Enabling Replication

The following information illustrates the steps required to enable a High Availability Replicant Server.

It is assumed that you already have a functional installation of TapeTrack Server running.

All steps must be performed in the order presented to create a successful connection between the Master and Replican Server.

IP addresses included in the instructions are for demonstration only, these must be replaced with your correct values.

Steps On Remote Server

Install the TapeTrack Framework Server software on your Replicant machine.

Navigate Windows File Explorer to the TapeTrack Framework Server installation directory
(TapeTrack\TapeTrack Framework Server) to the var\db folder.

Delete all database files on the Replicant machine (all files in the TapeTrack\TapeTrack Framework Server\var\db directory) **EXCEPT** the DB CONFIG file).

Enabling	Replication

S	TapeTrack Server H	lelper		
F	Service			
-	Name		TMSS10SVC	
	Status	N	Running	
	Process ID	1	20584	
	Binary		C:\Program Files\TapeTrack\TapeTrack Framework Server\TMSS10Server.exe	
Ξ	Options			
	Home Directory			
	Port		5000	
	Syslogd Server			
	Enable Replication		True	
	Log File Name Type	в	0	
k	Save S	Service Set	ings	
C	ontrol Service		Update Software	Edit/View Files
1.0	Stop	1.1.1		1 Jan -

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File Home Share	View			× 🕐
← → ~ 🔒 « Tap	oeTrack > TapeTrack Framework Server > var >	ى خ db		
V 🖈 Quick Sccess	Name	Date modified	Туре	Size ^
Desktop 💉	SDB_Err.txt	3/11/2021 9:37 AM	Text Document	
Downloads *	SDB_Msg.txt	3/11/2021 9:37 AM	Text Document	
	DB_CONFIG	3/10/2021 12:38 PM	File	
🖆 Documents 🖈	TMSS10.attribute-history	3/8/2021 3:11 PM	ATTRIBUTE-HISTO	
📰 Pictures 🛛 🖈	TMSS10.attribute-history.dump	3/8/2021 3:11 PM	DUMP File	
📙 TapeTrack 🛛 🖈	TMSS10.attribute-history.save	3/8/2021 2:31 PM	SAVE File	
> 🔿 OneDrive	TMSS10.attributes	3/8/2021 3:10 PM	ATTRIBUTES File	
	TMSS10.attributes.dump	3/8/2021 3:10 PM	DUMP File	
🗸 💻 This PC	TMSS10.attributes.save	3/8/2021 2:31 PM	SAVE File	
> 🧊 3D Objects	TMSS10.attributetype	3/8/2021 3:10 PM	ATTRIBUTETYPE File	
> Desktop	TMSS10.attributetype.dump	3/8/2021 3:10 PM	DUMP File	
> 🛱 Documents	TMSS10.attributetype.save	3/8/2021 2:31 PM	SAVE File	
	TMSS10.barcode	3/8/2021 3:03 PM	BARCODE File	
> 🕂 Downloads	TMSS10.barcode.dump	3/8/2021 3:02 PM	DUMP File	
> 🎝 Music	TMSS10.barcode.save	3/8/2021 2:31 PM	SAVE File	
> E Pictures	TMSS10.catalog	3/8/2021 3:15 PM	CATALOG File	
> 📑 Videos	TMSS10.catalog.dump	3/8/2021 3:14 PM	DUMP File	
> 🏥 Local Disk (C:)	TMSS10.catalog.save	3/8/2021 2:31 PM	SAVE File	
	TMSS10.catalog-extent	3/8/2021 3:16 PM	CATALOG-EXTENT	
> 💣 Network	TMSS10.catalog-extent.dump	3/8/2021 3:16 PM	DUMP File	
	TMSS10.catalog-extent.save	3/8/2021 2:31 PM	SAVE File	
	TMSS10.catalog-extent-time	3/11/2021 9:37 AM	CATALOG-EXTENT	
	TMSS10.catalog-extent-time.dump	3/8/2021 3:16 PM	DUMP File	
	TMSS10.catalog-extent-time.save	3/8/2021 2:36 PM	SAVE File	
	TMSS10.catalog-file	3/8/2021 3:17 PM	CATALOG-FILE File	
	TMSS10.catalog-file.dump	3/8/2021 3:17 PM	DUMP File	¥
	<			>
218 items 1 item selected	d 81 bytes			

Edit the TapeTrack\TapeTrack Framework Server\DB_CONFIG file and remove the comments (#'s) starting from the line **rep-set-priority 0** to make the machine a Replicant.

Edit the Replicant Server and Master Server host names in the DB_CONFIG file.

- Replace **replicant-1.tapetrack.com** with the IP address of **your** Replicant Server (your_replicant_IP_address used as Replicant IP example).
- Replace **master.tapetrack.com** with the IP address of **your** Master Server (your_master_IP_address used as Master IP example).



Ensure you use the IP4 address for the Master and Replicant Server as using the domain name can cause issues with the IP6 address replacing the IP4 address, stopping the Master and Replicant communication.

```
DB_CONFIG - Notepad
                                                                          \times
File Edit Format View Help
set_flags DB_LOG_AUTOREMOVE
                                                                                 1
#
# Set the log directory to an alternate directory
#
set_lg_dir ..\dblogs
#
    Ι
#
# Set Verbose Output
#
set verbose DB VERB DEADLOCK
set_verbose_DB_VERB_RECOVERY
set verbose DB VERB REPLICATION
set verbose DB VERB WAITSFOR
#
#rep set priority 1
#repmgr site replicant-1.tapetrack.com 5010
#repmgr site master.tapetrack.com 5010 db local site on db group creator on
#
# Optional settings
#
#rep set config DB REP CONF BULK on
#rep set config DB_REP_CONF_AUTOINIT off
#
#
#rep set priority 0
#repmgr site replicant-1.tapetrack.com 5010 db local site on
#repmgr site master.tapetrack.com 5010 db bootstrap helper on
#rep set config DB REP CONF BULK on
<
                                                    100%
                                                                      UTF-8
                                     Ln 1, Col 1
                                                         Windows (CRLF)
```

Ensure that the replication TCP/IP ports specified in the DB_CONFIG file are open for inbound connections.

Steps On Master Server

Stop the TapeTrack service on the master TapeTrack server.



Do Not delete any files on the master server

Edit the TapeTrack\TapeTrack Framework Server\DB_CONFIG file and remove the comments (#'s) starting from the line **rep-set-priority 1** to make the machine a master server.

Edit the DB_CONFIG file to define the local and remote server. Edit the Replicant Server and Master

Server host names in the DB_CONFIG file.

- Replace **replicant-1.tapetrack.com** with the domain name (or IP address) of **your** Replicant Server (your_replicant_IP_address used as Replicant IP example).
- Replace **master.tapetrack.com** with the domain name (or IP address) of **your** Master Server (your_master_IP_address used as Master IP example).

```
*DB_CONFIG - Notepad
File Edit Format View Help
set flags DB LOG AUTOREMOVE
#
# Set the log directory to an alternate directory
#
    set_lg_dir ..\dblogs
#
#
# Set Verbose Output
#
set verbose DB VERB DEADLOCK
set verbose DB VERB RECOVERY
set verbose DB VERB REPLICATION
set verbose DB VERB WAITSFOR
#
#rep set priority 1
#repmgr site replicant-1.tapetrack.com 5010
#repmgr site master.tapetrack.com 5010 db local site on db group creator on
#
# Optional settings
#
#rep set config DB REP CONF BULK on
#rep set config DB REP CONF AUTOINIT off
#
#
#rep set priority 0
#repmgr site replicant-1.tapetrack.com 5010 db local site on
#repmgr site master.tapetrack.com 5010 db bootstrap helper on
#rep set config DB REP CONF BULK on
<
                                                                     UTF-8
                                    Ln 45, Col 2
                                                   100%
                                                        Windows (CRLF)
```

Delete all the files starting with _db. and db. rep..

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File Home Share	View			~ ()
← → × ↑ 📙 « Ta	peTrack > TapeTrack Framework Server > var >	Ū ∨ db		
✓	Name	Date modified	Туре	Size ^
Desktop *	SDB_Err.txt	3/11/2021 9:37 AM	Text Document	
	SDB_Msg.txt	3/11/2021 9:37 AM	Text Document	
🕂 Downloads 🖈	🚽db.001	3/11/2021 9:37 AM	001 File	
🖆 Documents 🖈	db.002	3/11/2021 9:37 AM	002 File	
📰 Pictures 🛛 🖈	db.003	3/11/2021 9:37 AM	003 File	
📙 TapeTrack 🛛 🖈	db.004	3/11/2021 9:37 AM	004 File	
	🚽db.rep.diag00	3/11/2021 9:37 AM	DIAG00 File	
> 📥 OneDrive	🚽db.rep.diag01	3/11/2021 9:37 AM	DIAG01 File	
🗸 💻 This PC	db.rep.egen	3/11/2021 9:37 AM	EGEN File	
> 🧊 3D Objects	db.rep.gen	3/11/2021 9:37 AM	GEN File	
> Desktop	DB_CONFIG	3/10/2021 12:38 PM	File	
> A Documents	TMSS10.attribute-history	3/8/2021 3:11 PM	ATTRIBUTE-HISTO	
_	TMSS10.attribute-history.dump	3/8/2021 3:11 PM	DUMP File	
> 🕂 Downloads	TMSS10.attribute-history.save	3/8/2021 2:31 PM	SAVE File	
> 🁌 Music	TMSS10.attributes	3/8/2021 3:10 PM	ATTRIBUTES File	
> 📰 Pictures	TMSS10.attributes.dump	3/8/2021 3:10 PM	DUMP File	
> 📑 Videos	TMSS10.attributes.save	3/8/2021 2:31 PM	SAVE File	
> 🏥 Local Disk (C:)	TMSS10.attributetype	3/8/2021 3:10 PM	ATTRIBUTETYPE File	
	TMSS10.attributetype.dump	3/8/2021 3:10 PM	DUMP File	
> 💣 Network	TMSS10.attributetype.save	3/8/2021 2:31 PM	SAVE File	
	TMSS10.barcode	3/8/2021 3:03 PM	BARCODE File	
	TMSS10.barcode.dump	3/8/2021 3:02 PM	DUMP File	
	TMSS10.barcode.save	3/8/2021 2:31 PM	SAVE File	
	TMSS10.catalog	3/8/2021 3:15 PM	CATALOG File	
	TMSS10.catalog.dump	3/8/2021 3:14 PM	DUMP File	
	TMSS10.catalog.save	3/8/2021 2:31 PM	SAVE File	¥
	<			>
226 items				

Ensure that the replication TCP/IP ports are open for inbound/outbound connections.

Start The Servers

Start the TapeTrack service on the remote machine.

The replicant server will prepare the database for connection to the master server and move into Start Pending mode while waiting for the master server to respond.

Start the master TapeTrack Server.

The master server will now connect to the replicant server and load the database information across the connection. This may take time depending on the database size.

S	TapeTrack Server Helper				
	Service				
	Name	TMSS10SVC			
	N	Stopped			
	Binary	C:\Program Files\TapeTrack\TapeTrack Framework Server\TMSS10Server.exe			
	Options				
	Home Directory	5000			
	Port	5000			
	Syslogd Server	-			
	Enable Replication	True			
	Log File Name Type	0			
Ŀ	Save Service Setting	S			
C C	ontrol Service	Update Software	Edit/View Files		
	Stop	Start Download and Update	DB_CONFIG		

Confirming Functionality Of Primary And Replicant Servers

Open \$DB_Msg.txt file (in the var/db directory) on both the primary and replicant server to ensure that replication is functional.



Ensure that all firewall ports are open to allow the replication traffic to pass between the replicants.



The replication communications are not encrypted so if replication is enabled you should ensure that all machines that are replicated are in a trusted network or connected via a secure VPN connection.

Server replication troubleshooting

See Also

Restoring replicant server to master server status

From: https://rtfm.tapetrack.com/ - TapeTrack Documentation

Permanent link: https://rtfm.tapetrack.com/server/replication?rev=1615421862



