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Error 1418 and Good Basic Setup Guide

**stupots***Friday, June 16, 2006 3:03 PM*

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Hi,

I'm new to DB Mirroring, and I am trying to get it going in a test enviroment between two SQL 2005 Dev Servers. I have followed documentation that I have found but cannot get past a 1418 error when establishing a connection between the servers initially. Does anyone know of any good step by step guides that I could look at, in case I have missed something stupid.

Thanks in advance

Stupots

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Last Reply: 11/22/2006
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Replies: 17
Views: 18,599**All Replies****Torsten_Katthoefer***Monday, June 19, 2006 8:23 AM*

0

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Hi,

the easiest way is to run the sql services of all partners as local admins (domain user), then there should not be a great problem to establish a session. Furthermore make sure, that you mack a full backup and a transaction log backup what you both restore on the mirror. While establishing the mirroring session ensure that no further trans. log backup proceeds.

Thats it. ;-)

Torsten

[Reply](#)[Quote](#)**Mark Wistrom***Monday, June 19, 2006 3:21 PM*

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Look at the troubleshooting section for setting up mirroring in BOL.

Thanks,

Mark

[Reply](#)[Quote](#)**stupots***Tuesday, June 20, 2006 9:53 AM*

0

Great, thanks for that, I'm sure it's something simple that is stopping it working properly! I'll have another play.

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stupots

Wednesday, June 21, 2006 11:42 AM



Hi,

Still having major problems with this.

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So far I have tried:

1. Set my main database to 'FULL' recovery mode, with autoclose set to false.
2. Backed the database to my mirror server with NORECOVERY and left it in a restoring state.
3. Used the following T-SQL on both servers to create my endpoints, using port 5022 on the principal and port 5023 on the mirror:

create endpoint mirror

state=started

as tcp(listener_port = 5022)

for database_mirroring (role =partner)

4. I'm using a domain account on both servers, and I granted connect permissions to the endpoints using:

grant connect

on endpoint::mirror

TO [DOMAIN\DOMAINUSER]

Finally i try and initiate the mirror by running with differnt ports and server names on each server:

alter database LR

set partner = 'tcp://SERVERNAME.DOMAIN.COM:5022'

the mirror server works fine, but the principal comes up with;

Msg 1418, Level 16, State 1, Line 1

The server network address "TCP://mirrorserver.domain.com:5023" can not be reached or does not exist. Check the network address name and that the ports for the local and remote endpoints are operational.


In the logs I also get

2006-06-21 11:39:30.84 spid26s Error: 1443, Severity: 16, State: 2.

2006-06-21 11:39:30.84 spid26s Database mirroring has been terminated for database 'LR'. This is an informational message only. No user action is required.

I can telnet to both servers on 5022 and 5023, and see the ports listening if I do a netstat -abn.

I also get this error if I use the security wizard on the database mirror page. Is there

anything I may have missed or need to check, I think I'm gonna cry 

Thanks in advance


Stu

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Torsten_Katthoefer

Wednesday, June 21, 2006 12:26 PM



0

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Why you use differential ports? 5022 and 5023?

You sets the partner connectionon 5022 for all partners (it looks like), but one of the partners endpoint on 5023? I see no requirement to do that...

I use 5022 for all partners and witness, and it works fine!


Torsten

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stupots

Wednesday, June 21, 2006 1:16 PM




0

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It doesn't seem to matter if I use the same or different ports! I used different ports as I was getting another error saying the port was already in use. Shouldn't make a difference should it?

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Torsten_Katthoefer

Wednesday, June 21, 2006 1:21 PM



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Yes, it shouldn't matter... There are a few things, that shouldn't matter - i've been crying a few times.

Have you tried to use on all partner the same port (5023)? An by the way - why is 5022 used by what application? I would clarify these...


Dont cry ;-)

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stupots

Wednesday, June 21, 2006 4:20 PM



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Thanks Torsten, I'm holding back the tears 

I managed to get a step closer, as it seems I had a problem with my dns servers. I still get the same error, but in the error log I get:

```

2006-06-21 15:40:14.85 Logon      Error: 17836, Severity: 20, State: 1.
2006-06-21 15:40:14.85 Logon      Length specified in network packet payload did
not match number of bytes read; the connection has been closed. Please contact the
vendor of the client library. [CLIENT: 192.168.1.48]
2006-06-21 15:40:17.37 Logon      Error: 17836, Severity: 20, State: 1.
2006-06-21 15:40:17.37 Logon      Length specified in network packet payload did
not match number of bytes read; the connection has been closed. Please contact the
vendor of the client library. [CLIENT: 192.168.1.48]
2006-06-21 15:40:19.87 Logon      Error: 17836, Severity: 20, State: 1.
2006-06-21 15:40:19.87 Logon      Length specified in network packet payload did
not match number of bytes read; the connection has been closed. Please contact the
vendor of the client library. [CLIENT: 192.168.1.48]


```

Anyone seen this before?

Thanks

Stu

[Reply](#) [Quote](#)



harsh88

Wednesday, July 05, 2006 5:28 AM

0

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Try using certificates to connect and make sure that the server instance is listening on port 5022 for mirroring by checking the event log.

Here is some info

Set the database recovery model for database mirroring

- Select the database to be mirrored on the Principal Instance
- Set recovery model by executing the following statement

```
ALTER DATABASE [DATABASE] SET RECOVERY FULL.
```

Alternatively, you can right click on the database, select properties, options, set recovery model to full and click OK.

Create endpoints for database mirroring

Use the following procedure to create and configure endpoints for certificate-based authentication

- Create a database master key in the **master** database, as shown in the following TSQL example:

```
CREATE MASTER KEY ENCRYPTION BY PASSWORD = 'MIP0wEr'
```

- Create a certificate. For example, the following TSQL creates a certificate with subject "SQLServer1 mirroring certificate":

```
CREATE CERTIFICATE Sql1MirroringCert WITH SUBJECT = 'SQLServer1 mirroring certificate'
```

- Create an endpoint that uses the certificate for outbound authentication, as shown in the following TSQL example:

```
CREATE ENDPOINT EPMirroring STATE = STARTED
AS TCP (LISTENER_PORT = 6025)
FOR DATABASE_MIRRORING (
AUTHENTICATION = CERTIFICATE Sql1MirroringCert
, ENCRYPTION = REQUIRED ALGORITHM RC4
, ROLE = PARTNER ) [1]
```

- Check the Event Log to make sure that SQL Server instance is listening to port 6025 (In this case) for database mirroring sessions.
- Export the certificate and copy it securely to the other servers in the mirroring solution. The following TSQL shows how to export a certificate:

```
BACKUP CERTIFICATE Sql1MirroringCert TO FILE =
'C:\Sql1MirroringCert.Cer'
```

- Create a login and a user for each remote server, and create a certificate for those users from the certificates copied from the remote servers, as shown in the following TSQL example:

```
-- create a login for the remote server

USE master

CREATE LOGIN SqlServer2Lgn WITH PASSWORD = 'MiP0wEr'

-- create a user

CREATE USER SqlServer2Usr FOR LOGIN SqlServerLgn

-- create a certificate for the user

CREATE CERTIFICATE Sql2MirroringCert AUTHORIZATION

    SqlServer2Usr FROM FILE = 'C:\Sql2MirroringCert.Cer'
```

- Grant the logins for the remote servers CONNECT permission on the endpoint, as shown in the following TSQL example:

```
GRANT CONNECT ON ENDPOINT::EPMirroring TO SqlServer2Lgn
```

Prepare the mirror database for a mirroring session

Before a mirroring session can be initialized, the mirror database has to be prepared

- Backup database on Principal Server. The following TSQL example can be used:

```
BACKUP DATABASE [DATABASE]

TO DISK = 'C:\BACKUPS\DATABASE.BAK'

WITH FORMAT
```

- Restore the database on the Mirror server with NORECOVERY. You will need to copy the backup file to the mirror server and restore the database there as shown in the following TSQL example:

```
RESTORE DATABASE [DATABASE] FROM

DISK 'C:\BACKUPS\DATABASE.BAK'

WITH NORECOVERY
```

Setting the NORECOVERY option is very important and this will place the Database in a Restoring state. The mirror database remains in restoring state during the mirroring session and continuously applies the transactions from the principal database's transaction log.

- Create server-level resources on Mirror Server. Database mirroring operates at the database level and sever-level resources such as logins, certificates,

endpoints, a SQL Agent jobs are not mirrored. These resources will need to be duplicated on the mirror server to ensure continued operation in the event of a failover.

Establish a mirroring session

The order of the following steps is very important to establish a mirroring session.

- Set Partner on mirror database. To initiate a mirroring session, start by setting the mirroring partner endpoint on the mirror database as shown in the following TSQL example:

```
ALTER DATABASE [DATABASE] SET  
PARTNER = 'TCP://WHITE:6025'
```

- Set Partner on principal database

```
ALTER DATABASE [DATABASE] SET  
PARTNER = 'TCP://BIG-BLUE:6025'
```

- Set Witness on principal or mirror

```
ALTER DATABASE [DATABASE] SET  
PARTNER = 'TCP://WITNESS:6025'
```

- Check the event logs on all three servers to make sure that the database mirroring session is established on the selected databases.

Manage a mirroring session

- Configure Transaction Safety – Transaction safety level can be set to FULL (Transactions are forwarded synchronously) or OFF (Transactions are forwarded asynchronously).

```
ALTER DATABASE [DATABASE] SET TRANSACTION  
SAFETY OFF
```

The above statement will configure transaction safety to asynchronous mode.

- Remove Witness

```
ALTER DATABASE [DATABASE] SET WITNESS OFF
```

- Manual Failover

From principal database you can use the following TSQL statement:

ALTER DATABASE [DATABASE] SET PARTNER FAILOVER

If transaction safety is OFF, transactions are forwarded asynchronously and the mirror server remains online but in a restoring state in the event of a principal server failure. You can force restore on the mirror server, even though some transaction may have been lost, as shown in the following example:

**ALTER DATABASE [DATABASE] SET PARTNER
FORCE_SERVICE_ALLOW_DATA_LOSS**

[1] The ROLE argument can be PARTNER, for a principal or mirror server; WITNESS, for a witness server; or ALL, for servers that will be both a partner (principal or mirror) and a witness server for another mirroring session

Use these SQL statements for trouble shooting

```
SELECT e.name, e.protocol_desc, e.type_desc, e.role_desc, e.state_desc, t.port,
e.is_encryption_enabled, e.encryption_algorithm_desc, e.connection_auth_desc
FROM sys.database_mirroring_endpoints e JOIN sys.tcp_endpoints t ON
e.endpoint_id = t.endpoint_id
```

```
SELECT d.name, d.database_id, m.mirroring_role_desc, m.mirroring_state_desc,
m.mirroring_safety_level_desc, m.mirroring_partner_name,
mirroring_partner_instance, m.mirroring_witness_name,
m.mirroring_witness_state_desc FROM sys.database_mirroring m JOIN
sys.databases d ON m.database_id = d.database_id WHERE
mirroring_state_desc IS NOT NULL
```

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angelar
Wednesday, July 12, 2006 10:00 PM

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Hi there,

I was just wondering if the resolution posted by (harsh88) resolved the matter? Also, are you working in a particular domain (i.e. Partners/Extranet, vs. Redmond or Phoenix)?

Thanks,

Angela

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gmpdx
Friday, August 18, 2006 6:29 PM

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hey stupots

hope you solved the mirroring problem. i had the problem once and it was because i forgot to restore the database on the mirror as 'non recovery' mode. after i changed that, the error (the same one you encountered) went away. i spent so much time tried to trouble shoot tcp and listening port 5022 but the cuase was total unrelated to that. typical microsoft 'misleading' error message.

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Krobar
Tuesday, November 21, 2006 10:31 AM

0

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I am newbie to this and am getting quite confused, I have been following Harsh 88s post and it all makes sense to me except this part:

- Create a login and a user for each remote server, and create a certificate for those users from the certificates copied from the remote servers, as shown in the following TSQL example:

```
-- create a login for the remote server
```

```
USE master
```

```
CREATE LOGIN SqlServer2Lgn WITH PASSWORD = 'MiP0wEr'
```

```
-- create a user
```

```
CREATE USER SqlServer2Usr FOR LOGIN SqlServerLgn
```

```
-- create a certificate for the user
```

```
CREATE CERTIFICATE Sql2MirroringCert AUTHORIZATION
```

```
SqlServer2Usr FROM FILE = 'C:\Sql2MirroringCert.Cer'
```

Firstly I assume all the above is to be run on the primary server. Where does SqlServerLgn come from? Was Sql2MirroringCert.cer generated on the second SQL server? I know these are simple questions but this is the only part of the process I'm not clear on.

[Reply](#)[Quote](#)

Tarkan G_

Tuesday, November 21, 2006 11:33 AM

0

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Hello,

Please follow this steps..You can find sample codes and it is very useful

<http://msdn2.microsoft.com/en-us/library/ms191140.aspx>

Regards...

Tarkan G.

GTA

[Reply](#)[Quote](#)

Krobar

Tuesday, November 21, 2006 2:02 PM

0

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Thanks Tarkan, That guide is quite clear.

I think I'm almost there now but am still having trouble making the Primary DB partner with the secondary DB (Secondary is in restore). I get this error:

Msg 1478, Level 16, State 0, Line 1

The mirror database, "Testing", has insufficient transaction log data to preserve the log backup chain of the principal database. This may happen if a log backup from the principal database has not been taken or has not been restored on the mirror database.

This is how I prepped the database:

On Primary:


```
ALTER DATABASE Testing SET RECOVERY FULL;

BACKUP DATABASE Testing
TO DISK = 'C:\Testing.bak'
WITH FORMAT;

*Copy File to C:\ On Secondary

On Secondary:

RESTORE DATABASE Testing FROM
DISK = 'C:\Testing.bak'
WITH NORECOVERY;

On Secondary:

ALTER DATABASE Testing
SET PARTNER = 'TCP://MsSql1.test.com:5022';
GO
```

On Primary:

(Alter statement below causes the error)

```
ALTER DATABASE Testing
SET PARTNER = 'TCP://MsSql2.test.com:5022';
GO
```

Logs on Primary give this info:

```
2006-11-21 13:39:48.13 spid24s  Error: 1443, Severity: 16, State: 2.
2006-11-21 13:39:48.13 spid24s  Database mirroring has been terminated for database 'Testing'. This is an
informational message only. No user action is required.
2006-11-21 13:41:30.34 spid24s  Error: 1474, Severity: 16, State: 1.
2006-11-21 13:41:30.34 spid24s  Database mirroring connection error 4 'An error occurred while receiving data:
'64(error not found)'. for 'TCP://MsSql2.test.com:5022'.
```

Logs on Secondary give this info:

```
2006-11-21 13:36:12.65 spid53   Starting up database 'Testing'.
2006-11-21 13:36:12.67 spid53   The database 'Testing' is marked RESTORING and is in a state that does not
allow recovery to be run.
2006-11-21 13:36:12.68 Backup   Database was restored: Database: Testing, creation date(time): 2006/11/21
(13:03:20), first LSN: 18:426:37, last LSN: 18:442:1, number of dump devices: 1, device information: (FILE=1,
TYPE=DISK: ('C:\Testing.bak')). Informational message. No user action required.
2006-11-21 13:36:49.67 spid25s  Error: 1443, Severity: 16, State: 2.
2006-11-21 13:36:49.67 spid25s  Database mirroring has been terminated for database 'Testing'. This is an
informational message only. No user action is required.
```

Do you know what might be causing the issue?

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Krobar

Tuesday, November 21, 2006 2:25 PM



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Tarkan G_

Tuesday, November 21, 2006 3:23 PM



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Hello Krober,

I think your mirror database status has changed (Restoring--->In Recovery) Please refresh mirror database

then restore mirror database again but dont forget you must restore WITH NORECOVERY option.

Regards..

Tarkan G.

GTA

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Krobar

Wednesday, November 22, 2006 10:13 AM

0

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I did restore with the No RECOVERY option but this did not help.

What I had to do was backup the log seperately and restore it:

```
BACKUP LOG Testing  
TO DISK = 'C:\Testing.log'  
WITH FORMAT;
```

```
RESTORE LOG Testing FROM  
DISK='C:/Testing.log' WITH NORECOVERY
```

It Works Now!!!!
;) :)

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