



# Working with Databases in P6 8.4

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***2014 Technical  
Webinar Series***



# Thank you for joining today's technical webinar

- Mute – all call in phones are automatically muted in order to preserve the quality of the audio for all attendees.
- Questions – during the session, questions can be submitted through the Questions Box on the right side of the screen . We will try to address your questions at the end of the presentation, time permitting.
- Follow up – all registrants will receive an Excel file listing all questions and responses along with a link to the recorded webinar.



# Safe Harbor

- The statements made in this technical presentation are based on our current knowledge of the tools.
- Our statements should not be construed to be an official “Oracle perspective”, but are intended to be the sharing of technical and user knowledge gained as we explore new paths and technologies, usually in advance of our clients.
- Our statements should not be construed as in conflict with any Oracle statement, as the Oracle statement is likely made based on more current knowledge than is available to us.

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- Oracle Primavera Certified Implementation Specialists
- Custom Integration, Analytics and Dashboard Utilities
- Project Support Services and Partnering

- Global, dedicated environment hosting services
- Primavera OPPM, P6 EPPM, P6 Pro, Primavera Unifier, Contract Management, BI Publisher, UCM/Sharepoint, P6 Risk, AutoVue and Analytics
- Hard Dollar, HCSS, Acumen Fuse, Ecosys, Prism G2, US Cost, Microsoft...
- Global Data Centers in USA, London, Singapore and Brisbane



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# Abstract – Working with Databases in P6 Pro 8.4

- With the release of P6 8.4 Oracle has replaced the local database Oracle Express with Oracle SQLite. SQLite has some limitations with P6 Pro including no access to Claim Digger. We've always been fans of using MS SQL Express for local installs rather than Oracle Express. Not only is MS SQL Express free, it supports multiple databases on local installations with no sacrifice in functionality.
- We will review the positives and negatives of each choice and walk through the process for installing P6 Pro with the local (SQLite) database and also configuring it to run with MS SQL Express 2012.



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# Working with Databases in P6 Pro 8.4

## Agenda

- Overview of P6 Pro 8.4 Databases
- Installing P6 Professional 8.4 with SQLite
- Download and Install MS SQL Express 2012
- Configuring MS SQL Express and P6 Pro 8.4
- Migrate existing databases to 8.4
- Summary
- Questions



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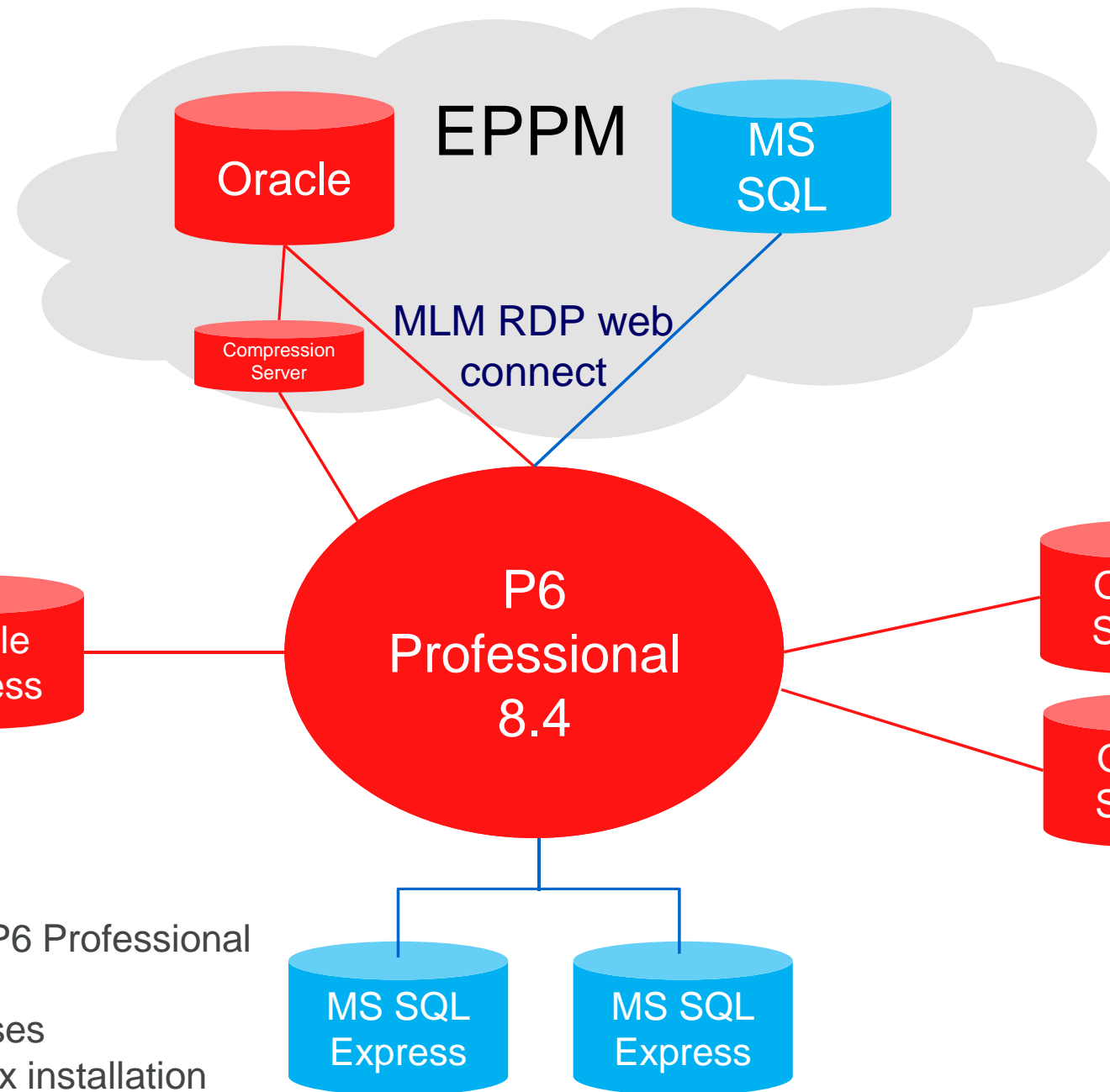
# Overview of P6 Pro 8.4 Databases

- Supported local databases
  - Oracle SQLite
  - Oracle Express (P6 8.2, 8.3). If you have previous version it will run with 8.4.
  - MS SQL Express (2005, 2008, 2012)
- Supported group (server) databases
  - Oracle 11, 12
  - MS SQL 2005, 2008, 2012
- P6 Pro can also connect to P6 EPPM databases
  - Direct connection across a LAN or WAN
  - P6 Pro Cloud Connect



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# Databases Supported by P6 Professional 8.4



## P6 Pro Cloud Connect

- + Direct connect to EPPM via WAN
- Administration and Global data removed for P6 Pro
- Latency increases as users increase

- + Free
- + Full function of P6 Pro
- Can be difficult to install
- Single database

- + Full function of P6 Professional
- + Free
- + Multiple databases
- Manual, complex installation
- Manually configure "Alias's"

- + Free
- + Easy installation
- + Multiple databases
- + Share db: copy from Documents folder
- No ClaimDigger\*
- No Check-In/Check-out\*
- No XML import\*
- No Update Baseline\*
- No Administration for multiple users

\* Additional functionality expected to be re-added through Service Packs.



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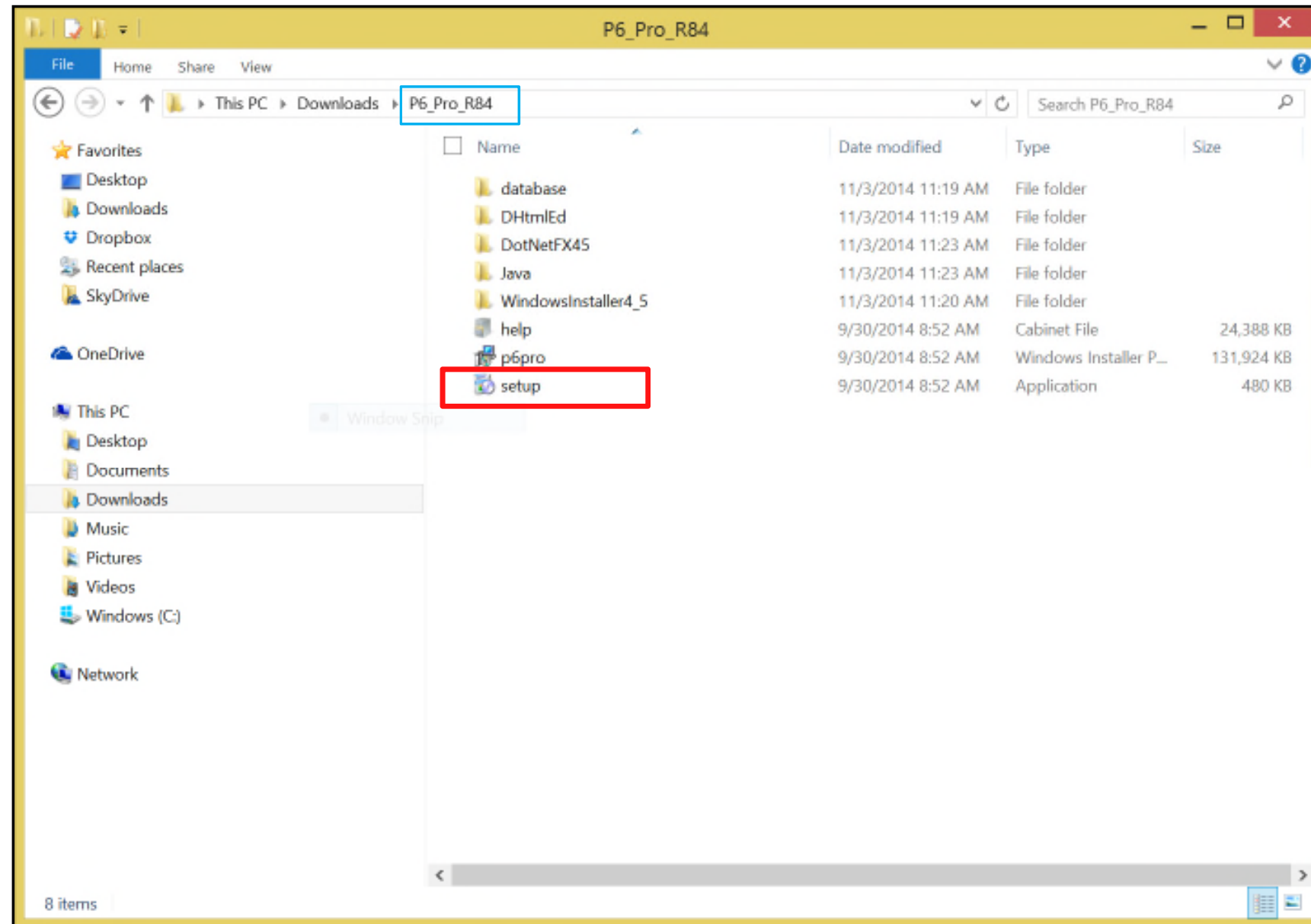
# Installing P6 Pro 8.4 with Oracle SQLite

- Download Software
  - [www.edelivery.oracle.com](http://www.edelivery.oracle.com)
  - Oct 2014 DRM Tech Webinar: [www.drmcnatty.com/Webinars/14Oct/](http://www.drmcnatty.com/Webinars/14Oct/)
- Unzip into folders
- Typical Installation uses Oracle SQLite
- Oracle SQLite does limit some P6 functionality



# Installing P6 Pro with Oracle SQLite

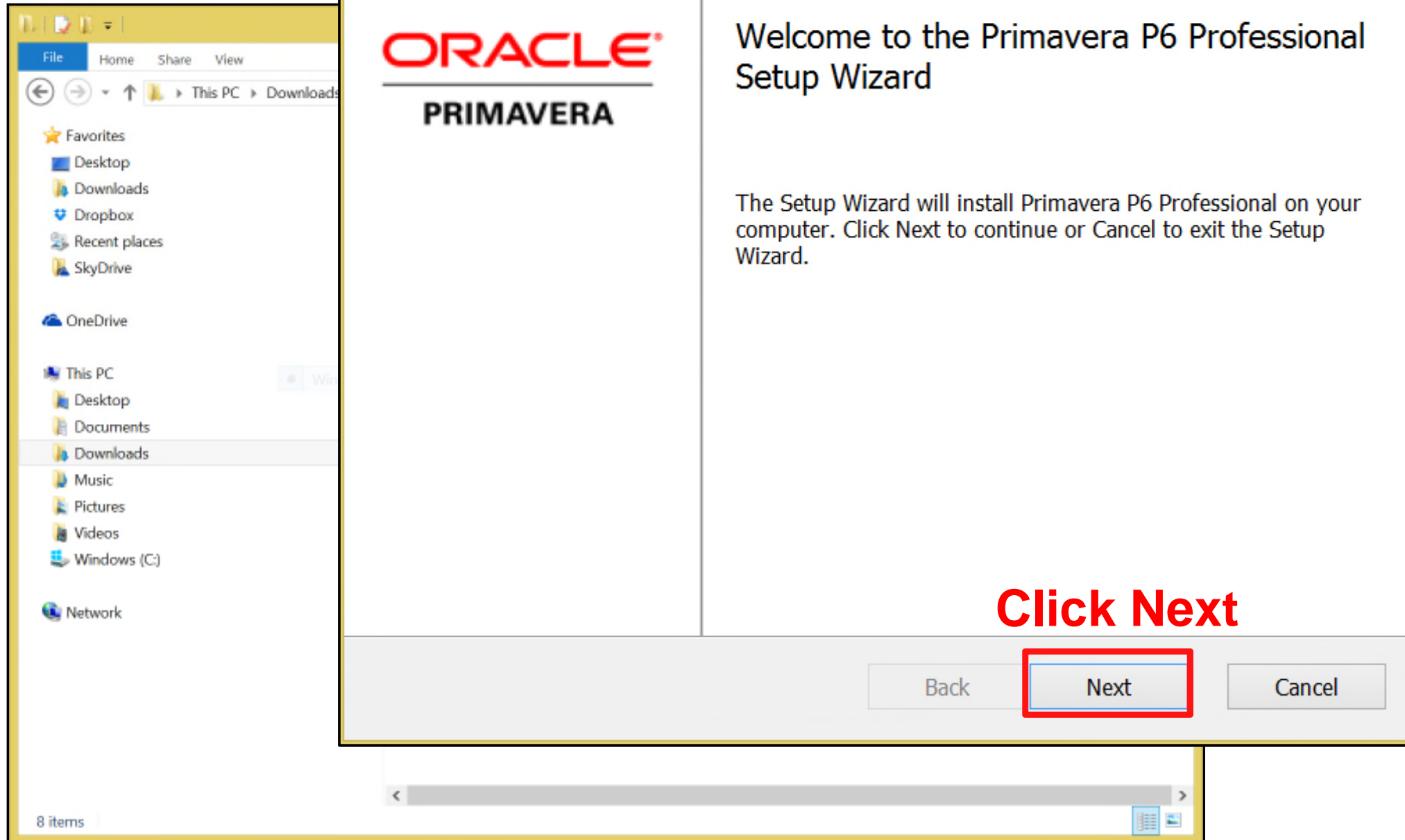
Go to the P6 Pro software folder and click on “Setup”





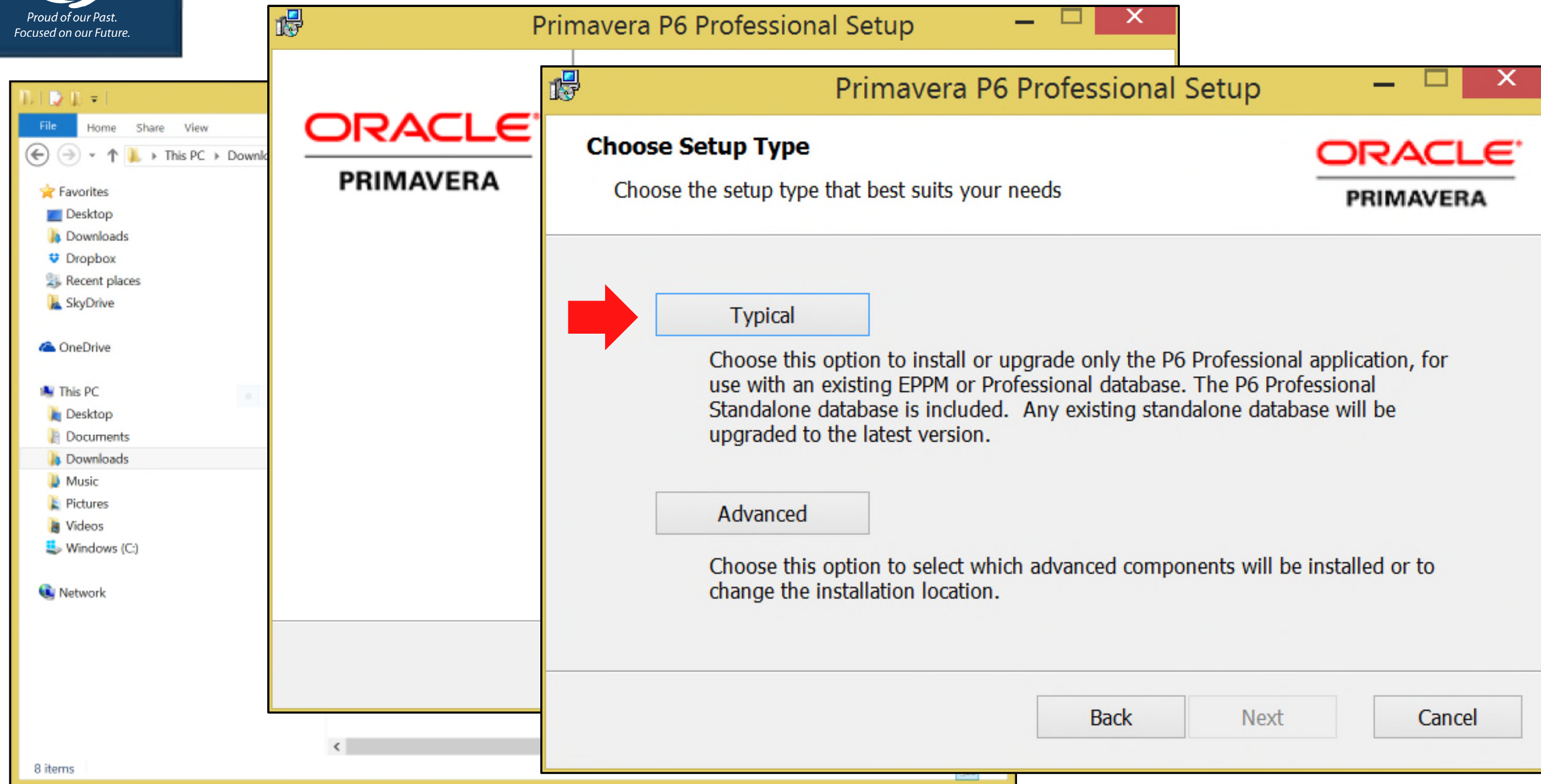


# Installing P6 Pro with Oracle SQLite



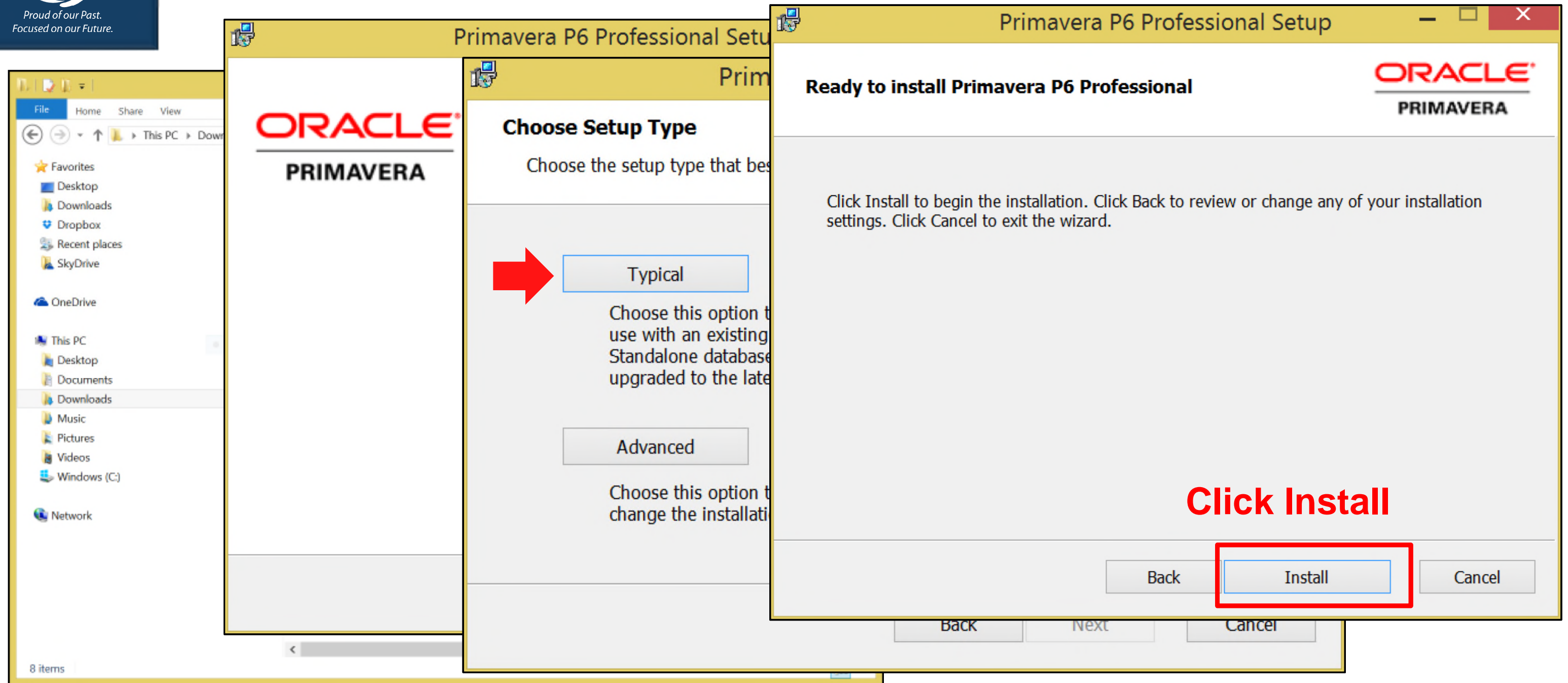


# Installing P6 Pro with Oracle SQLite





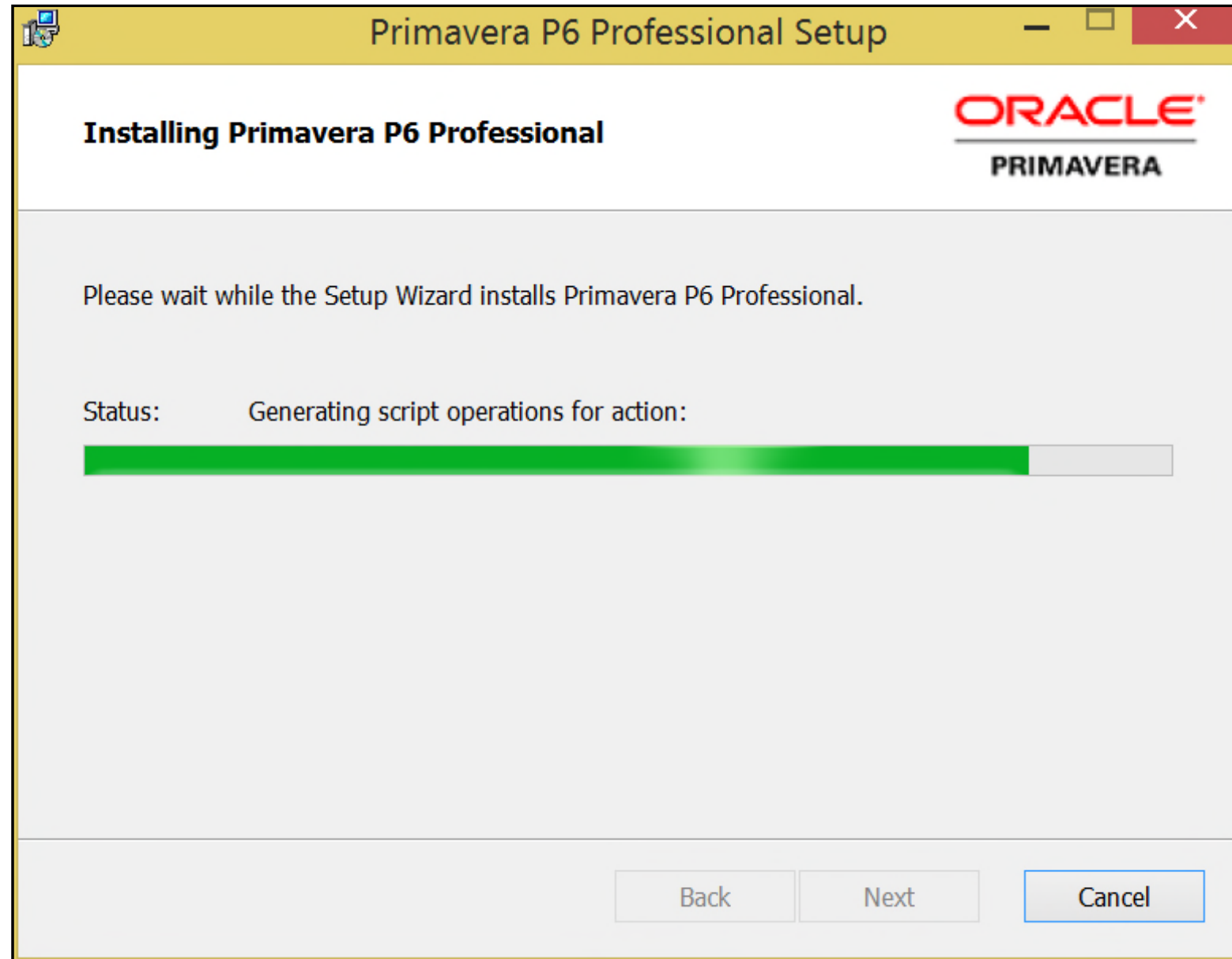
# Installing P6 Pro with Oracle SQLite





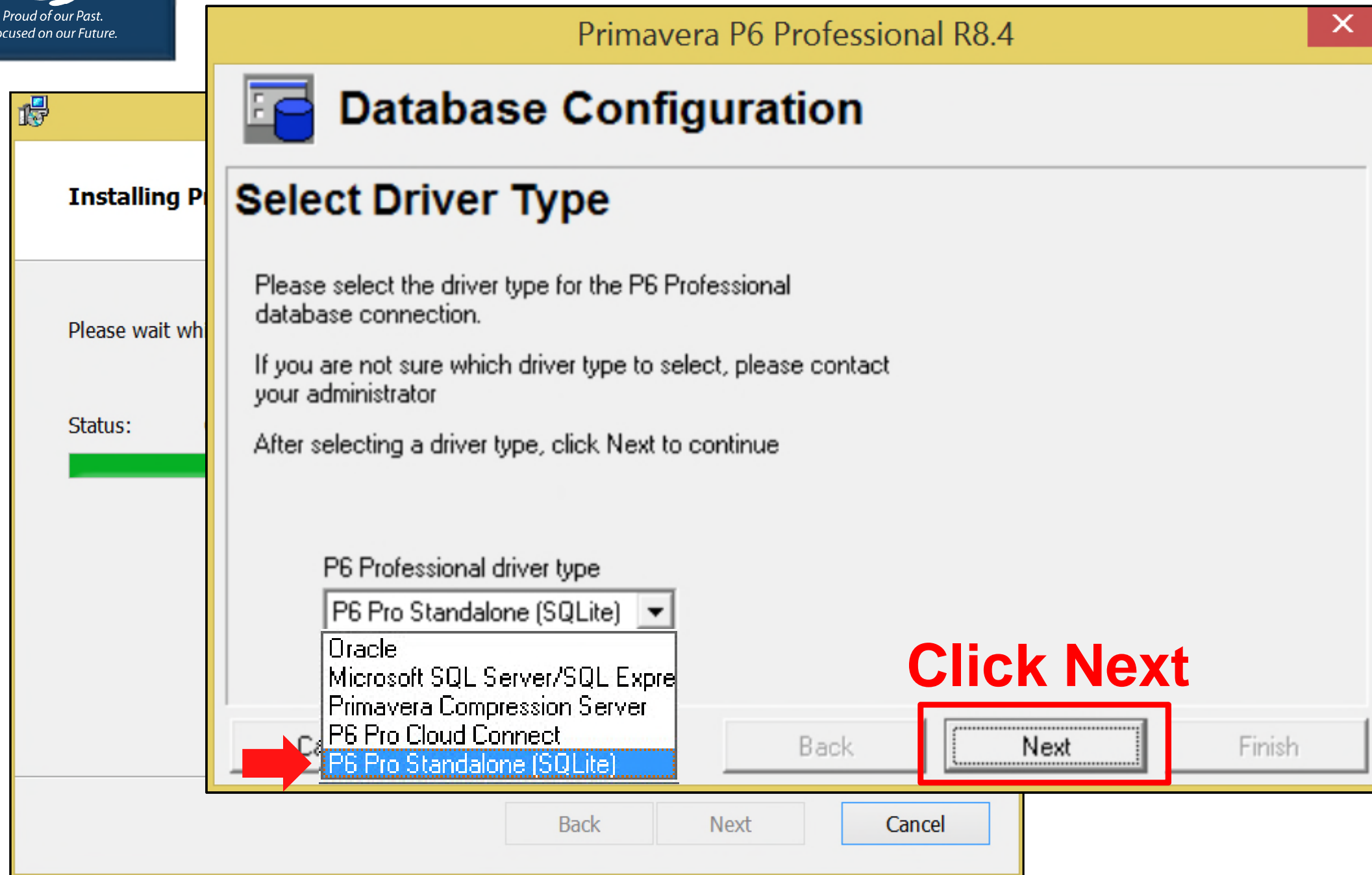
# Installing P6 Pro with Oracle SQLite

Installation process runs...





# Installing P6 Pro with Oracle SQLite







# Installing P6 Pro with Oracle SQLite

Primavera P6 Professional R8.4

**Database Configuration**

**Select Driver Type**

Please select the driver type for the P6 Professional database connection.

If you are not sure which driver type to select, contact your administrator.

After selecting a driver type, click Next to continue.

P6 Professional driver type

- P6 Pro Standalone (SQLite)
- Oracle
- Microsoft SQL Server/SQL Express
- Primavera Compression Server
- P6 Pro Cloud Connect
- P6 Pro Standalone (SQLite)

Cancel Back

Primavera P6 Professional R8.4

**Database Configuration**

**Configure P6 Professional Standalone Connection**

You can add a new standalone database and connection or add a connection to an existing standalone database.

Database Alias

PMDB

☐ Add a connection to an existing standalone database

☒ Add a new standalone database and connection

Cancel Back Next Finish

**Click Next**





# Installing P6 Pro with Oracle SQLite

Primavera P6 Professional R8.4

**Database Configuration**

**Select Driver Type**

Please select the driver type for the P6 Pro database connection.

If you are not sure which driver type to select, click the Help button for more information.

After selecting a driver type, click Next to continue.

P6 Professional driver type

- P6 Pro Standalone (SQLite)
- Oracle
- Microsoft SQL Server/SQL Express
- Primavera Compression Server
- P6 Pro Cloud Connect
- P6 Pro Standalone (SQLite)

Back

Primavera P6 Professional R8.4

**Database Configuration**

Enter the admin username and password for the database. The admin user is the single user with access to the standalone database.

Database Alias

PMDB

Login Name

admin

Personal name

SYSTEM

Enter new password

xxxxxx

Confirm new password

xxxxxx

Cancel

Back

**Click Next**

Next

Finish



# Installing P6 Pro with Oracle SQLite

Primavera P6 Professional R8.4

## Database Configuration

Enter the database file name to be added with this connection

Database Alias  
PMDb

User name  
admin

File Name  
C:\Users\Donald\Documents\PPMDBSQLite.db

☒ Load Sample Data

Cancel Back Next Finish

**Stand-alone database file**



# Installing P6 Pro with Oracle SQLite

Primavera P6 Professional R8.4

## Database Configuration

**Connection Successful!**

Congratulations! The database connection was successful. You may now return to your application by selecting Finish.

Database alias  
PMDB

**Click Back**

Cancel Back Next Finish

Enter the database file name  
Database Alias  
PMDB  
User name  
admin  
File Name  
C:\Users\Donald\Documents\Primavera P6 Professional R8.4\PMDB  
☒ Load Sample Data  
Cancel Back Next Finish



# Installing P6 Pro with Oracle SQLite

Primavera P6 Professional R8.4

**Database Connection Success**

Congratulations! The database connection has been successfully established. Selecting Finish.

Database alias: PMDB

Cancel

Back

Primavera P6 Professional R8.4

**Database Configuration**

Enter the database file name to be added with this connection

Database Alias: New\_Connection\_1

User name: admin

File Name: C:\Users\Donald\Documents\PPMDBSQLite1.db

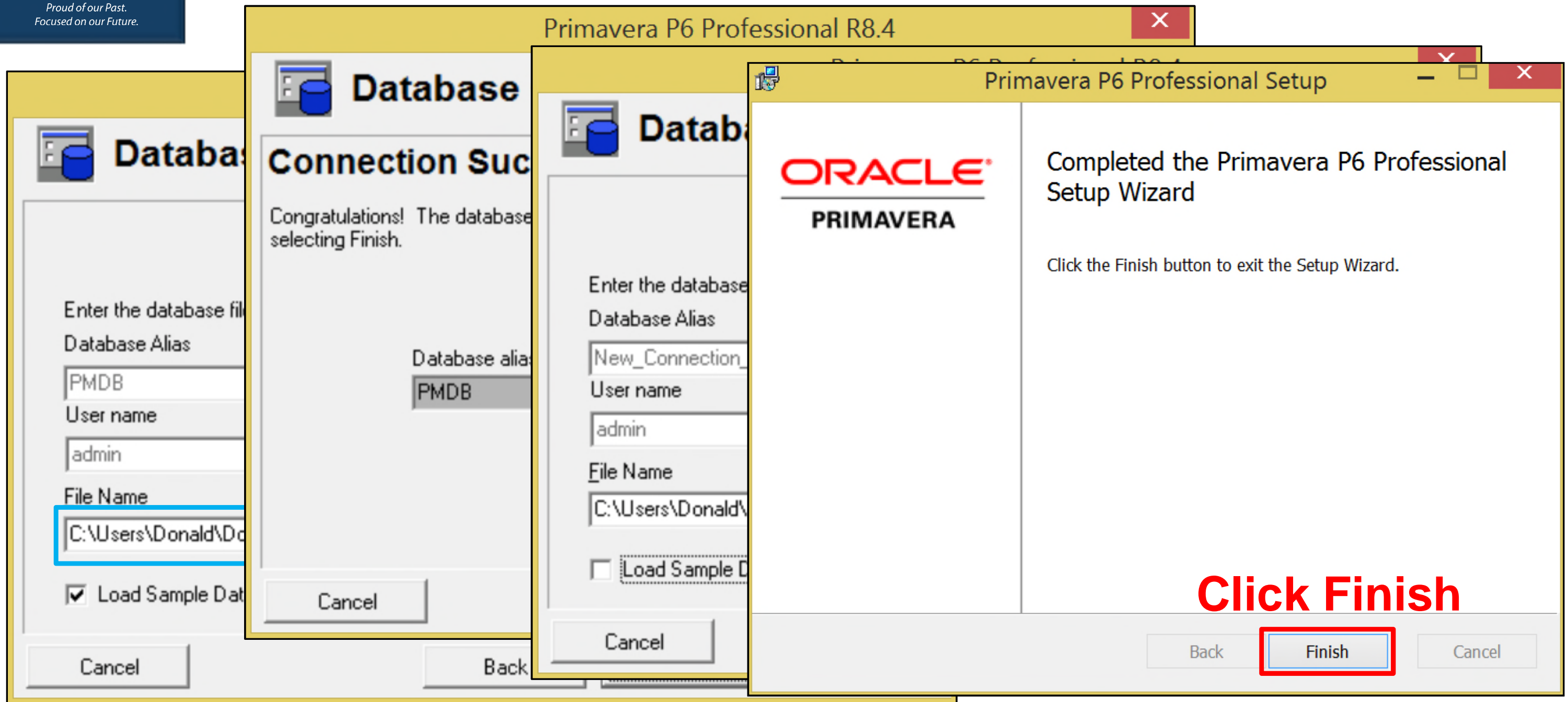
☐ Load Sample Data

Click Next

Cancel Back Next Finish



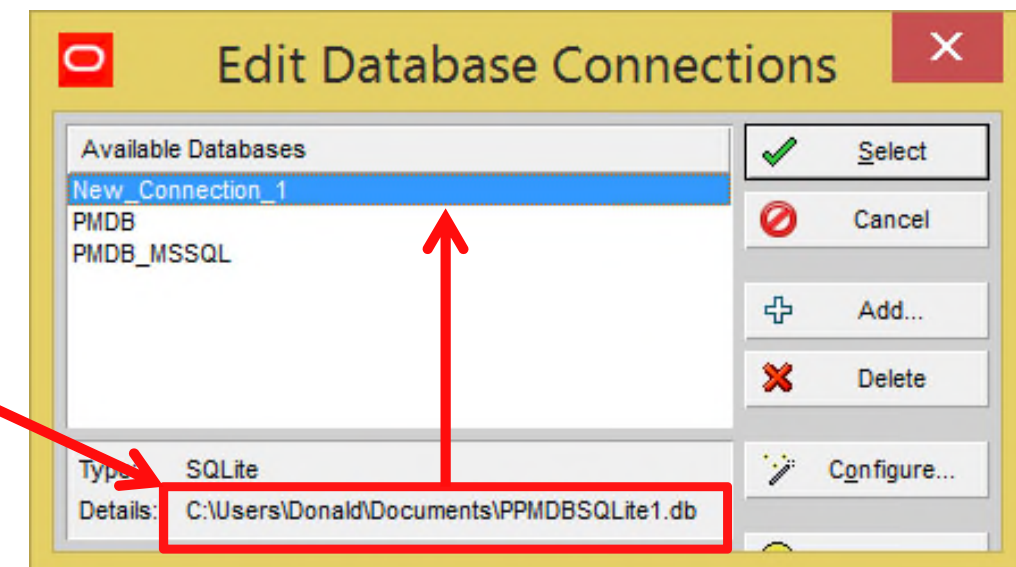
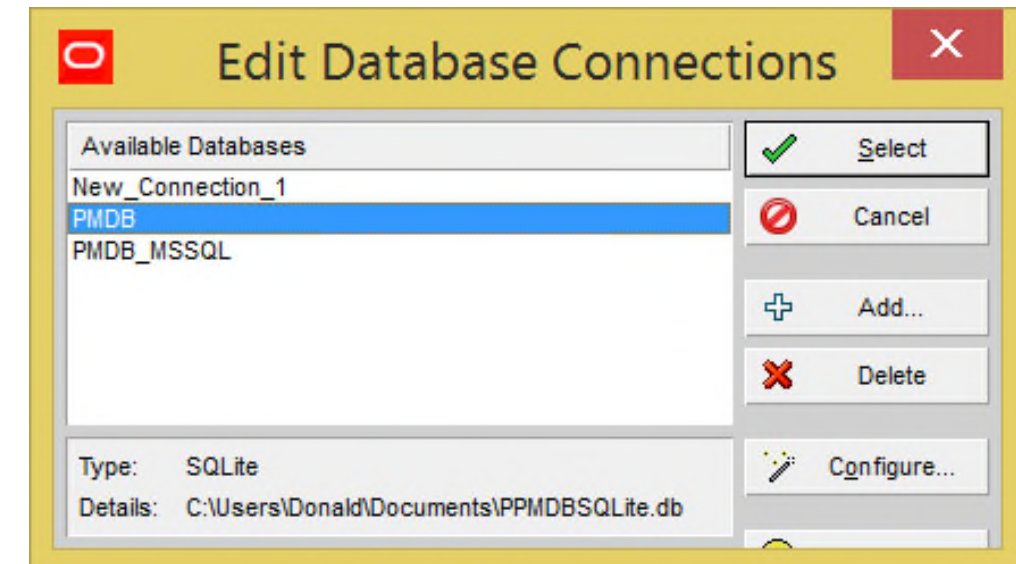
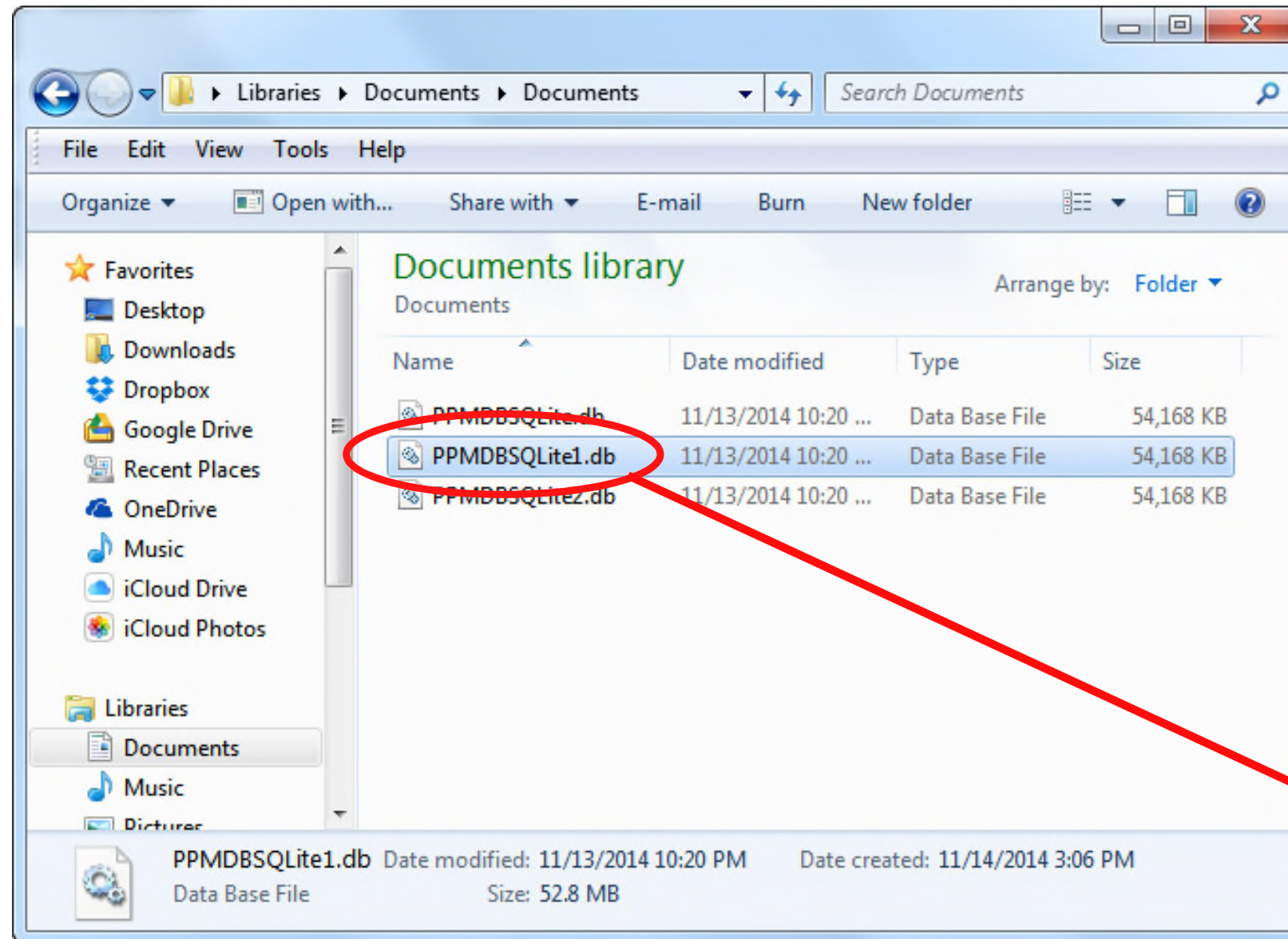
# Installing P6 Pro with Oracle SQLite





# Installing P6 Pro with Oracle SQLite

SQLite supports multiple standalone databases

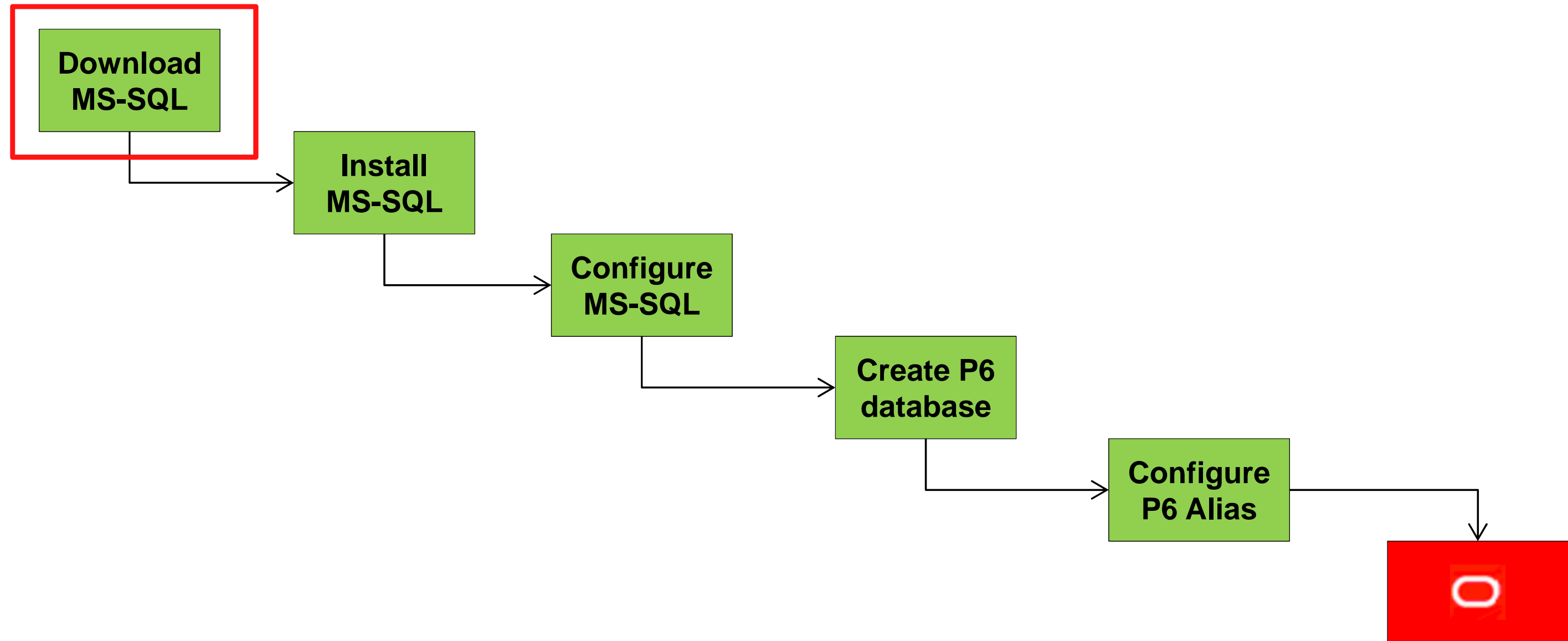






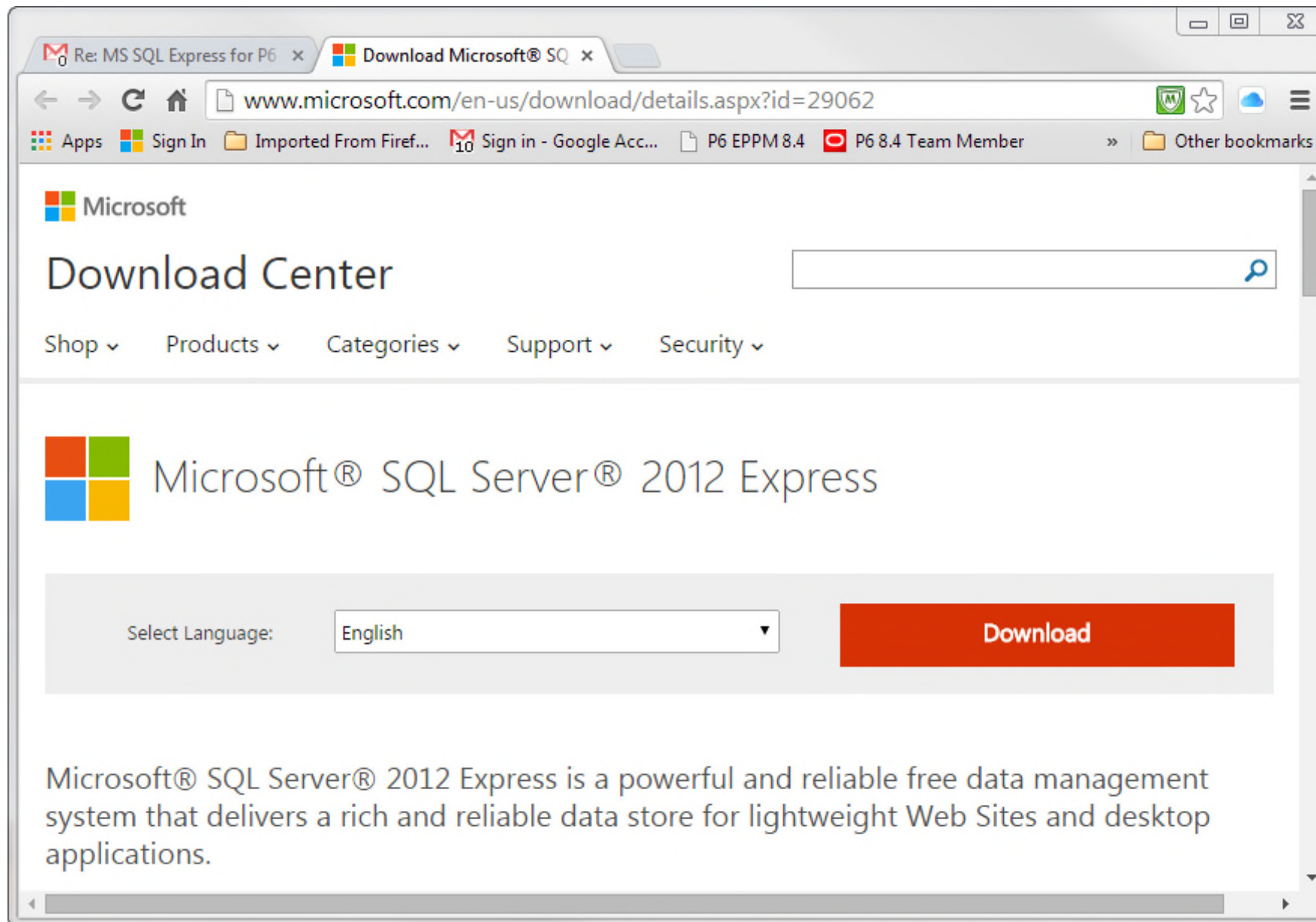
# Download and install MS-SQL database for P6

Five distinct steps are required



# Download/Install MS SQL Express 2012

<http://www.microsoft.com/en-us/download/details.aspx?id=29062>

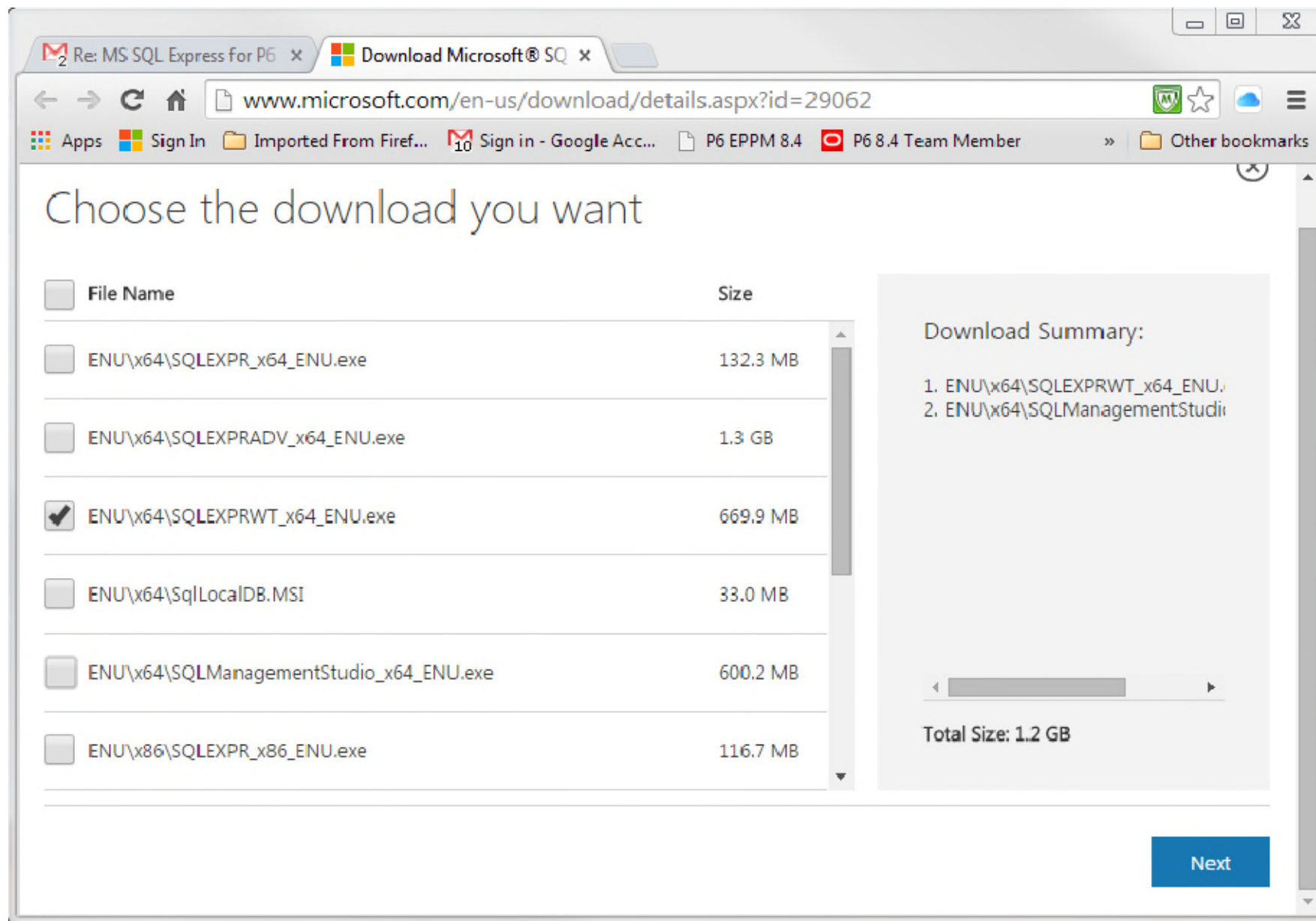


- Click “Download”
- MS SQL Express is free.



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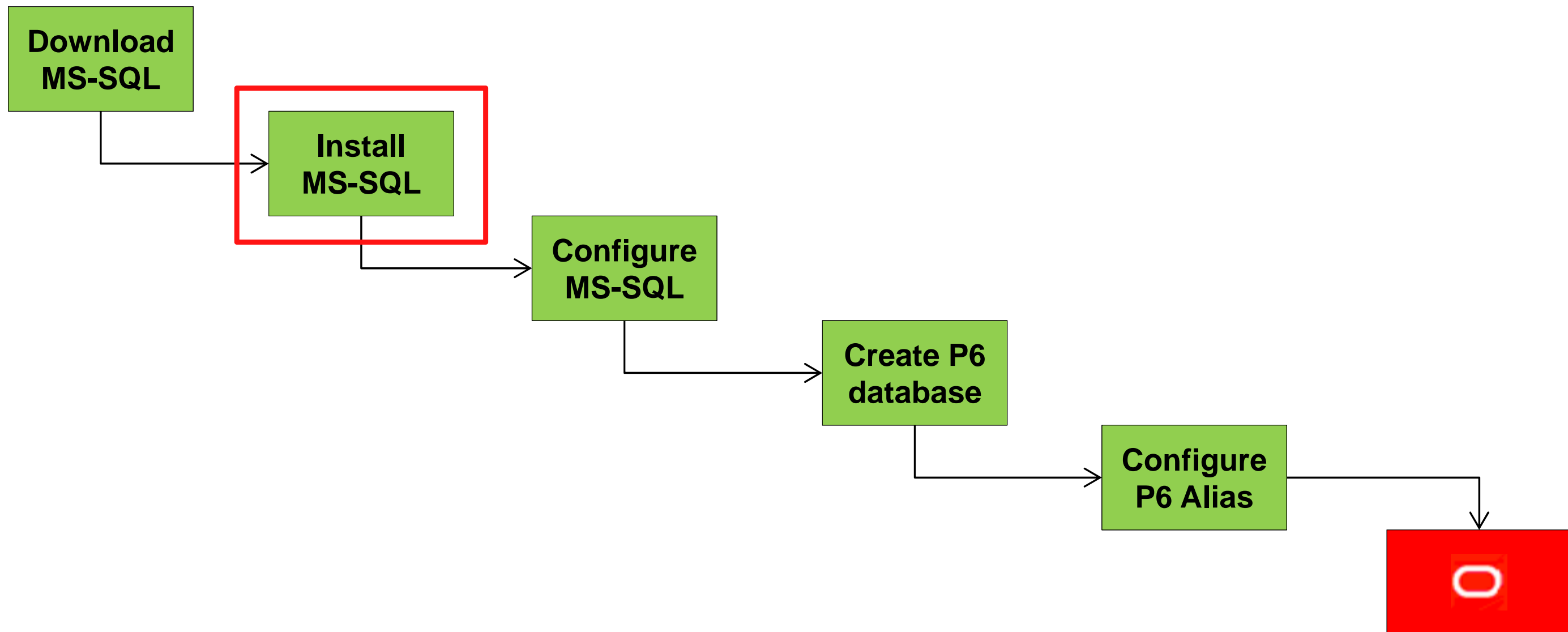
# Download MS-SQL Express 2012



- Download the file version with tools (“WT”).

# Download and install MS-SQL database for P6

Install the database next

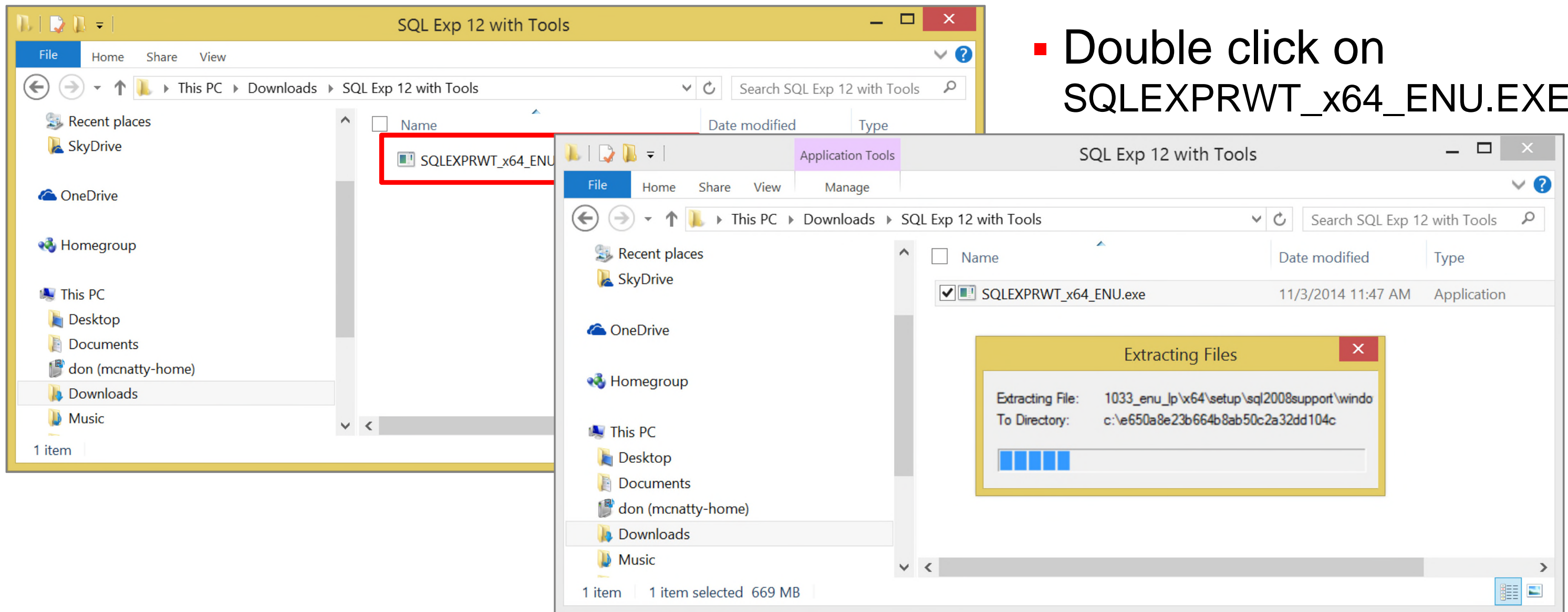




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# Install MS-SQL Express 2012

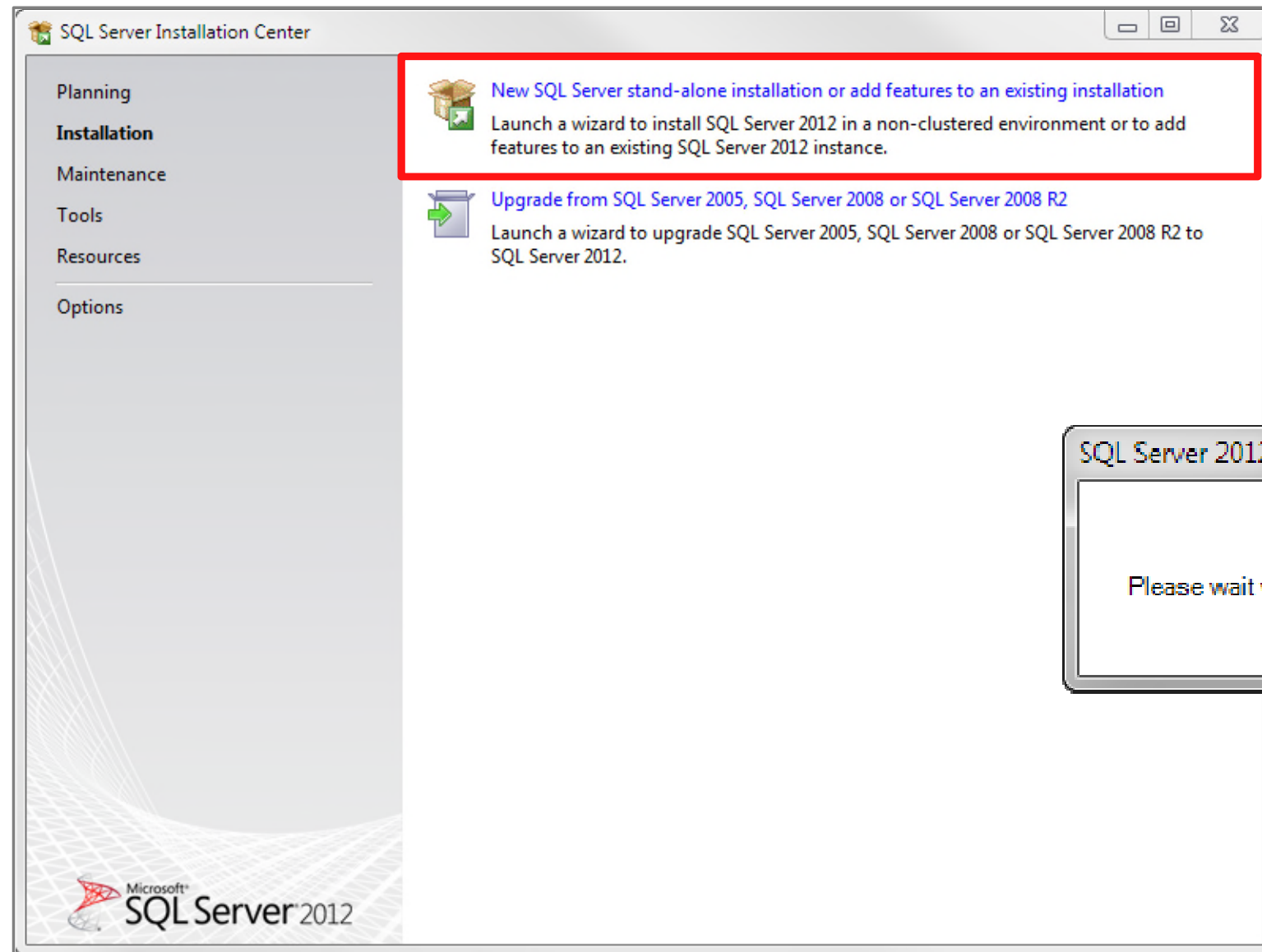
- Double click on SQLEXPRTW\_x64\_ENU.EXE.



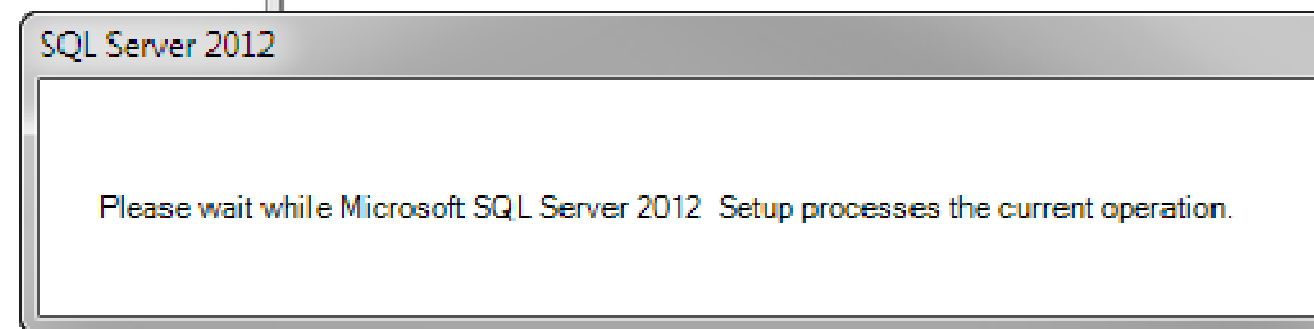


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# Install MS-SQL Express 2012



- Click to do a stand alone install of MS-SQL server.







# Install MS-SQL Express 2012

As always... you have to accept the license terms to move on

SQL Server 2012 Setup

**License Terms**

To install SQL Server 2012, you must accept the Microsoft Software License Terms.

**MICROSOFT SOFTWARE LICENSE TERMS**

**MICROSOFT SQL SERVER 2012 EXPRESS**

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services.

☒ I accept the license terms.

☐ Send feature usage data to Microsoft. Feature usage data includes information about your hardware configuration and how you use SQL Server and its components.

[See the Microsoft SQL Server 2012 Privacy Statement for more information.](#)

[Copy](#) [Print](#)

[< Back](#) [Next >](#) [Cancel](#)

Click Next

SQL Server 2012 Setup

**Product Updates**

Always install the latest updates to enhance your SQL Server security and performance.

☒ Include SQL Server product updates

Name	Size (MB)	More Information
SQL Server 2012 SP1 GDR Setup ...	26	<a href="#">KB 2793634</a>

1 updates (26 MB) found online.  
The Setup updates (26 MB) will be installed when you click Next.

[Read our privacy statement online](#)  
[Learn more about SQL Server product updates](#)

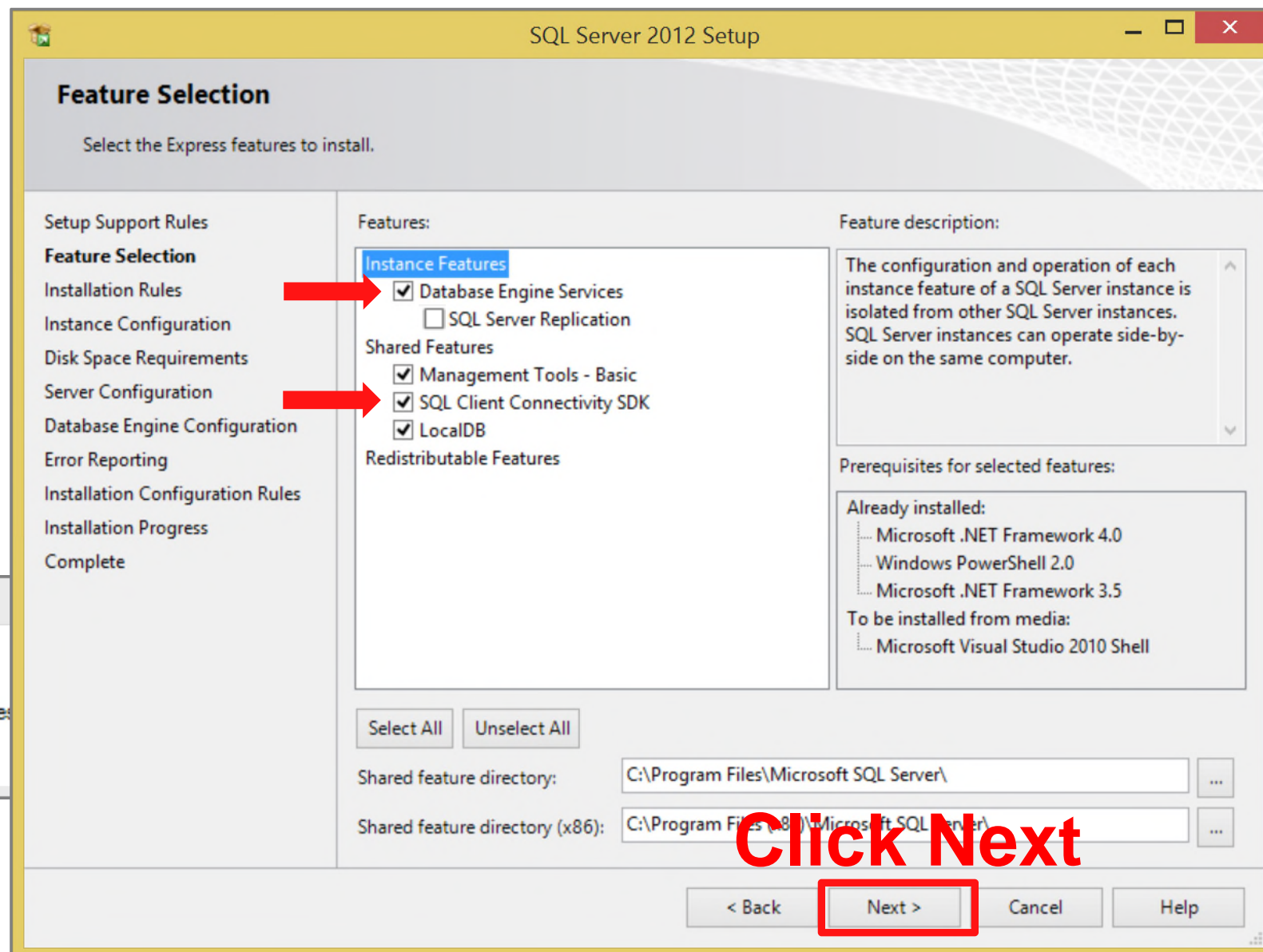
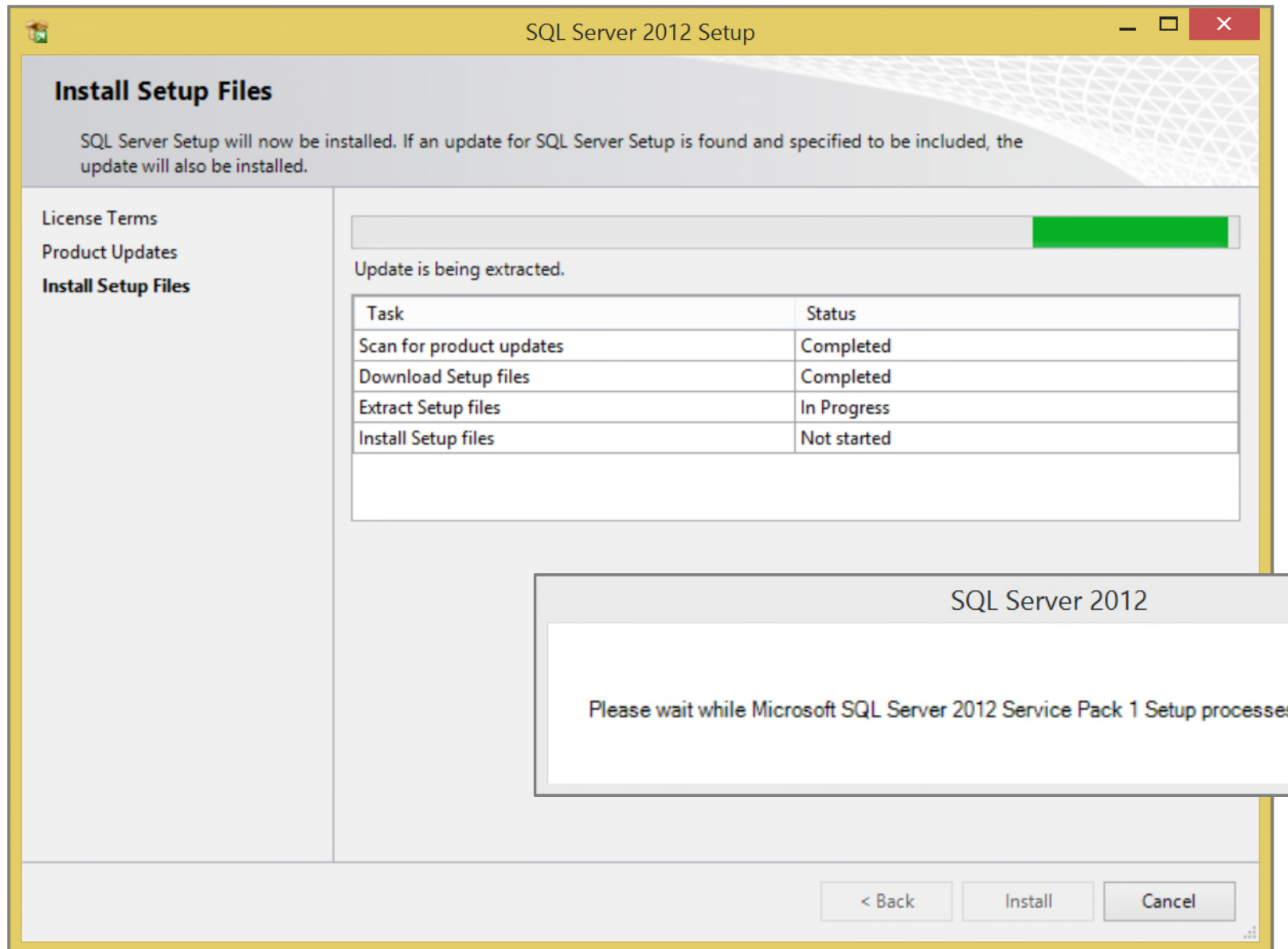
[< Back](#) [Next >](#) [Cancel](#)

Click Next



# Install MS-SQL Express 2012

The server installs...

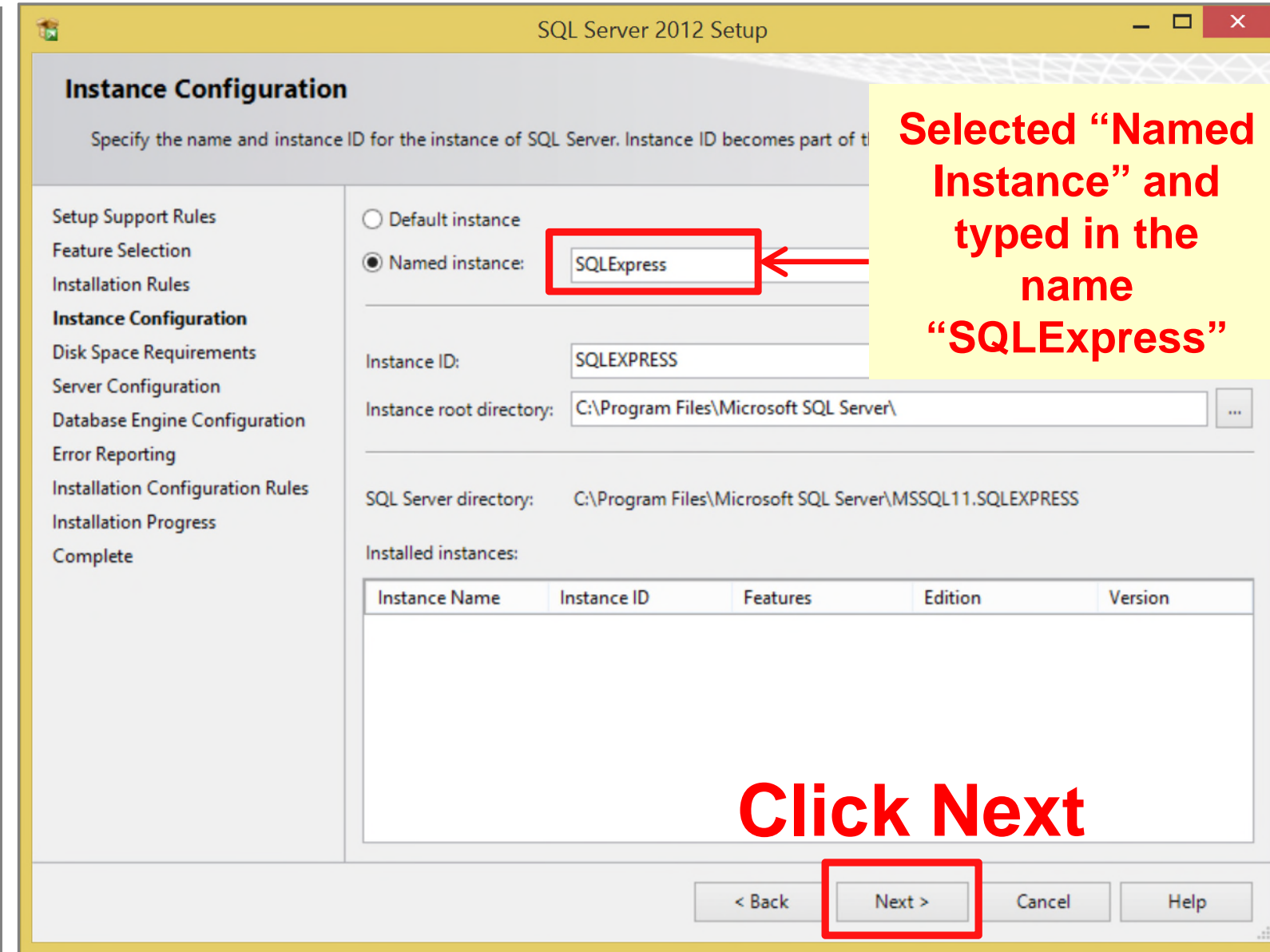
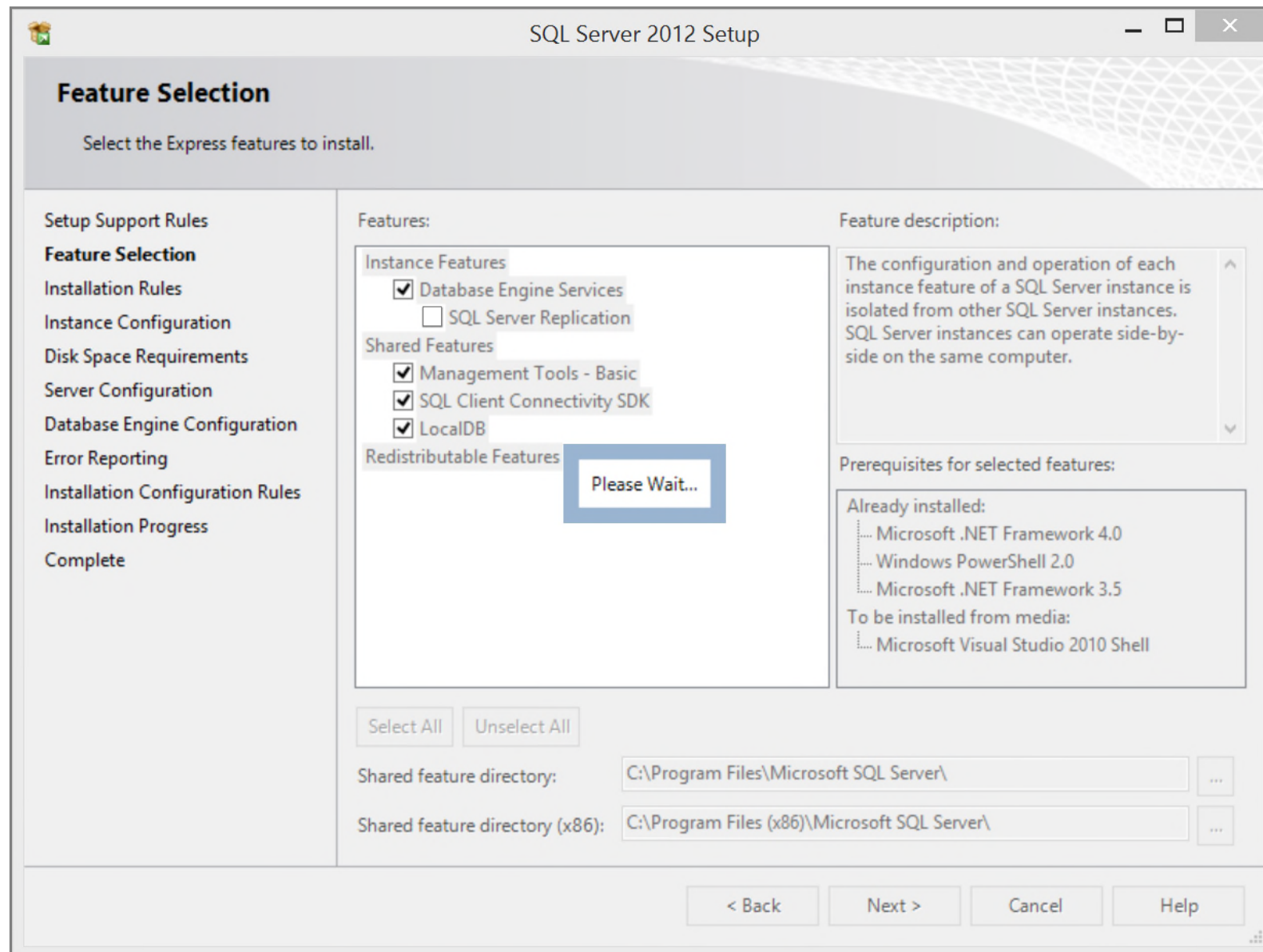






# Install MS-SQL Express 2012

The installation runs...





# Install MS-SQL Express 2012

Installation continues...

SQL Server 2012 Setup

### Instance Configuration

Specify the name and instance ID for the instance of SQL Server. Instance ID becomes part of the installation path.

Setup Support Rules  
Feature Selection  
Installation Rules  
**Instance Configuration**  
Disk Space Requirements  
Server Configuration  
Database Engine Configuration  
Error Reporting  
Installation Configuration Rules  
Installation Progress  
Complete

☐ Default instance  
☒ Named instance:

Instance ID:

Instance root directory:

SQL Server directory:  Microsoft SQL Server\MSSQL11.SQLEXPRESS

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
---------------	-------------	----------	---------	---------

< Back   Next >   Cancel   Help

SQL Server 2012 Setup

### Server Configuration

Specify the service accounts and collation configuration.

Setup Support Rules  
Feature Selection  
Installation Rules  
Instance Configuration  
Disk Space Requirements  
**Server Configuration**  
Database Engine Configuration  
Error Reporting  
Installation Configuration Rules  
Installation Progress  
Complete

Service Accounts   Collation

Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Database Engine	<input type="text" value="sa\MSSQL\$SQLEXPRESS"/>		Automatic
SQL Server Browser	NT AUTHORITY\LOCAL ...		Disabled

**I accepted the default value**

**Click Next**

< Back   **Next >**   Cancel   Help





# Install MS-SQL Express 2012

Be sure to write down your password...

SQL Server 2012 Setup

**Database Engine Configuration**

Specify Database Engine authentication security mode, administrators and data directories.

Setup Support Rules  
Feature Selection  
Installation Rules  
Instance Configuration  
Disk Space Requirements  
Server Configuration  
**Database Engine Configuration**  
Error Reporting  
Installation Configuration Rules  
Installation Progress  
Complete

Server Configuration | Data Directories | User Instances | FILESTREAM

Specify the authentication mode and administrators for the Database Engine.

Authentication Mode

☐ Windows authentication mode

☒ Mixed Mode (SQL Server authentication and Windows authentication)

Specify the password for the SQL Server system administrator (sa) account.

Enter password: .....

Confirm password: .....

Specify SQL Server administrators

DONSSURFACEPRO\Donald (Donald)

SQL Server administrators have unrestricted access to the Database Engine.

Add Current User | Add... | Remove

< Back | **Next >** | Cancel | Help

**Click Next**

SQL Server 2012 Setup

**Error Reporting**

Help Microsoft improve SQL Server features and services.

Setup Support Rules  
Feature Selection  
Installation Rules  
Instance Configuration  
Disk Space Requirements  
Server Configuration  
Database Engine Configuration  
**Error Reporting**  
Installation Configuration Rules  
Installation Progress  
Complete

Specify the information that you would like to automatically send to Microsoft to improve future releases of SQL Server. These settings are optional. Microsoft treats this information as confidential. Microsoft may provide updates through Microsoft Update to modify feature usage data. These updates might be downloaded and installed on your machine automatically, depending on your Automatic Update settings.

[See the Microsoft SQL Server 2012 Privacy Statement for more information.](#)

[Read more about Microsoft Update and Automatic Update.](#)

☐ Send Windows and SQL Server Error Reports to Microsoft or your corporate report server. This setting only applies to services that run without user interaction.

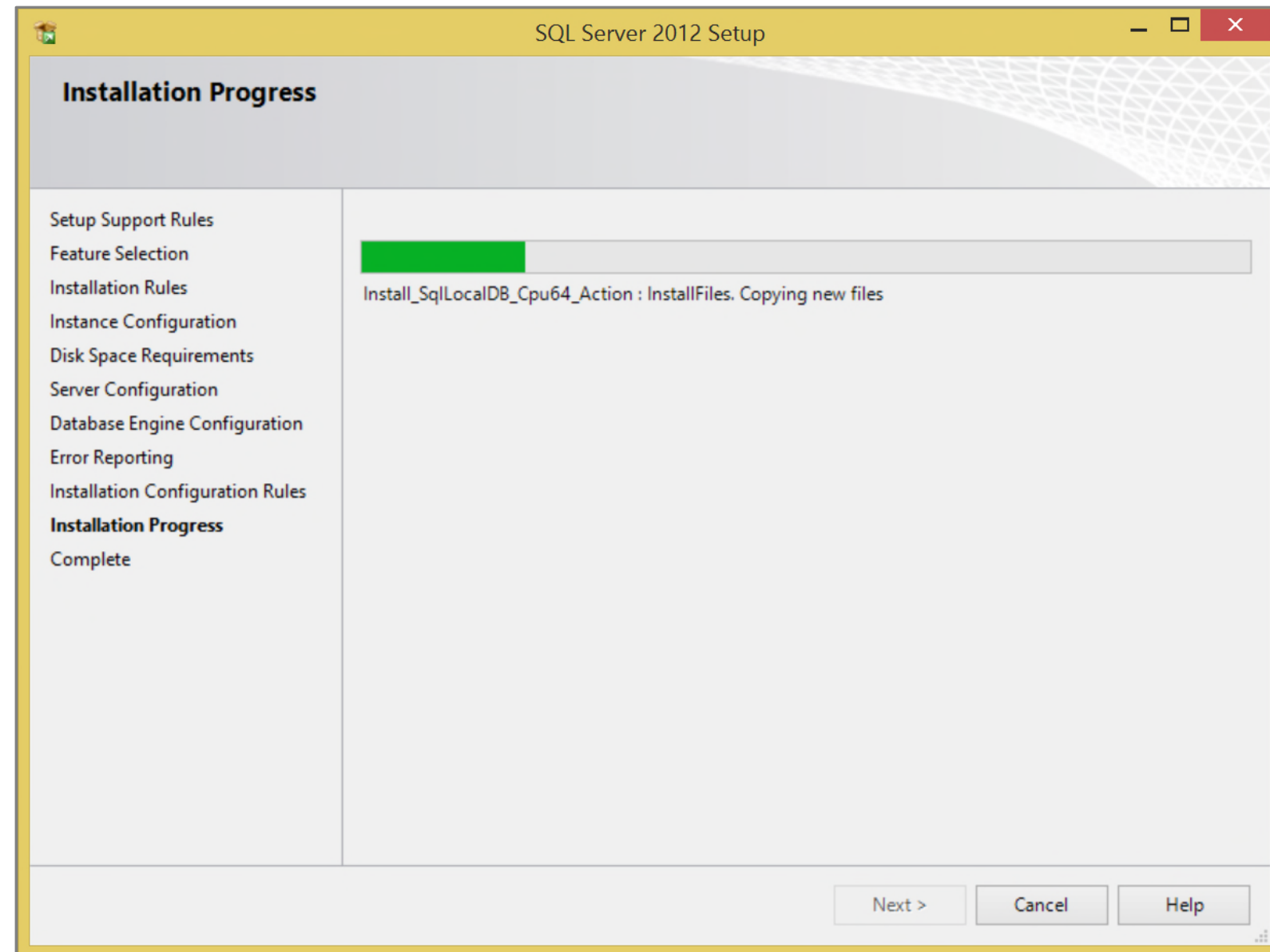
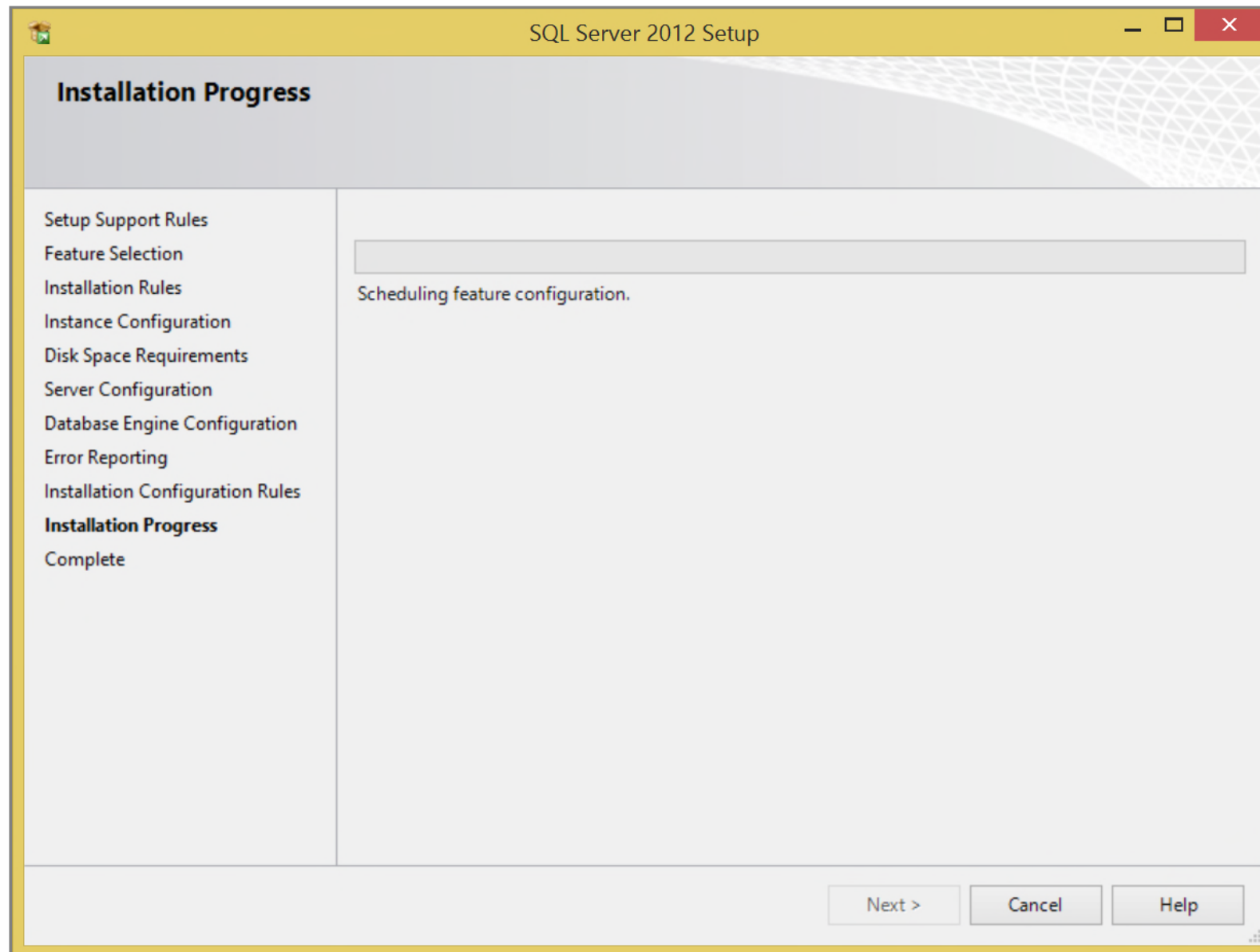
< Back | **Next >** | Cancel | Help

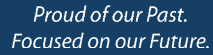
**Click Next**



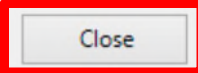
# Install MS-SQL Express 2012

Installation process continues...





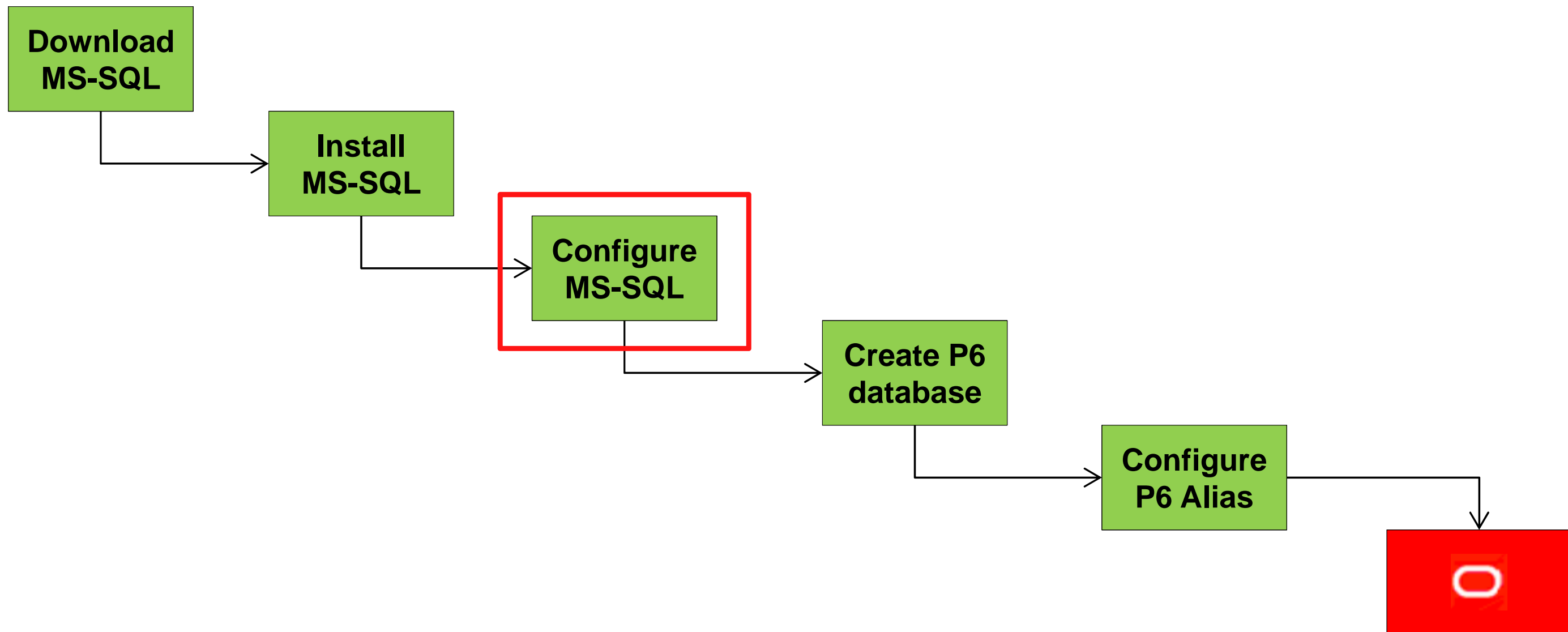
# Installation complete.





# Download and install MS-SQL database for P6

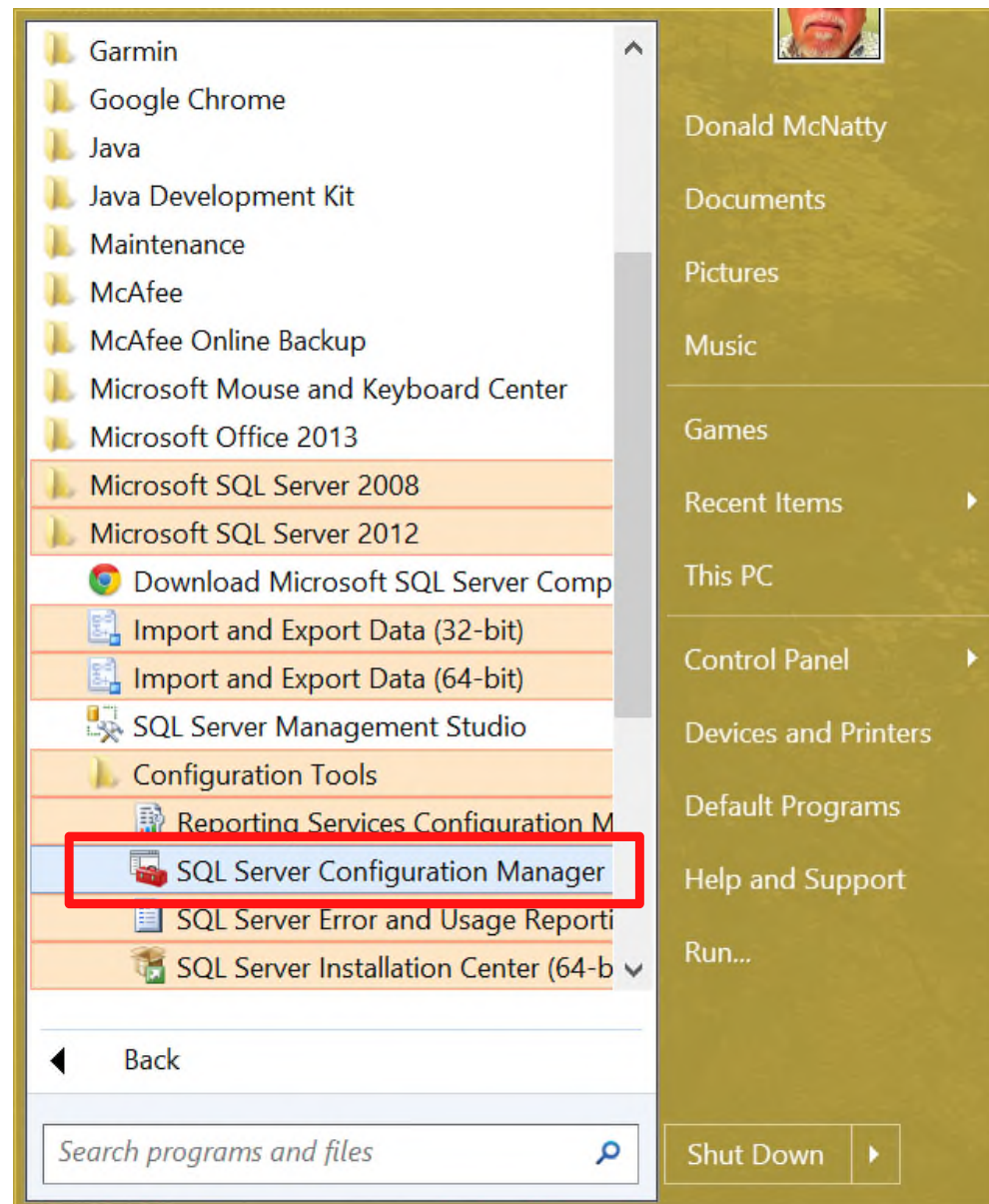
Then you need to configure the MS-SQL database



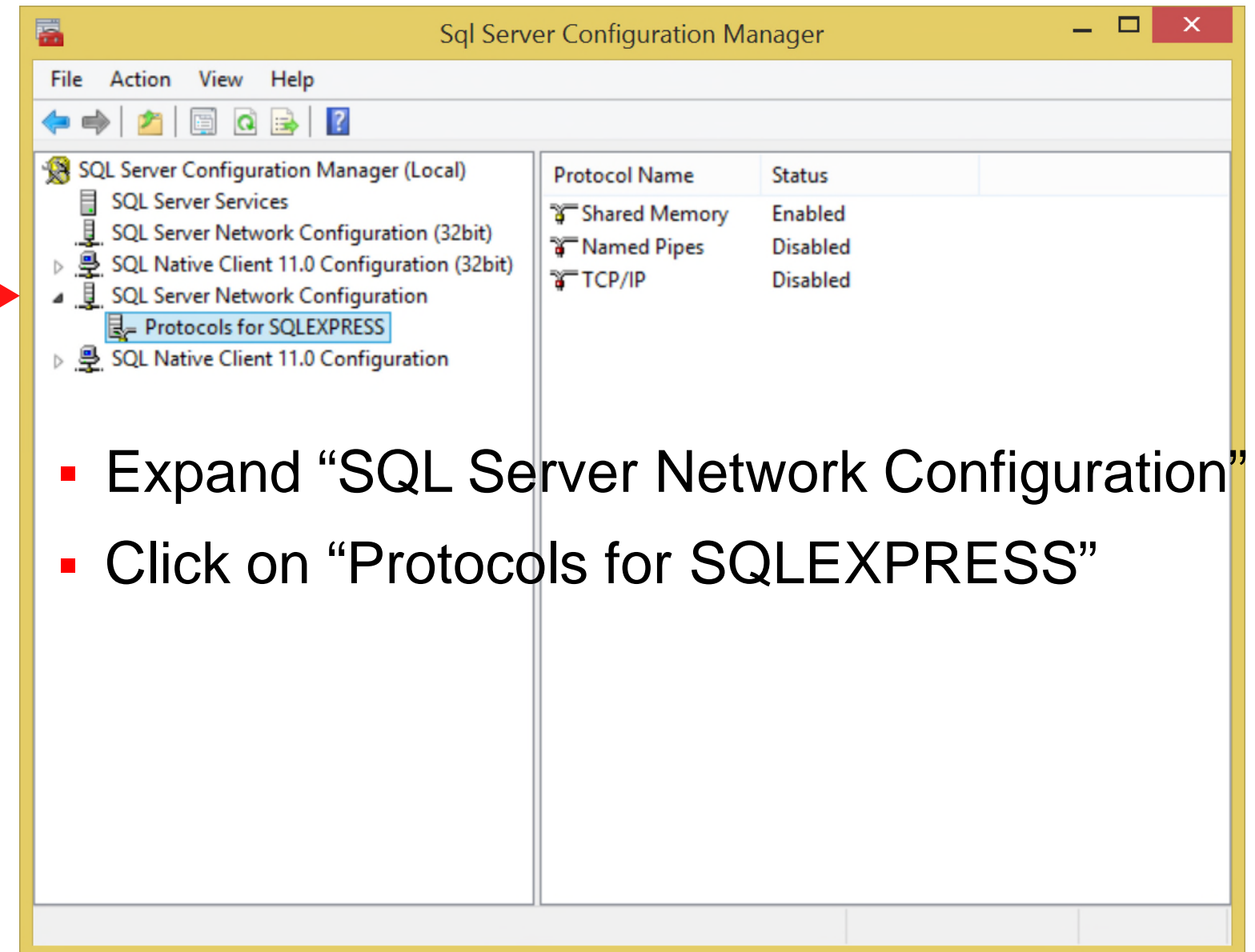


# Configure MS-SQL

## Browse to SQL Configuration Manager



Double  
Click to  
open

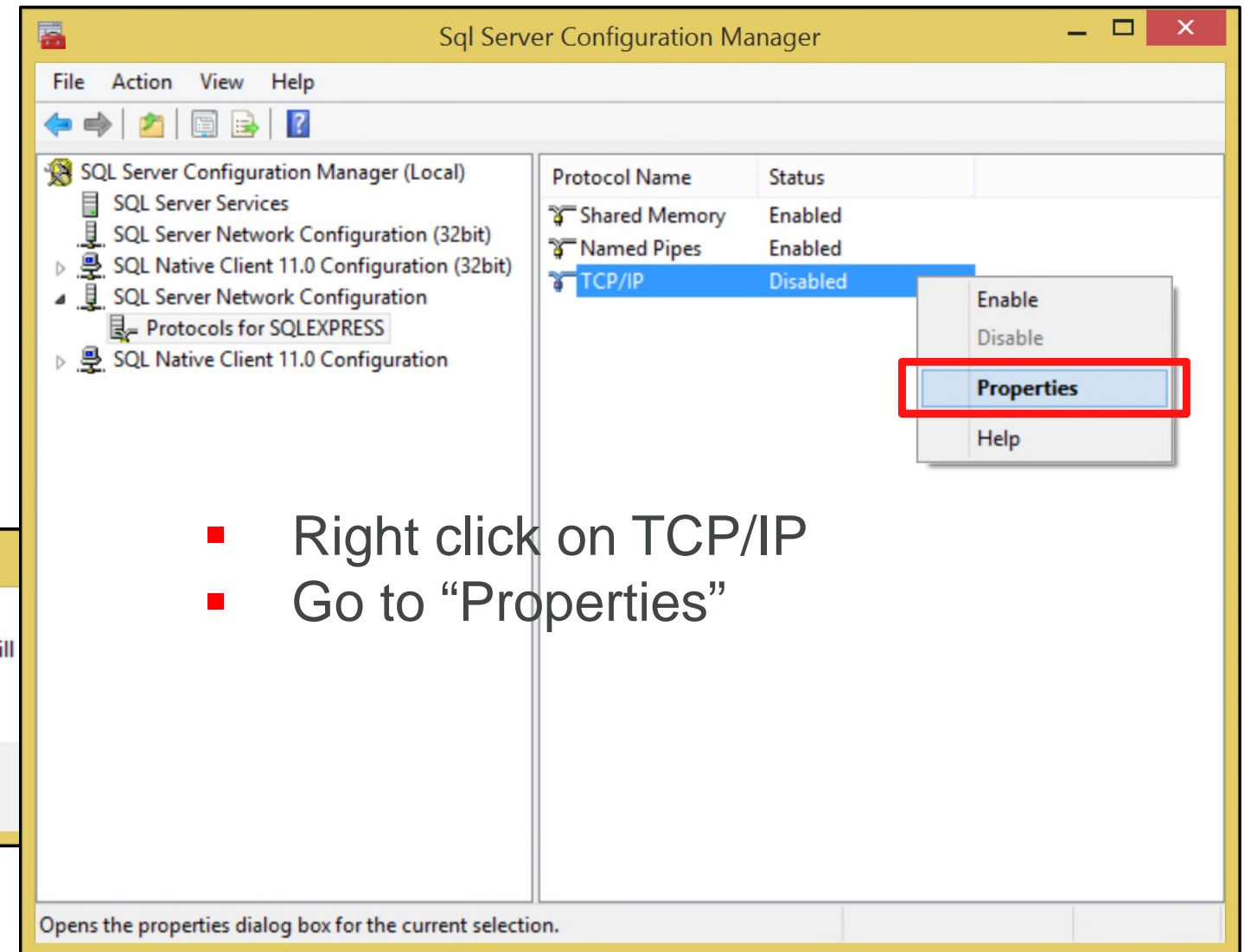
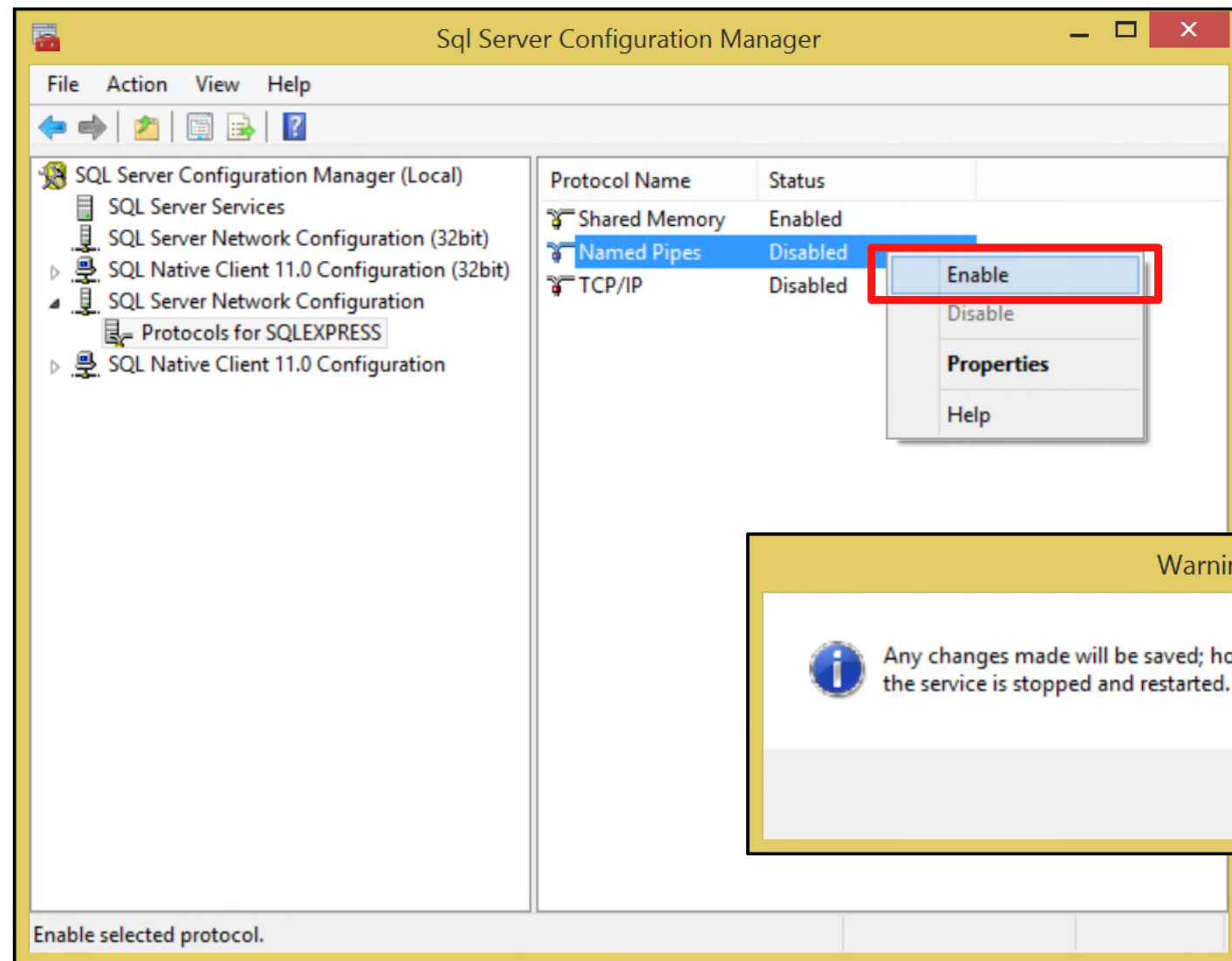


- Expand “SQL Server Network Configuration”
- Click on “Protocols for SQLEXPRESS”



# Configure MS-SQL

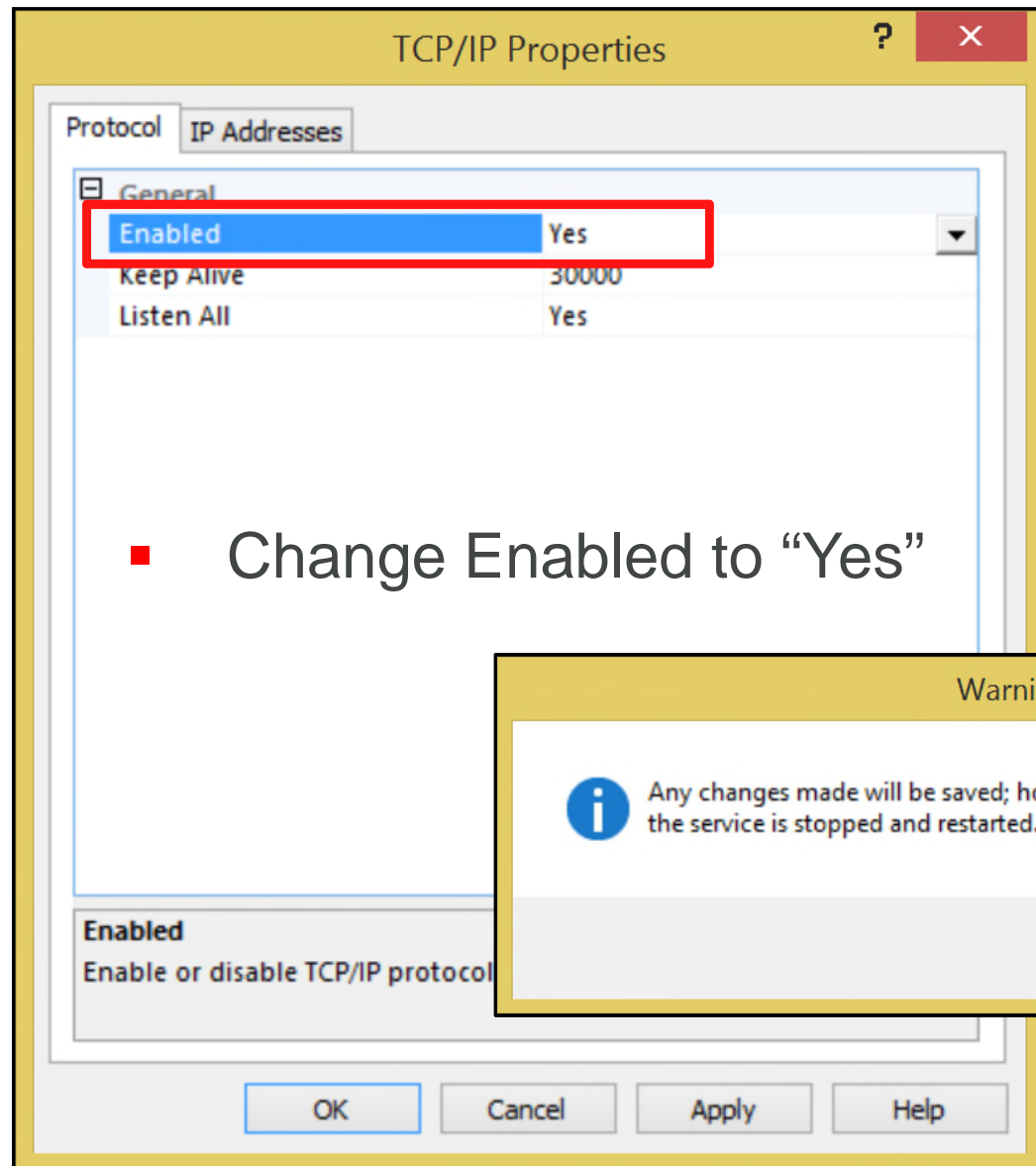
Right click on “Named Pipes” and click “Enable”



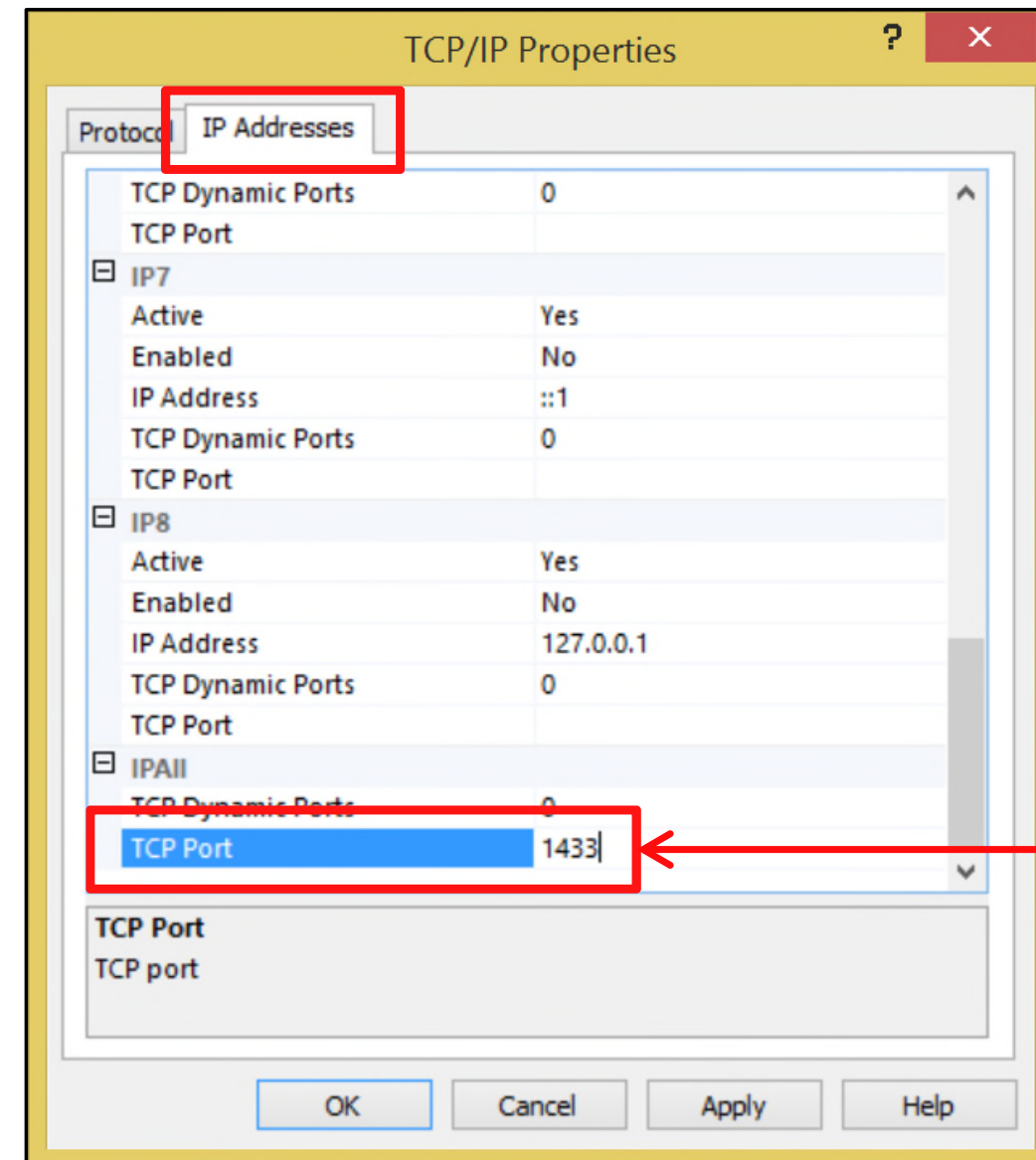
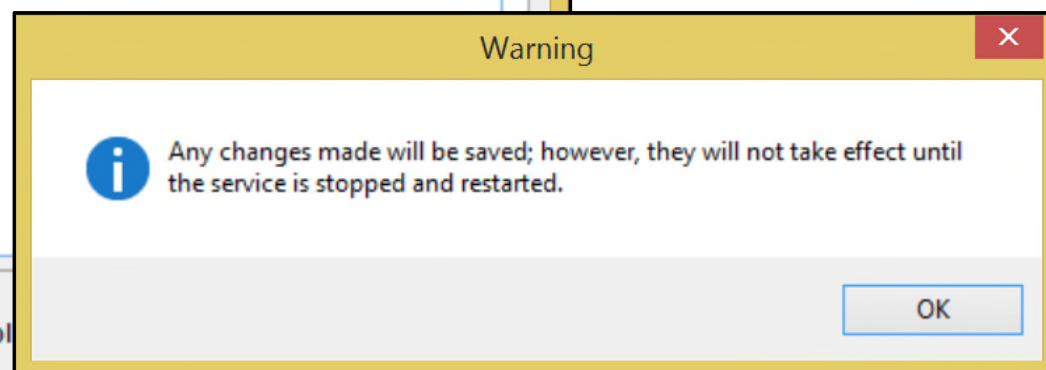
- Right click on TCP/IP
- Go to “Properties”

# Configure MS-SQL

## TCP/IP Properties dialog opens



■ Click on IP Addresses

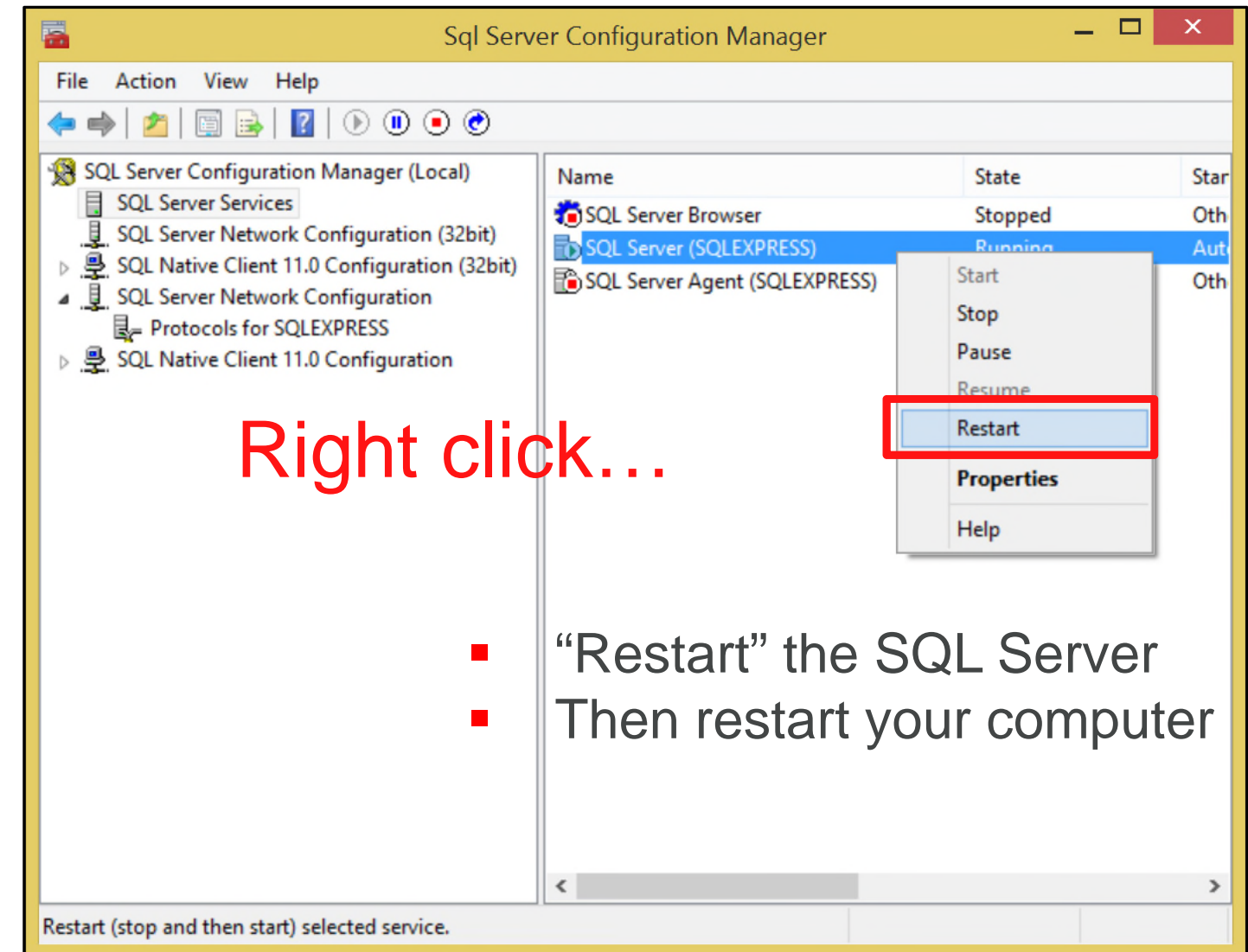
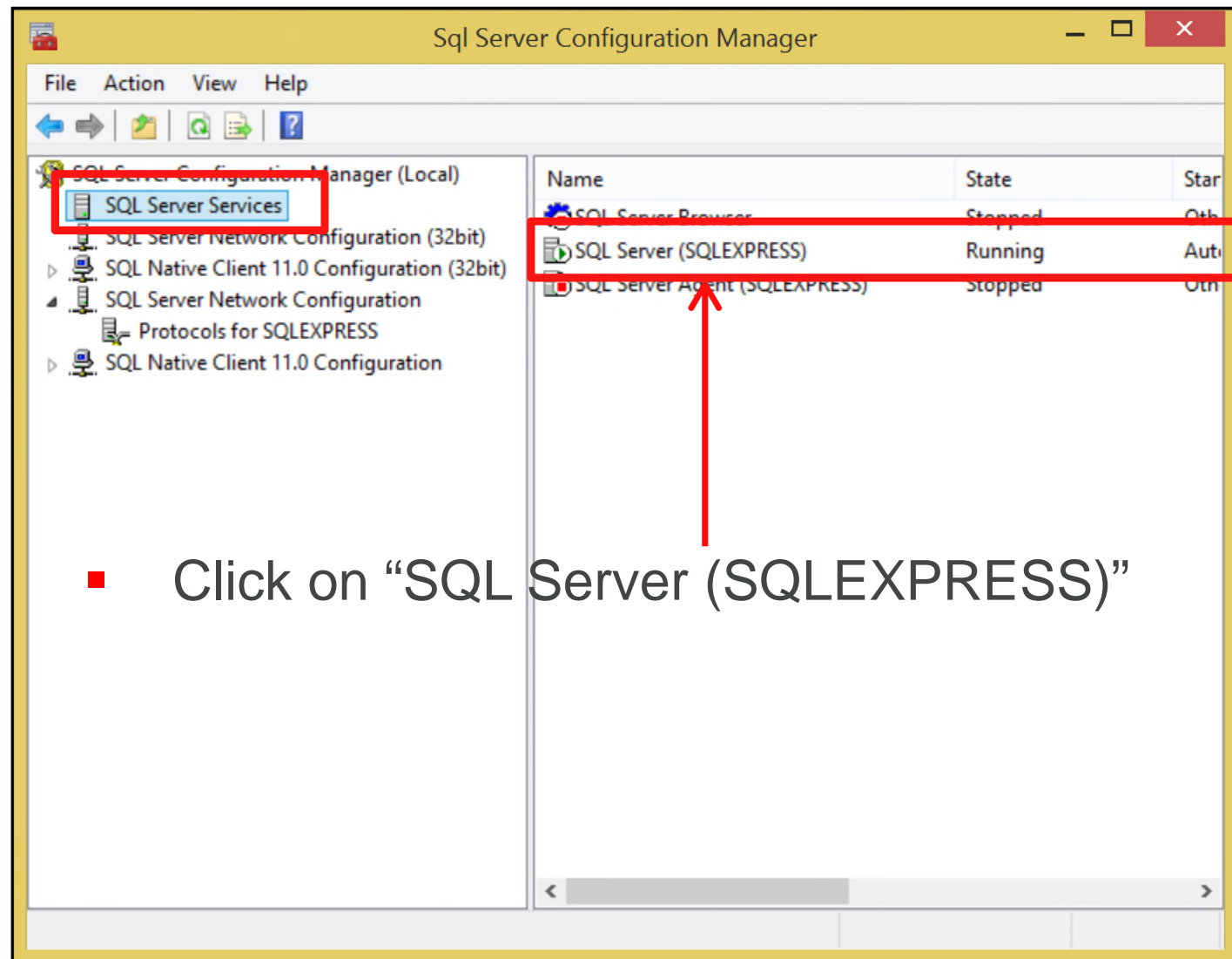






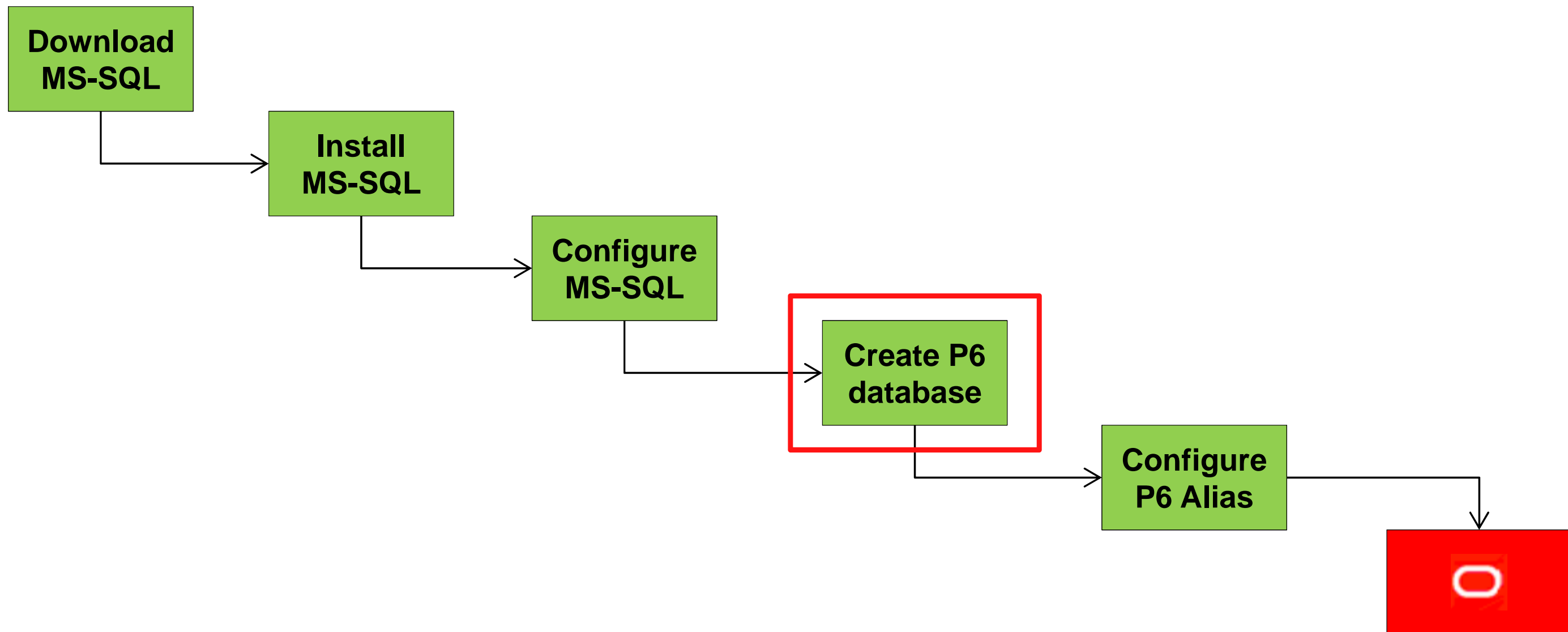
# Configure MS-SQL

Click on “SQL Server Services”



# Download and install MS-SQL database for P6

Then, create the P6 database instance

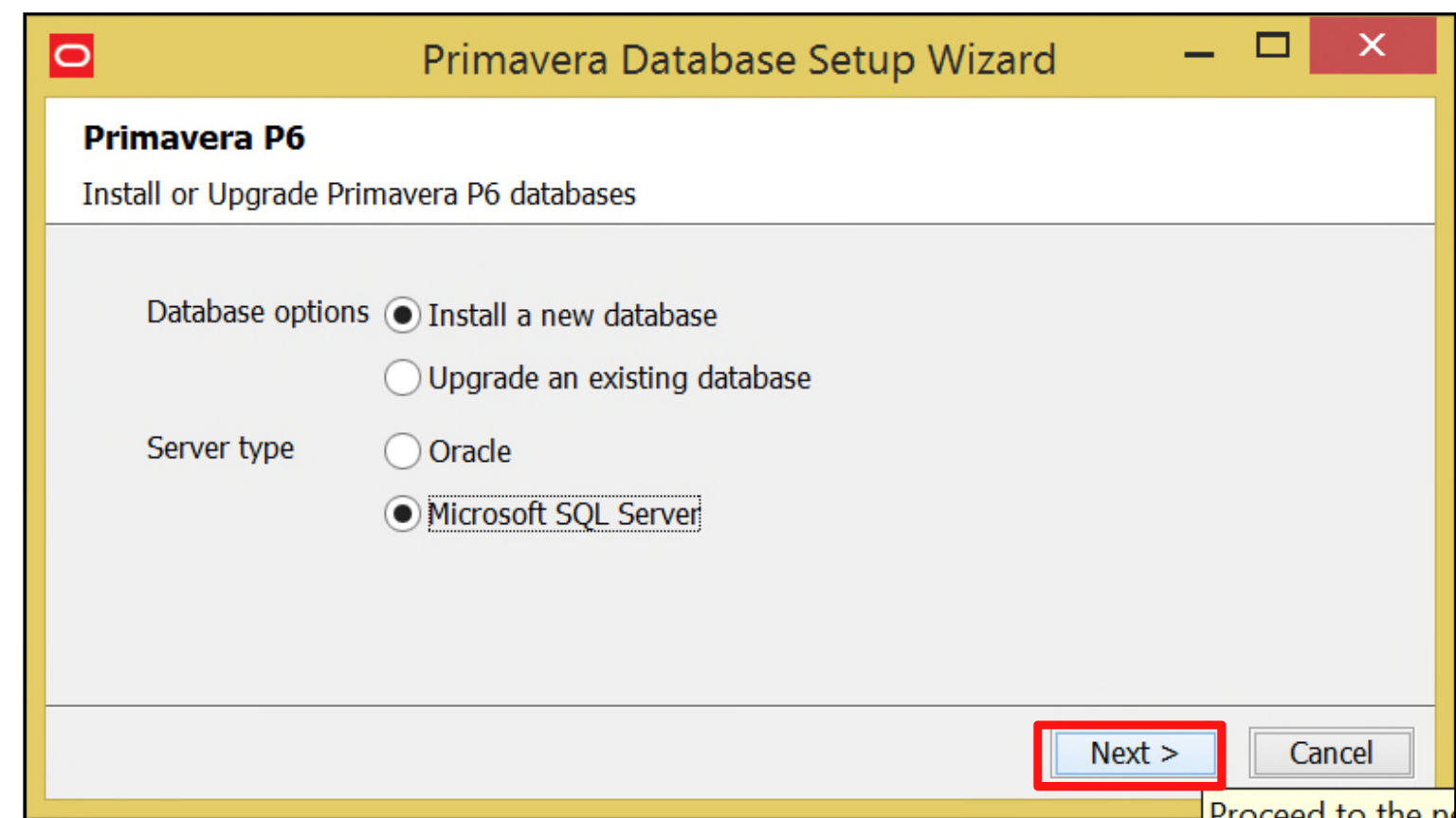
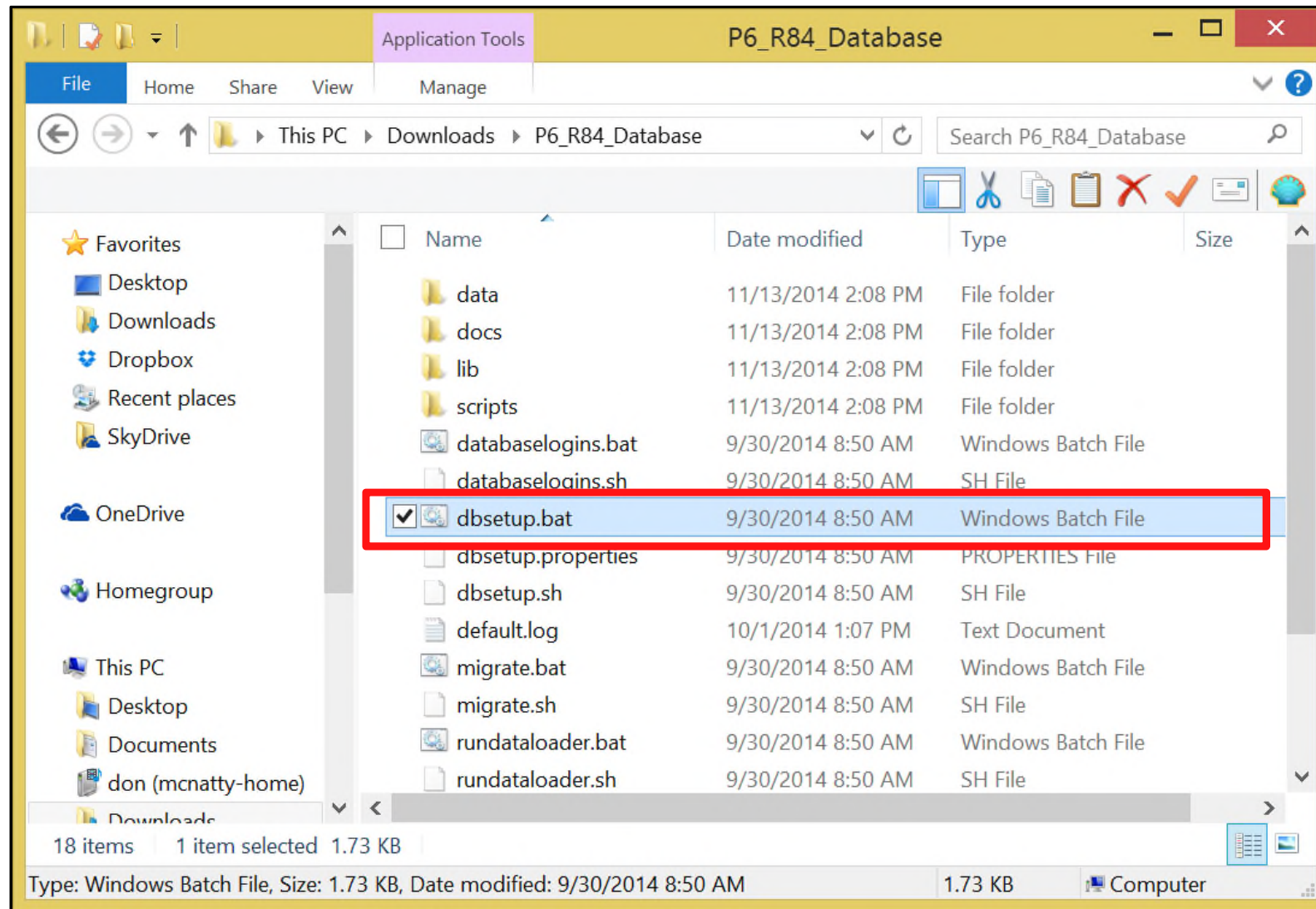






# Create MS-SQL P6 Database

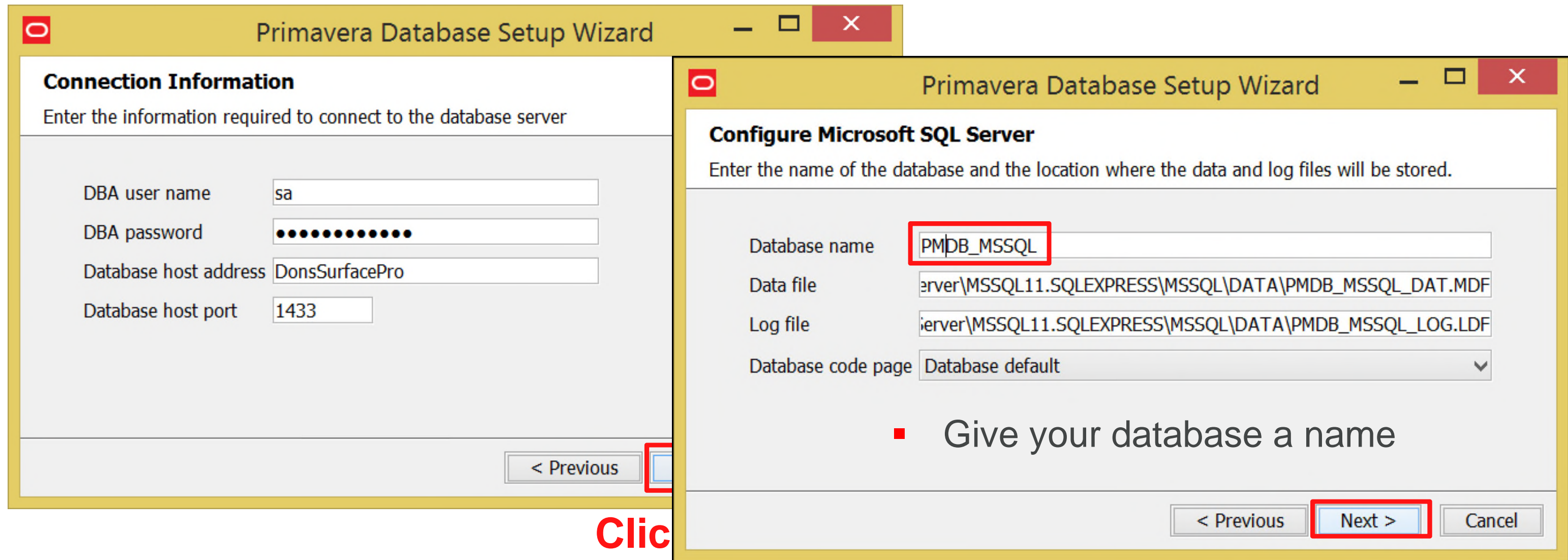
Double click on “dbsetup.bat”



- Click “Next” to create a new Microsoft SQL Server

# Create MS-SQL P6 Database

Enter the MS-SQL DBA password...



**Primavera Database Setup Wizard**

**Connection Information**  
Enter the information required to connect to the database server

DBA user name: sa

DBA password: .....

Database host address: DonsSurfacePro

Database host port: 1433

< Previous

**Primavera Database Setup Wizard**

**Configure Microsoft SQL Server**  
Enter the name of the database and the location where the data and log files will be stored.

Database name: PMDB\_MSSQL

Data file: server\MSSQL11.SQLEXPRESS\MSSQL\DATA\PMDB\_MSSQL\_DAT.MDF

Log file: server\MSSQL11.SQLEXPRESS\MSSQL\DATA\PMDB\_MSSQL\_LOG.LDF

Database code page: Database default

■ Give your database a name

< Previous Next > Cancel

Click

Click "Next"



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# Create MS-SQL P6 Database

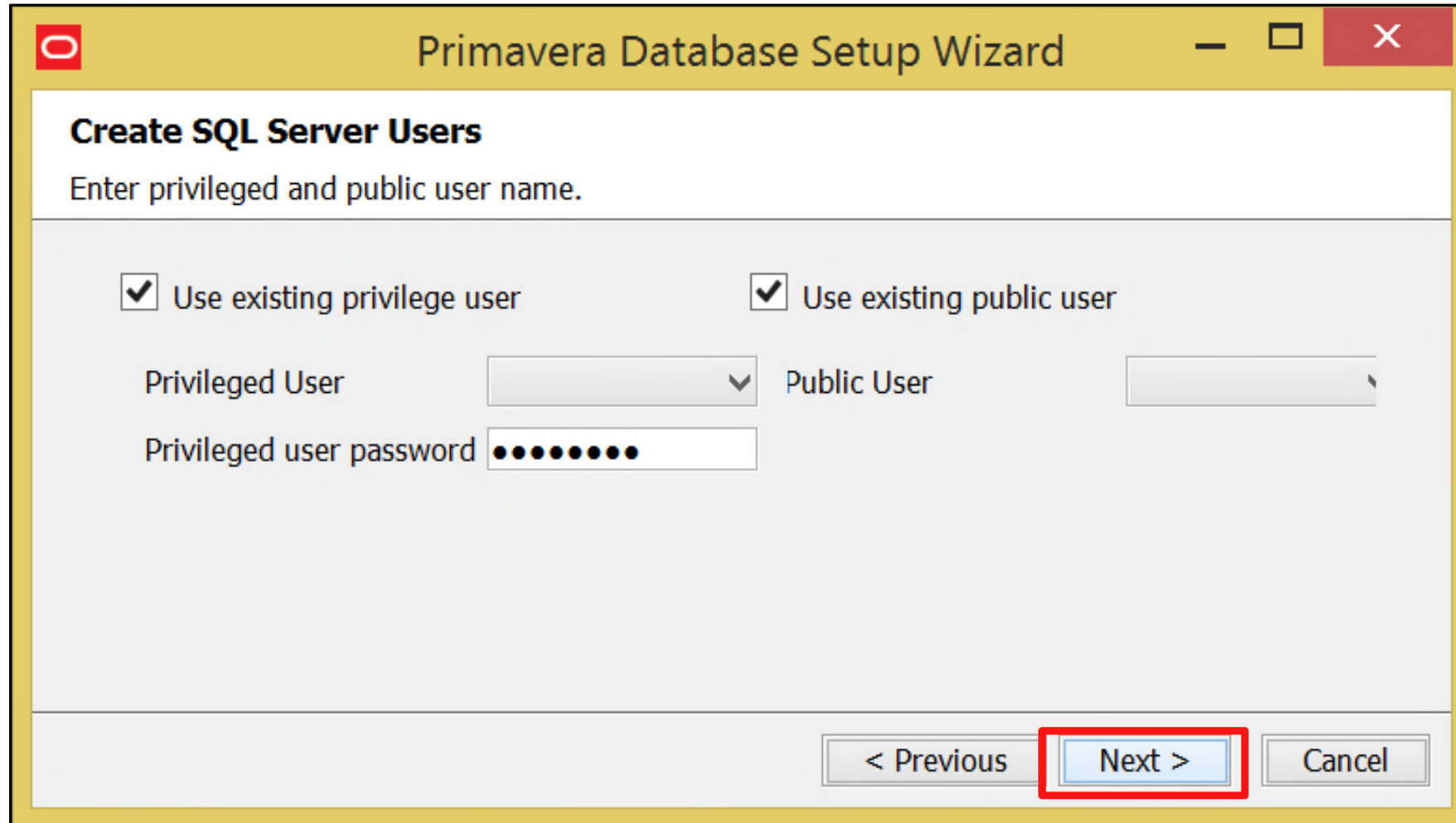
Critical step....,

The screenshot shows a window titled "Primavera Database Setup Wizard" with a yellow title bar. The main content area is titled "Create SQL Server Users" and contains the instruction "Enter privileged and public user name." Below this, there are two checkboxes: "Use existing privilege user" and "Use existing public user", both of which are unchecked. Under each checkbox, there are three input fields: "Privileged user name", "Privileged user password", and "Confirm password" for the privilege user; and "Public user name", "Public user password", and "Confirm password" for the public user. The "Privileged user name" field contains the text "privuser1" and the "Public user name" field contains the text "pubuser". At the bottom of the window, there are three buttons: "< Previous", "Next >", and "Cancel".



# Create MS-SQL P6 Database

Set up “privuser”



The screenshot shows the 'Create SQL Server Users' step of the Primavera Database Setup Wizard. The window title is 'Primavera Database Setup Wizard'. The subtitle is 'Create SQL Server Users' with the instruction 'Enter privileged and public user name.' Below this, there are two checked checkboxes: 'Use existing privilege user' and 'Use existing public user'. Under 'Use existing privilege user', there is a 'Privileged User' dropdown menu and a 'Privileged user password' field with masked characters. Under 'Use existing public user', there is a 'Public User' dropdown menu. At the bottom, there are three buttons: '< Previous', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangle.

Click “Next”

- Check both boxes for “privuser” and “pubuser”
- Default password for privuser is “privuser” (could be different if changed on initial P6 install)
- No password is required for “pubuser”



# Create MS-SQL P6 Database

User name and password dialog opens...

Click “Install”

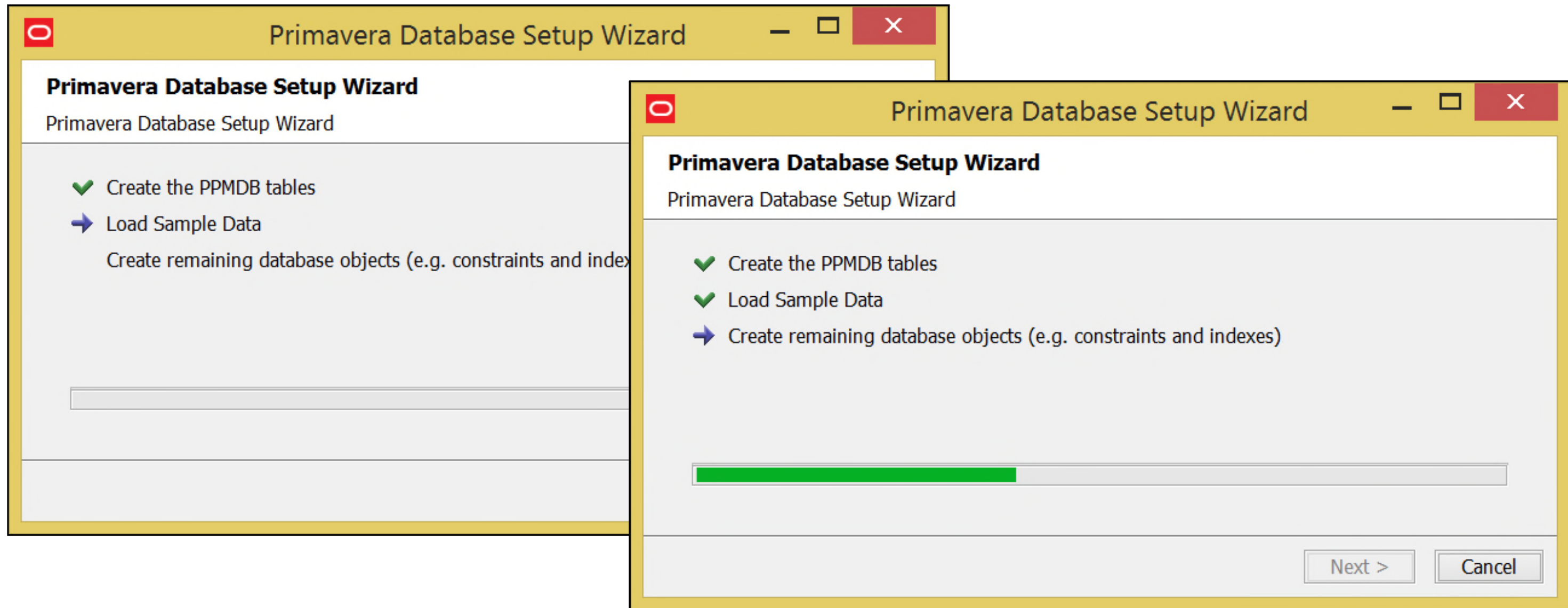
- Create a password for the Administrator. The default name and password are “admin”.
- If creating a blank database be sure to uncheck “Load Sample Data”.





# Create MS-SQL P6 Database

The installation process creates the database...

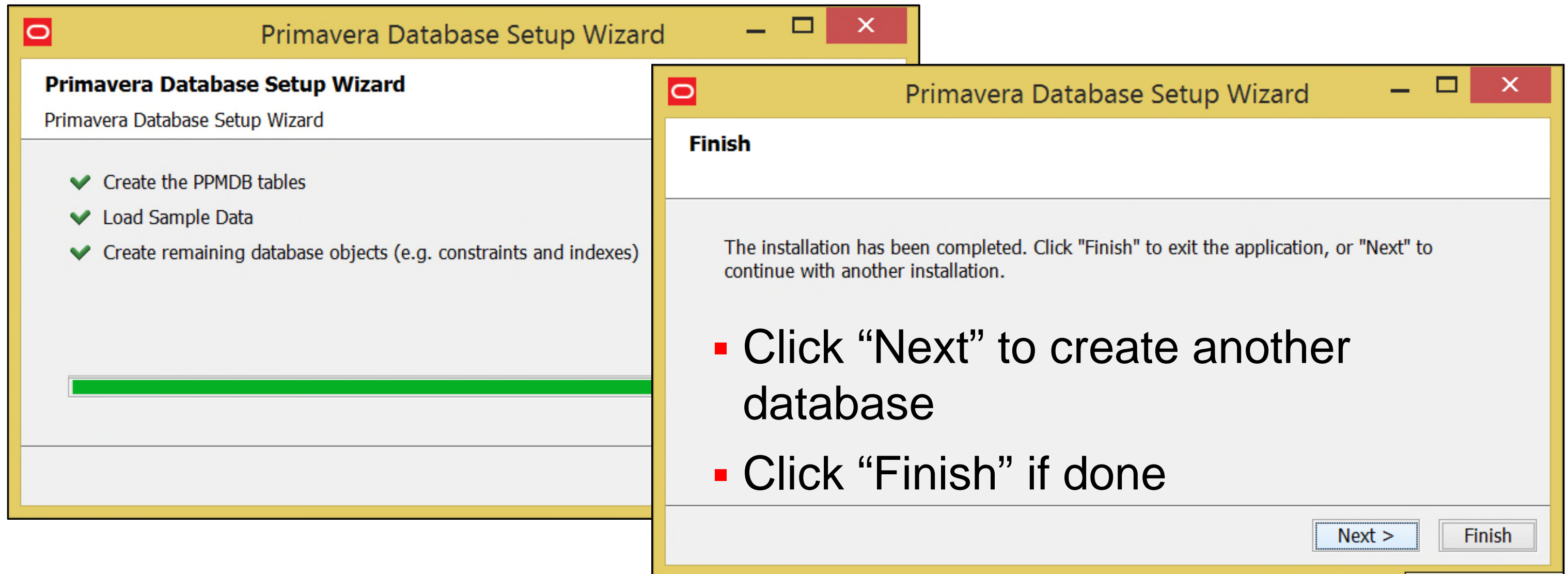




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# Create MS-SQL P6 Database

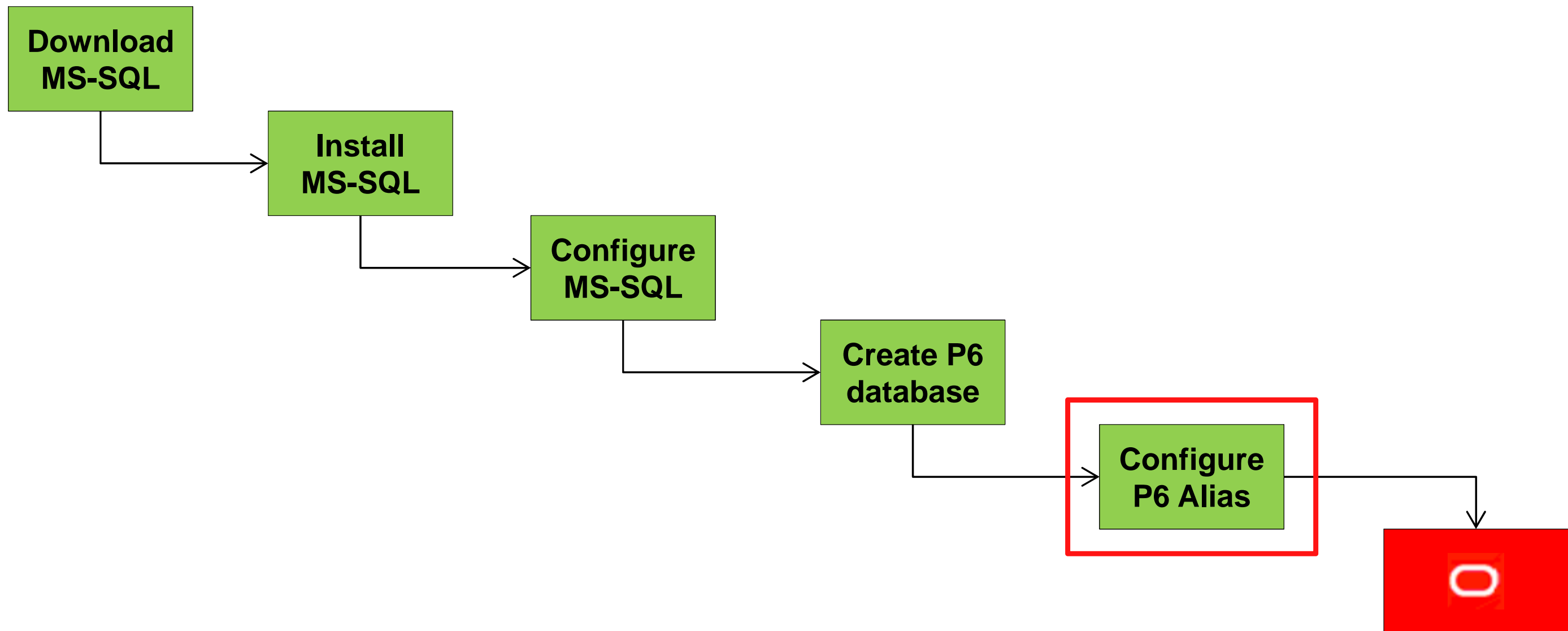
Click “Next” when complete





# Download and install MS-SQL database for P6

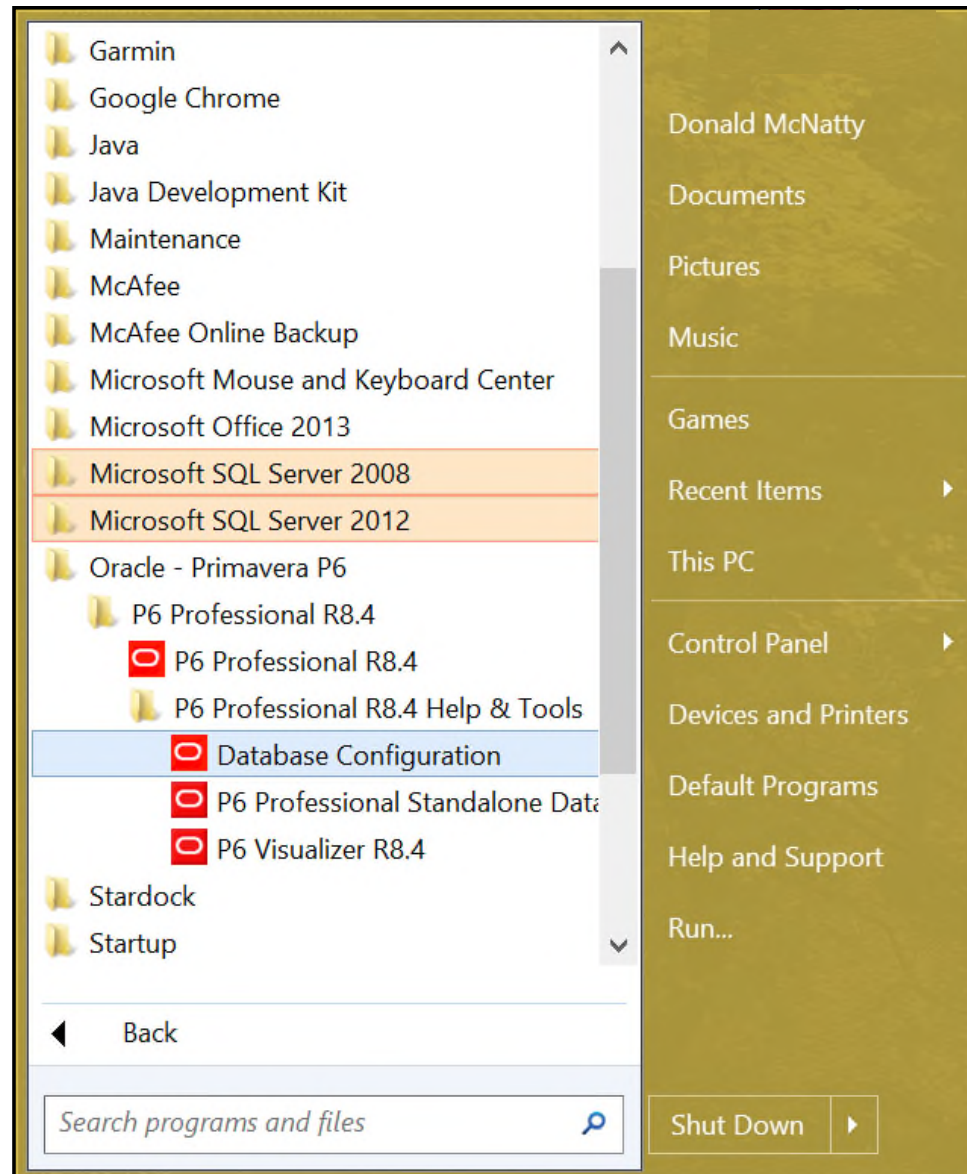
And finally, configure an alias to link to P6



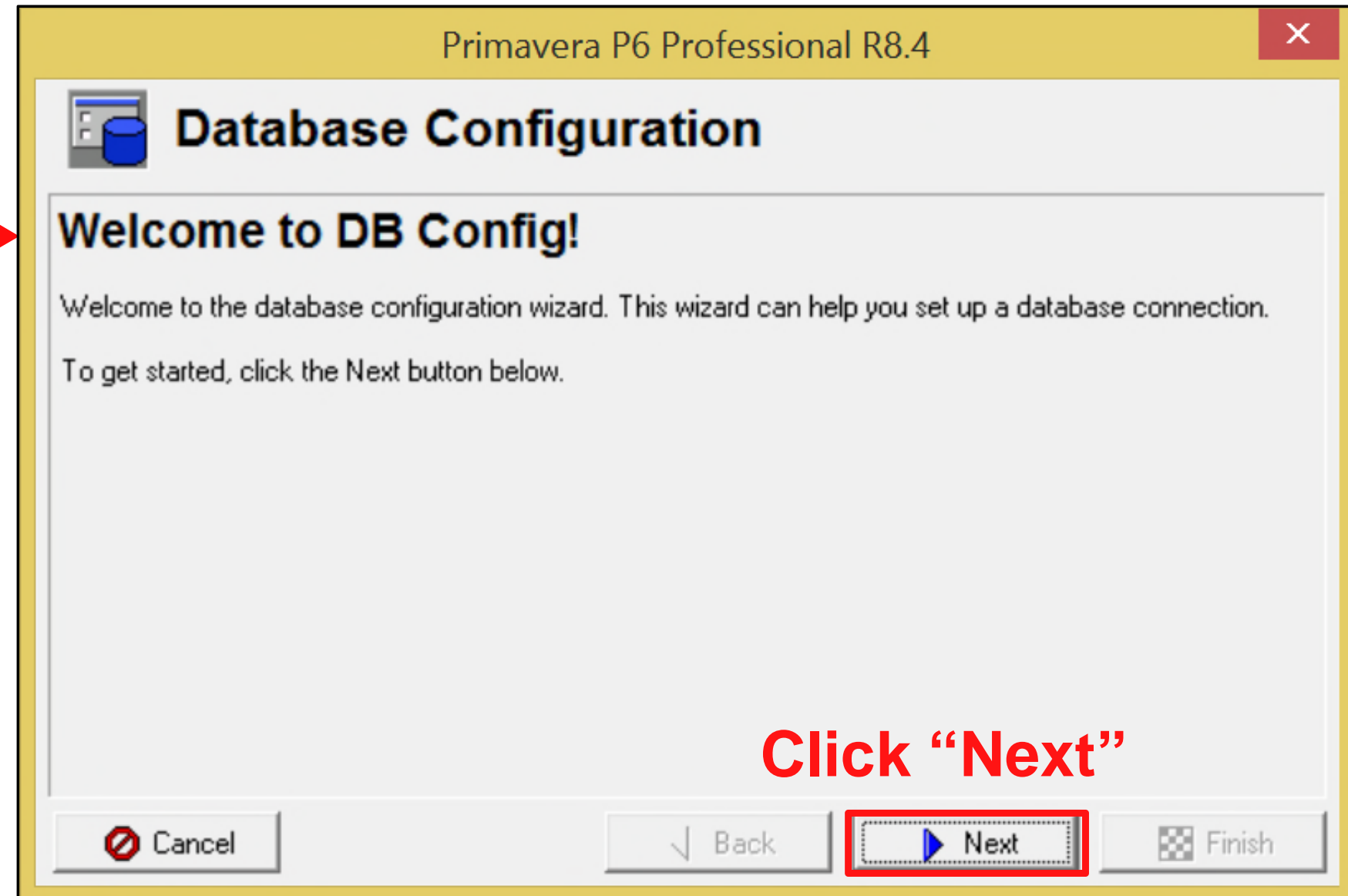


# Configure MS-SQL P6 Alias

Run the P6 Database Configuration module



Double  
Click to  
open





# Configure MS-SQL P6 Alias

Click to “Create a new database alias”

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## Database Configuration

### Select Database Alias Task

Select a database operation to perform.

☐ Modify an existing database alias

☒ Create a new database alias

Cancel Back Next Finish

Click “Next”

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## Database Configuration

### Select or Create Alias

Select an existing database alias, or enter a new database alias name to be created. If you are configuring a connection for the first time, select your database driver type using the list of driver types below. If you are not sure which alias or driver type to use, contact your administrator.

Database alias  
PMDb\_MSSQL

Driver type  
Microsoft SQL Server/SQL Express

Cancel Back Next Finish

Type a “database alias”

Click “Next”





# Configure MS-SQL P6 Alias

Enter the Host and Database name...

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## Database Configuration

### Configure SQL Server Connection

Enter the SQL Server connection information below.

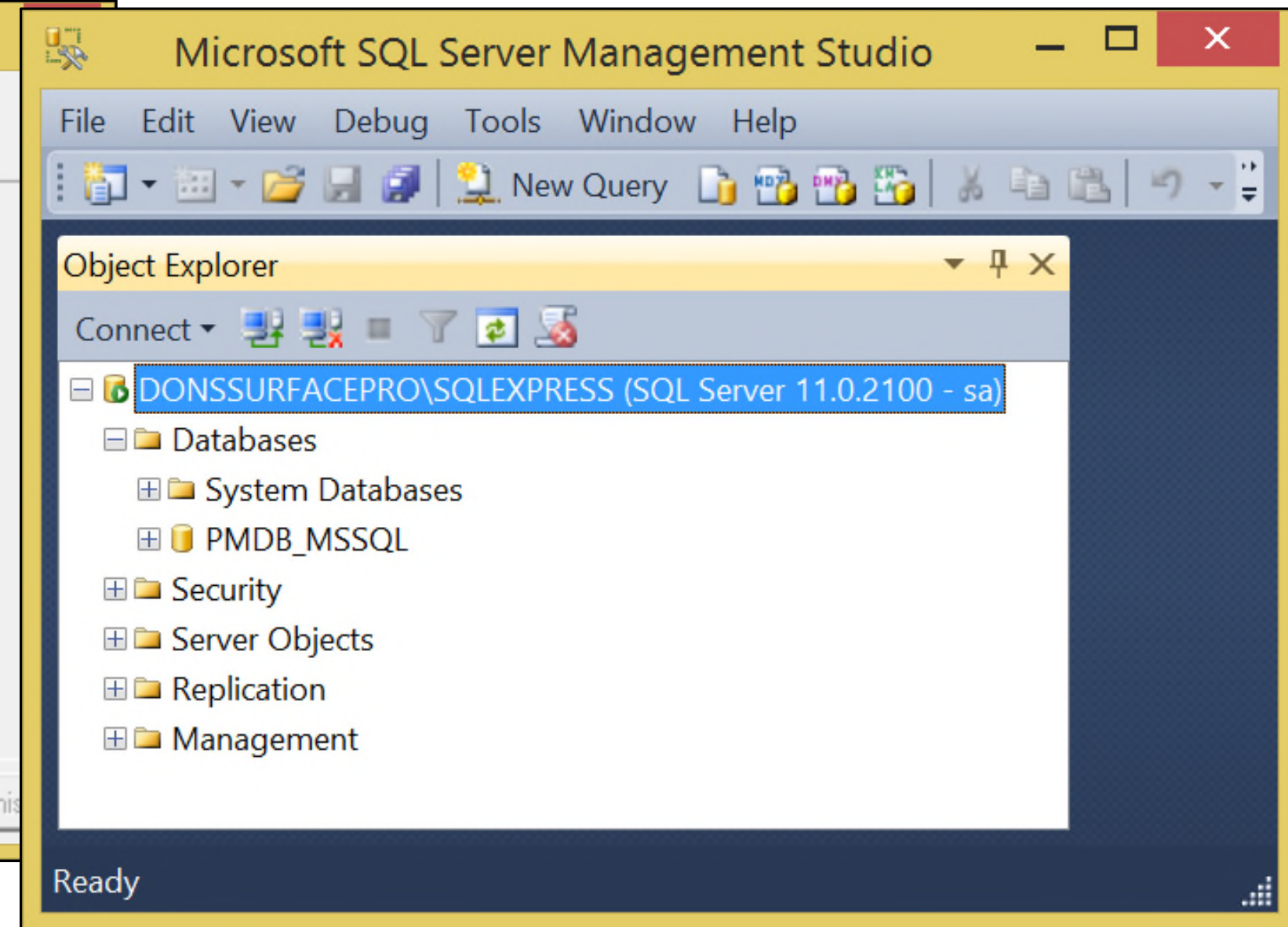
Host Name  
FACEPRO\SQLEXPRESS

Database name  
PMDB\_MSSQL

Cancel Back **Next** Finish

You may need to check the full "Host Name" in MS SQL Server Management Studio

Click "Install"





# Configure MS-SQL P6 Alias

Enter Privuser name and password

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## Database Configuration

### Enter Public Login Information

Enter the public username and password to use for connecting to this database. The public login is used to establish the initial connection to the application's database. It should be given to you by your administrator.

Also, specify which public group id you have been assigned. If you are not sure which public login or group id to use, please contact your administrator.

Database Alias  
PMDB\_MSSQL

Username  
privuser

Password  
xxxxxxxx

Public group ID  
1

Cancel Back Next Finish

Click "Next"

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## Database Configuration

### Validate Database Connection

Now you are ready to validate the settings for this alias. If any settings are incorrect, you can go back to change them.

Database alias  
PMDB\_MSSQL

Username  
privuser

Public group id  
1

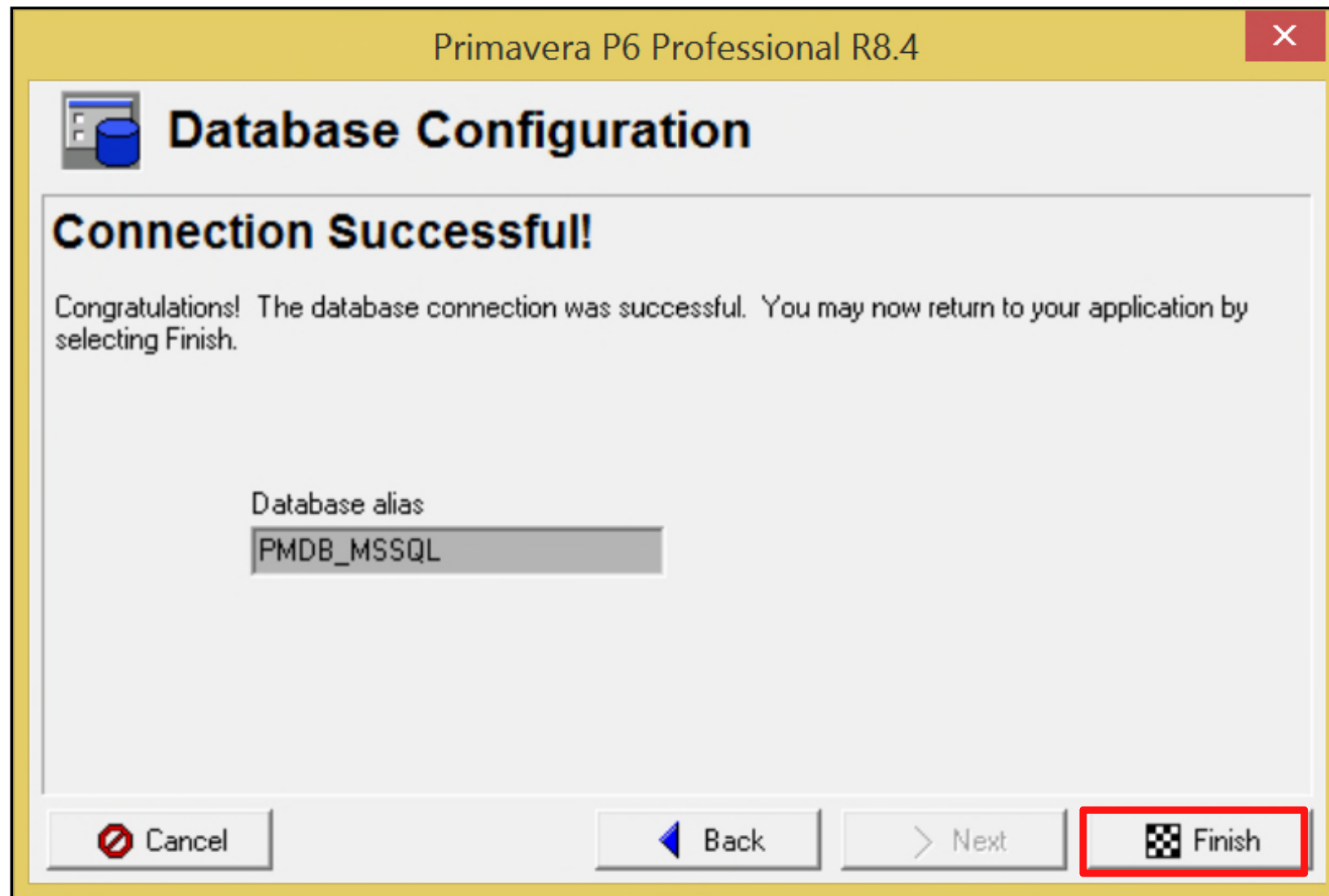
Click Next to test the database connection.

Cancel Back Next Finish

Click "Next"

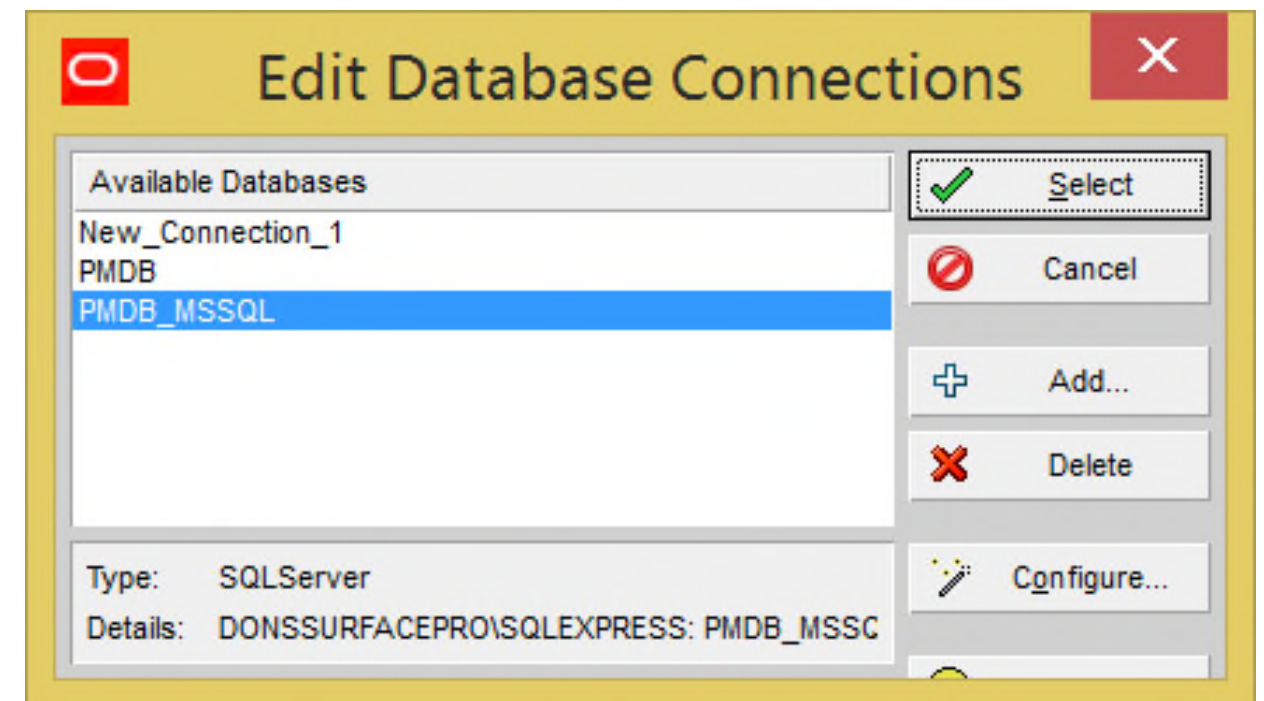
# Configure MS-SQL P6 Alias

Always hold your breath for this screen to appear...



Click "Finish"

The alias is now available in P6



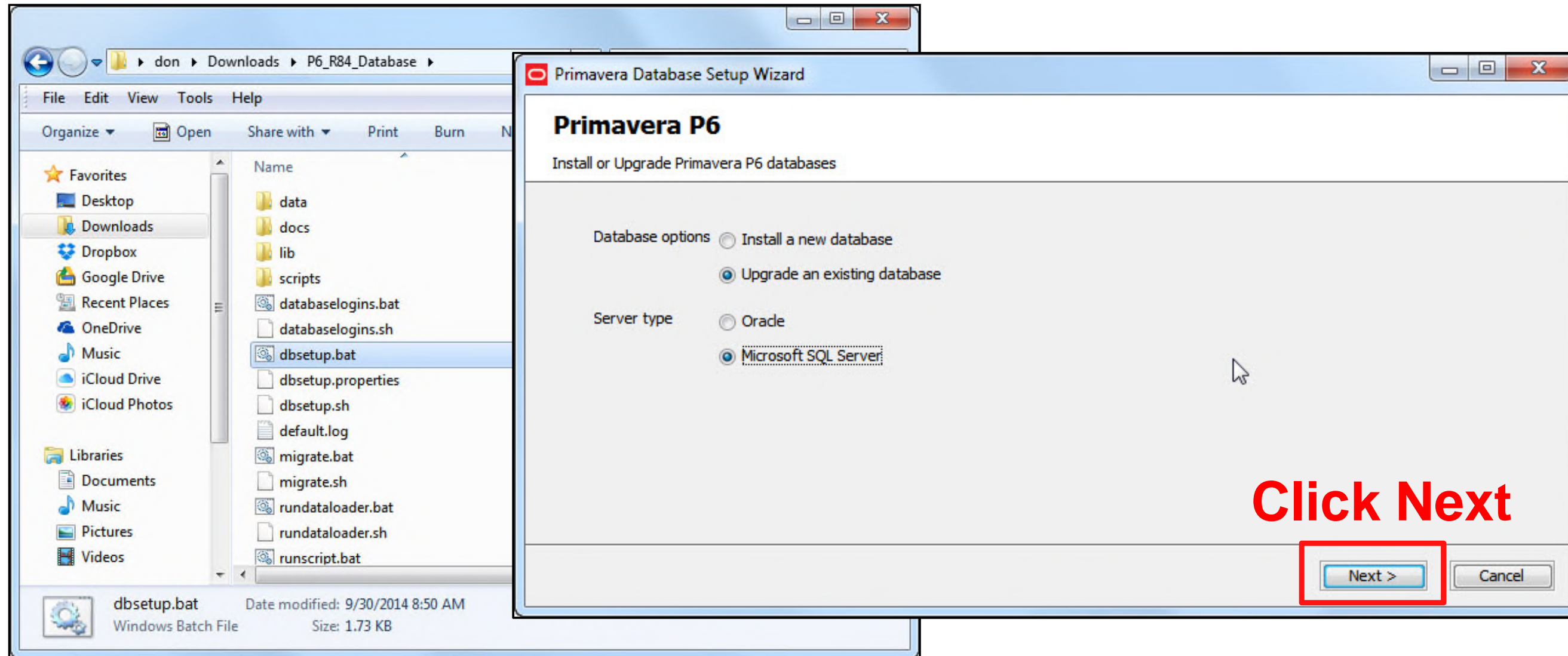




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# Migrate Existing databases to 8.4

Run dbsetup.bat (not migrate.bat)





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# Migrate Existing databases to 8.4

Remembering your correct password is key to this screen!

**Primavera Database Setup Wizard**

**Connection Information**

Enter the information required to connect to the database server

Administrative user name: sa

Administrative password: .....

Database host address: DonsSurfacePro\SQLExp

Database host port: 1433

Database name: DEMO

**Primavera Database Setup Wizard**

**Ready to Begin Upgrading Data**

You are now ready to begin upgrading your database to latest version

Upgrade? ☒ Yes, upgrade my database ☐ No, do not upgrade my database

< Previous Upgrade Cancel

**Click Upgrade**

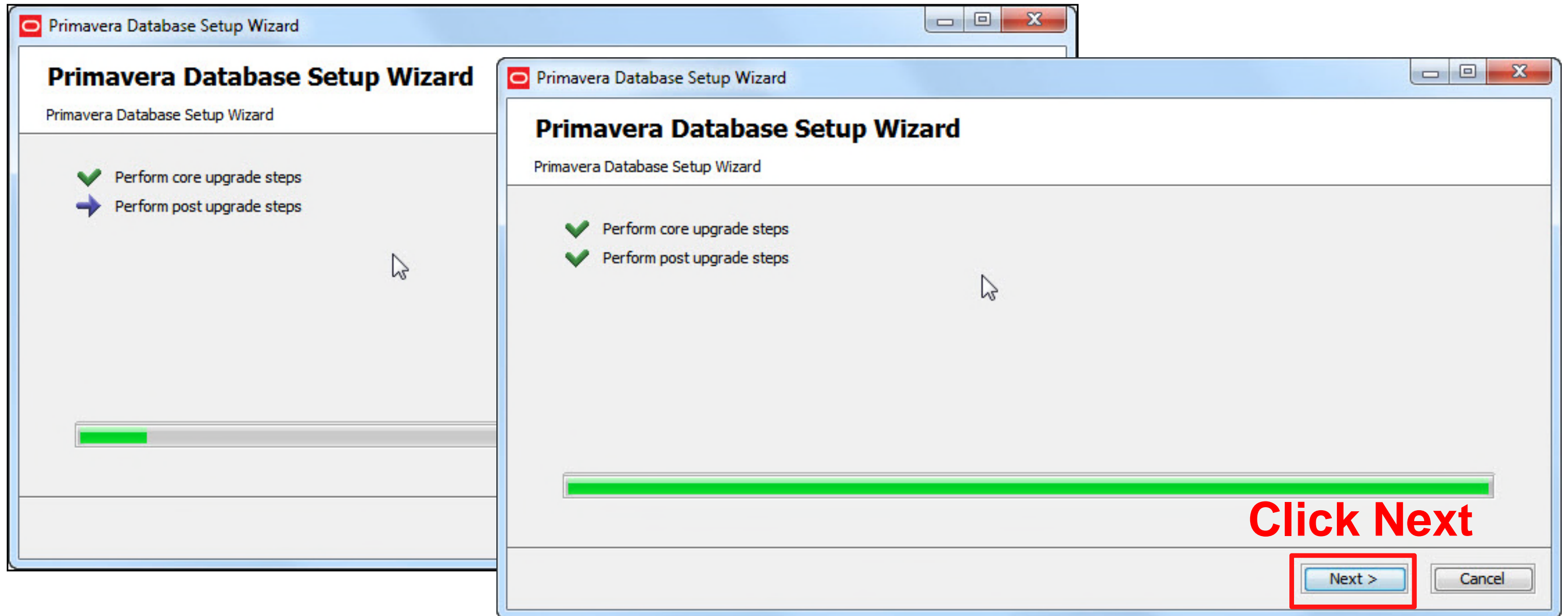




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# Migrate Existing databases to 8.4

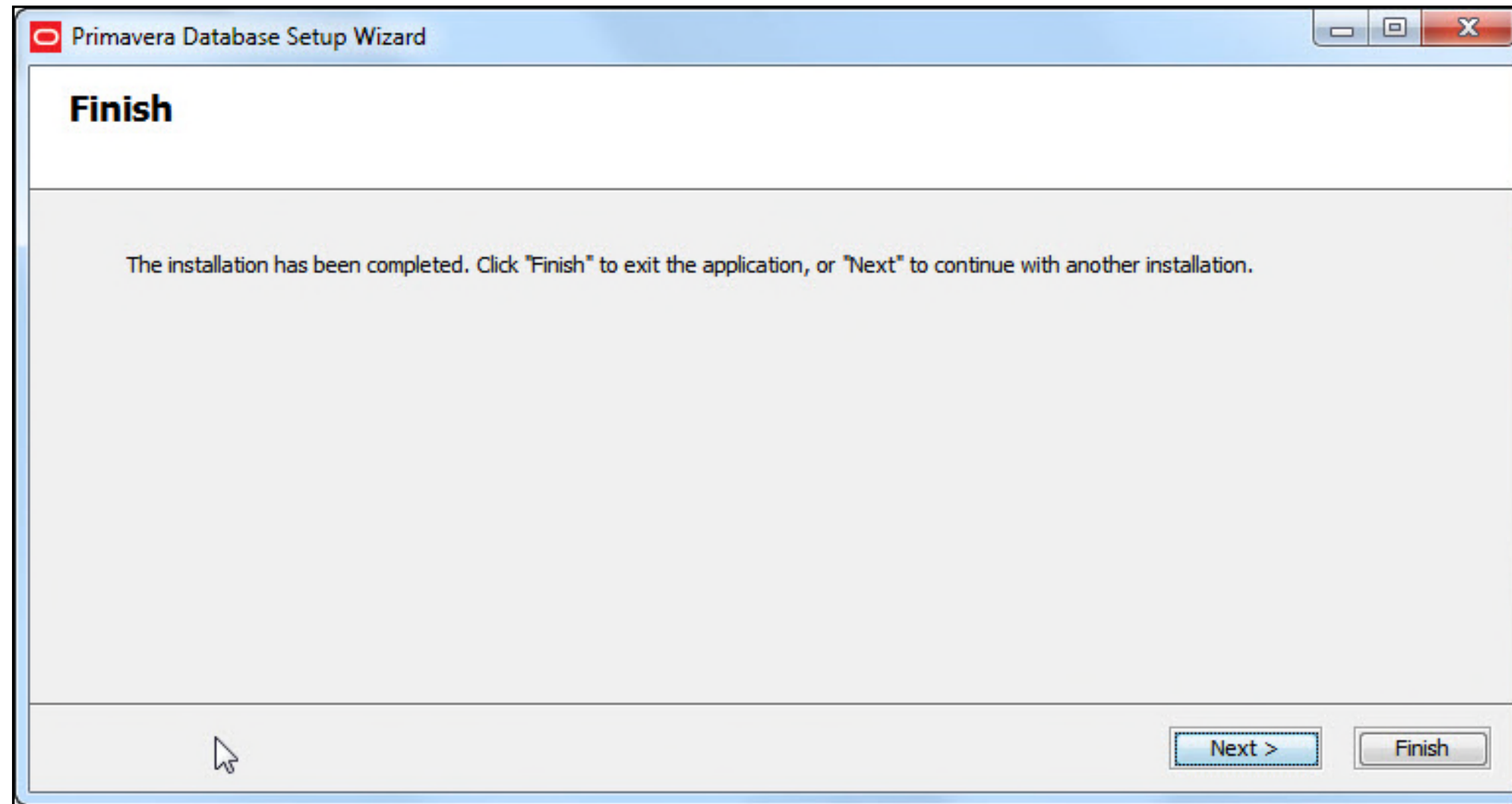
Migration process runs...





# Migrate Existing databases to 8.4

Migration process complete



- Click “Next” to return to migration screen and migrate another database.
- Click “Finish” if you are done migrating databases.



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# Recap of MS-SQL Installation

MS SQL is a multi-step process

- MS SQL databases provide:
  - Multiple database support
  - No loss of P6 functionality
- MS SQL database setup requires following steps
  - Download and install MS SQL 2012
  - Configure MS SQL Server
  - Create a P6 database
  - Create a P6 Alias to open with P6



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# Summary

You have multiple database options

- Oracle SQLite is the easiest to install
  - Some loss of P6 functionality
  - Very easy to copy and send the database
- MS SQL database is a more complex setup
  - No Loss of P6 functionality
  - More difficult to send full database to someone else
- You can continue to use Oracle Express db
  - You need to “migrate” the database to 8.4



# Questions

All questions are gathered into a master sheet, answered and distributed to all registrants as well as posted on our website.

Answers are based on our own experiences using the various software products related to your questions.

## Thank you for participating

Contact – [don@drmcnatty.com](mailto:don@drmcnatty.com)



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