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**ConfigMgr Site Server presumptions**

- SQL Server Agent must be running
- SQL must be installed locally on the Management Point with replication
- Primary Site Server must be member of the local administrator group
- The site database must publish the database replica.
- Each remote SQL Server computer that will host a database replica must subscribe to the published database replica.
- In this guide the following servers are used
  - Primary Site with a local SQL 2012 installation: CM02.SC2012.LOCAL
  - Remote Management Point with a local SQL 2012 installation: CM03.SC2012.LOCAL
- Additional info
  - Site code: PS1
  - Site Database: CM_PS1

**Credits**

This guide is based on information from:

Prepare Site Server

In these steps, you will create a share to store the replication data and run a stored procedure on the site server database.

On the primary site server create a local group called **ConfigMgr_MPReplicaAccess** and add all Management Points as members to the group.

Create a file share named **ConfigMgr_MPReplica** on the site server.

Share Permissions:
- System Account: **Full control**
- ConfigMgr_MPReplicaAccess: **Read**

NTFS Permissions
- SYSTEM Account: **Full Control**
- ConfigMgr_MPReplicaAccess: **Read, Read & execute, List folder contents**

If SQL is running under a domain account, that account must have full control.

Open SQL Studio Management on the Primary site server.

Create a new query and type

```
Use CM_PS1
Go
exec spCreateMPreplicaPublication
```

This will enable the database as publisher.
Verify the replication:
1. Select Replication, Local Publications, [CM_PS1]: ConfigMgr_MPReplica
2. Right click and Launch Replication Monitor

Verify replication job:
This stored procedure will create a new job new job called "cm02-CM_PS1-X."

1. Select SQL Server Agents, Job
2. Right click CM02-CM_PS1-X and select View History
Management Point

On the Management Point you will create a new database and configure replication.

Log on to the Management Point and launch SQL Server Management Studio.

Create a new database named **PS1_REPL**

- **Database size:** 3000 MB
- **Log size:** 128 MB

Create the Subscription

1. Select **Replication, Local Subscription**
2. Click **New Subscriptions**.

On the New Subscription welcome page click **Next**.

Click **Publisher, <Find SQL Server Publisher...>**
In Connect to Server select CM02 (where CM02 is the name of the primary site database server).

Select the **ConfigMgr_MPReplica** and click **Next**.

Select **Run each agent at its Subscriber (pull subscriptions)** and click **Next**.
Select **PS1_Repl** as the Subscription Database and click **Next**.

Click on the ... button, select **Run under the SQL Server service agent account**, click **OK** and **Next**.
Select agent schedule **Run Continuously** and click **Next**.

Configure Initialize When to **Immediately** and click **Next**.

Click **Next** and **Finish**.
Click Close.

Create a new query on the PS1_Repl database.

```
exec sp_configure 'clr enabled', 1;
RECONFIGURE WITH OVERRIDE
```

Failure to run this query will result in lots of errors in the mpcontrol.log file.

Connect to the primary site database and create a new query.

```
exec sp_configure 'clr enabled', 1;
RECONFIGURE WITH OVERRIDE
```
Configure the Management Point in ConfigMgr

Open the ConfigMgr administrator console. Navigate to the **Administration** workspace, select **Site Configuration, Servers and Site System Roles**.

Select the remote Management Point and open the Management Point properties.

Select the Management Point Database tab.

Select: **Use a database replica**

SQL Server FQDN: **CM03.2012.Local**

ConfigMgr Site database name: **PS1_REPL**

Click **OK**

Log on to the Management Point, open IIS manager, Select the default website, open Authentication and Enable **Windows Authentication**.
SQL Server Broker port (BGB Support)

To support the new ConfigMgr 2012 SP1 feature “client notification” you must configure communication between the site database server and the database replica server for the SQL Server Service Broker. This requires you to configure each database with information about the other database, and to exchange certificates between the two databases for secure communication. The Management Point replica will work even if you do not configure BGB support.

Log on to the Management Point server and launch SQL Server Management Studio. Connect to **PS1_REPL**, click **New Query** and run this query

```
ALTER DATABASE PS1_Repl SET ENABLE_BROKER,
HONOR_BROKER_PRIORITY ON WITH ROLLBACK IMMEDIATE
```

(Where PS1_Repl is the name of the replica database). This enables the Broker service on the replica database server.

Still on the Management Point server, click **New Query** and run this stored procedure.

```
EXEC sp_BgbConfigSSBForReplicaDB
'CM03.2012.Local', 'PS1_Repl',
'D:\Install\SQL\sql.cer'
```

This stored procedure configures the Service Broker for client notification and export the Service Broker certificate.

CM03.SC2012.local is the FQDN of the Management Point.
PS1_Repl is the name of the database.
D:\Install\SQL\sql.cer is the name of the SQL certificate that will be exported by the stored procedure.

Connect to your primary site and run this stored procedure to import the certificate

First copy the certificate to D:\Install\SQL on the primary site server. You can of course also save the certificate to a UNC.

In SQL Server Management Studio, connect to CM_PS1, click **New Query** and run this query
EXEC `sp_BgbConfigSSBForRemoteService` 'REPLICA', '4022', 'D:\Install\SQL\sql.cer', 'CM03.2012.Local', 'PS1_REPL'

Still in SQL Server Management Studio run the following command to export the certificate for the site database server

EXEC `sp_BgbCreateAndBackupSQLCert` 'D:\Install\SQL\sqlpri.cer'

Connect to your management point and run this stored procedure to import the certificate. Notice that you need to either store the certificate on a UNC or copy it to D:\Install\SQL on the management point server

In SQL Studio Management, connect to `PS1_REPL`, click New Query and run this query (where PS1 is the site code and 4022 is the broker port)

EXEC `sp_BgbConfigSSBForRemoteService` 'PS1', '4022', 'D:\Install\SQL\sqlpri.cer'

bgbmgr.log on the primary site server

Verify the BGB traffic by looking in the bgbmgr.log file on the site server and bgbserver.log on the Management Point.