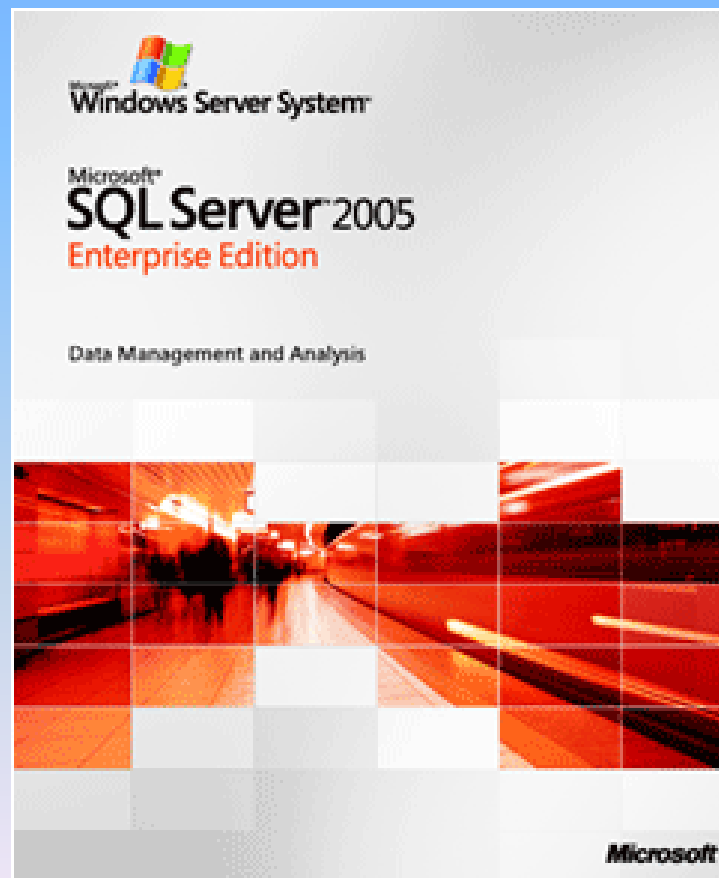


Microsoft SQL Server 2005 – replication settings



Step 1

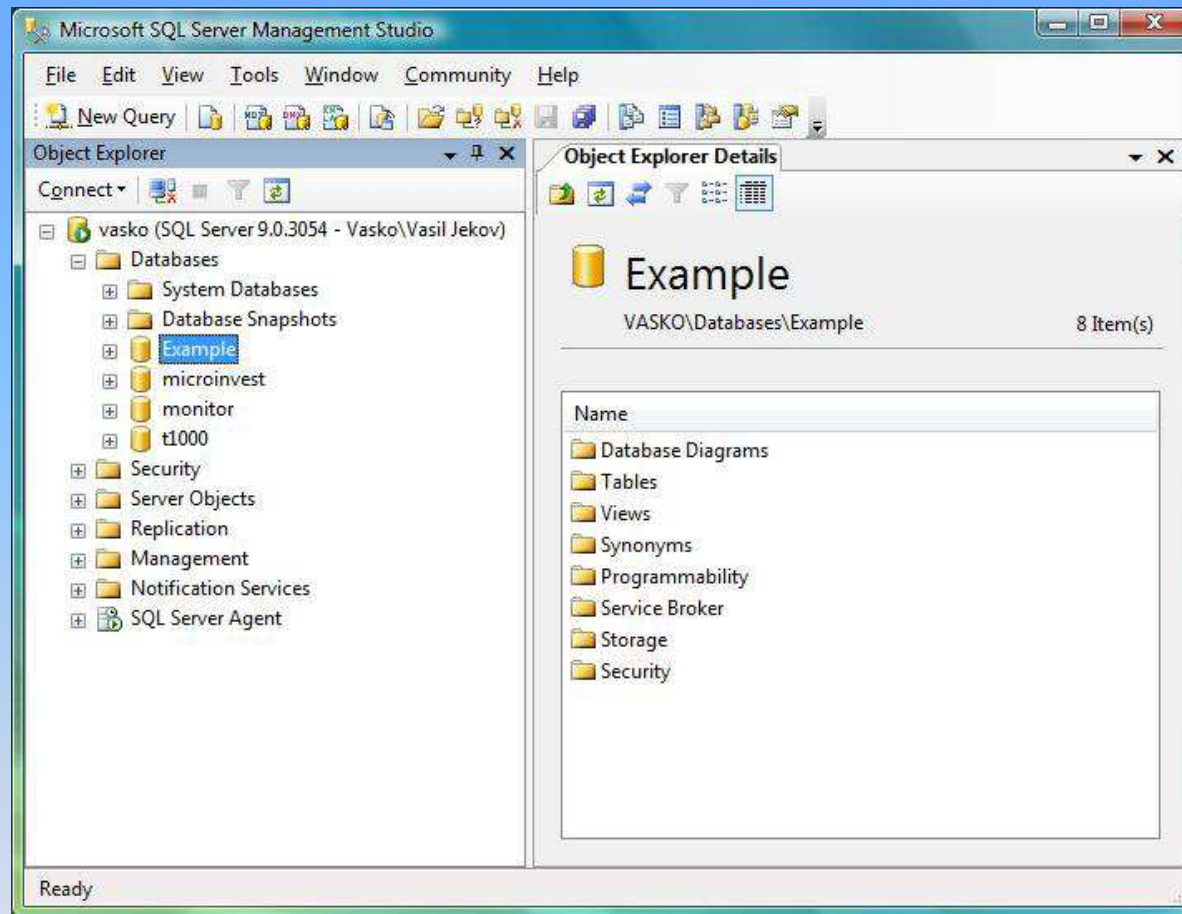
Preparation

- Install „Microsoft SQL Server 2005” on the main server, which will be the „publisher”.
- Install „Microsoft SQL Server 2005 Express” on all servers, which will be „subscribers”.
- All servers should be with open 1433 port.
- All of the IP addresses and the names of all „subscriber” servers, should be added in the “HOSTS” file of the Windows installation on the main server. This must be done in the end of the file, below the “local host” section.

(c:\windows\system32\drivers\etc\hosts).

Step 2

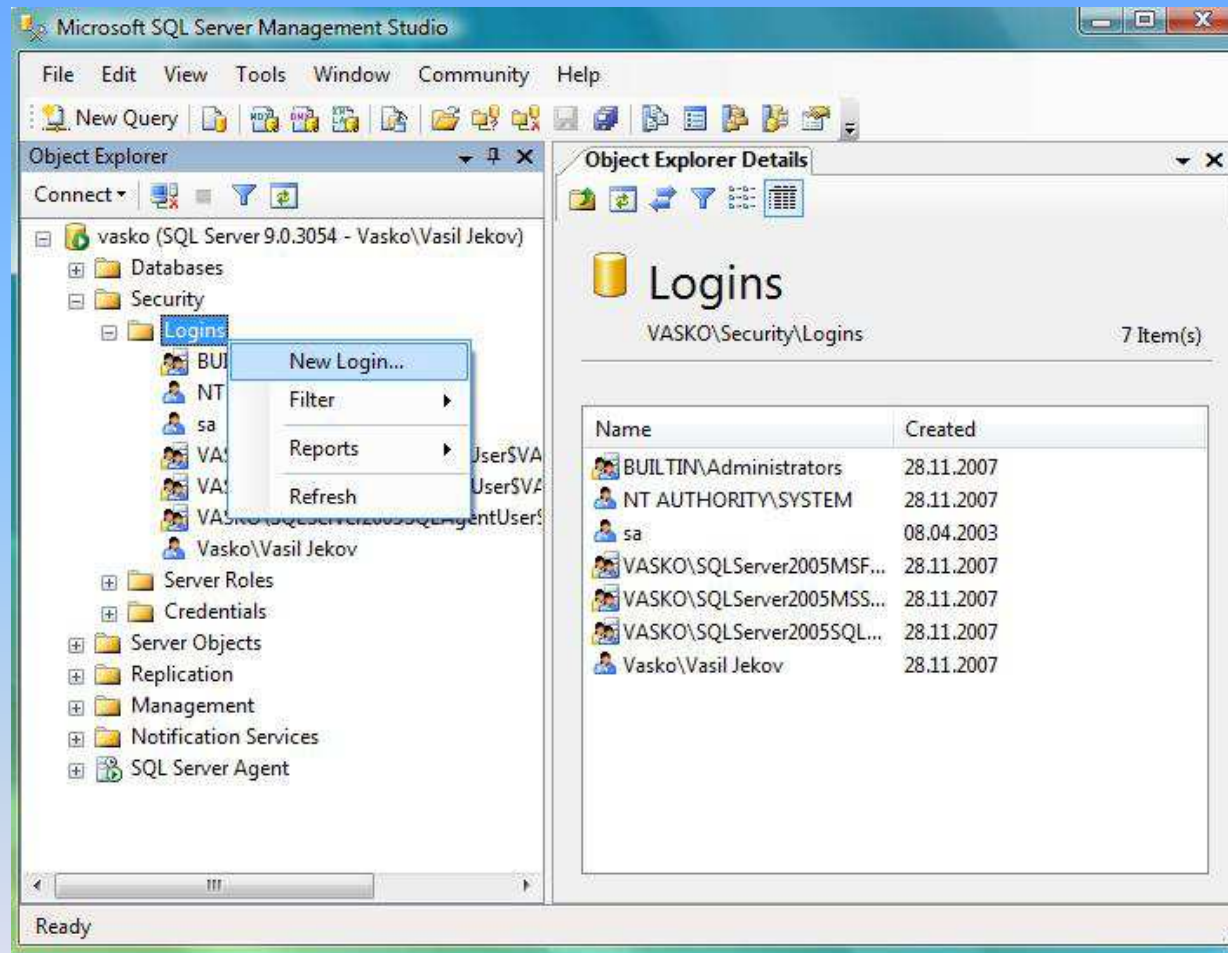
With the „SQL Server Management Studio“, you create the data base which will be in replication.



It is recommended all of the initial data, as items, locations and quantities to be created in the database before the replication. It is not recommended, a large amount of information to be imported in the data base, if it is already working with replication.

Step 3

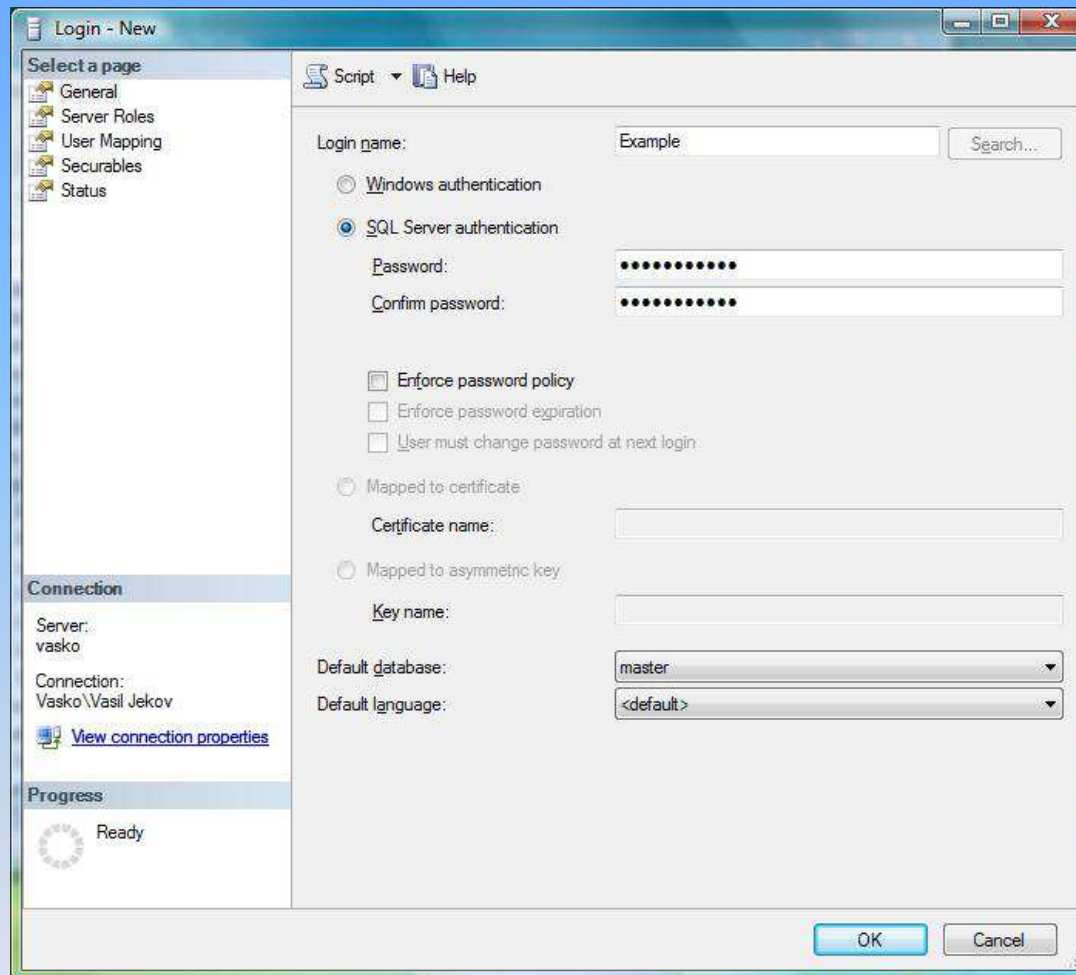
Creation of User with a password on the server, which will be used for the replication.



The creation of an User is a two phase process. First, it must be added in section: „Security” – „Logins” – „New login”.

Step 4

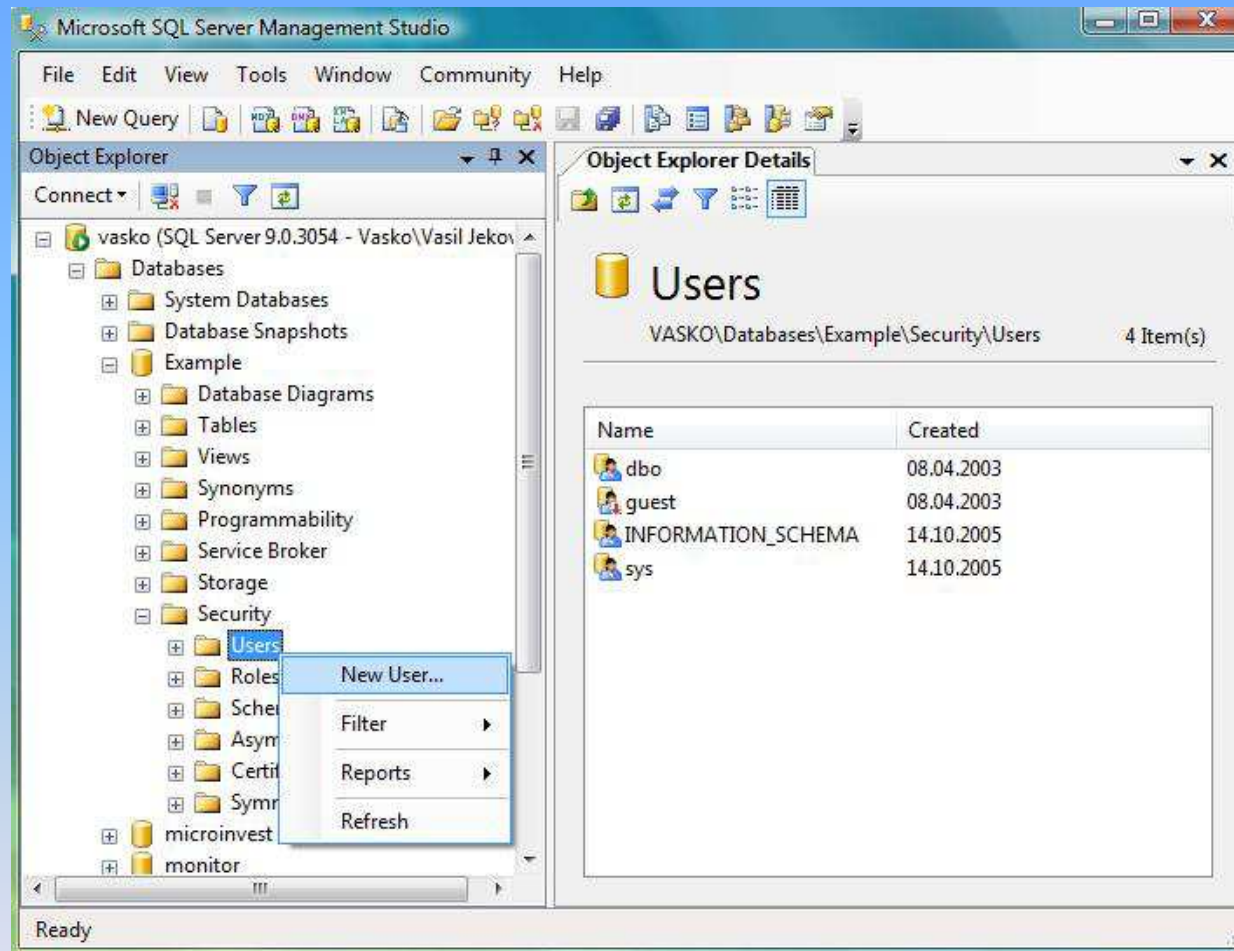
Creation of User with a password on the server, which will be used for the replication.



Then you choose „SQL server authentication”, where you should define the password and to disable the following: “Enforce password policy”, “Enforce password expiration” and “User must change password at next login” .

Step 5

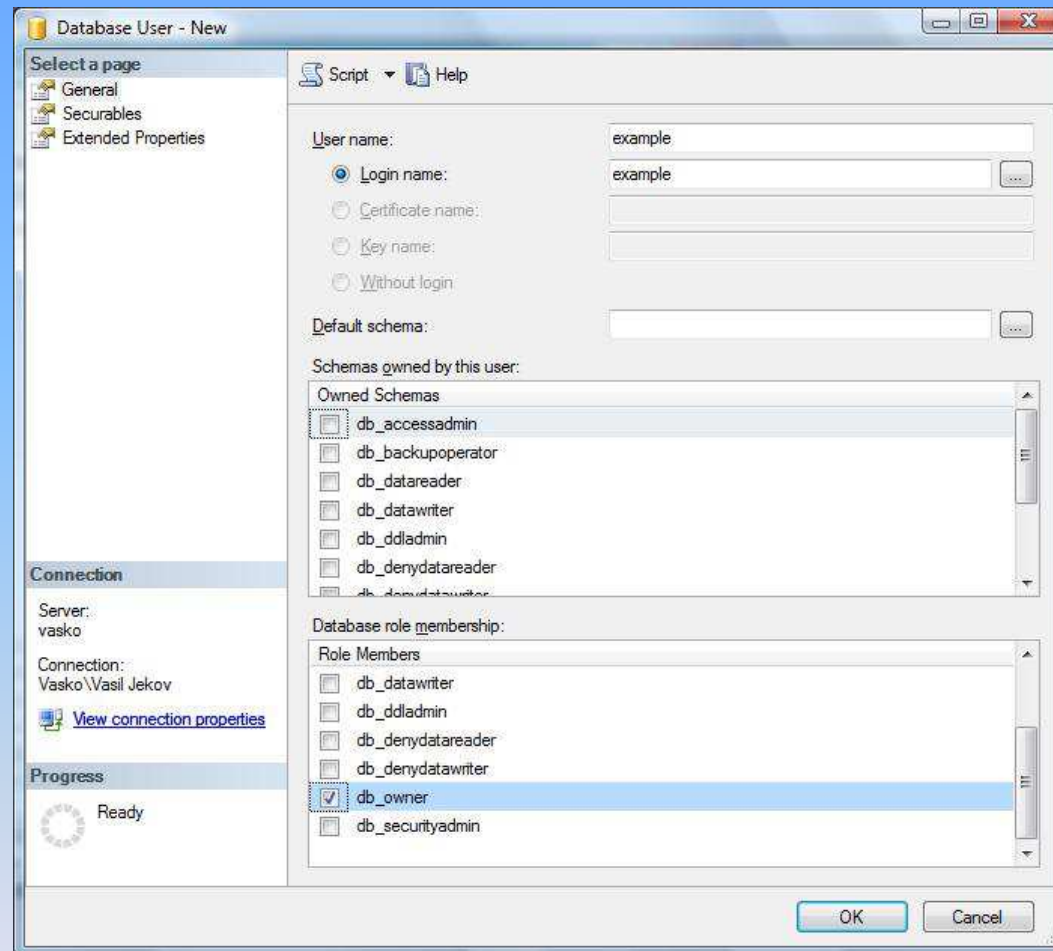
Creation of User with a password on the server, which will be used for the replication.



The second phase is to add an “User” to the data base. This can be done from: „Security” – „Users” – „New user”.

Step 6

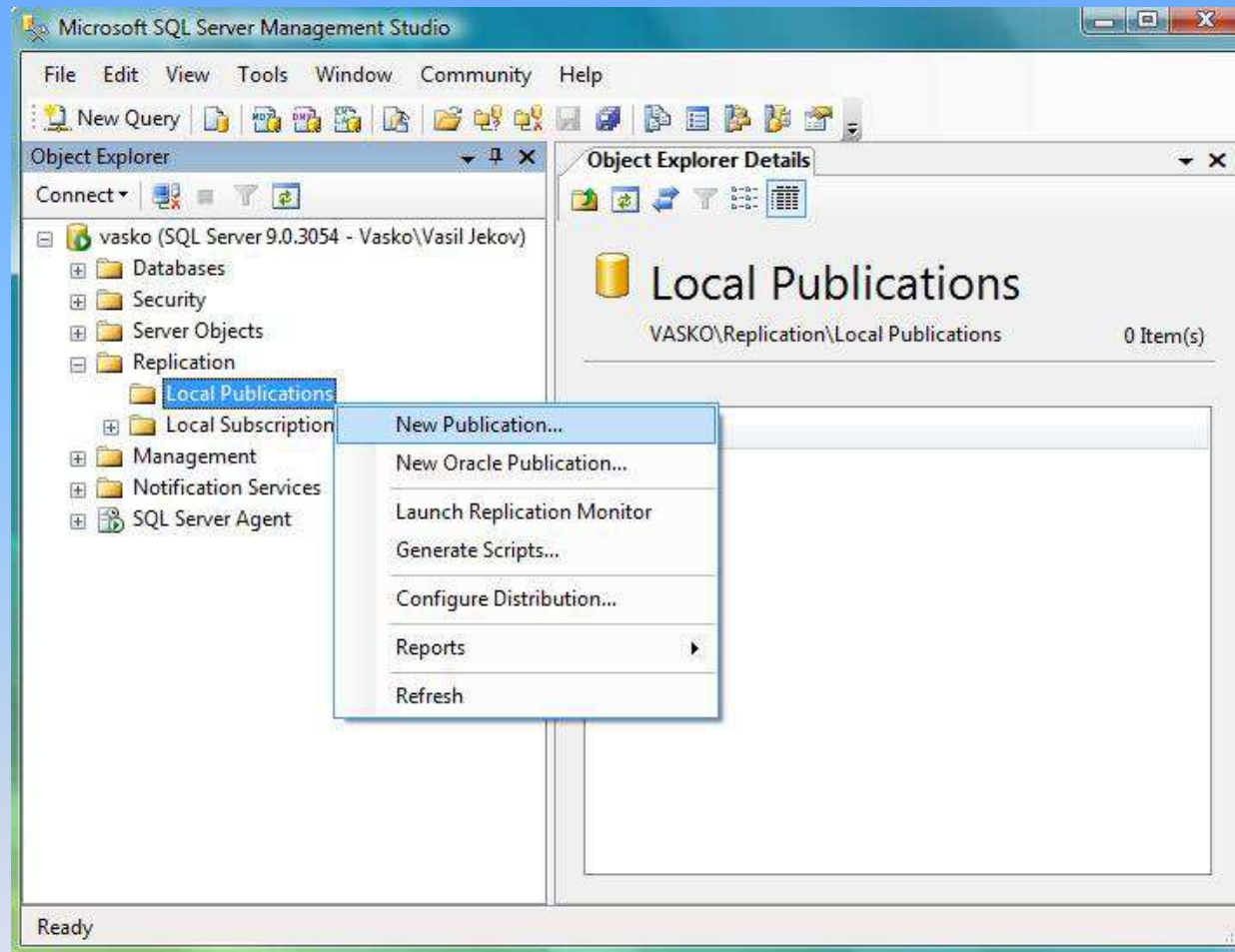
Creation of User with a password on the server, which will be used for the replication.



In the field „User name”, you should put the name you want, at the „Login name” field you choose the already created “User” from the menu. In the “database role membership” window, you should check “db_owner”.

Step 7

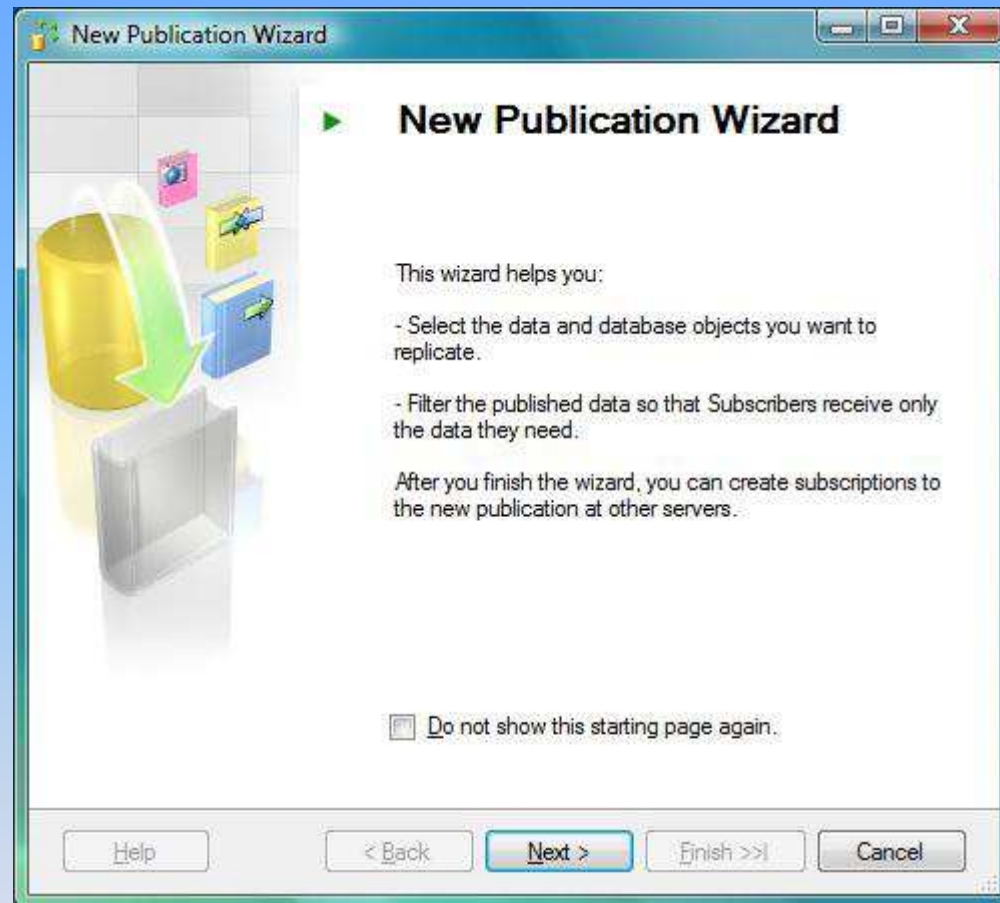
How to make publication



To create a publication, you should go to: „Replication” – „local publications” and with a right click of the mouse, choose „New publication”.

Step 8

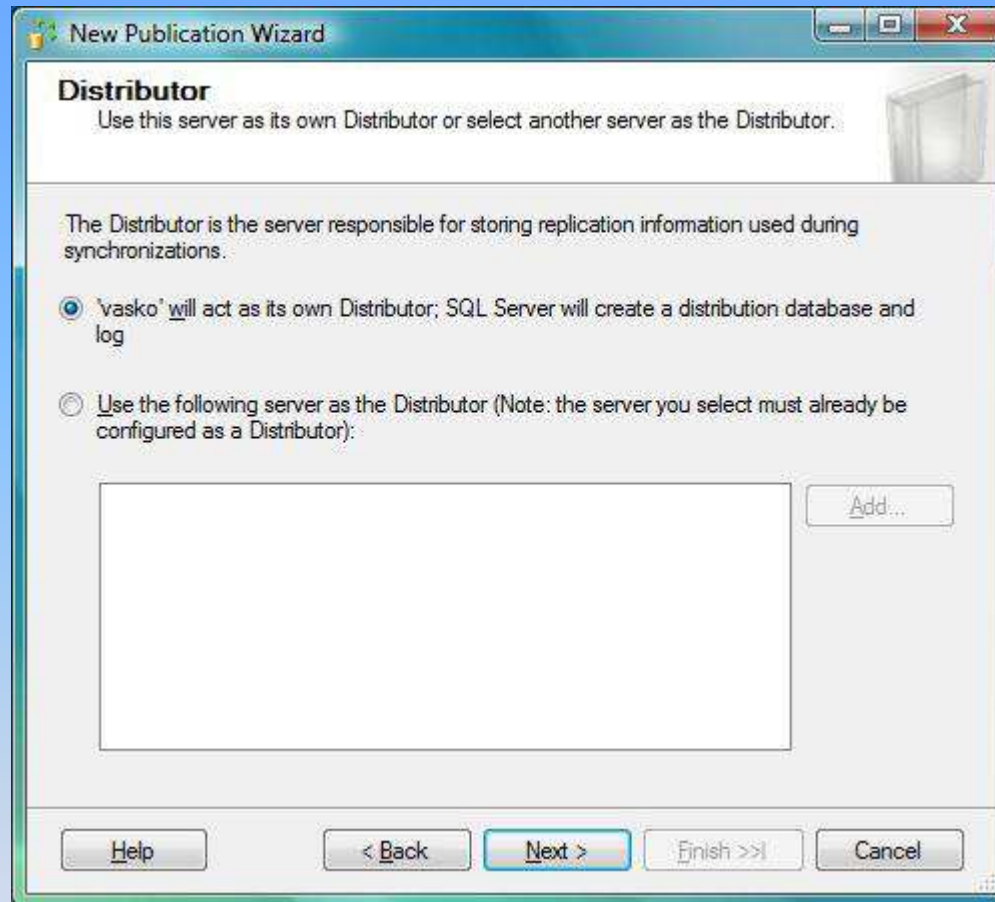
How to make publication



When you get to the upper screenshot, don't change anything and go ahead.

Step 9

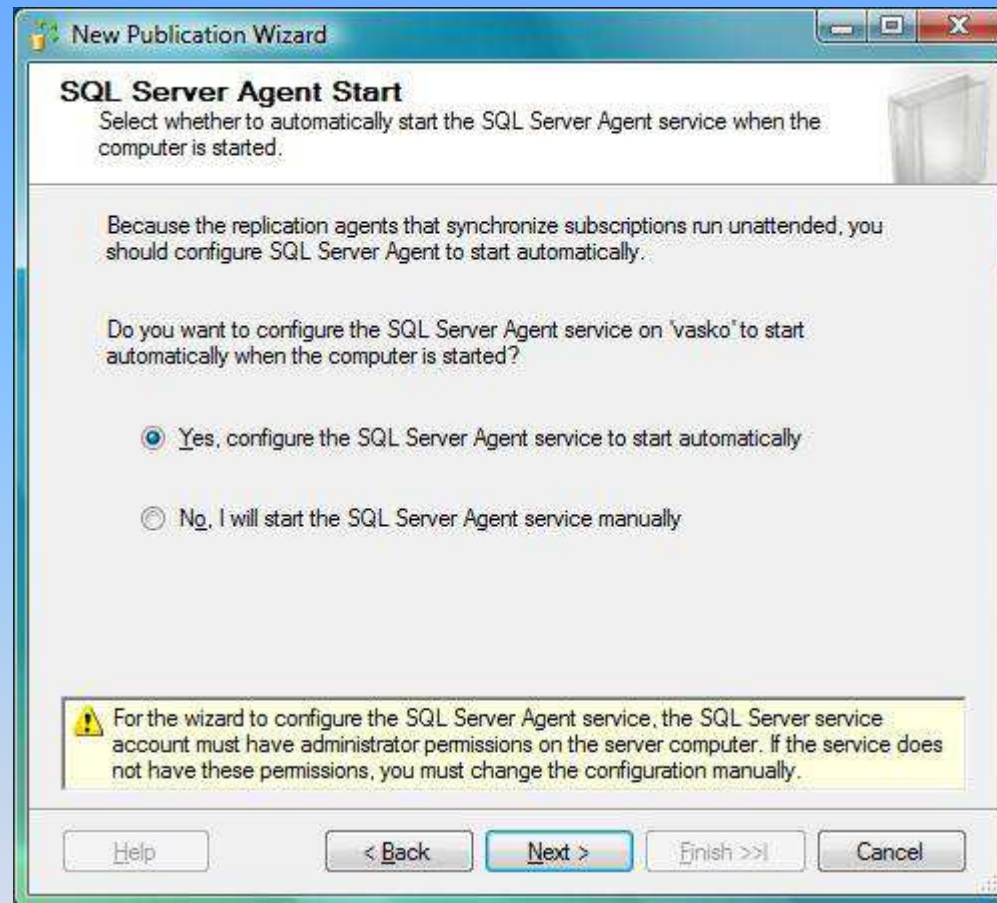
Distributor's configuration



When you get to the upper screenshot, don't change anything and go ahead.

Step 10

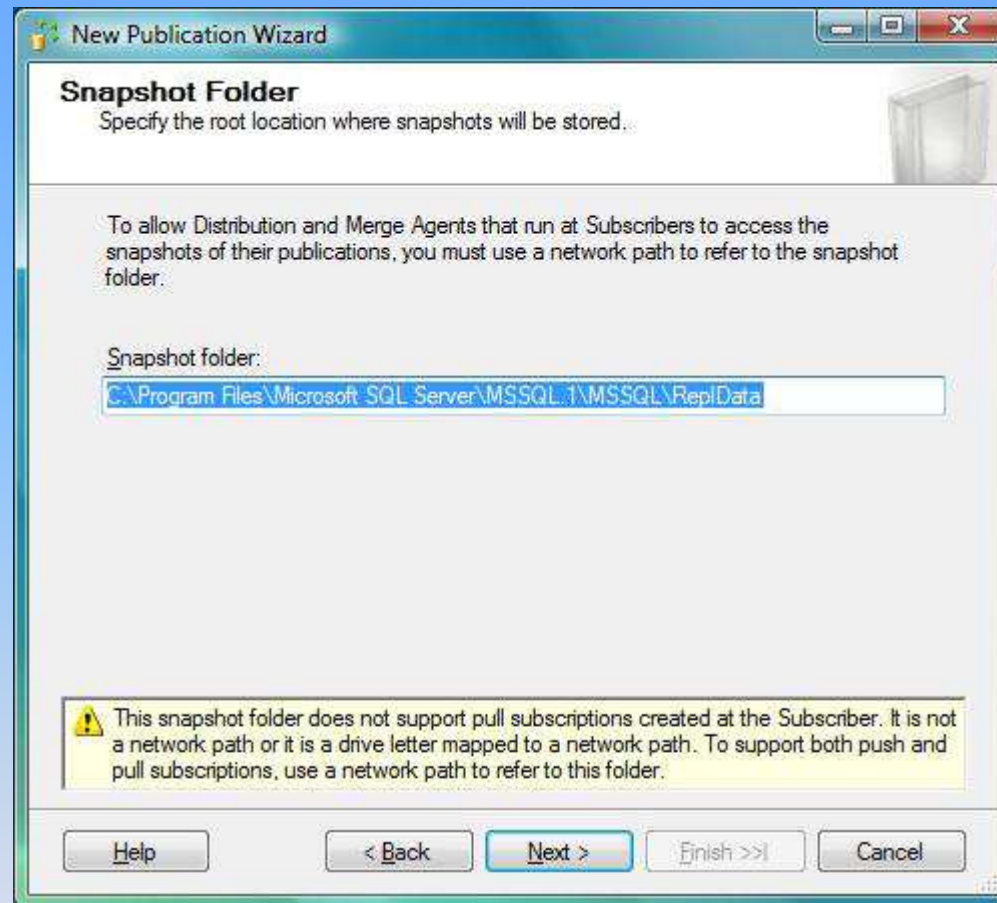
Distributor's configuration



When you get to the upper screenshot, don't change anything and go ahead.

Step 11

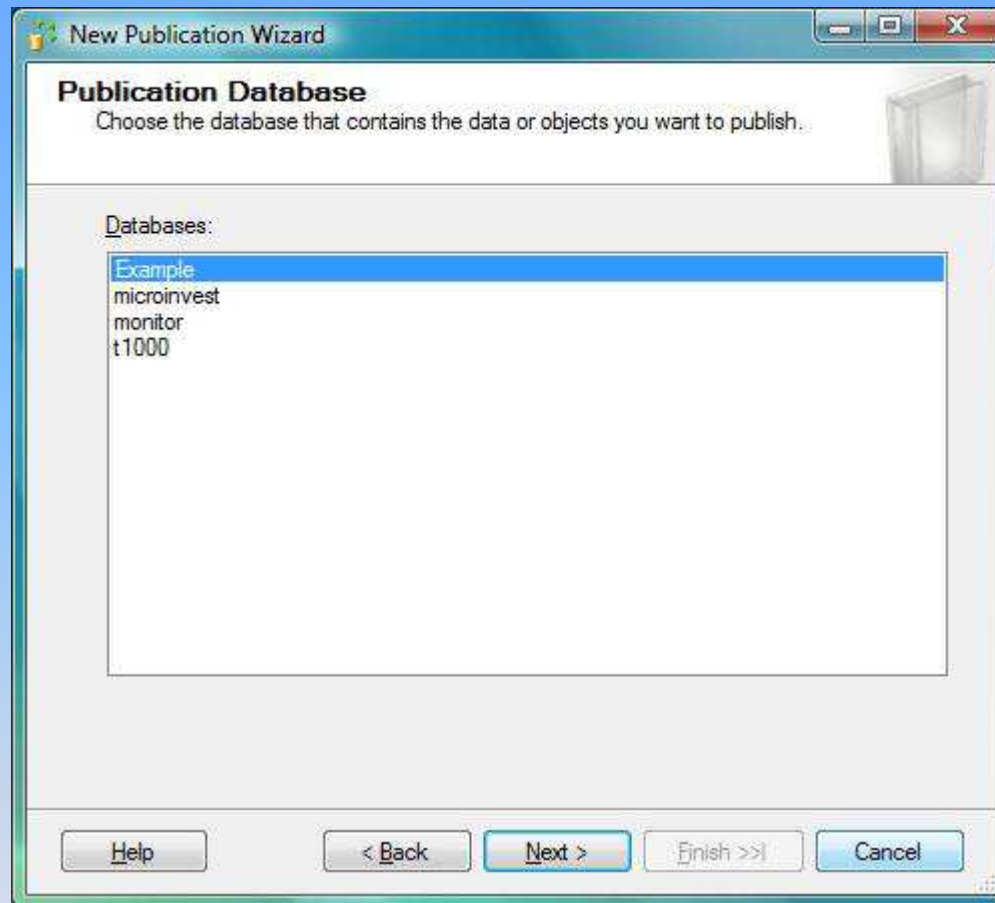
Distributor's configuration



When you get to the upper screenshot, don't change anything and go ahead.

Step 12

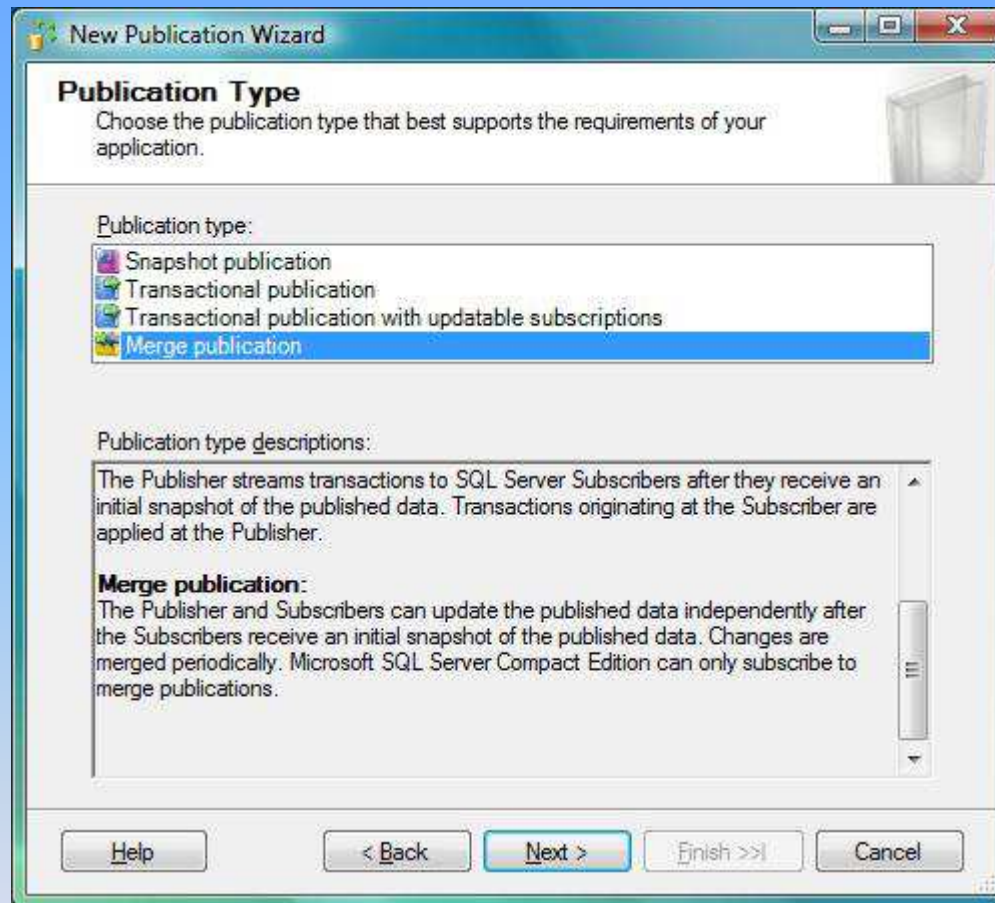
How to make publication



Choose the data base, which will be replicated.

Step 13

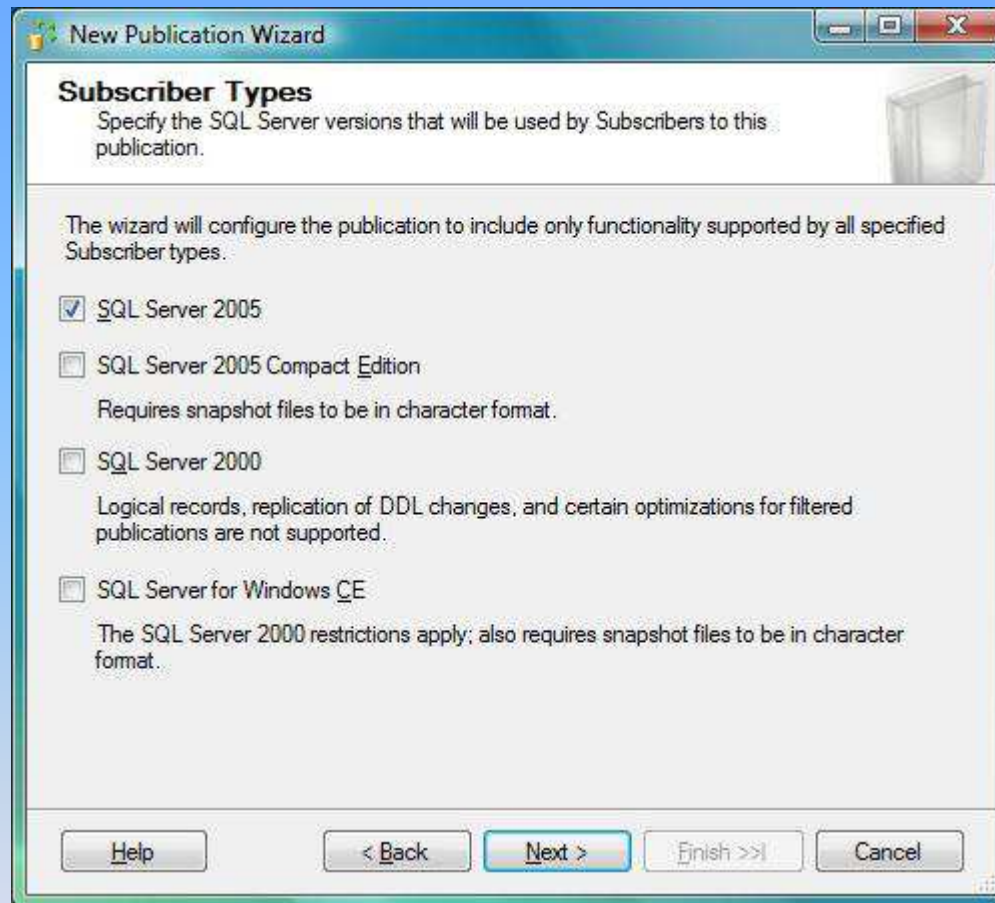
How to make publication



Choose the type of the publication: “Merge publication”.

Step 14

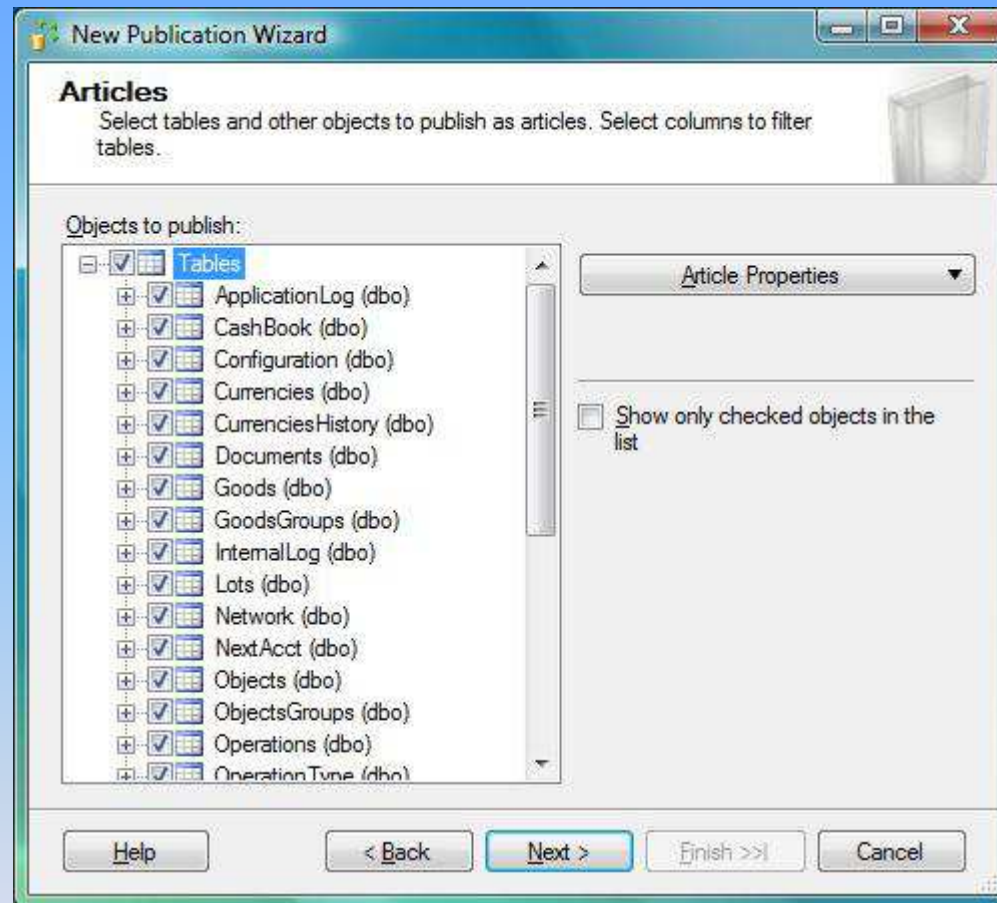
How to make publication



When you get to the upper screen,, please go ahead without changing anything. Leave: „SQL Server 2005”.

Step 15

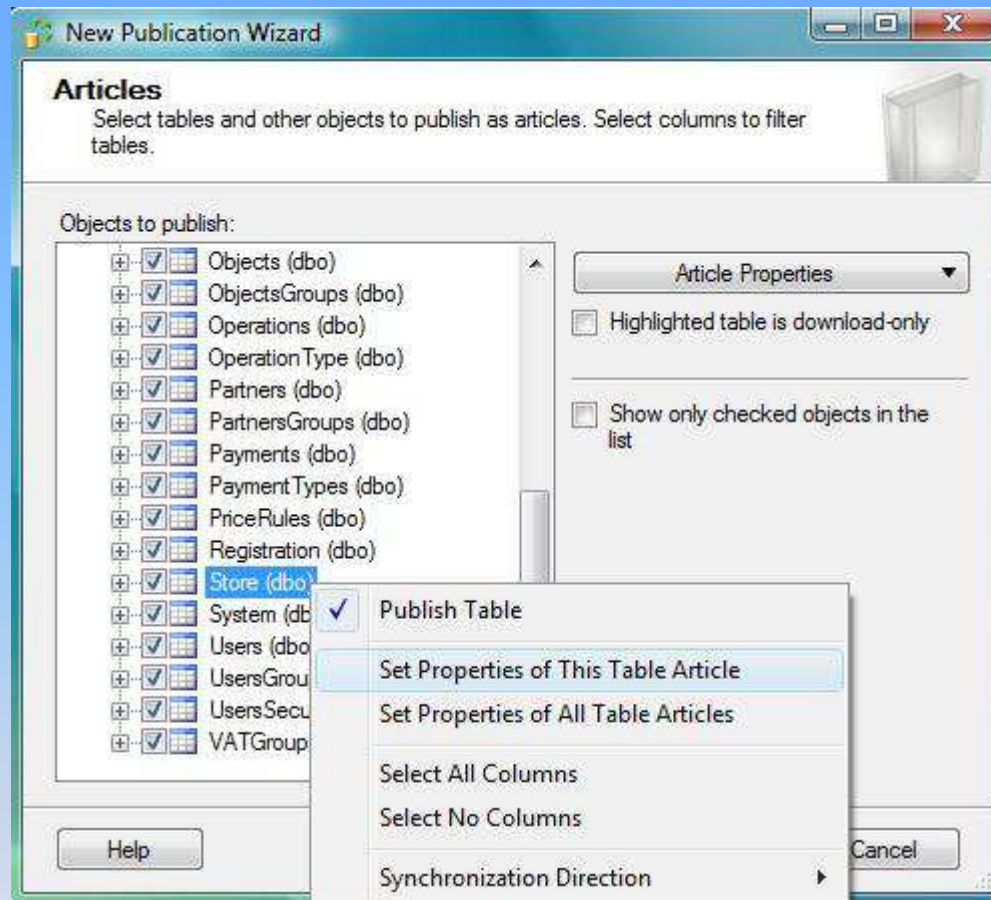
How to make publication



Pick up all of the tables shown.

Step 16

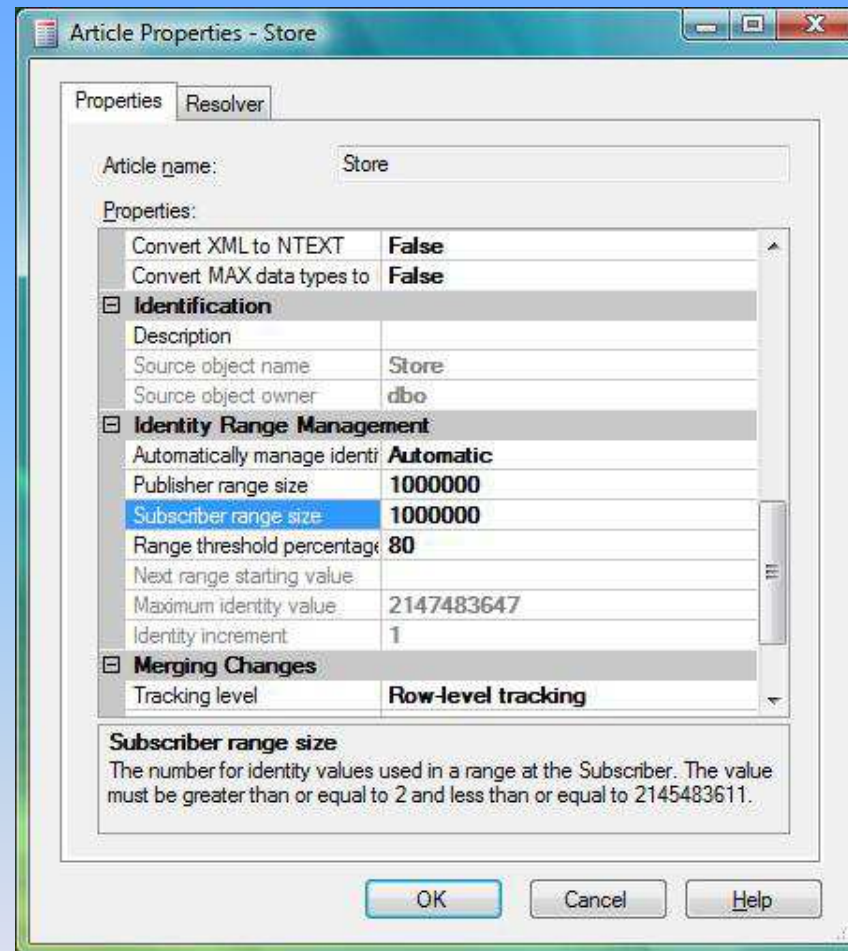
How to make publication



There are two recommended steps for tables: Store, Payments and Operations. Choose: “Set Properties of This Table Articles”.

Step 17

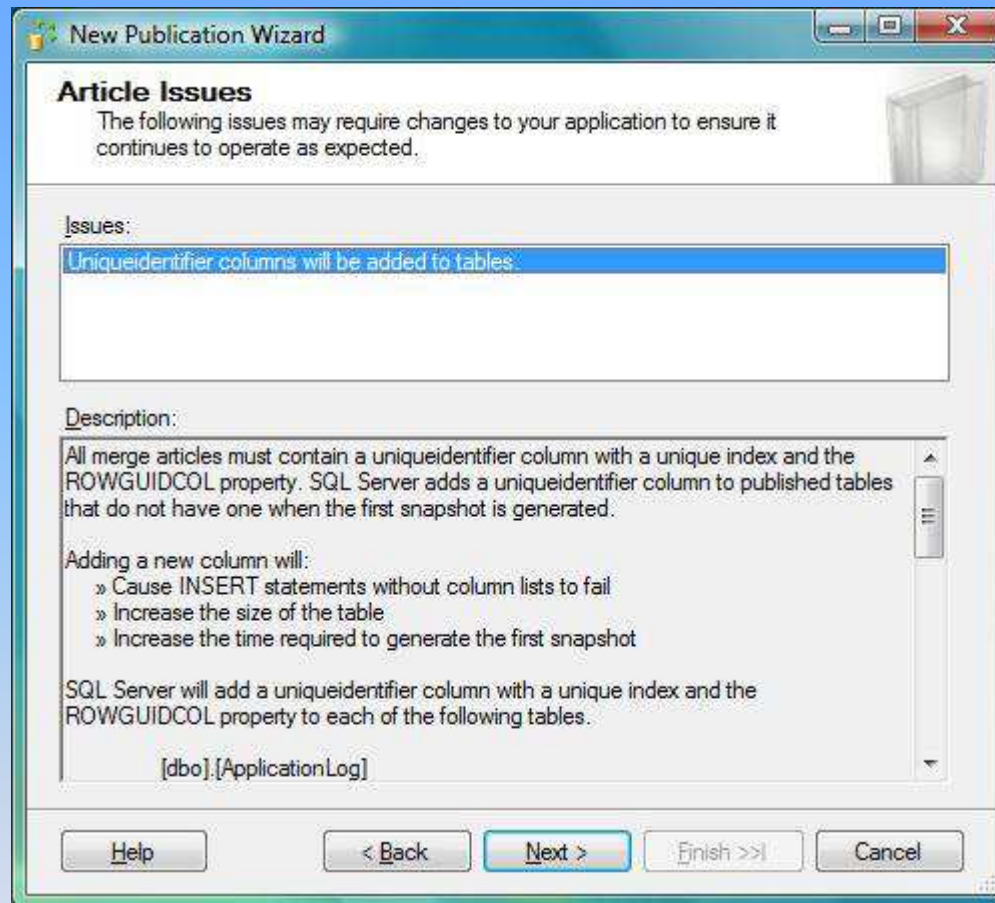
How to make publication



“Publisher range size” and “Subscriber range size” should be increased to one million.

Step 18

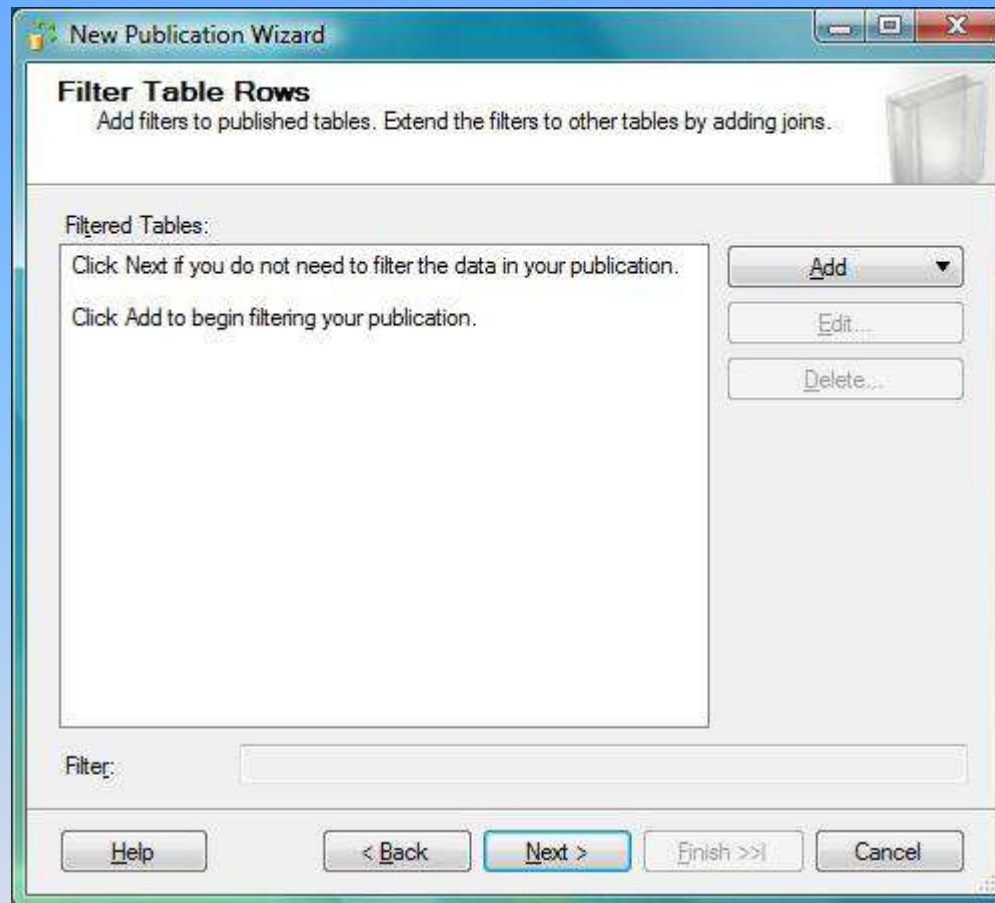
How to make publication



When you get to the shown screen, please tap “Next”, without any changes.

Step 19

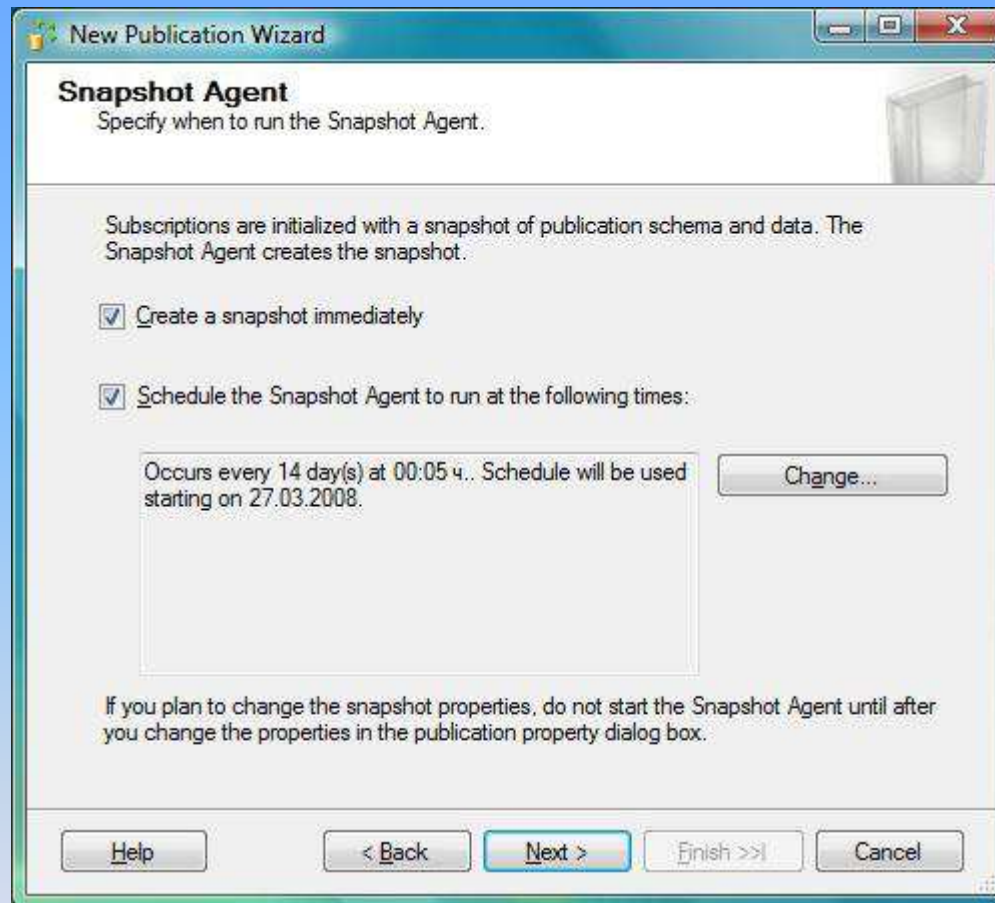
How to make publication



When you get to the shown screen, please tap “Next”, without any changes.

Step 20

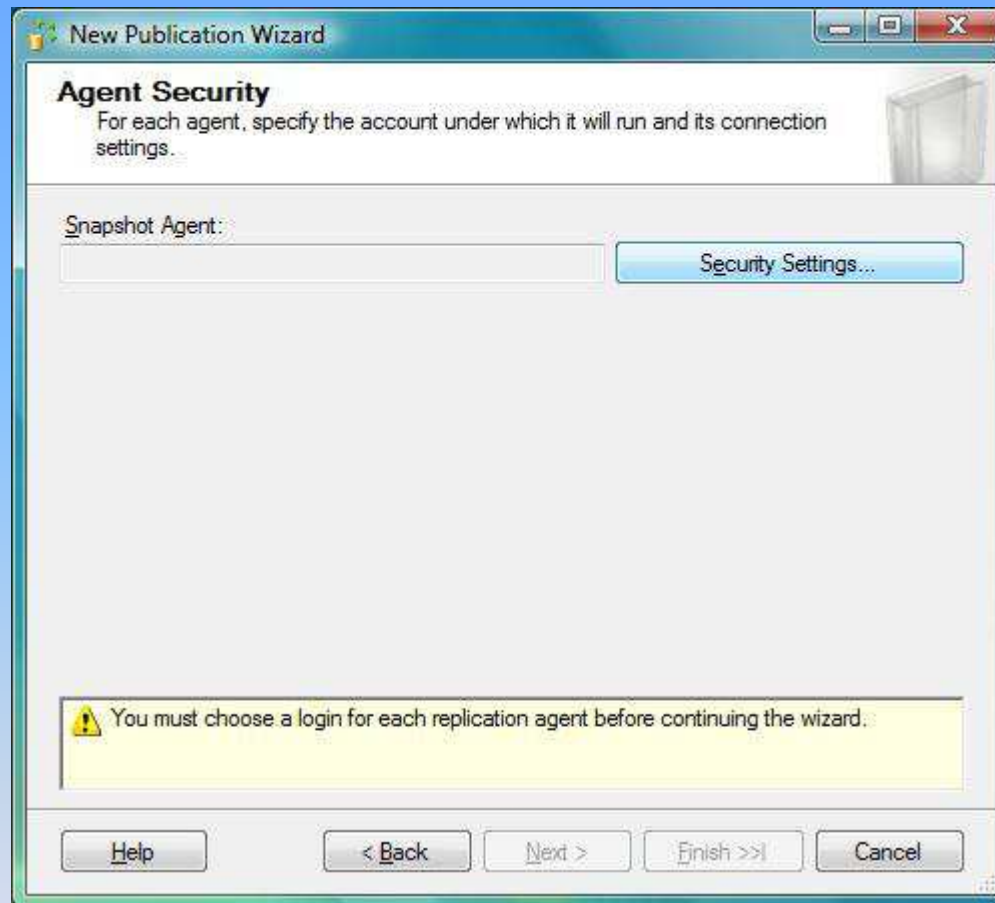
How to make publication



When you get to the shown screen, please tap “Next”, without any changes.

Step 21

How to make publication



Defining the “Security Settings” for the connection to the Publisher.

Step 22

How to make publication

Snapshot Agent Security

Specify the domain or machine account under which the Snapshot Agent process will run.

Run under the following Windows account:

Process account:
Example: domain\account

Password:
Confirm Password:

Run under the SQL Server Agent service account (This is not a recommended security best practice.)

Connect to the Publisher

By impersonating the process account

Using the following SQL Server login:

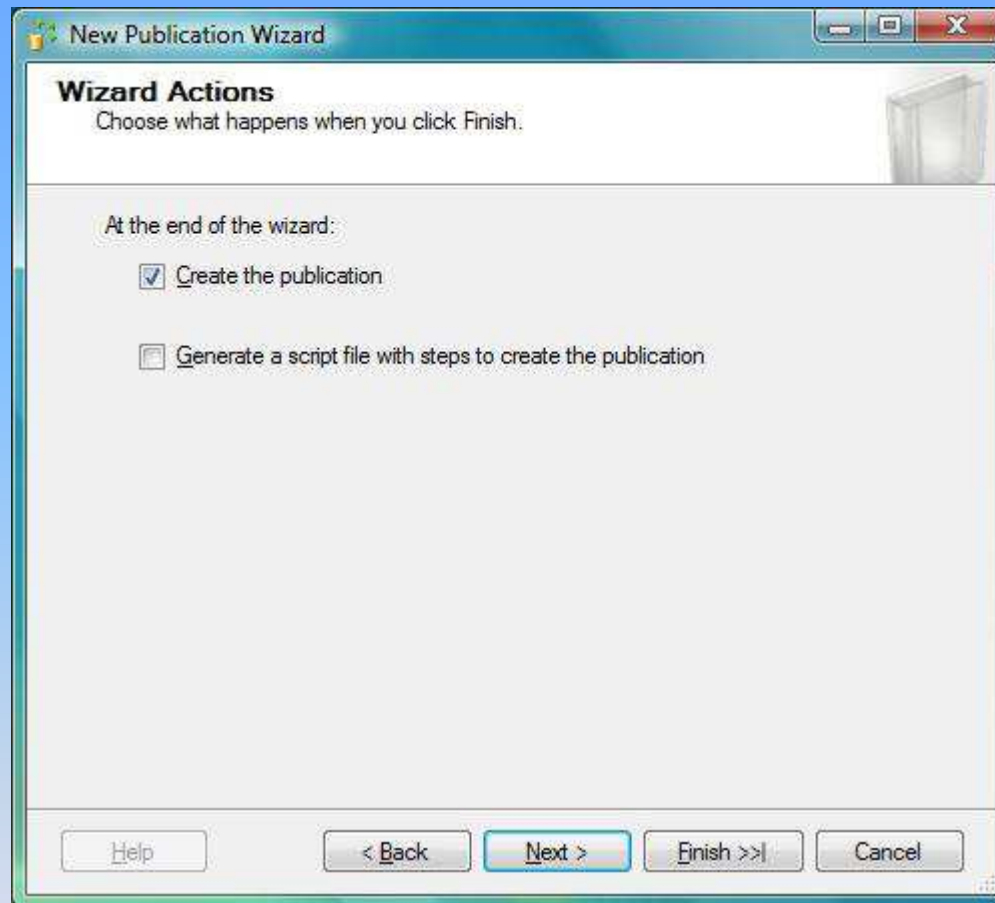
Login:
Password:
Confirm Password:

OK Cancel Help

Please, choose „Run under the SQL Server Agent service account” and „Using the following SQL Server login”. Put username and password.

Step 23

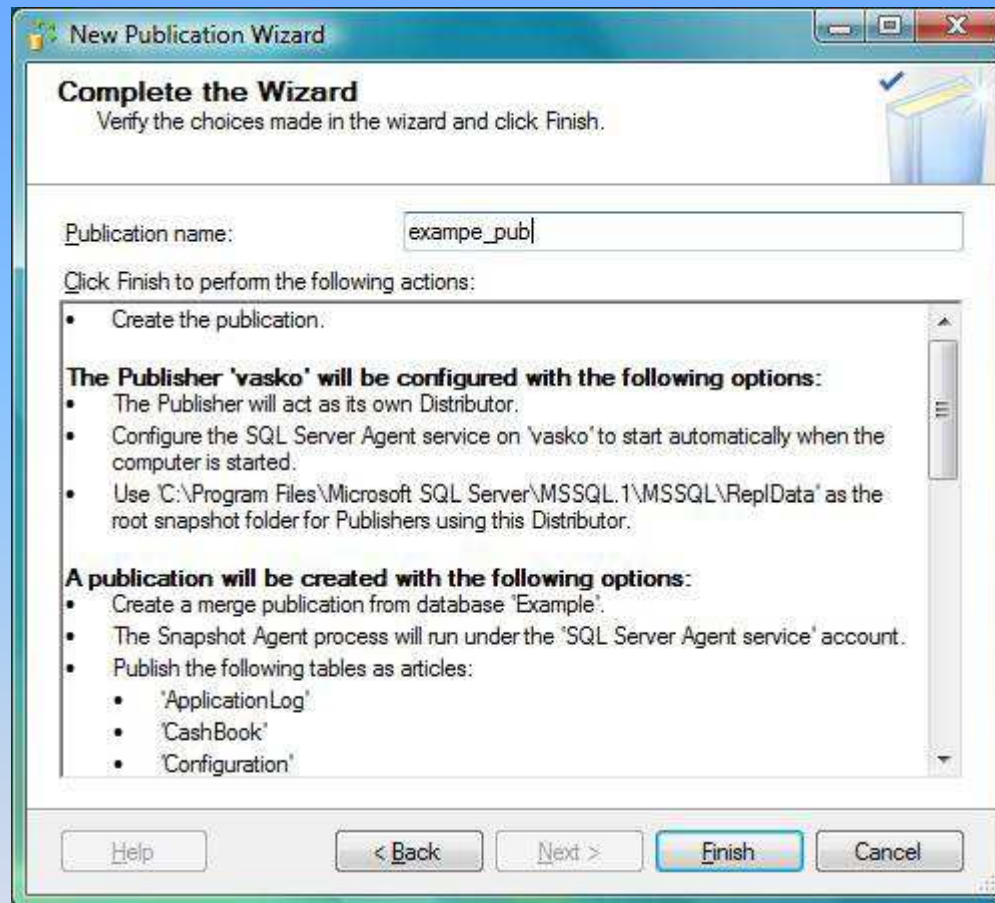
How to make publication



When you get to the shown screen, please tap “Next”, without any changes.

Step 24

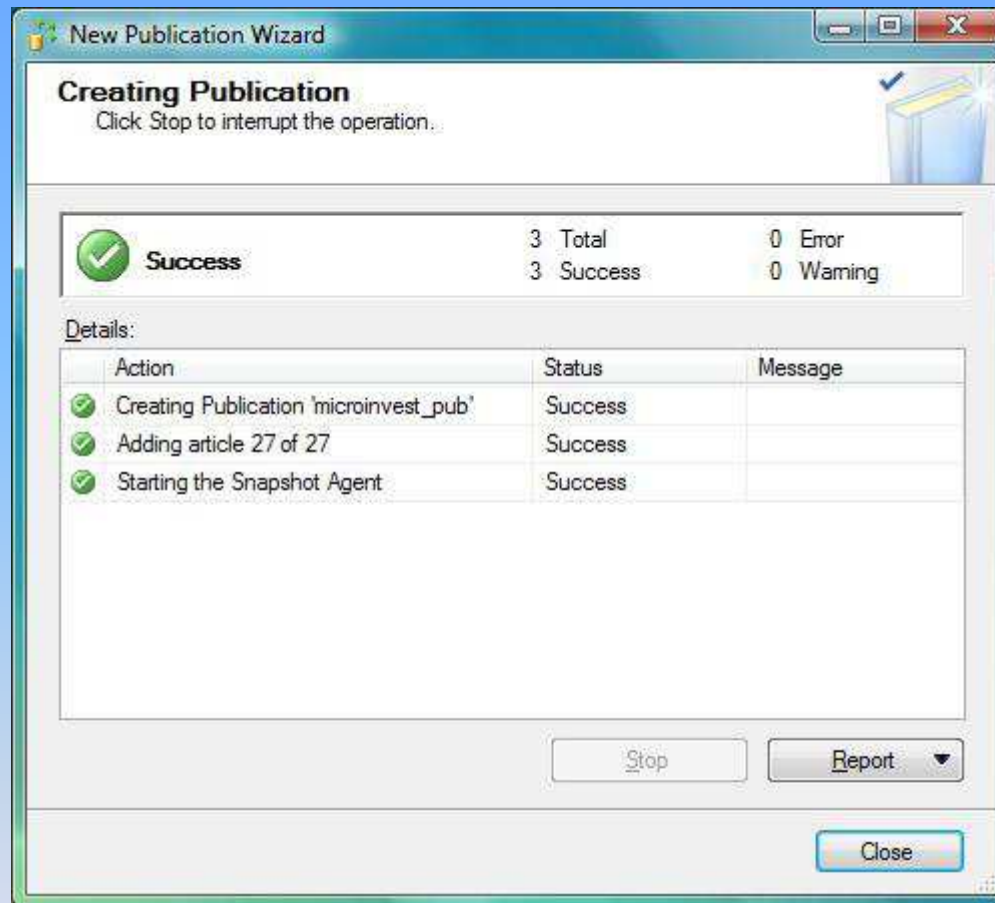
How to make publication



Define the name of the publication.

Step 25

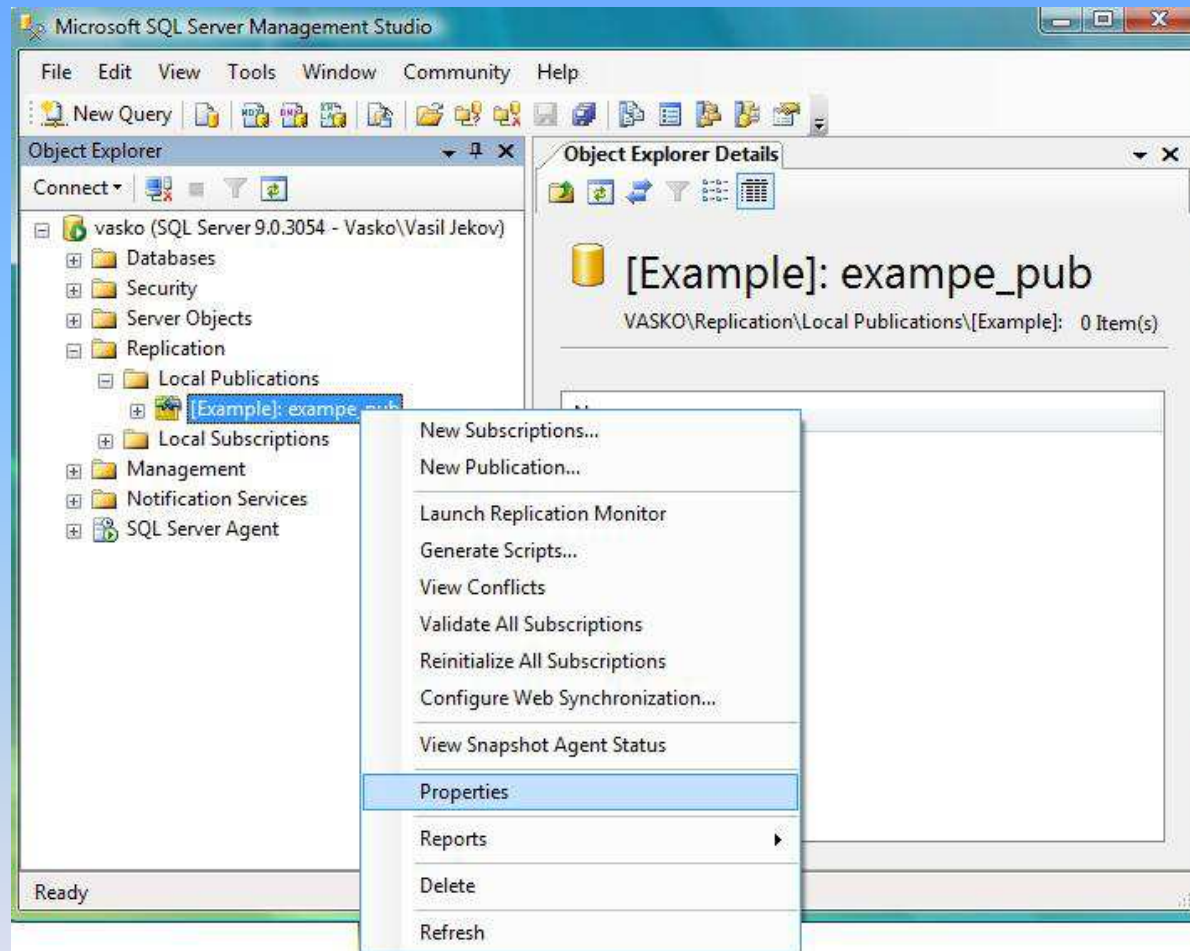
How to make publication



In case, there are no mistakes, the publication is created successfully.

Step 26

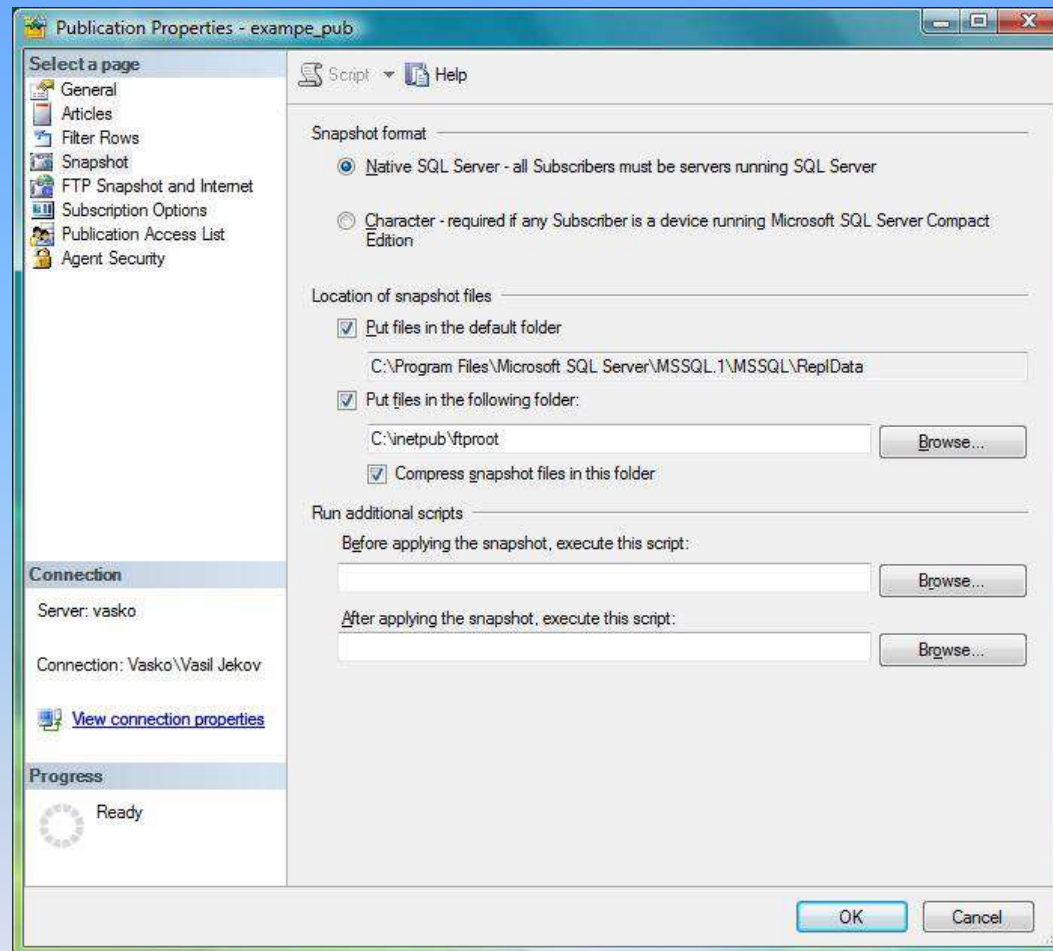
Settings of the publication



After the creation is done, please enter the “Properties” of the publication.

Step 27

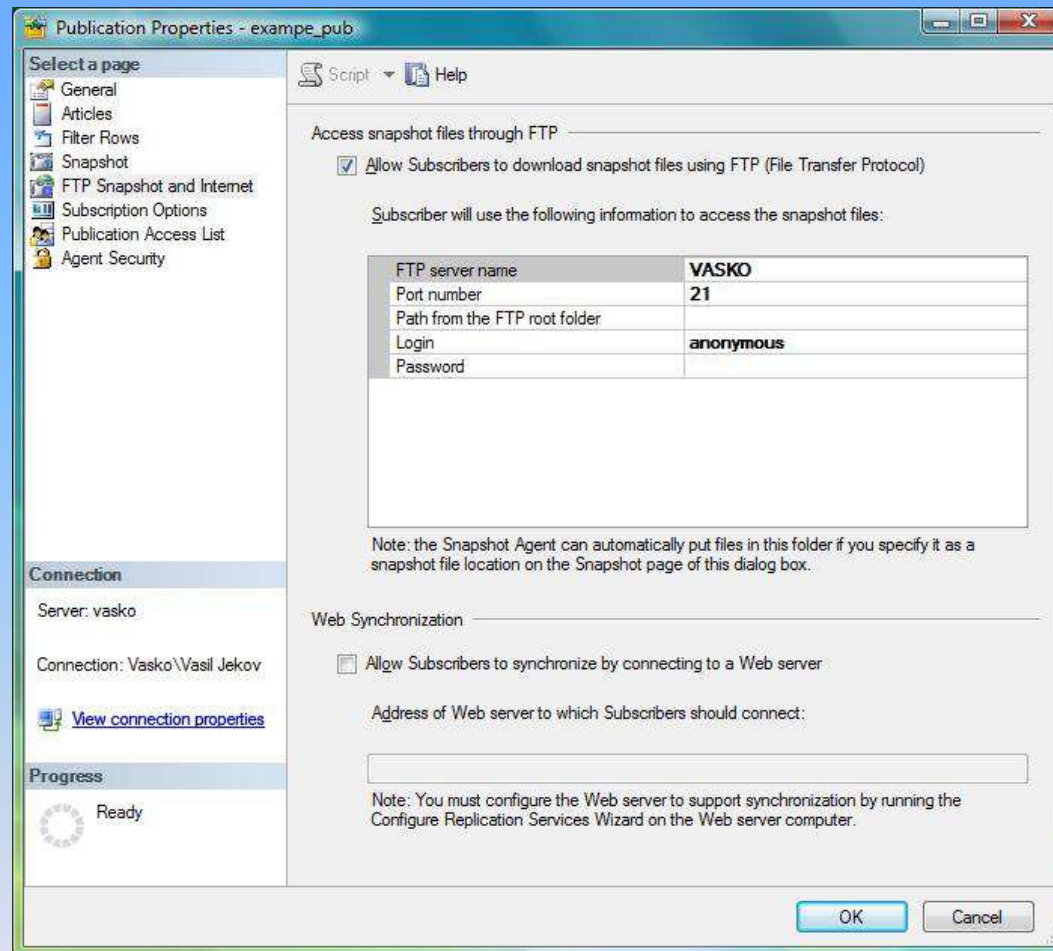
Settings of the publication



Enter the "Snapshot" settings' page. Choose "Put files in the following folder" and browse for folder: "C:\inetpub\ftproot", Afterwards check in: "Compress snapshot files in this folder".

Step 28

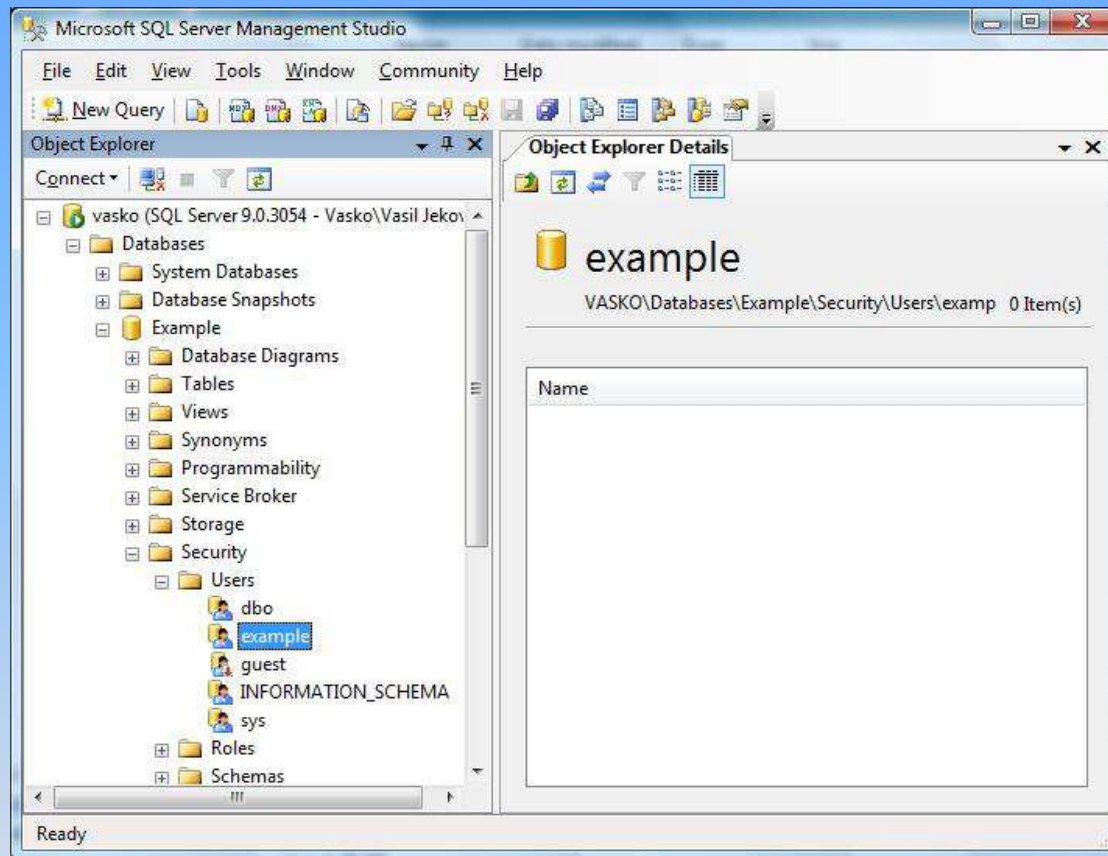
Settings of the publication



In the page: "FTP Snapshot and Internet" , you should check in "Allow Subscribers to download snapshot files using FTP".

Step 29

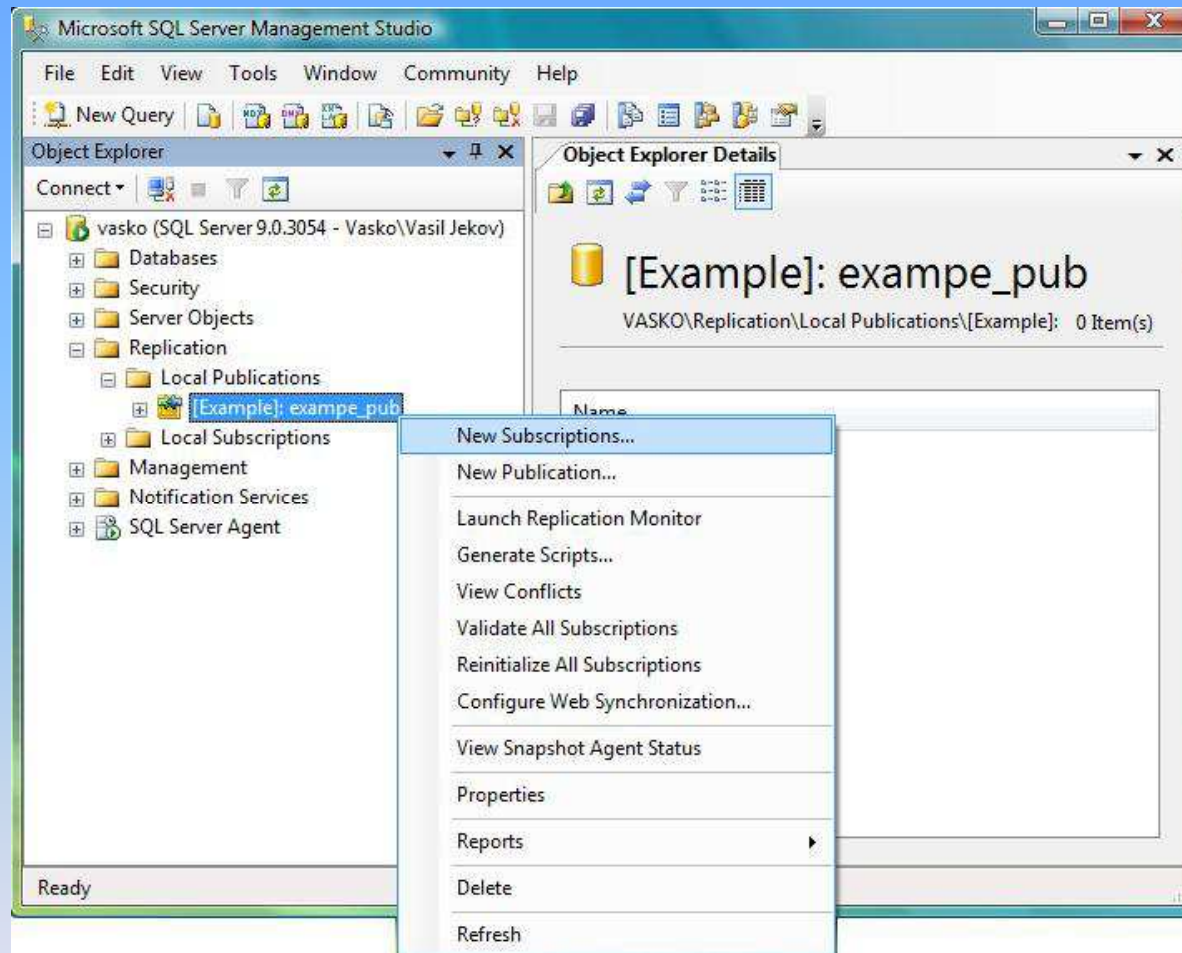
Creation of a Subscriber



An empty database should be created on the Subscriber. It must be with the same name, as the main database. An User must be added – it must be the same, as the one in the Publisher (it must be added to the server and to the database).

Step 30

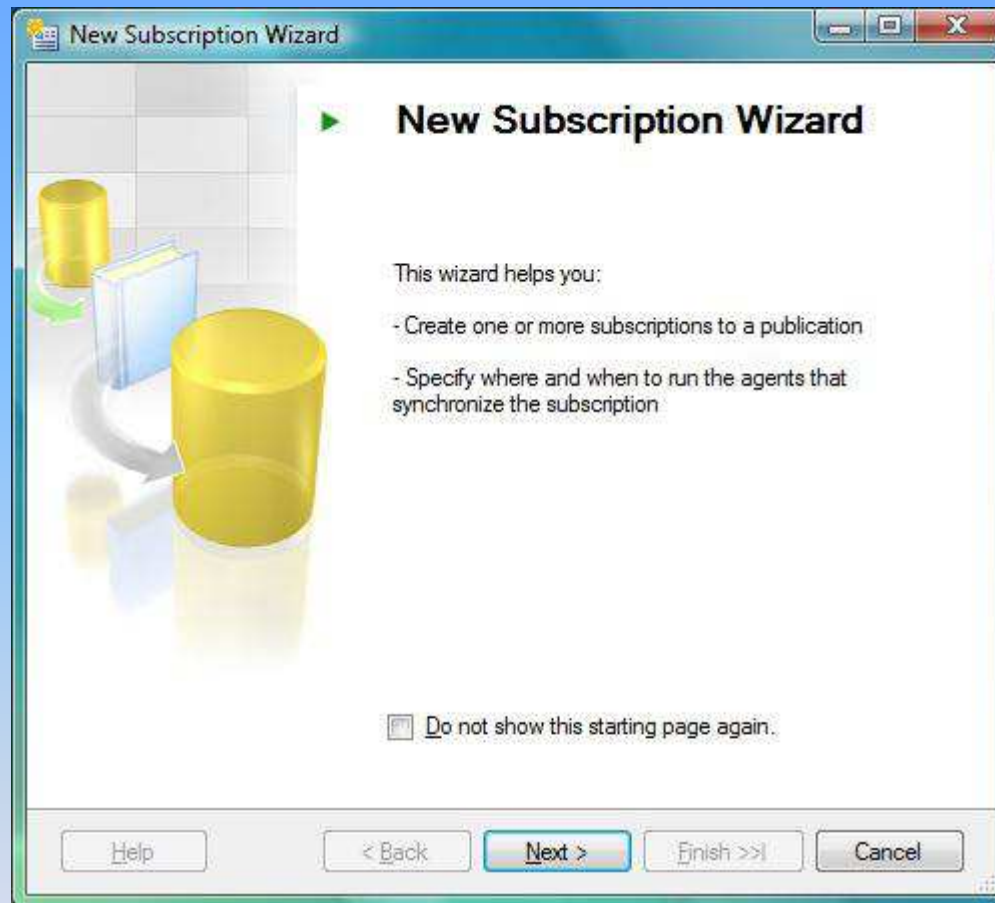
Creation of a Subscriber



Creation of a Subscriber from section „Replication” – „local publications” – our publication must be marked and with right mouse click, “New subscriptions” must be choosed.

Step 31

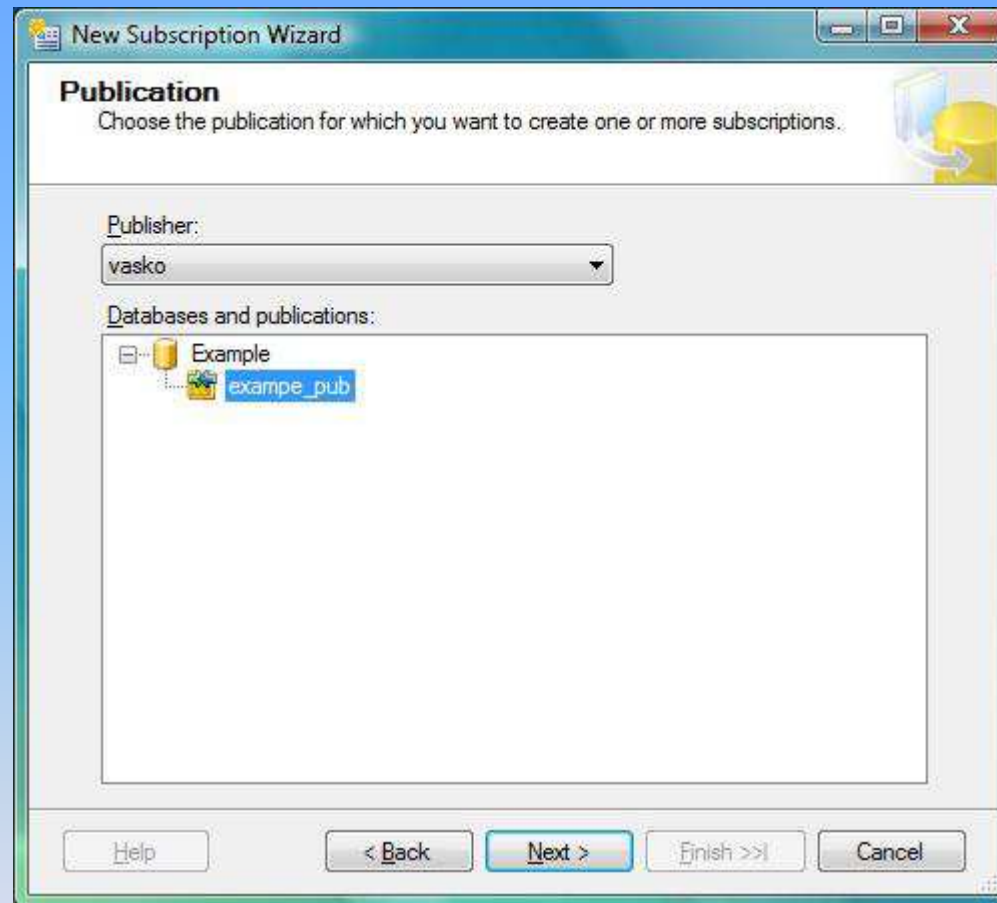
Creation of a Subscriber



When you get to the shown screen, please tap “Next”, without any changes.

Step 32

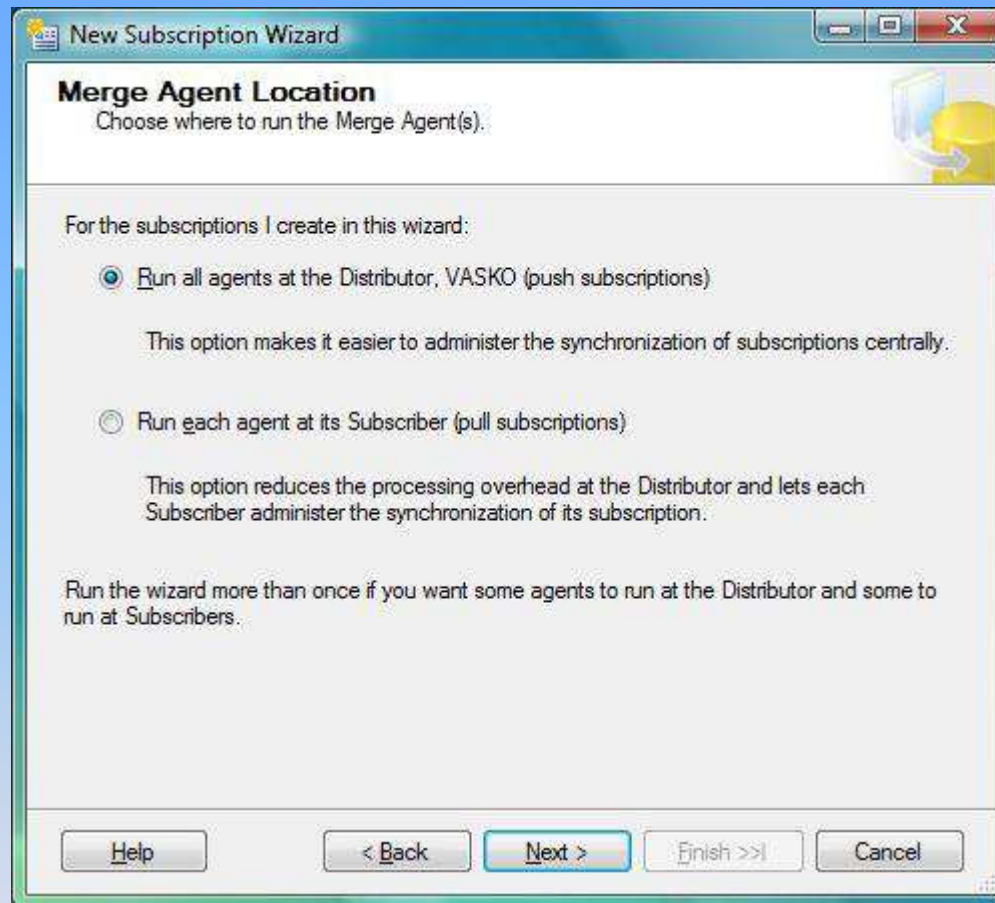
Creation of a Subscriber



Choose the publication, to whom the Subscriber will be.

Step 33

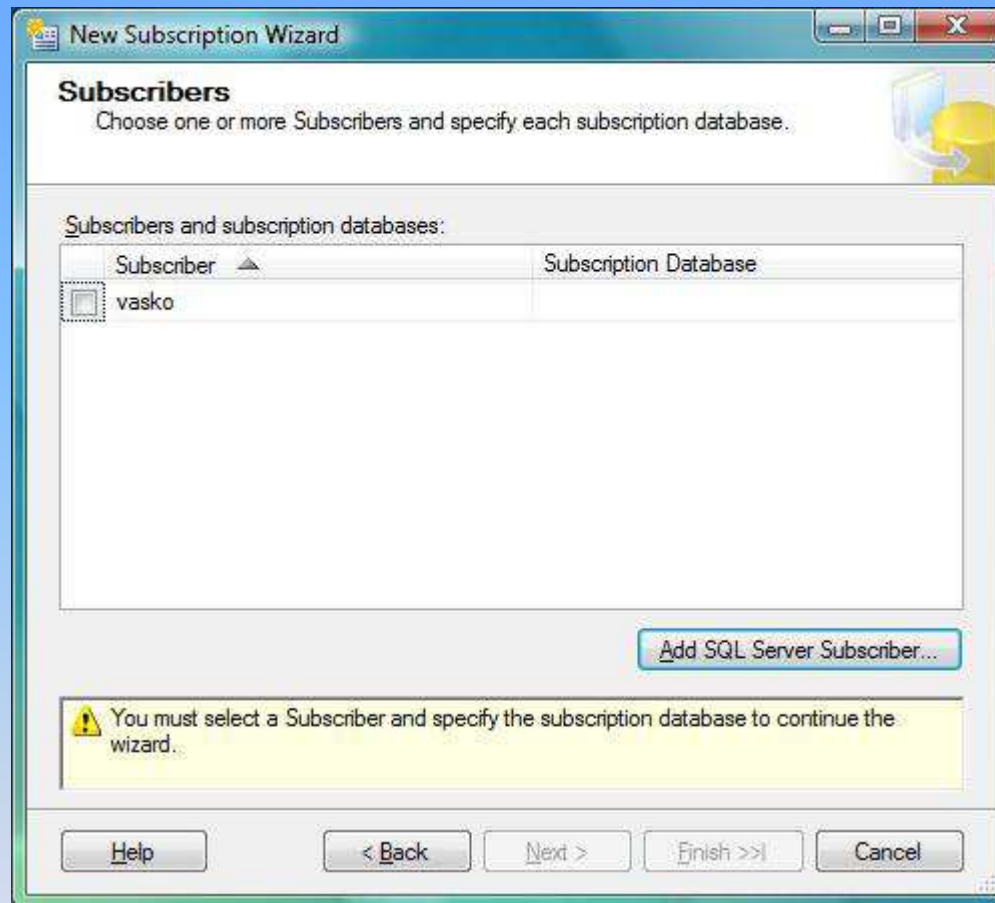
Creation of a Subscriber



In the "Merge Agent Location" nothing have to be changed. „Push Subscriptions" must be marked.

Step 34

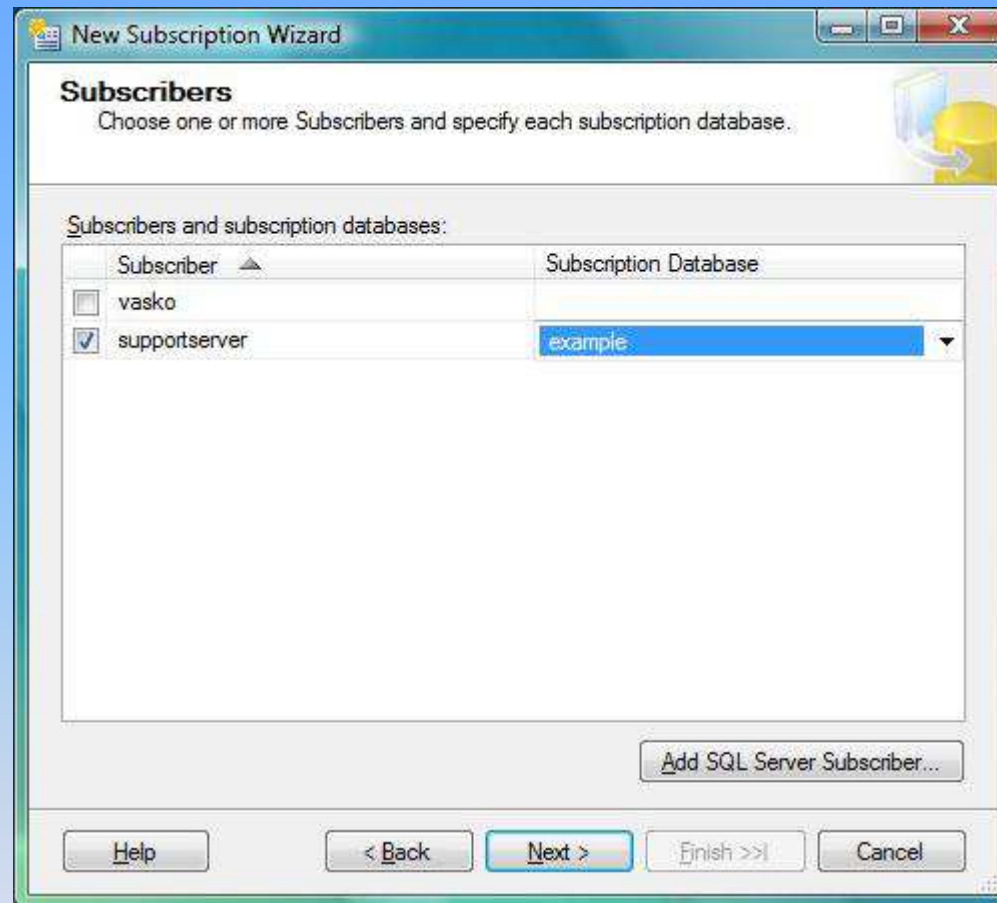
Creation of a Subscriber



From "Add SQL Server Subscriber", you must choose the server, which will be a "Subscriber".

Step 35

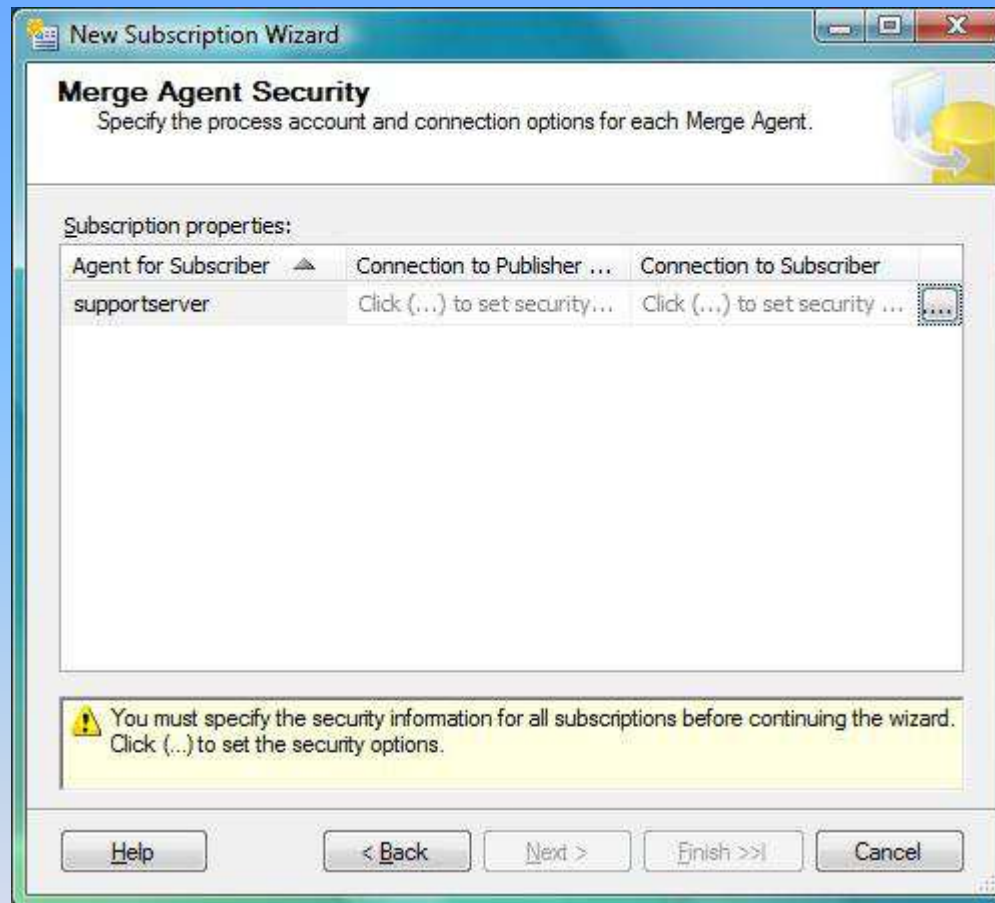
Creation of a Subscriber



The Subscriber's data base have to be defined.

Step 36

Creation of a Subscriber



The Security Settings for the connection with the Merge Agent must be set.

Step 37

Creation of a Subscriber

Merge Agent Security

Specify the domain or machine account under which the Merge Agent process will run when synchronizing this subscription:

Run under the following Windows account:

Process account:
Example: domain\account

Password:
Confirm Password:

Run under the SQL Server Agent service account (This is not a recommended security best practice.)

Connect to the Publisher and Distributor

By impersonating the process account

Using a SQL Server login

The connection to the server on which the agent runs must impersonate the process account. The process account must be a member of the Publication Access List.

Connect to the Subscriber

By impersonating the process account

Using the following SQL Server login:

Login:
Password:
Confirm password:

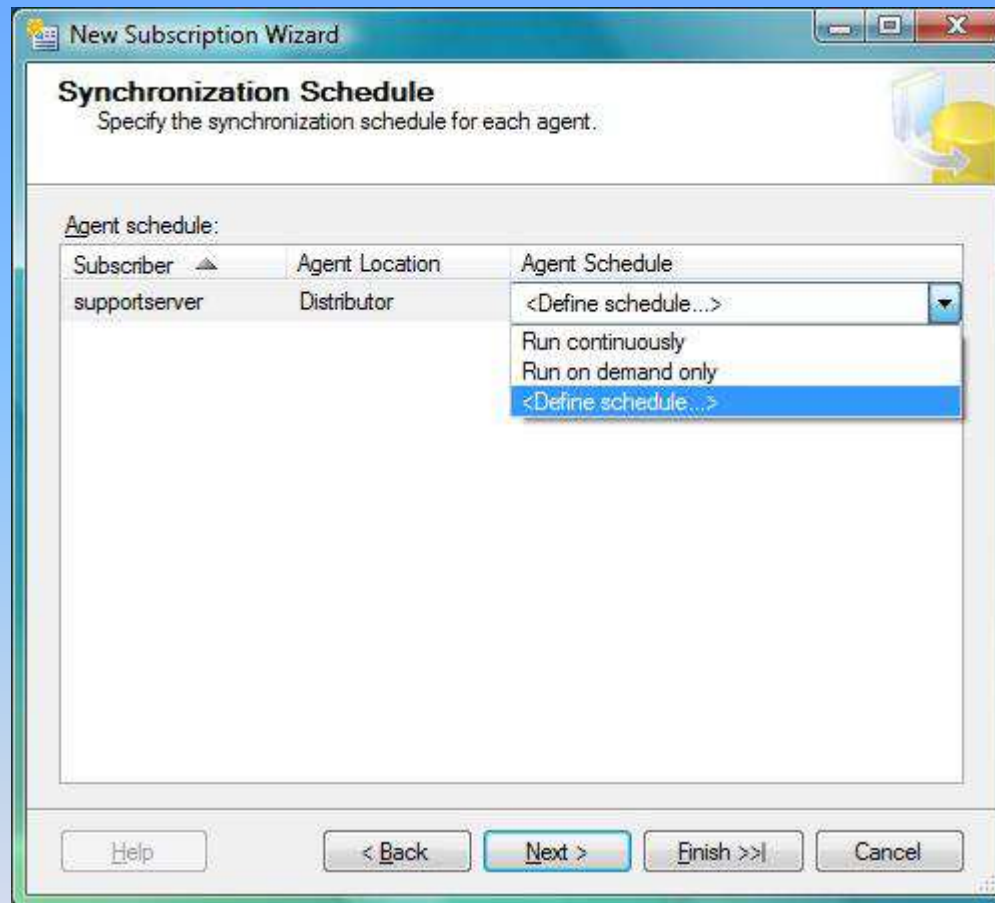
The login used to connect to the Subscriber must be a database owner of the subscription database.

OK Cancel Help

In the "Merge Agent Security" field, „Run under the SQL Server Agent service account" and „Using the following SQL Server login" must be marked. With the last setting, an username and password have to be defined.

Step 38

Creation of a Subscriber



A Synchronization Schedule must be defined.

Step 39

Creation of a Subscriber

New Job Schedule

Name: Jobs in Schedule

Schedule type: Recurring Enabled

One-time occurrence

Date: 27.03.2008 Time: 11:34 ч.

Frequency

Occurs: Daily

Rekurs every: 1 day(s)

Daily frequency

Occurs once at: 00:00 ч.

Occurs every: 5 minute(s) Starting at: 00:00 ч. Ending at: 23:59 ч.

Duration

Start date: 27.03.2008 End date: 27.03.2008 No end date

Summary

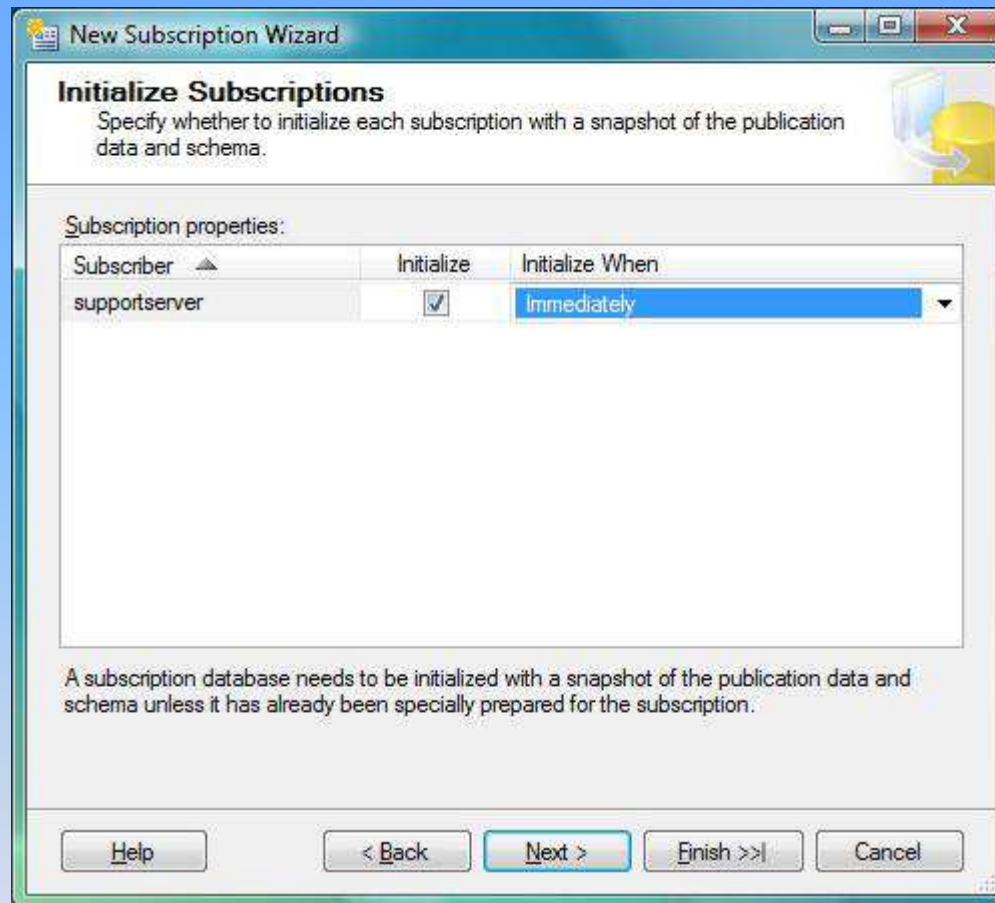
Description: Occurs every day every 5 minute(s) between 00:00 ч. and 23:59 ч.. Schedule will be used starting on 27.03.2008.

OK Cancel Help

The schedule, which must be choose is: every day; every five minute.

Step 40

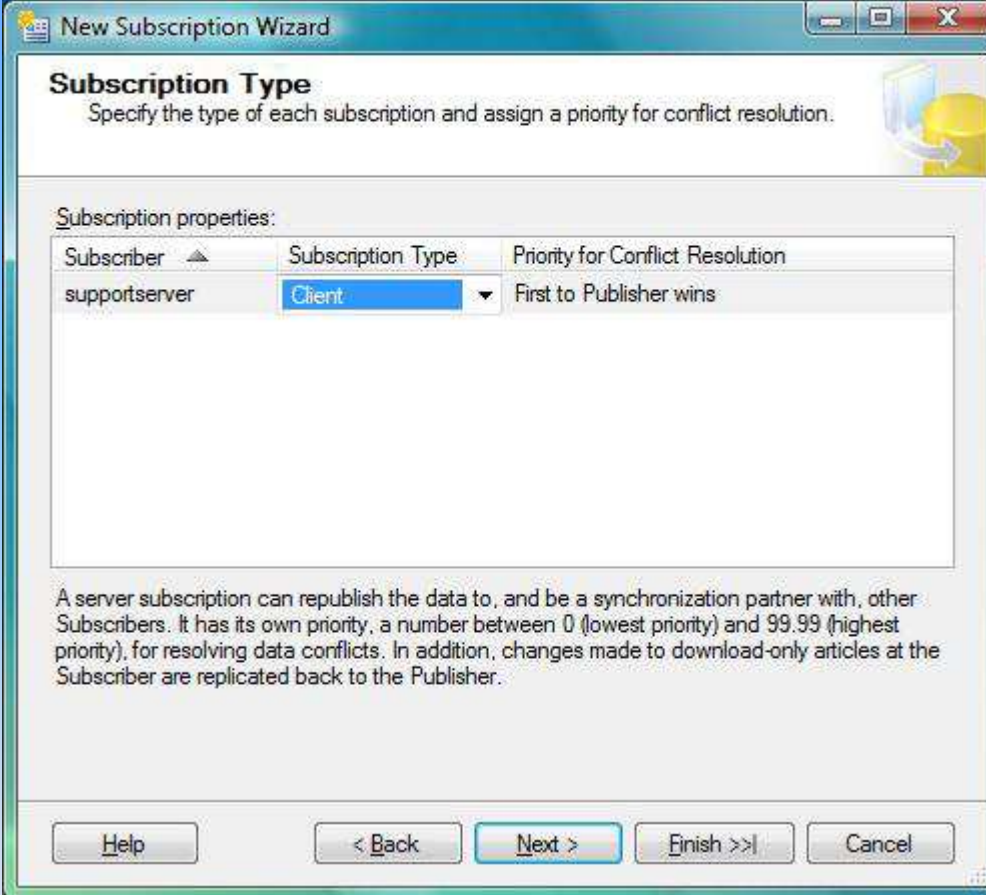
Creation of a Subscriber



In the „Initialize Subscriptions” field, must be marked „Immediately”.

Step 41

Creation of a Subscriber



Subscription Type
Specify the type of each subscription and assign a priority for conflict resolution.

Subscription properties:

Subscriber ▲	Subscription Type	Priority for Conflict Resolution
supportserver	Client ▼	First to Publisher wins

A server subscription can republish the data to, and be a synchronization partner with, other Subscribers. It has its own priority, a number between 0 (lowest priority) and 99.99 (highest priority), for resolving data conflicts. In addition, changes made to download-only articles at the Subscriber are replicated back to the Publisher.

Buttons: Help, < Back, Next >, Finish >>|, Cancel

In „Subscription Type” field, a “Client” must be choose.

Step 42

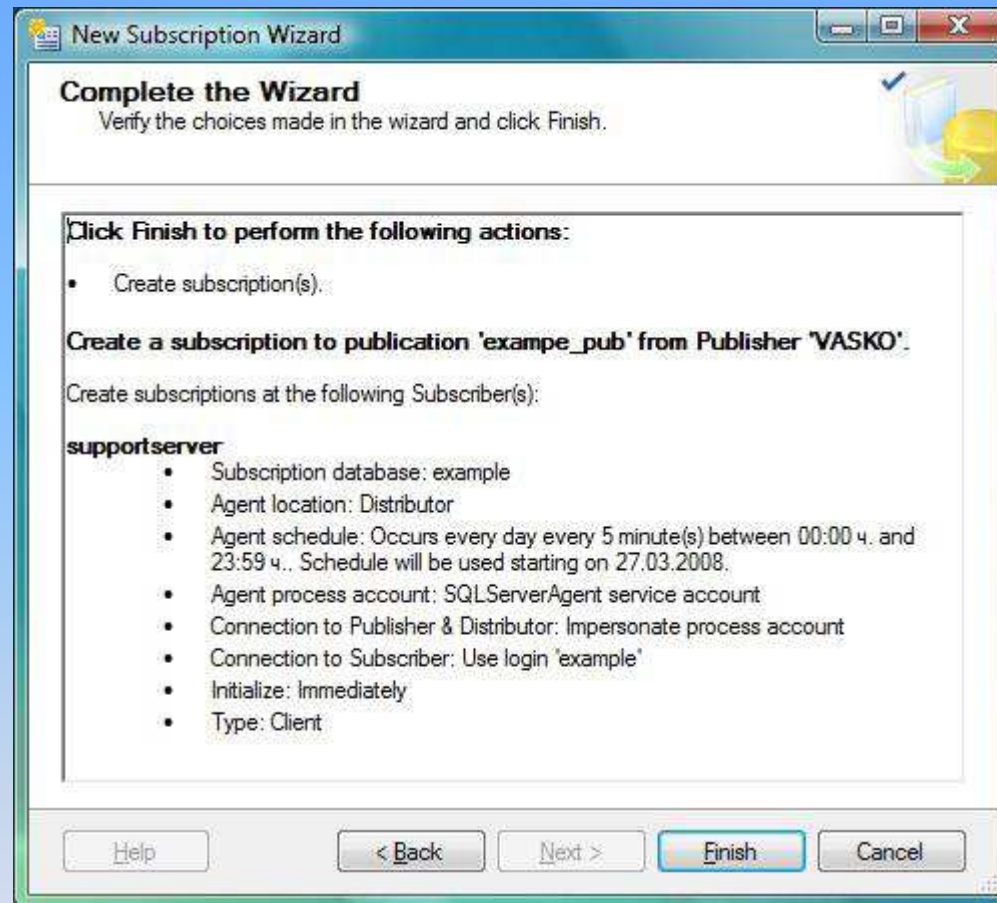
Creation of a Subscriber



In the „Wizard Actions” window, choose „Create the subscription(s)”.

Step 43

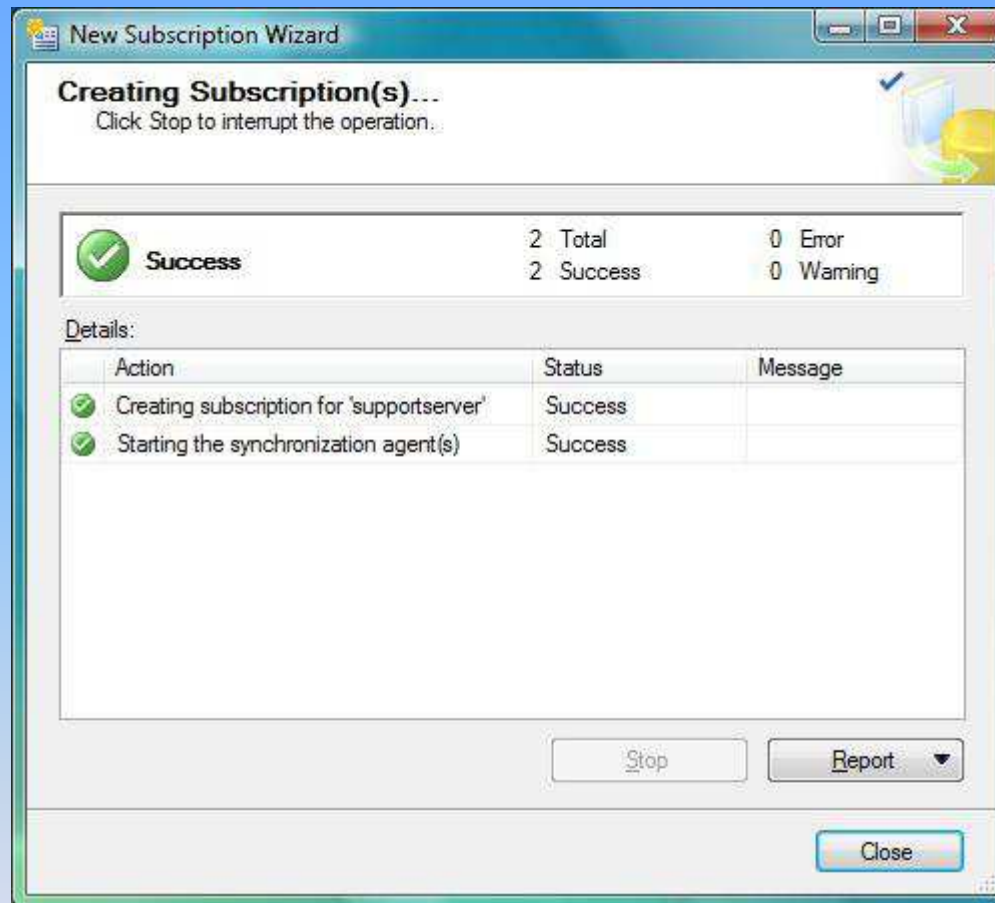
Creation of a Subscriber



A window with all chosen parameters will show up.

Step 44

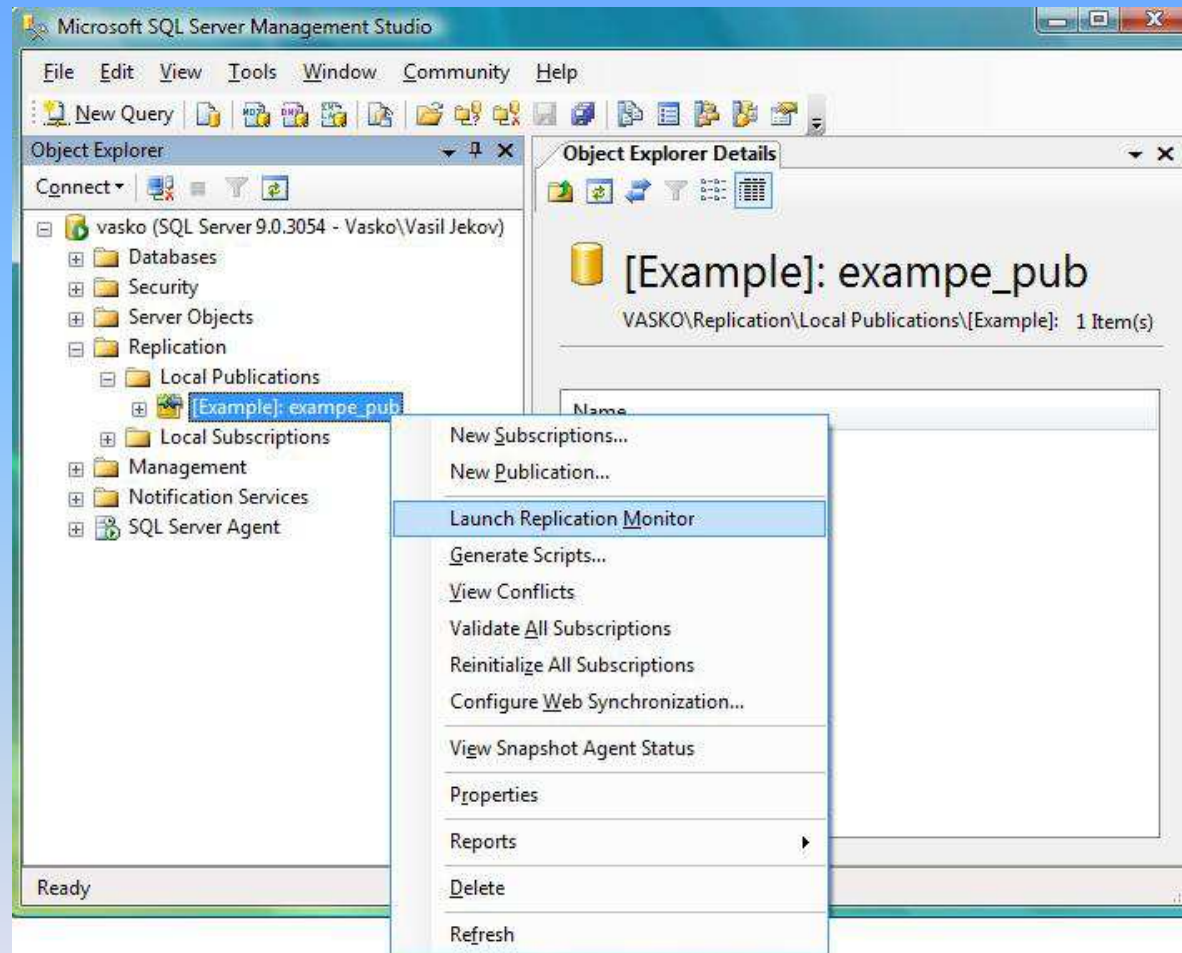
Creation of a Subscriber



In case, there are no mistakes, the Subscriber has be done successfully.

Step 45

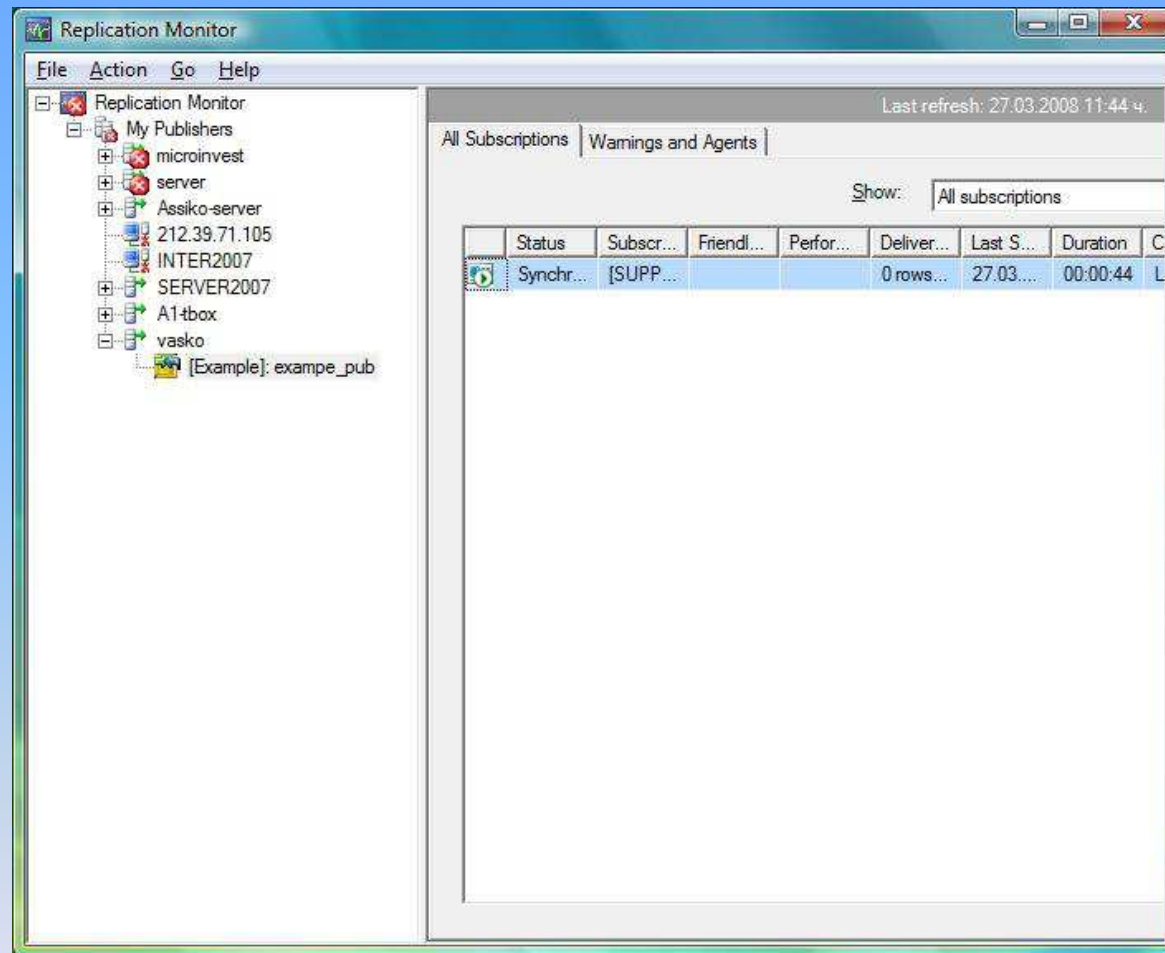
Monitor of all replications



From the field „Replication” – „local publications” – with a right click on the publication, a „launch replication monitor” can be start. It can be used for monitoring the status of the replications.

Step 46

Monitor of all replications



From the upper screen, you can see the Subscriber in synchronization process.

Step 47

Monitor of all replications

Subscription SUPPORTSERVER:example to VASKO:Example:exampe_pub

File Action Help

Last refresh: 27.03.2008 11:38 ч.

Synchronization History

View: The last 100 synchronizations

Sessions of the Merge Agent:

Status	Start Time	End Time	Duration	Uploade...	Downloa...	Error Message
Running	27.03.2008 11:37 ч.	-	00:01:18	0	0	

Articles processed in the selected session:

Article	% of Total	Duration	Inserts	Updates	Deletes	Conflicts	Schema C...
Initialization	100	00:01:18	-	-	-	-	-
Schema changes and bulk in...	0	00:00:00	0	-	-	-	0
Upload changes to Publisher	0	00:00:00	0	0	0	0	-
Download changes to Subsc...	0	00:00:00	0	0	0	0	-

Last message of the selected session:

Applied script 'UsersGroups_27.prc'

Applying Database Schema - 0% complete (approximately 00:00:00 remaining)

The Subscriber is still synchronizing.

Step 48

Monitor of all replications

Subscription SUPPORTSERVER:example to VASKO:Example:exampe_pub

File Action Help

Last refresh: 27.03.2008 11:44 ч.

Synchronization History

View: The last 100 synchronizations

Sessions of the Merge Agent:

Status	Start Time	End Time	Duration	Uploade...	Downloa...	Error Message
Completed	27.03.2008 11:43 ч.	27.03.2008 11:44 ч.	00:01:07	0	0	

Articles processed in the selected session:

Article	% of Total	Duration	Inserts	Updates	Deletes	Conflicts	Schema C...
Initialization	2	00:00:01	-	-	-	-	-
Schema changes and bulk in...	98	00:01:06	293	-	-	-	150
Upload changes to Publisher	0	00:00:00	0	0	0	0	-
Download changes to Subsc...	0	00:00:00	0	0	0	0	-

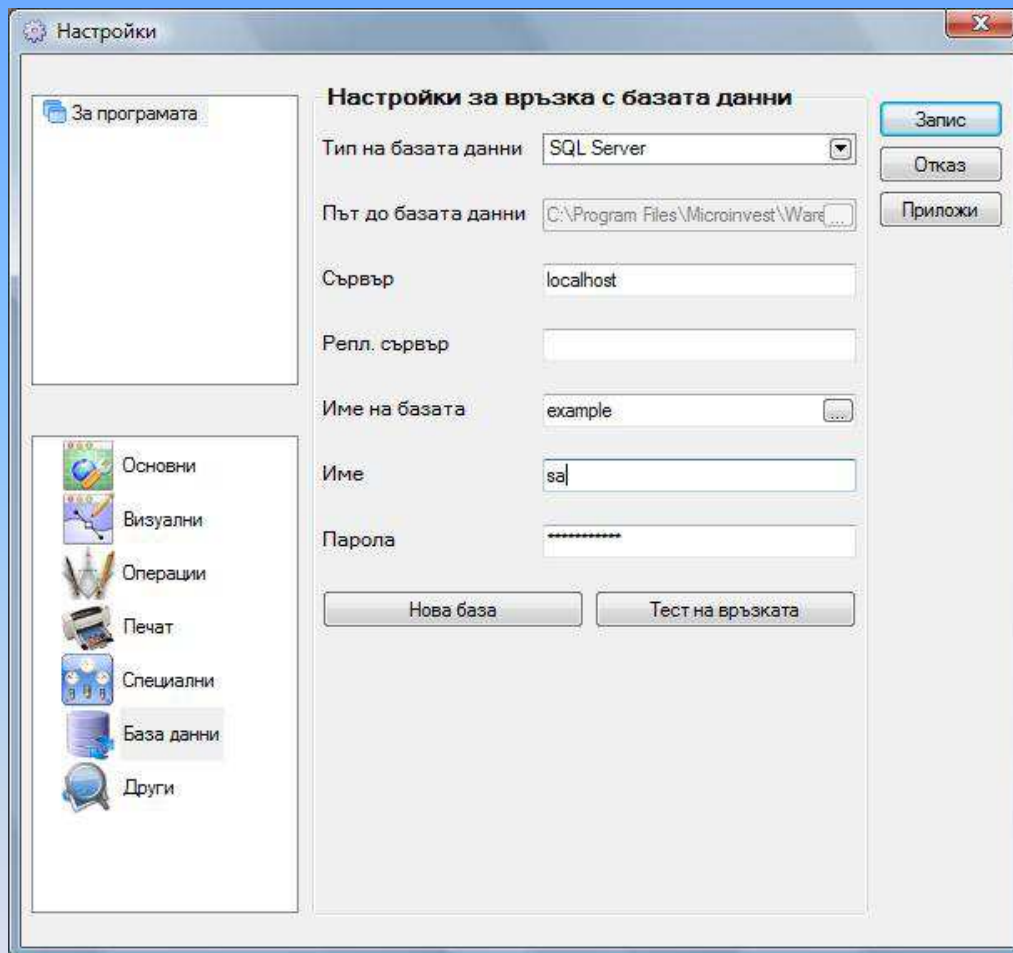
Last message of the selected session:

Applied the snapshot and merged 0 data change(s) (0 insert(s), 0 update(s), 0 delete(s), 0 conflict(s)).

The synchronization has been successfully accomplished.

Step 49

Microinvest Warehouse Pro settings



The screenshot shows a window titled 'Настройки' (Settings) with a sub-section 'Настройки за връзка с базата данни' (Database Connection Settings). The settings are as follows:

Field	Value
Тип на базата данни	SQL Server
Път до базата данни	C:\Program Files\Microinvest\Ware...
Сървър	localhost
Репл. сървър	
Име на базата	example
Име	sa
Парола	*****

Buttons visible in the dialog include: 'Запис' (Save), 'Отказ' (Cancel), 'Приложи' (Apply), 'Нова база' (New database), and 'Тест на връзката' (Test connection). A sidebar on the left contains icons for 'Основни' (Basic), 'Визуални' (Visual), 'Операции' (Operations), 'Печат' (Print), 'Специални' (Special), 'База данни' (Database), and 'Други' (Other).

- In the Microinvest Warehouse Pro settings, must be filled in only the “Server”, without the “Replication Server”
- When a replication is in use, Microinvest Warehouse Pro must work with “Document numbers by locations” (must be enabled).
- All “Users” must be locked by “Locations” and each user must work only from the “Location” he is assigned to.