABLE dados
  (
     id    INT IDENTITY(1, 1),
     nome VARCHAR (50)
  )

--insere dados
INSERT INTO dados
VALUES       ('João'),
             ('Pedro'),
             ('Maria')
```

Execute este script em seu servidor primário

```
****** Início: Script a ser executado no Primário: [192.168.0.100] ******



-- Executar as seguintes instruções no Primário para configurar o Envio de Logs
-- para o banco de dados [192.168.0.100].[homolog],
-- O script precisa ser executado no Primário, no contexto do banco de dados [msdb].
-----------------------------------------------------------------------------------
-- Adicionando a configuração de Envio de Log

-- ****** Início: Script a ser executado no Primário: [192.168.0.100] ******

BACKUP DATABASE homolog
TO DISK = '/datafiles/tlogs/homolog_teste.bak'
GO


DECLARE @LS_BackupJobId    AS uniqueidentifier
DECLARE @LS_PrimaryId      AS uniqueidentifier
DECLARE @SP_Add_RetCode    As int


EXEC @SP_Add_RetCode = master.dbo.sp_add_log_shipping_primary_database
              @database = N'homolog'
              ,@backup_directory = N'/datafiles/tlogs'
              ,@backup_share = N'/datafiles/tlogs'
              ,@backup_job_name = N'LSBackup_homolog'
              ,@backup_retention_period = 4320
              ,@backup_compression = 2
              ,@backup_threshold = 60
              ,@threshold_alert_enabled = 1
              ,@history_retention_period = 5760
              ,@backup_job_id = @LS_BackupJobId OUTPUT
              ,@primary_id = @LS_PrimaryId OUTPUT
              ,@overwrite = 1


IF (@@ERROR = 0 AND @SP_Add_RetCode = 0)
```

```
BEGIN

DECLARE @LS_BackUpScheduleUID      As uniqueidentifier
DECLARE @LS_BackUpScheduleID       AS int


EXEC msdb.dbo.sp_add_schedule
              @schedule_name =N'LSBackupSchedule'
              ,@enabled = 1
              ,@freq_type = 4
              ,@freq_interval = 1
              ,@freq_subday_type = 4
              ,@freq_subday_interval = 15
              ,@freq_recurrence_factor = 0
              ,@active_start_date = 20181017
              ,@active_end_date = 99991231
              ,@active_start_time = 0
              ,@active_end_time = 235900
              ,@schedule_uid = @LS_BackUpScheduleUID OUTPUT
              ,@schedule_id = @LS_BackUpScheduleID OUTPUT

EXEC msdb.dbo.sp_attach_schedule
              @job_id = @LS_BackupJobId
              ,@schedule_id = @LS_BackUpScheduleID

EXEC msdb.dbo.sp_update_job
              @job_id = @LS_BackupJobId
              ,@enabled = 1


END


EXEC master.dbo.sp_add_log_shipping_alert_job

EXEC master.dbo.sp_add_log_shipping_primary_secondary
              @primary_database = N'homolog'
              ,@secondary_server = N'192.168.0.200'
              ,@secondary_database = N'homolog'
              ,@overwrite = 1

-- ****** Fim: Script a ser executado no Primário: [192.168.0.100]  ******
```

Instalação via T-SQL de envio de logs (servidor Secundário)

```
-- Executar as seguintes instruções no Secundário para configurar o Envio de Logs
-- para o banco de dados [192.168.0.200].[homolog],
-- o script precisa ser executado no Secundário, no contexto do banco de dados [msdb].
-----------------------------------------------------------------------------------
-- Adicionando a configuração de Envio de Log

-- ****** Início: Script a ser executado no Secundário: [192.168.0.200] ******

RESTORE DATABASE homolog FROM DISK = '/datafiles/tlogs/homolog_teste.bak '
WITH NORECOVERY;
```

```
DECLARE @LS_Secondary__CopyJobId  AS uniqueidentifier
DECLARE @LS_Secondary__RestoreJobId      AS uniqueidentifier
DECLARE @LS_Secondary__SecondaryId       AS uniqueidentifier
DECLARE @LS_Add_RetCode     As int


EXEC @LS_Add_RetCode = master.dbo.sp_add_log_shipping_secondary_primary
              @primary_server = N'192.168.0.100'
              ,@primary_database = N'homolog'
              ,@backup_source_directory = N'/datafiles/tlogs'
              ,@backup_destination_directory = N'/datafiles/tlogs'
              ,@copy_job_name = N'LSCopy_homolog'
              ,@restore_job_name = N'LSRestore_homolog'
              ,@file_retention_period = 4320
              ,@overwrite = 1
              ,@copy_job_id = @LS_Secondary__CopyJobId OUTPUT
              ,@restore_job_id = @LS_Secondary__RestoreJobId OUTPUT
              ,@secondary_id = @LS_Secondary__SecondaryId OUTPUT

IF (@@ERROR = 0 AND @LS_Add_RetCode = 0)
BEGIN

DECLARE @LS_SecondaryCopyJobScheduleUID  As uniqueidentifier
DECLARE @LS_SecondaryCopyJobScheduleID   AS int


EXEC msdb.dbo.sp_add_schedule
              @schedule_name =N'DefaultCopyJobSchedule'
              ,@enabled = 1
              ,@freq_type = 4
              ,@freq_interval = 1
              ,@freq_subday_type = 4
              ,@freq_subday_interval = 15
              ,@freq_recurrence_factor = 0
              ,@active_start_date = 20181017
              ,@active_end_date = 99991231
              ,@active_start_time = 0
              ,@active_end_time = 235900
              ,@schedule_uid = @LS_SecondaryCopyJobScheduleUID OUTPUT
              ,@schedule_id = @LS_SecondaryCopyJobScheduleID OUTPUT

EXEC msdb.dbo.sp_attach_schedule
              @job_id = @LS_Secondary__CopyJobId
              ,@schedule_id = @LS_SecondaryCopyJobScheduleID

DECLARE @LS_SecondaryRestoreJobScheduleUID      As uniqueidentifier
DECLARE @LS_SecondaryRestoreJobScheduleID       AS int


EXEC msdb.dbo.sp_add_schedule
              @schedule_name =N'DefaultRestoreJobSchedule'
              ,@enabled = 1
              ,@freq_type = 4
              ,@freq_interval = 1
              ,@freq_subday_type = 4
              ,@freq_subday_interval = 15
              ,@freq_recurrence_factor = 0
              ,@active_start_date = 20181017
              ,@active_end_date = 99991231
```

```
              ,@active_start_time = 0
              ,@active_end_time = 235900
              ,@schedule_uid = @LS_SecondaryRestoreJobScheduleUID OUTPUT
              ,@schedule_id = @LS_SecondaryRestoreJobScheduleID OUTPUT

EXEC msdb.dbo.sp_attach_schedule
              @job_id = @LS_Secondary__RestoreJobId
              ,@schedule_id = @LS_SecondaryRestoreJobScheduleID


END


DECLARE @LS_Add_RetCode2    As int


IF (@@ERROR = 0 AND @LS_Add_RetCode = 0)
BEGIN

EXEC @LS_Add_RetCode2 = master.dbo.sp_add_log_shipping_secondary_database
              @secondary_database = N'homolog'
              ,@primary_server = N'192.168.0.100'
              ,@primary_database = N'homolog'
              ,@restore_delay = 0
              ,@restore_mode = 0
              ,@disconnect_users   = 0
              ,@restore_threshold = 45
              ,@threshold_alert_enabled = 1
              ,@history_retention_period = 5760
              ,@overwrite = 1

END


IF (@@error = 0 AND @LS_Add_RetCode = 0)
BEGIN

EXEC msdb.dbo.sp_update_job
              @job_id = @LS_Secondary__CopyJobId
              ,@enabled = 1

EXEC msdb.dbo.sp_update_job
              @job_id = @LS_Secondary__RestoreJobId
              ,@enabled = 1

END


-- ****** Fim: Script a ser executado no Secundário: [192.168.0.200] ******



--Restaurar quando Necessário

RESTORE DATABASE homolog WITH RECOVERY;
```

Verifique se o envio de Log funciona (servidor Primário)

```
USE msdb;
GO

EXEC dbo.sp_start_job N'LSBackup_homolog' ;
GO
```

Verifique se o envio de Log funciona (servidor Secundário)

USE msdb ;

GO

EXEC dbo.sp_start_job N'LSCopy_homolog' ;

GO

EXEC dbo.sp_start_job N'LSRestore_homolog' ;

GO

RESTORE DATABASE homolog WITH RECOVERY;

EXTRAS

Deletar Jobs de Log Shipping

Servidor Primário

```
use master
go
EXEC dbo.sp_delete_log_shipping_primary_secondary
       @primary_database = N'homolog' ,
       @secondary_server = N'192.168.0.200',
       @secondary_database = N'homolog';
GO

EXEC sp_delete_log_shipping_primary_database @database = N'homolog';
GO

EXEC dbo.sp_delete_log_shipping_primary_database @database = N'homolog';
GO
```

Servidor Secundario

```
use master
go
EXEC sp_delete_log_shipping_secondary_primary
             @primary_server='192.168.0.100',
             @primary_database='homolog'

Exec sp_delete_log_shipping_secondary_database
@secondary_database =N'homolog'
```

```
EXEC sp_delete_log_shipping_alert_job;
```

--Tabelas de consultas LOG Shipping

```
use msdb
go
select * from log_shipping_monitor_alert
select * from log_shipping_monitor_error_detail
select * from log_shipping_monitor_history_detail
select * from log_shipping_monitor_primary
select * from log_shipping_monitor_secondary
select * from log_shipping_primary_databases
select * from log_shipping_primary_secondaries
select * from log_shipping_secondary
select * from log_shipping_secondary_databases

--delete
use msdb
go
delete from log_shipping_monitor_alert
delete from log_shipping_monitor_error_detail
delete from log_shipping_monitor_history_detail
delete from log_shipping_monitor_primary
delete from log_shipping_monitor_secondary
delete from log_shipping_primary_databases
delete from log_shipping_primary_secondaries
delete from log_shipping_secondary
delete from log_shipping_secondary_databases
```