

Database Migration for SyncThru application is an intuitive tool that enables the data stored in the database of an older version of SyncThru, to be moved to the database of the latest version of SyncThru. This is an automated process that happens during the installation of SyncThru 6 application on the server, on which the older version of SyncThru application is also running. Data migration between the applications happens only on same source database i.e. from **PostgreSQL** to **PostgreSQL** and from **MS SQL** to **MS SQL**, to be noted that cross migration of databases are not supported.

NOTE

If SyncThru 5 server is using MS SQL database, then system administrators' authentication is required during migration.

Database Migration Process

The database migration in SyncThru is explained here in three phases:

NOTE

"Source database" refers to Database used by SyncThru 5.x application and "Destination database" refers to Database used by SyncThru 6.x.

PHASE 1: The older version of SyncThru 5 source database is upgraded to the latest version of SyncThru 5; this up gradation is done to ensure that it meets the migration criteria, which allows the source database to be migrated to the destination database.

During this phase of internal upgrade a backup of the SyncThru 5 source database is taken and restored onto an empty database on the same database server.

PHASE 2: In this phase SyncThru Admin 6 database creates new schema or tables.

PHASE 3: Migration process in SyncThru consists of three stages and they are:

a. **Extract** : It Extracts the data from the upgraded SyncThru database (from the below example: SyncThru Admin 5.6) .

b. **Transform**: The data is transformed into a schema which is compatible with SyncThru Admin 6.

For example, consider a feature in SyncThru Admin 5 that consist a table of 8 columns and the same feature in SyncThru Admin 6 have a 12 columns table. During migration the older versions' schema (8 columns) is transformed to the new schema (12 columns) which is compatible with the latest version.

c. **Load**: In the final stage the data is loaded in the SyncThru Admin 6 database.

Migration compatible versions of SyncThru Admin 5

[SyncThru™ Admin 6]

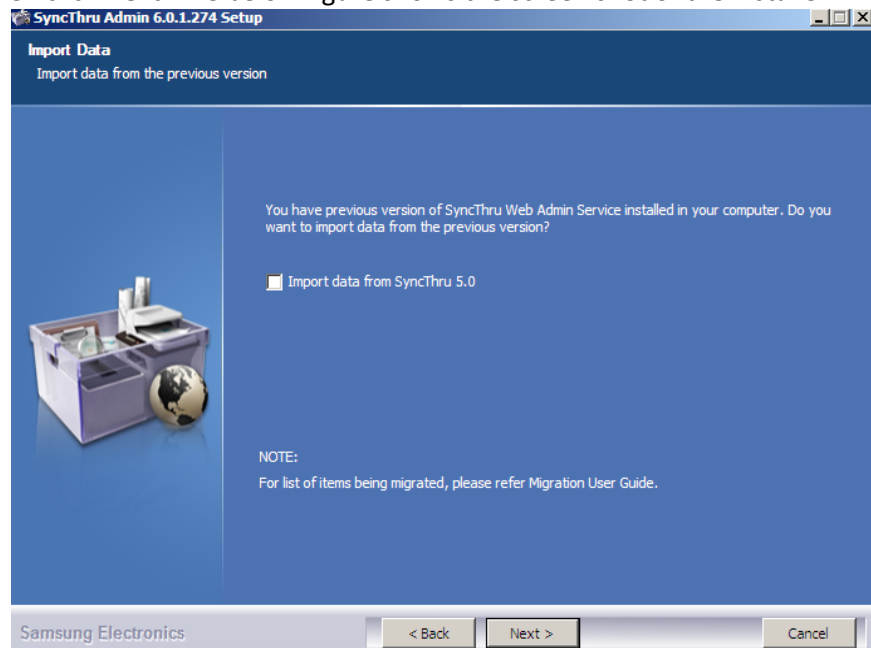
Specified here are the compatible versions of SyncThru Admin 5 application that supports migration. The **Import data from SyncThru 5.0** check box in the setup wizard of SyncThru Admin 6, will appear only if any one of the below mentioned versions of SyncThru Admin 5 is running on the system:

- 5.0.88
- 5.1.10
- 5.2.1.2924
- 5.3.1.2940
- 5.4.1.2953
- 5.4.1.2962
- 5.5.1.2972
- 5.5.2.2985
- 5.5.2.2990
- 5.5.2.3005
- 5.5.2.3013

Migration process between MS SQL databases

The migration between MS SQL databases happens while installing SyncThru Admin 6 application. In SyncThru Admin 6 setup wizard the **Import Data** window appears only if the application is being installed for the first time. Follow these steps to migrate data between MS SQL databases and also mentioned here are the screenshots of the installer:

1. In the **Import Data** window, select **Import data from SyncThru 5.0** check box and then click **Next**. The below figure shows the screen shot of the installer.



2. In the **Admin Authentication for SyncThru 5 MS SQL Database** window, the server configuration and system administrator privileges are displayed.

- a. Click the **Test Connection** button, to authenticate the database connection.
- b. If the test connection fails, enter these details and re-test the connection:

- **User ID:** Enter the Admin User ID of the selected database.

NOTE

The above user must have "sysdba" privileges.

- **Password:** Enter the Admin password of the selected database.

NOTE

Database migration will not happen if the user does not have system administrator privileges.

SyncThru Admin 6.0.1.270 Setup

Admin Authentication for SyncThru 5 MSSQL Database
System Admin privileges needed for migration

Database server type: Microsoft SQL Server

Database server: 107.109.105.15 Port: 1433

Database name: st5_522

User ID: sa

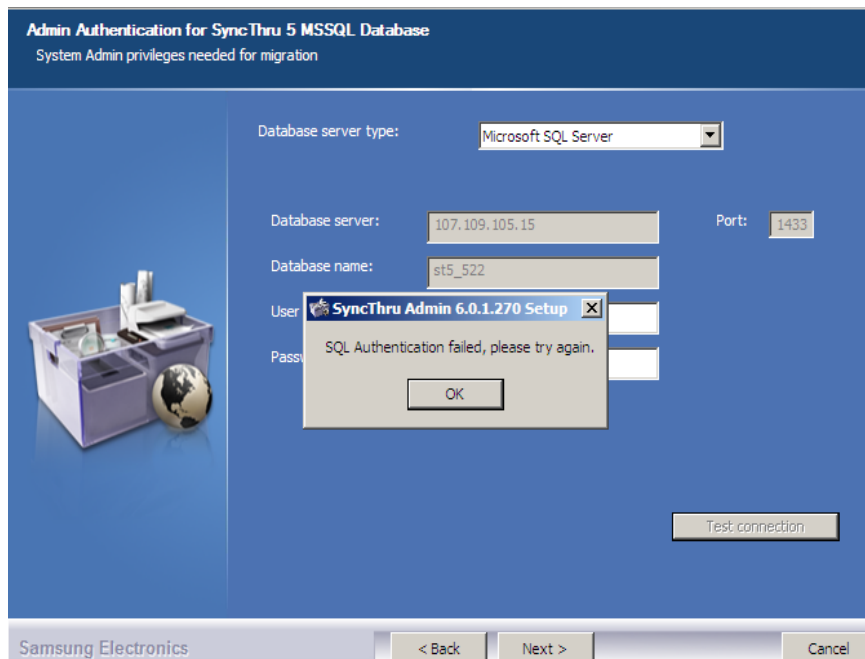
Password:

Test connection

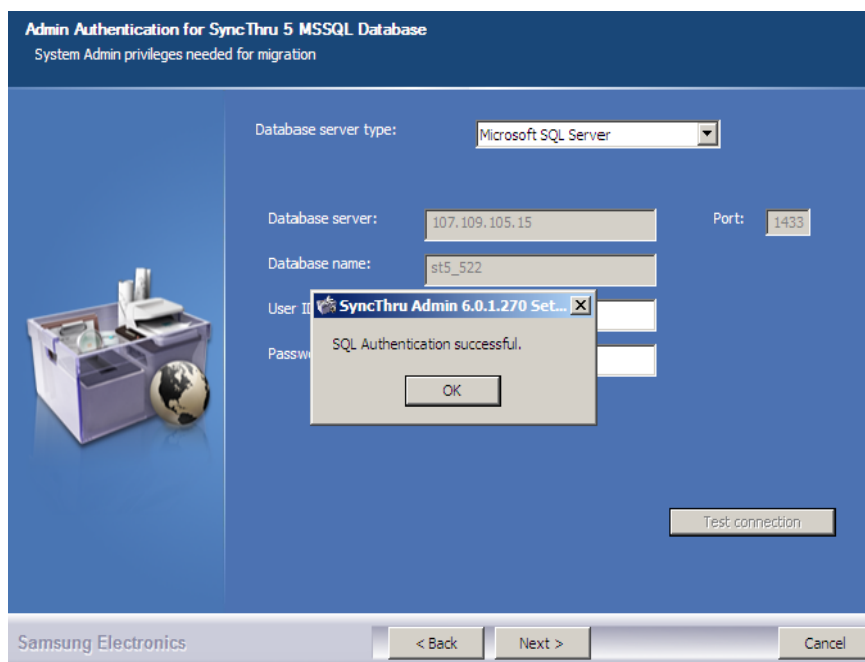
Samsung Electronics

< Back Next > Cancel

3. If the test connection fails the following message will appear in the setup wizard.



4. Once the test connection is successful the below message will appear, click **OK** and then click **Next**.



5. In the **Select SyncThru 6 Database** window, the configuration of the SyncThru 5 database is captured. The **Create database** checkbox is disabled.

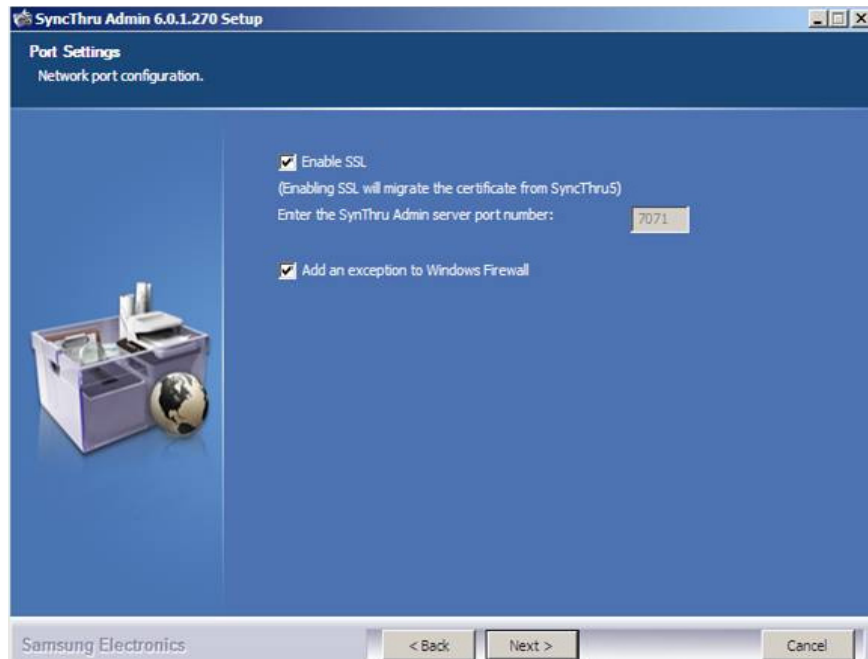
- Select the **Customize database settings** check box, to customize the configuration of SyncThru 6 database.

The screenshot shows the 'Select SyncThru 6 Database' window of the SyncThru Admin 6.0.1.270 Setup application. The window has a blue header with the title 'SyncThru Admin 6.0.1.270 Setup' and a subtitle 'Select SyncThru 6 Database'. Below the subtitle is the instruction 'Please select preferred database'. The main area is divided into two sections. On the left is a graphic of a purple storage box with a globe. On the right are the configuration fields: 'Database server type' is a dropdown menu set to 'Microsoft SQL Server'; 'Customize database settings.' is a checked checkbox; 'Database server' is a text box with '107.109.105.15'; 'Port' is a text box with '1433'; 'Database name' is a text box with 'SolutionPlatform'; 'User ID' is a text box with 'sa'; 'Password' is a text box with masked characters; 'Create database' is a checked checkbox; and a 'Test connection' button. At the bottom, there is a 'Samsung Electronics' logo, '< Back' and 'Next >' buttons, and a 'Cancel' button.

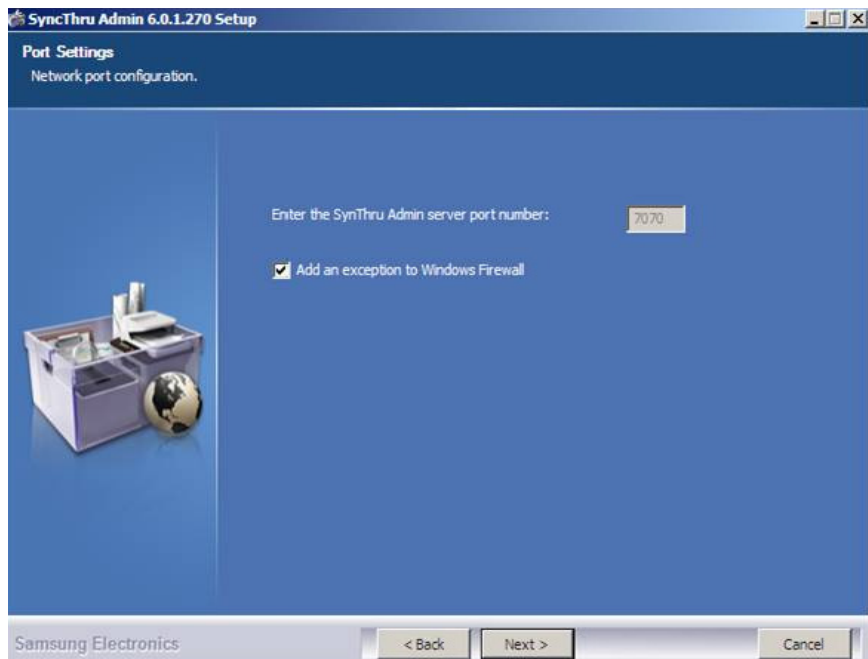
- a. Click the **Test Connection** button, to authenticate the database connection.
 - b. If the test connection fails, enter these details and re-test the connection:
 - **User ID:** Enter the Admin User ID of the selected database.
 - **Password:** Enter the Admin Password of the selected database.
6. If the connection is successful, click **Next** to proceed with the migration.
7. In the **Port Settings** window, if SyncThru 5 is using HTTPS only then **Enable SSL** checkbox will appear.

NOTE

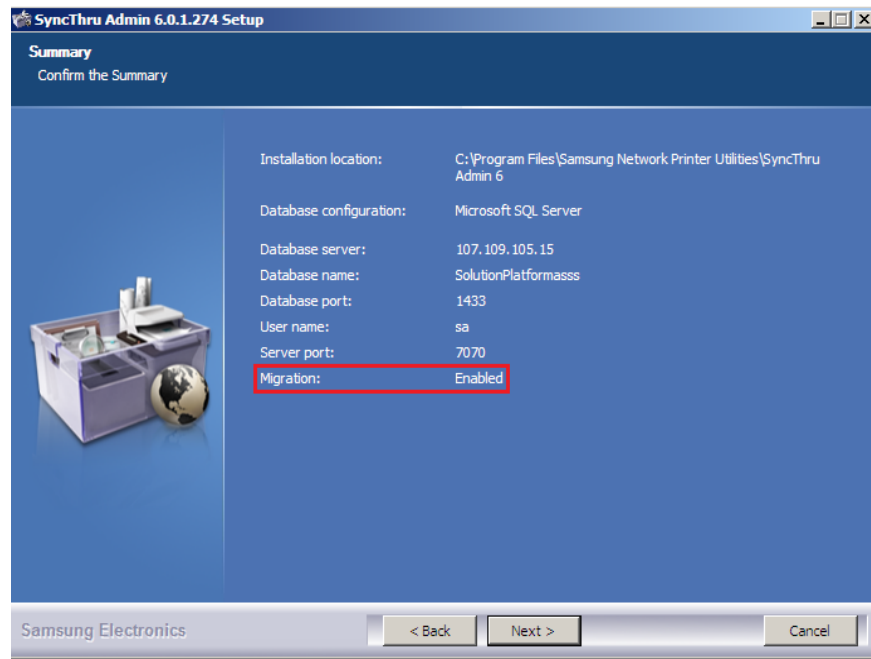
SyncThru Admin 6 application will be reusing SyncThru Admin 5 applications' port number.



The below screenshot shows the **Port Settings** window without **Enable SSL** check box.

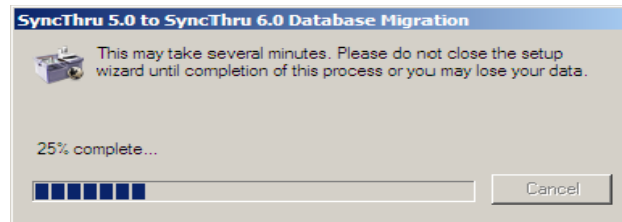


8. Click **Next**, to view the Summary window and notice ***“Migration is enabled”***.



9. Click **Next**, to start the installation of SyncThru Admin 6 application.

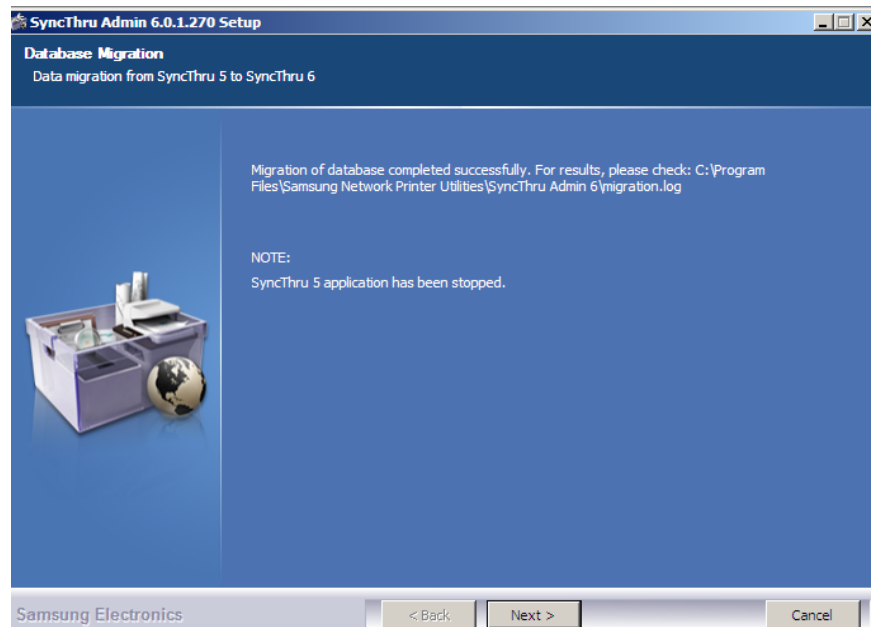
10. The Database Migration progress bar appears in a dialog box, which gives you the progress status of the data being migrated from SyncThru 5 database to SyncThru 6 database.



11. After completing the migration of data, the **Database Migration** window appears which displays the information on migration. The migration result can be verified in **migration.log** file, which is found in the path "**C:\Program Files\Samsung Network Printers\SyncThru Admin 6\migration.log**".

NOTE

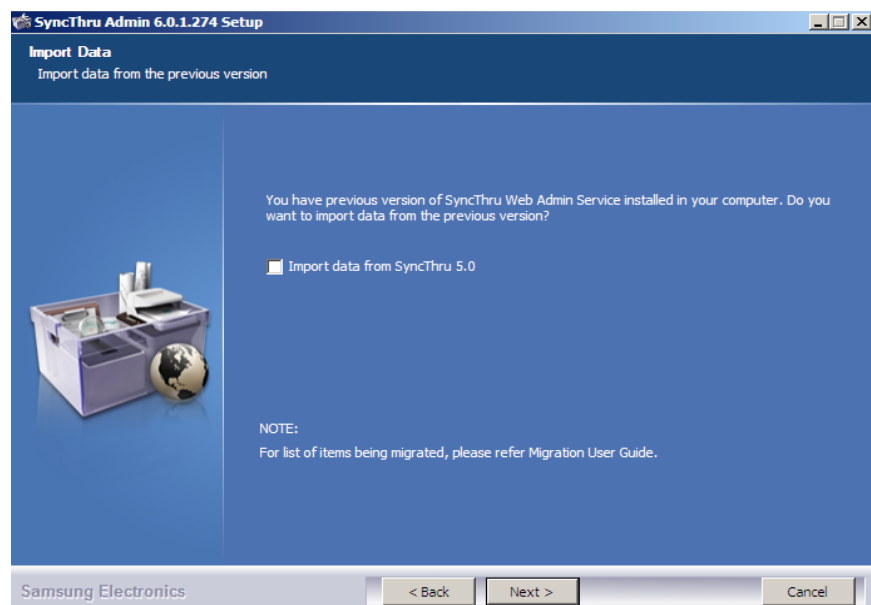
SyncThru Admin 5 application will be stopped.



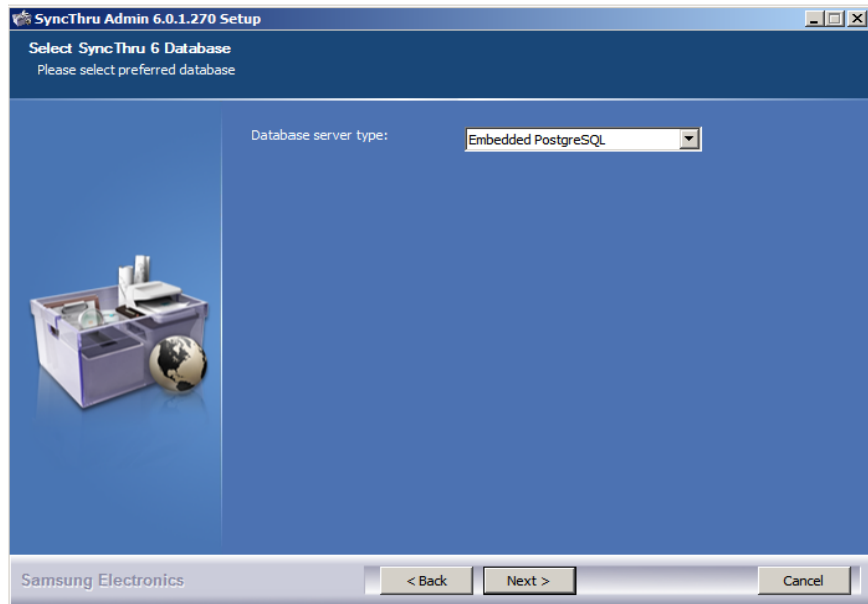
Migration process between PostgreSQL databases

The migration between PostgreSQL databases happens while installing SyncThru Admin 6 application. In SyncThru Admin 6 setup wizard the **Import Data** window appears only if the application is being installed for the first time. Follow these steps to migrate data between PostgreSQL databases:

1. In the **Import Data** window, select **Import data from SyncThru 5.0** check box and then click **Next**.



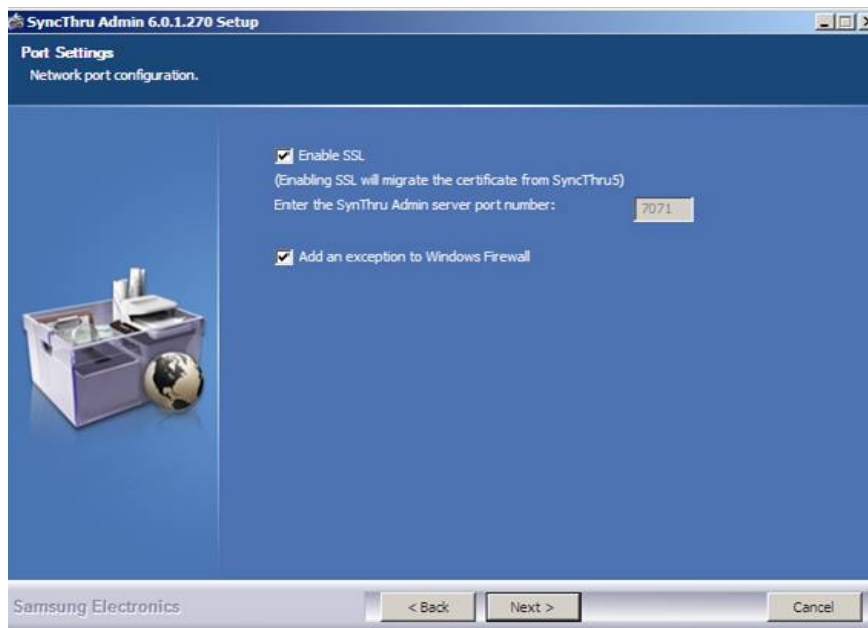
2. In the **Select SyncThru 6 Database** window, the Database server type is displayed.



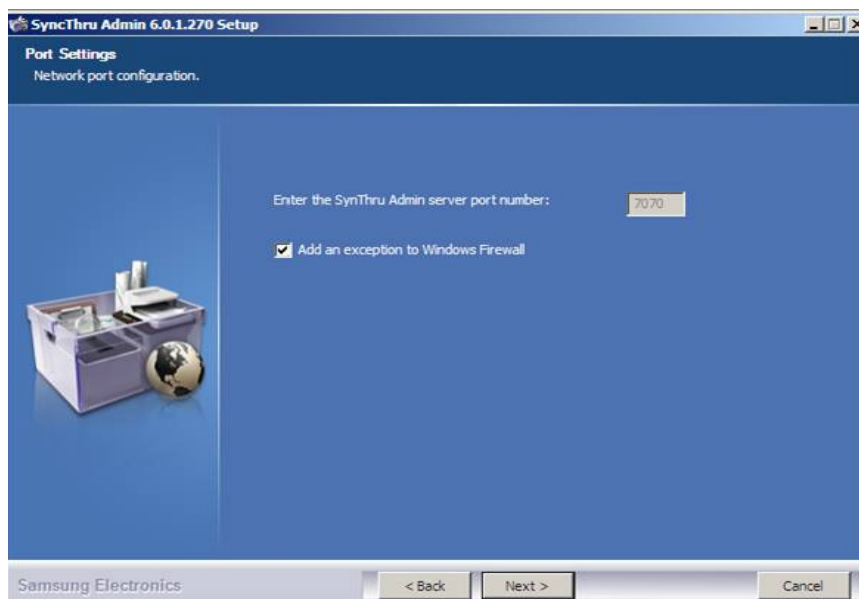
3. Click **Next**.
4. In the **Port Settings** window, if SyncThru 5 is using HTTPS only then **Enable SSL** checkbox will appear.

NOTE

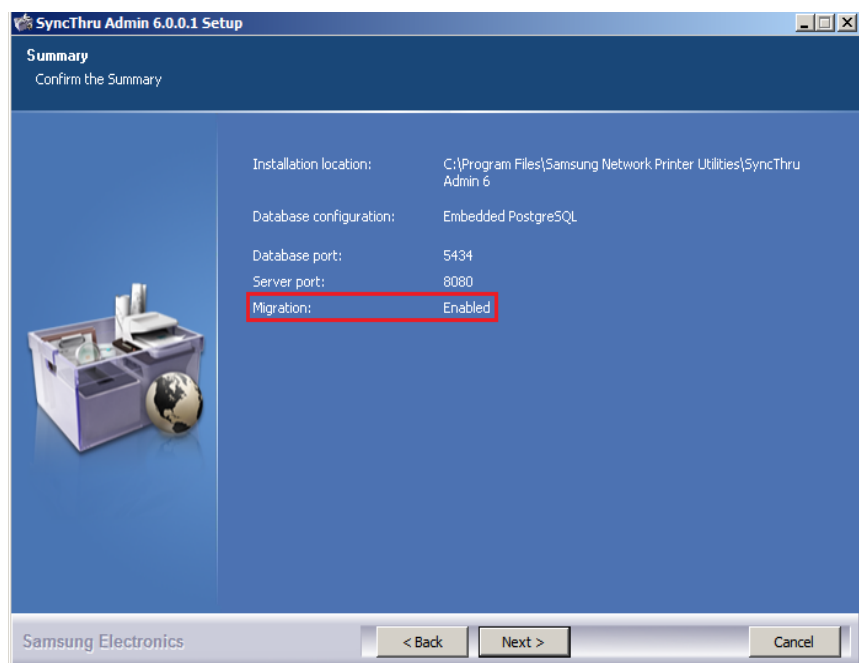
SyncThru Admin 6 application will be reusing SyncThru Admin 5 applications' port number.



The below screenshot shows the **Port Settings** window without **Enable SSL** check box.

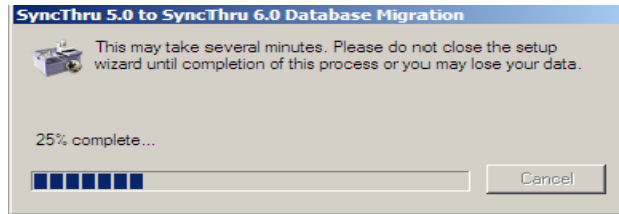


5. Click **Next**, to view the **Summary** window and notice “**Database Migration is enabled**”.



6. Click **Next**, to start the installation of SyncThru Admin 6.

- The Database Migration progress dialog box appears which gives you the progress status of the data being migrated from SyncThru 5 database to SyncThru 6 database.



- After completing the migration of data, the **Database Migration** window appears which displays the information on migration. The migration result can be verified in the **migration.log** file, which is found in the path mentioned "**C:\Program Files\ Samsung Network Printers\ SyncThru Admin 6\migration.log**".

NOTE

SyncThru Admin 5 application will be stopped.



Post Migration

After the migration of the database, the services in the older version of SyncThru application are stopped and the start-up type is set to manual. Also, the PostgreSQL database services of older version SyncThru application are stopped and the start-up type is set to manual.

NOTE

“Job Accounting” feature has been re-named as “Accounting” in SyncThru Admin 6.

What types of data can be migrated between SyncThru applications?

It has to be noted that, only the data present in database are migrated. Any other related data which may be present on the file system will not be migrated. Refer the below table on migration of features supported by SyncThru.

Features	Supported
DASHBOARD	
Dashboard widgets	Yes
DEVICE MANAGEMENT	
Device List	Yes
Device Groups	Yes
Dynamic Groups & Custom Filters.	Yes
Device Settings (Channel Protocols, Storages, Scanning parameters).	Yes
Device Usage (Counters, Marker Supplies)	Yes
Device HW (Network Interfaces, Input Trays, Output Trays, Finishers)..	Yes
Discovery Templates (including LDAP, CSV).	Yes
Trouble Severity	Yes
Passive discovery	Yes
Discovery Tasks & History.	No
Configuration Tasks & History.	No
USER MANAGEMENT	
User List	Yes
User Groups	Yes
User Roles & Permissions.	Yes
EAM	
Device Application Files	Yes
Tasks & History.	No

Features	Supported
FIRMWARE MANAGEMENT	
Firmware Files	Yes
Tasks & History.	No
FILE STORAGE MANAGEMENT	
File Storage Files	Yes
Tasks & History.	No
DRIVER MANAGEMENT	
Driver Device Models & Files.	Yes
Tasks & History.	No
Driver Push Installation & Driver Preconfiguration.	No
JOB ACCOUNTING	
Job Accounting Devices	Yes
Job Accounting Users	Yes
Job Accounting Groups	Yes
Job Accounting User & Group Permissions.	Yes
Job Accounting User & Group Access Rights.	Yes
Job Accounting Jobs (Print, Copy, Scan, Fax).	Yes
Job Accounting Counters	Yes
Job Accounting Settings, e-mails, Fax numbers.	Yes
ANALYSIS & REPORTS	
Analysis	No
Reports	No
SETTINGS (SMTP SERVER, LDAP SERVERS, ...).	Yes
LOGS (EVENT LOG, DEBUG LOG).	No
DEVICE MAPS	No
SSL CERTIFICATE	Yes

This sections gives details on limitations of migration and are listed as follows:

1. Migration for SyncThru 5 Driver Management plug-in is supported for v1.2.1.494 and later versions.
2. In SyncThru 5, devices may belong to multiple groups. But in SyncThru 6 a device may belong only to a single group. Hence, during migration if a device is found to belong to multiple groups, it will be added to the Ungrouped group.
3. Data belonging to **History, Tasks or Reports** will not be migrated.
4. Dashboard widget will be migrated only if authentication is enabled in SyncThru 5. Actual data for each dashboard widget is not migrated.
5. Alert notification configuration is not migrated.
6. After migration **Role Assignment** column in **User Management -> User List** will be filled with default value "Individual"
7. **Role Assignment** column in **User Management -> User List** will not be displayed by default, user should add the field.
8. Job Accounting users after migration shall become part of SyncThru 6 users i.e.
 - a. If a user exists in SyncThru 6 with same id as job accounting user in SyncThru 5, then the job accounting user will be added to the SyncThru 6 user under the "**Device Account**" field.
 - b. If SyncThru 5 job accounting user does not exist in SyncThru 6, then a SyncThru 6 creates a user with the same credentials of the job accounting user and the "**Device Account**" field will also contain the same credentials. While logging into SyncThru 6 the same user id & password from SyncThru 5 job accounting can be used.
9. Time interval migration:
 - Time intervals in Job Accounting settings of SyncThru 5 such as 30 mins, Hourly, and 6 hours will be migrated to 1 hour in Job Accounting settings of SyncThru 6.
 - Time interval of 12 hours in Job Accounting settings of SyncThru 5 will be migrated to 1 day in Job Accounting settings of SyncThru 6.
10. SyncThru 5 job accounting user groups will be migrated to SyncThru 6 user groups.
11. Migration for SyncThru 5 Enterprise Application Management (EAM) plug-in is supported for v5.4.1.2953 and later versions.
12. The table here shows the **User Management > Permissions** mapping between SyncThru 5 and SyncThru 6.

SyncThru 5	SyncThru 6
User Accounts	<ul style="list-style-type: none"> • Manage user • Add user • Delete user • Modify user
User Roles	<ul style="list-style-type: none"> • Manage role • Assign role
Active Tasks Management	Manage active tasks

SyncThru 5	SyncThru 6
Configuration	Initialize configuration
Discovery	Initialize discovery
File Storage	Manage font/form/macro
Firmware	Manage firmware
Device List Management	<ul style="list-style-type: none"> • Add device • Add device group • Delete device
LDAP Servers	Configure LDAP
Log Messages	Manage log settings
HTTP Security	Manage HTTP security settings
SyncThru Discovery	Manage SyncThru discovery
Reports	Manage reports
Blocked Devices	Manage device management settings
Connection Settings	<ul style="list-style-type: none"> • Manage device management settings • Manage discovery connection settings
Database and History Management	Manage data provisioning
Email Settings	Manage SMTP settings
Alert Notifications	Manage device management settings
Alerts Configuration	Manage device management settings
Unconfigured Devices	Manage device management settings
SyncThru Update	<ul style="list-style-type: none"> • Manage Plug-in • Manage Plugin-in Repository
Remote Installation	Feature has been replaced with Pull Installation: <ul style="list-style-type: none"> • Install device drivers • Manage driver install history
Driver Files	Manage driver file repository
Host Settings	N/A
Install/Uninstall Applications	Manage device applications
Start/Stop Applications	Manage device applications
View Applications	Manage device applications
License Management	N/A
Application Repository	Manage device application repository

SyncThru 5	SyncThru 6
Job Accounting Management	<ul style="list-style-type: none"> • Manage Accounting enable/disable • Manage Accounting group permission • Manage accounting user permission • Manage accounting group permission history • Manage accounting user permission history • Manage accounting import permission • Manage accounting job records • Manage accounting
Job Accounting Settings	Manage accounting settings

How to reuse SyncThru 5 application?

It is recommended not to reuse SyncThru 5 application after migrating to SyncThru 6. But if you encounter any issues while using SyncThru 6 application, then only it is advisable to reuse SyncThru 5. This section explains how to stop SyncThru 6 and restart SyncThru 5.

The user must stop the services of SyncThru 6 application before starting SyncThru 5 application because it will reuse the same port settings. If SyncThru 6 is running on PostgreSQL database, then its corresponding service has to be stopped and SyncThru 5 applications' PostgreSQL database service has to be restarted. This process can be done either automatically (*using batch file*) or manually.

To start SyncThru 5 application automatically run the below mentioned batch file, which is found in **SyncThru Admin 6** folder.

- **start_syncthru5_service.bat**: This will start SyncThru Admin 5 services and stop SyncThru Admin 6 services.

To start SyncThru 6 application automatically run the below mentioned batch file, which is found in **SyncThru Admin 6** folder.

- **start_syncthru6_service.bat**: This will start SyncThru Admin 6 services and stop SyncThru Admin 5 services.

Follow the below procedure to manually start/stop SyncThru 5 and SyncThru 6 application.

To stop SyncThru 6 application, do as follows:

1. Open **Services**.
2. In the details panel, select **SyncThru Admin 6** and then, right click on the selection.
3. From the menu, select **Properties**.
4. In the Properties window, select **Manual** as the Startup type.
5. Click **Stop** and then click **OK**.

To stop Postgre SQL database service of SyncThru 6, do as follows:

1. Open **Services**.
2. In the details panel, select **SyncThru Admin 6 Database** and then, right click on the selection.
3. From the menu, select **Properties**.
4. In the Properties window, select **Manual** as the Startup type.
5. Click **Stop** and then click **OK**.

To start SyncThru 5 application, do as follows:

1. Open **Services**.
2. In the details panel, select **SyncThru Admin 5** and then, right click on the selection.
3. From the menu, select **Properties**.
4. In the Properties window, select **Automatic** as the Startup type.
5. Click **Start** and then click **OK**.

To start Postgre SQL database service of SyncThru 5, do as follows:

1. Open **Services**.
2. In the details panel, select **SyncThru Admin 5 Database** and then, right click on the selection.
3. From the menu, select **Properties**.
4. In the Properties window, select **Automatic** as the Startup type.
5. Click **Start** and then click **OK**.

Note

- *After restarting SyncThru 5, the tasks performed or data generated in SyncThru Admin 6 will not be reflected or visible in SyncThru Admin 5.*
- *If configuration changes are made to the device using SyncThru Admin 6, it may be reflected or visible in SyncThru Admin 5.*