

MIKE OPERATIONS

Installation Guide 2021



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1 Introduction

This installation guide covers the installation of MIKE OPERATIONS 2021 and related Modules (MIKE WORKBENCH, Database Manager Utility, MIKE OPERATIONS Desktop) and required 3rd party software

MIKE OPERATIONS can be deployed in different ways – ranging from a personal installation to a corporate installation.

1. Personal installation, which allows users to work in a network independent mode on their desktop. This requires the installation of a database on the local computer;
2. Corporate installation, which allows for an office to have multiple installations (clients) all working against a central database.
3. Web installation, which allows for an organisation to access MIKE OPERATIONS over the Internet (this option requires installation of MIKE OPERATIONS Web as well).

This installation guide describes the installation process for all the different deployment patterns and required associated 3rd party software.

Installation of MIKE OPERATIONS Web is described in a separate installation guide.

Important information: Please be aware that all MIKE software (including the DHI License Manager) on the same computer must be installed with the same service pack. This is due to the dependencies between MIKE software products and our wish to use the latest and technically most advanced development systems.

2 Installation Prerequisites

MIKE OPERATIONS depends on some prerequisites as listed below.

1. **Database service (optional):** Because MIKE OPERATIONS runs on a database, a supported database software or service must be installed. The following databases are supported by MIKE OPERATIONS:

- a. PostgreSQL
- b. SQLite
- c. MS SQL Server
- d. Oracle

SQLite is installed and run automatically by MIKE OPERATIONS. The other database types run as services and must be installed by the user.

- a. **PostgreSQL**

The MIKE OPERATIONS installer includes an optional PostgreSQL installer that installs a PostgreSQL server along with the PostGIS spatial database extender. Although the PostgreSQL installer delivered with MIKE OPERATIONS installs the latest PostgreSQL/PostGIS combination, it's also possible to use older combinations. MIKE OPERATIONS supports the following combinations of the two products:

- PostgreSQL 9.6 and PostGIS 2.3.0 (build 15146)
- PostgreSQL 9.6 and PostGIS 2.3.1 (build 15264)
- PostgreSQL 9.6 and PostGIS 2.3.2 (build 15302)
- PostgreSQL 9.6 and PostGIS 2.4.1 (build 16012)
- PostgreSQL 9.6 and PostGIS 2.4.4 (build 16526)
- PostgreSQL 9.6 and PostGIS 2.5.1 (build 17027)
- PostgreSQL 9.6 and PostGIS 2.5.3 (build 17699)
- PostgreSQL 10 and PostGIS 2.4.1 (build 16012)
- PostgreSQL 10 and PostGIS 2.4.4 (build 16526)
- PostgreSQL 10 and PostGIS 2.4.3 (build 16312)
- PostgreSQL 10 and PostGIS 2.4.4 (build 16526)
- PostgreSQL 10 and PostGIS 2.5.0 (build 16836)
- PostgreSQL 10 and PostGIS 2.5.1 (build 17027)
- PostgreSQL 10 and PostGIS 2.5.2 (build 17328)
- PostgreSQL 10 and PostGIS 2.5.3 (build 17699)
- PostgreSQL 11 and PostGIS 2.5.0 (build 16836)
- PostgreSQL 11 and PostGIS 2.5.1 (build 17027)
- PostgreSQL 11 and PostGIS 2.5.2 (build 17328)
- PostgreSQL 11 and PostGIS 2.5.3 (build 17699)
- PostgreSQL 12 and PostGIS 3.0.0 (build 17983)
- PostgreSQL 12 and PostGIS 3.0.1 (build 3.0.1)
- PostgreSQL 12 and PostGIS 3.0.2 (build 3.0.2)
- PostgreSQL 13 and PostGIS 3.1.0 (build 3.1.0)
- PostgreSQL 13 and PostGIS 3.1.1 (build 3.1.1)

Combinations of later versions may also work but have not been tested.

Postgres versions accepted by MIKE OPERATIONS can also be viewed in the file "DssDatabases.cfg.xml" of the MIKE OPERATIONS installation folder.

- b. **MS SQL Server**

MS SQL Server must be installed by the user. An installer is not included with the MIKE OPERATIONS installer. Supported versions include 2016, 2017, and 2019.

- c. **Oracle**
The Oracle database service must be installed by the user. An installer is not included with the MIKE OPERATIONS installer. MIKE OPERATIONS supports Oracle version 11g only.
2. The DHI License Management application. The installation wizard of the DHI License Manager is included in the MIKE OPERATIONS installer.
3. Microsoft .NET framework 4.7.2

3 MIKE OPERATIONS Installation/Upgrade

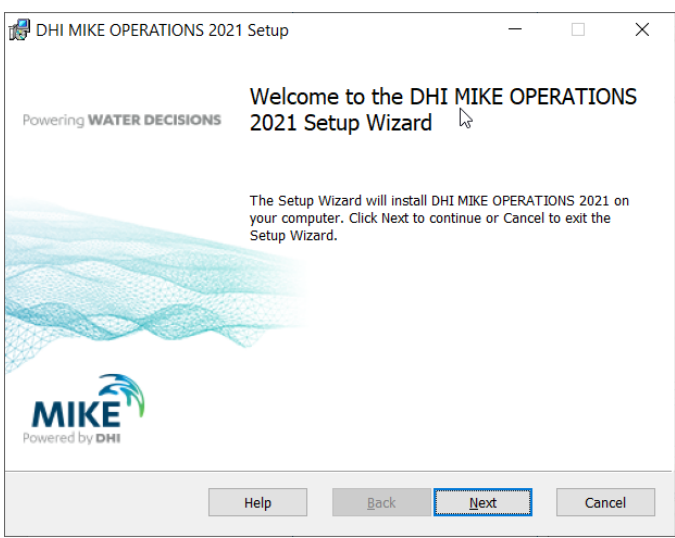
MIKE OPERATIONS 2021 is installed by running the *Setup.exe* program coming with the installation media. The installation process consists of two parts.


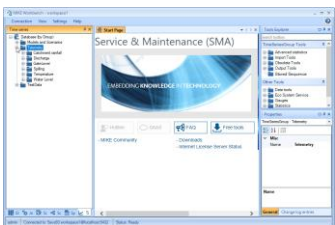
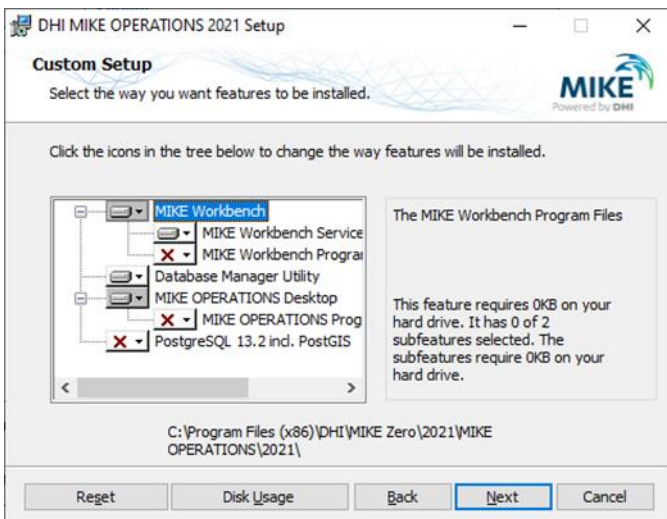
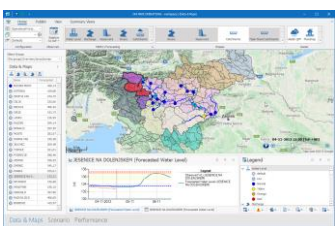
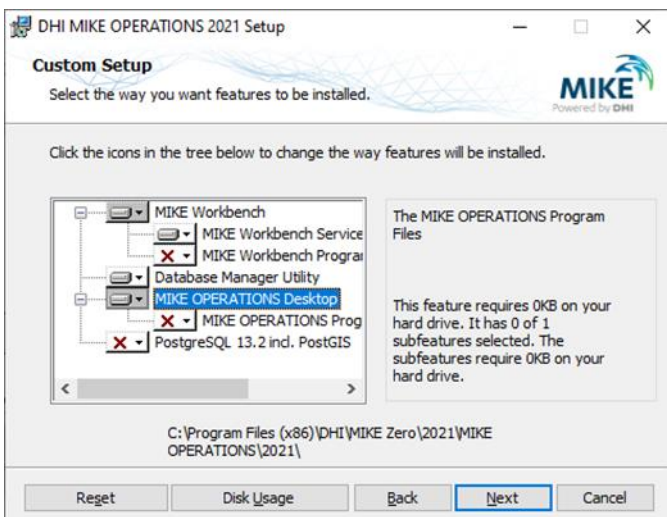
1. Installation of DHI License Management application (only if not previously installed with other MIKE software).
2. Installation of MIKE OPERATIONS 2021 software files including MIKE Workbench, Database Manager Utility, MIKE OPERATIONS Desktop, and PostgreSQL/PostGIS.

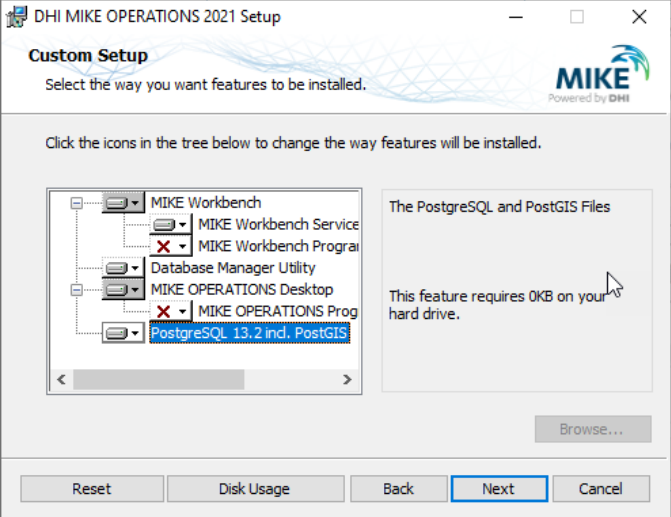
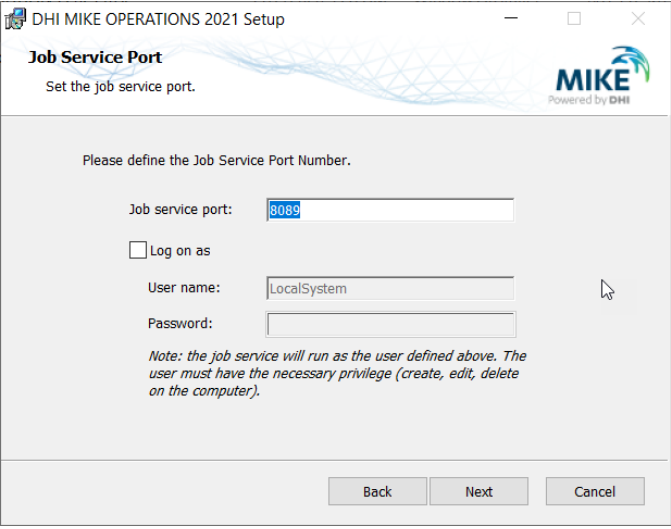
Installation of the MIKE OPERATIONS 2021 software package is simple and requires no user interactions beyond accepting the license conditions and specifying the installation folder.

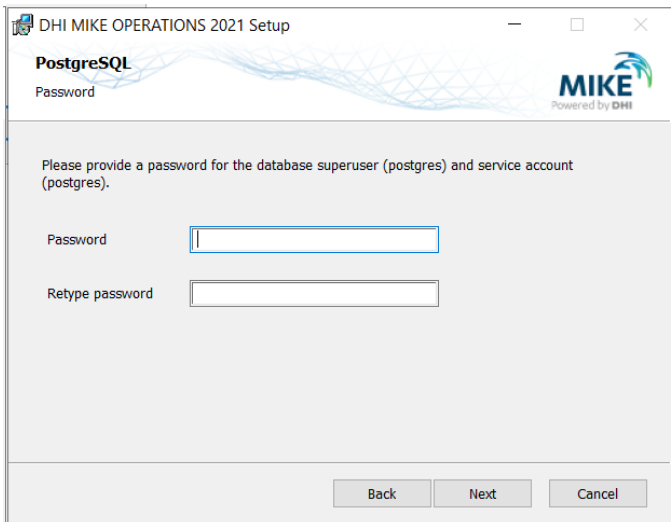
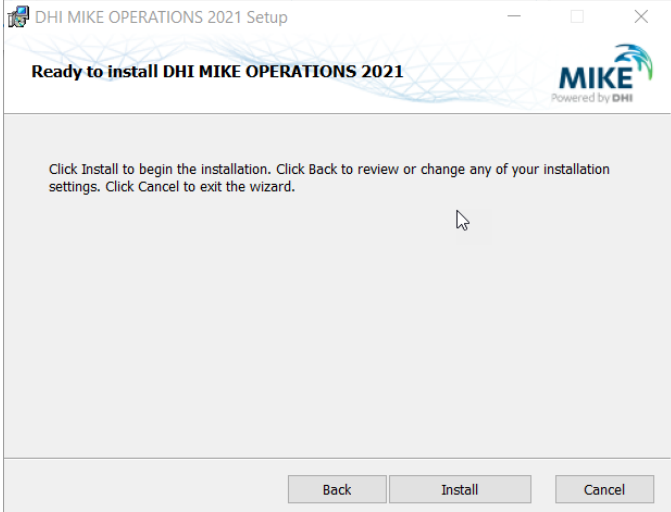
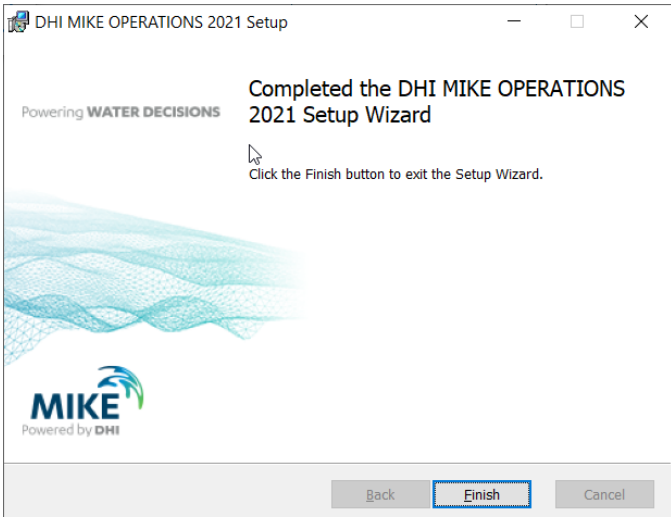
The following table explains how to install or upgrade MIKE OPERATIONS, MIKE WORKBENCH, and required 3rd party software.

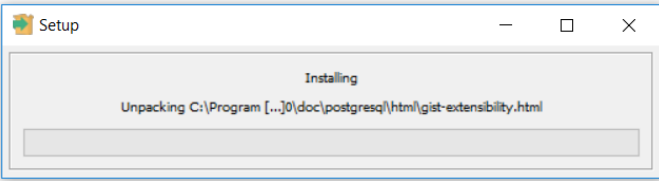
If you are installing MIKE OPERATIONS for the first time, PostgreSQL 13.2 and PostGIS 3.1.1 can be installed if you want to run on top of a PostgreSQL database. If you want to install a different combination than 13.2/3.1.1, refer to APPENDIX A.

Installation step	Screen
<p>Run the setup.exe file from the installation media/download folder.</p> <p><i>Note: In case the DHI License Manager is not installed, the installation wizard of the DHI License Manager will start.</i></p> <p><i>Refer to the installation guide of the DHI License Manager for more information about features and license configuration.</i></p> <p>Click Next</p>	

Installation step	Screen
<p>Accept the license agreement</p> <p>Click Next</p>	 <p>The screenshot shows the 'End-User License Agreement' window. It contains a '1 LEGAL NOTICE' section with three numbered points. Below the text, there is a checkbox labeled 'I accept the terms in the License Agreement' which is checked. At the bottom, there are buttons for 'Print', 'Back', 'Next', and 'Cancel'.</p>
<p>Select the components to install.</p> <p>MIKE Workbench and the Database Manager Utility are required components when installing MIKE OPERATIONS.</p> 	 <p>The screenshot shows the 'Custom Setup' window. It displays a tree view of components to be installed. The components listed are: MIKE Workbench, MIKE Workbench Service, MIKE Workbench Program Files, Database Manager Utility, MIKE OPERATIONS Desktop, MIKE OPERATIONS Program Files, and PostgreSQL 13.2 ind. PostGIS. The 'MIKE OPERATIONS Desktop' component is highlighted. To the right, there is a text box stating: 'The MIKE OPERATIONS Program Files. This feature requires 0KB on your hard drive. It has 0 of 2 subfeatures selected. The subfeatures require 0KB on your hard drive.' At the bottom, there are buttons for 'Reset', 'Disk Usage', 'Back', 'Next', and 'Cancel'.</p>
<p>MIKE OPERATIONS Desktop (optional)</p> 	 <p>The screenshot shows the 'Custom Setup' window. It displays a tree view of components to be installed. The components listed are: MIKE Workbench, MIKE Workbench Service, MIKE Workbench Program Files, Database Manager Utility, MIKE OPERATIONS Desktop, MIKE OPERATIONS Program Files, and PostgreSQL 13.2 ind. PostGIS. The 'MIKE OPERATIONS Desktop' component is highlighted. To the right, there is a text box stating: 'The MIKE OPERATIONS Program Files. This feature requires 0KB on your hard drive. It has 0 of 1 subfeatures selected. The subfeatures require 0KB on your hard drive.' At the bottom, there are buttons for 'Reset', 'Disk Usage', 'Back', 'Next', and 'Cancel'.</p>

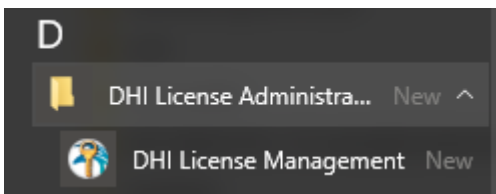
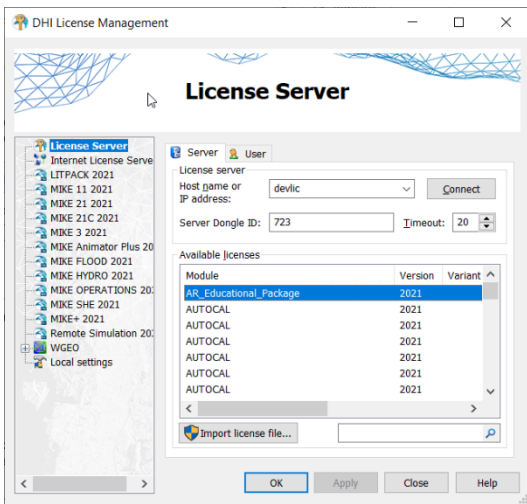
Installation step	Screen
<p>PostgreSQL 13.2 including PostGIS (optional)</p>	
<p>Job Service Port</p> <p>Specify the port to use for the Job Manager Service.</p> <p>Use the default port (8089).</p> <p>It's possible in this step to specify a computer user profile to be used when running jobs. This can be edited later.</p> <p><i>Note: If the Job Manager fails to start, this might be because the default port used for the Job Manager Service is already used. In that case, please restart the installation process and select a different port number.</i></p> <p>Click Next</p>	

Installation step	Screen
<p>If you've selected a PostgreSQL installation, you will be asked to provide a password for PostgreSQL database.</p> <p>Provide Password to the PostgreSQL database</p> <p>Click Next</p> <p>Note: The password should be used whenever the Database Manager Utility is used or PostgreSQL native software PgAdmin is applied</p>	
<p>Click Install</p>	
<p>Click Finish</p>	

Installation step	Screen
<p>If you are doing a PostgreSQL installation, wait until installation of PostgreSQL and PostGIS is complete</p> <p>And</p> <p>Click OK to complete the installation</p>	

4 DHI License File

The DHI license is handled through the DHI License Management software, which can be found under DHI License Administration in the Start Menu.

Installation step	Screen
Open the DHI License Management program in the start menu as admin	
<p>There three different options:</p> <ul style="list-style-type: none"> Internet License Network License Local License (dongle) <p>Note: All Users must be ticked to allow job execution (if job service is using another user profile)</p> <p>Please look in the documentation found by clicking the Help button or contact your local MIKE Sales representative.</p>	

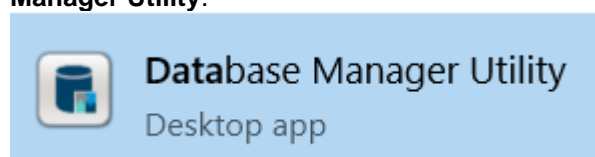
5 Set up database

Once the software is installed for the first time, it is required to set up a database. This includes connecting to a database file or server, creating a database, and making a database connection. Instructions for database setup and connection are provided in the help file for the **Database Manager Utility**. The following database types are supported:

- PostgreSQL
- SQLite
- Oracle
- MS SQL Server

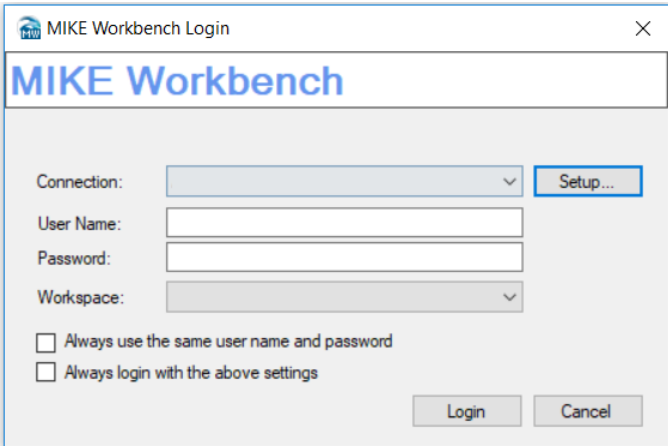
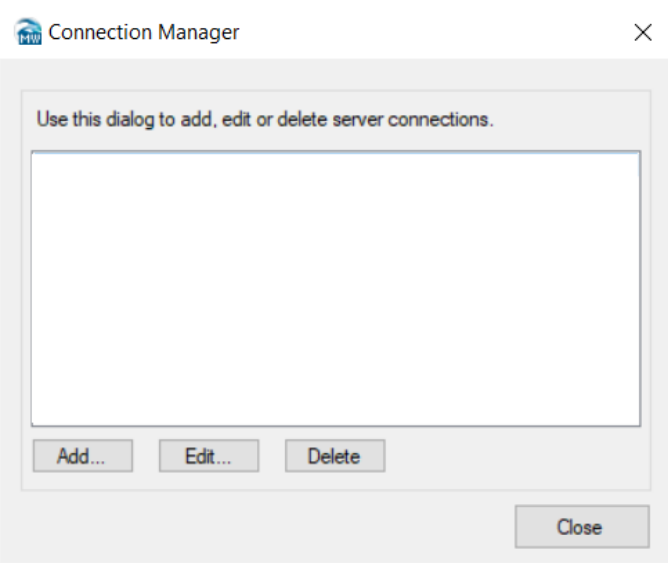
It's also possible to use Azure Database for PostgreSQL instead of a local PostgreSQL service.

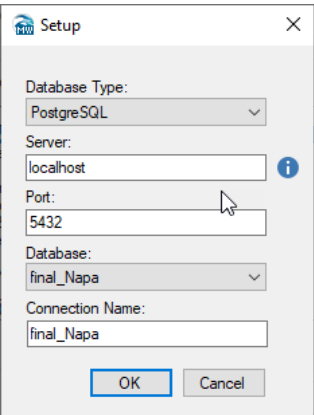
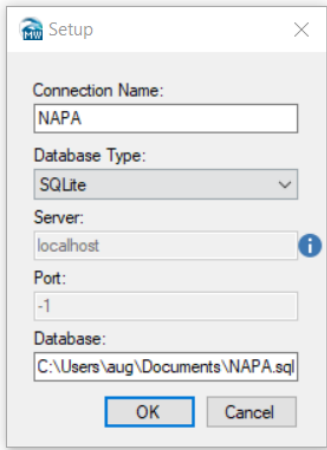
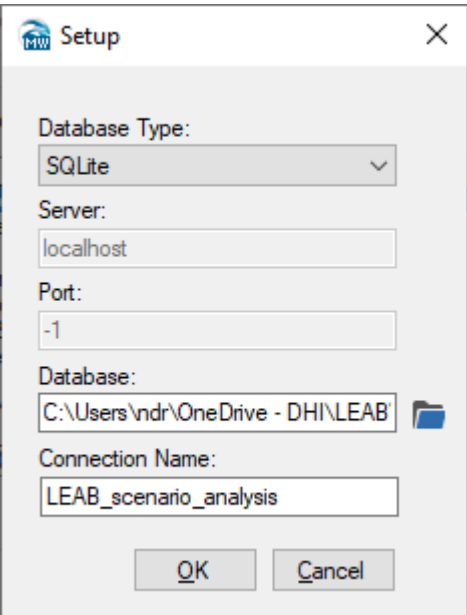
To launch **Database Manager Utility**, go to the Start menu and search for **Database Manager Utility**.

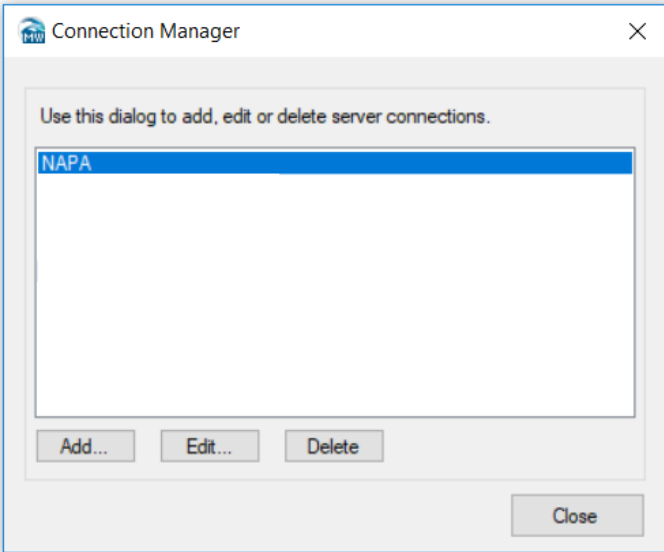
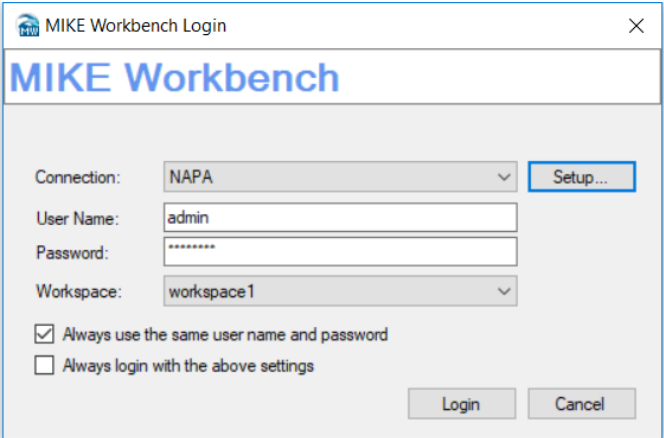


6 Connect to a database in MIKE Workbench

After a database has been created in the Database Manager Utility, a connection to the database must be created in MIKE WORKBENCH.

Instructions	Screen
<p>When opening MIKE WORKBENCH, a connection window appears</p> <p>Click "Setup..."</p>	 <p>The screenshot shows the 'MIKE Workbench Login' dialog box. It has a title bar with the MIKE logo and a close button. The main area is titled 'MIKE Workbench'. Below the title, there are four input fields: 'Connection:' (a dropdown menu), 'User Name:' (a text box), 'Password:' (a text box), and 'Workspace:' (a dropdown menu). To the right of the 'Connection:' dropdown is a 'Setup...' button. Below the input fields are two checkboxes: 'Always use the same user name and password' and 'Always login with the above settings'. At the bottom right are 'Login' and 'Cancel' buttons.</p>
<p>A connection manager then allow you to create a connection</p> <p>Click "Add..."</p>	 <p>The screenshot shows the 'Connection Manager' dialog box. It has a title bar with the MIKE logo and a close button. The main area contains the text 'Use this dialog to add, edit or delete server connections.' followed by a large empty rectangular box. At the bottom are three buttons: 'Add...', 'Edit...', and 'Delete'. At the bottom right is a 'Close' button.</p>

Instructions	Screen
<p>In the Setup window, a database connection is defined.</p> <p>If the selected database type is PostgreSQL, MS SQL Server, or Oracle, you should define the server name. In the current example, we work with a database installed locally and the server name should be set to "localhost".</p> <p>The port should be set to the port associated with the server. This association is made in Database Manager Utility for local services.</p> <p>The Database is selected from the databases available from the given server/port combination.</p> <p>The Connection Name is set to the database name by default but can be changed.</p> <p>Click OK</p>	 
<p>For SQLite, you should define the path to the sqlite file.</p> <p>The Connection Name is set to the database name by default but can be changed.</p> <p>Click OK</p>	

Instructions	Screen
<p>The newly created connection appears in the list.</p> <p>Click Close</p>	
<p>The Connection menu now shows the newly created database connection.</p> <p>By default, the pre-configured administrator account is called “admin”. The password is “dssadmin”</p> <p>This can be changed after logging in to the system. See the MIKE Workbench documentation for more information.</p> <p>Click “Login”</p>	

7 Updating Existing Database

If you are doing an update, you should ensure the database version and the MIKE OPERATIONS version are consistent. Indeed, from one version to another one, the database schema usually evolved.

Instructions for updating a database are provided in the help file of the Database Manager Utility.

Beware that after updating the database, MIKE OPERATIONS users working with the earlier version of the software will not be able to use the database. After the database has been updated everybody using the database should update the client.

8 Database Server Update

This chapter concerns users:

- **Installing** MIKE OPERATIONS on a computer different from the database server
- **Upgrading** MIKE OPERATIONS on a computer different from the database server
- **Updating** a database with Database Management Utility from a computer different from the database server

From version 2017.5, the Mesh Database was implemented in MIKE OPERATIONS. This requires a specific dll to be located on the database server. The installer and the Database Management Utility will copy automatically if PostgreSQL is installed locally. In the case PostgreSQL is not installed locally, the user will need to carry out the following steps to ensure MIKE OPERATIONS works correctly:

- Locate and copy the file called "DHI_mesh.dll" in the MIKE OPERATIONS bin folder¹
- Log in to the computer on which the database server is installed (PostgreSQL)
- Paste the file to the "lib" folder of the PostgreSQL installation².

¹ E.g. C:\Program Files (x86)\DHI\MIKE OPERATIONS\2021\bin\PostgreSQL

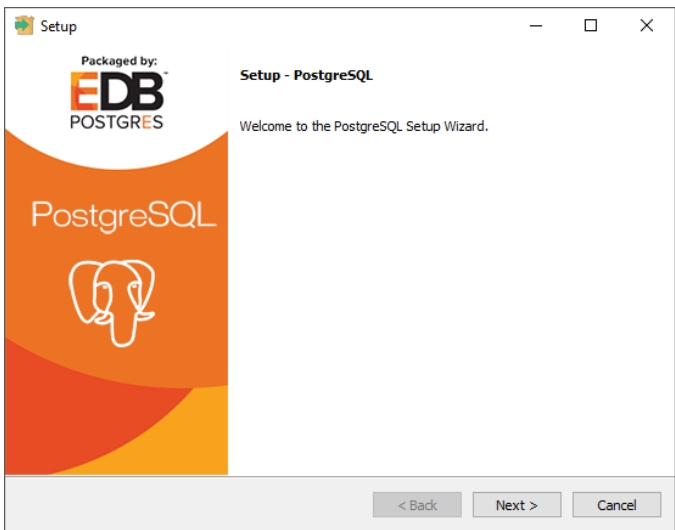
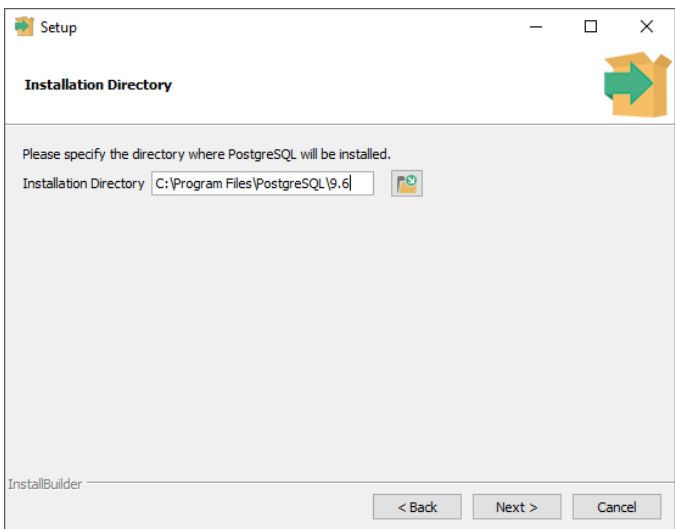
² C:\Program Files\PostgreSQL\12\lib (or relevant DB folder)

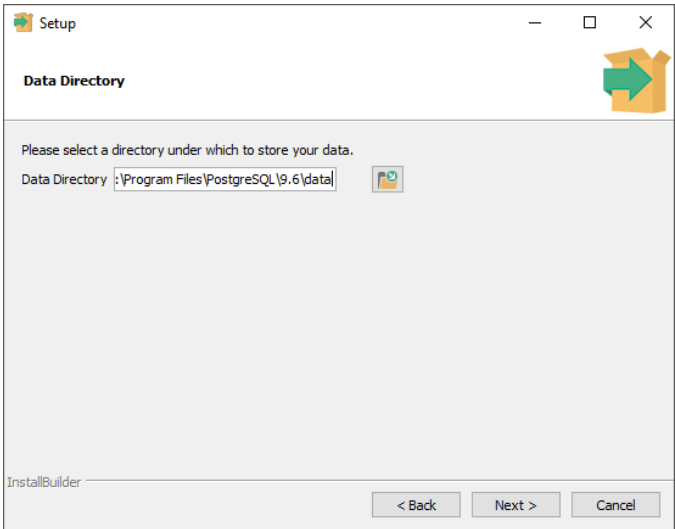
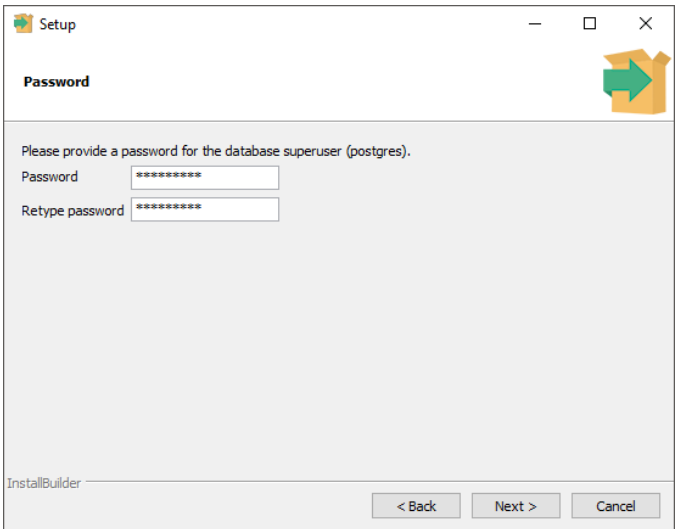
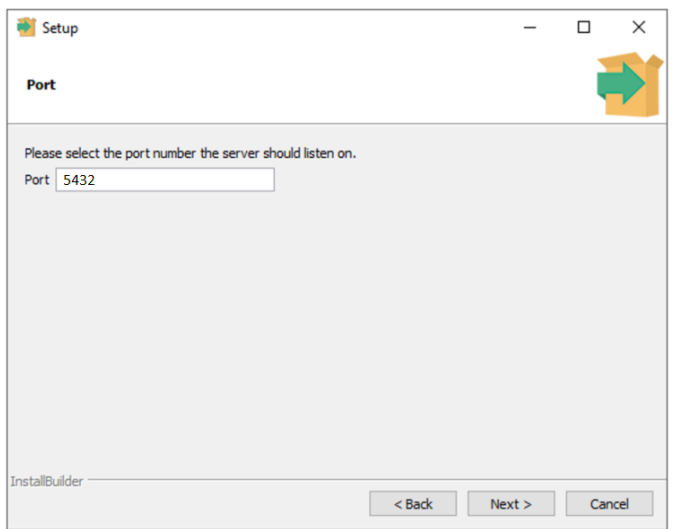
APPENDIX A: Install different version of PostgreSQL

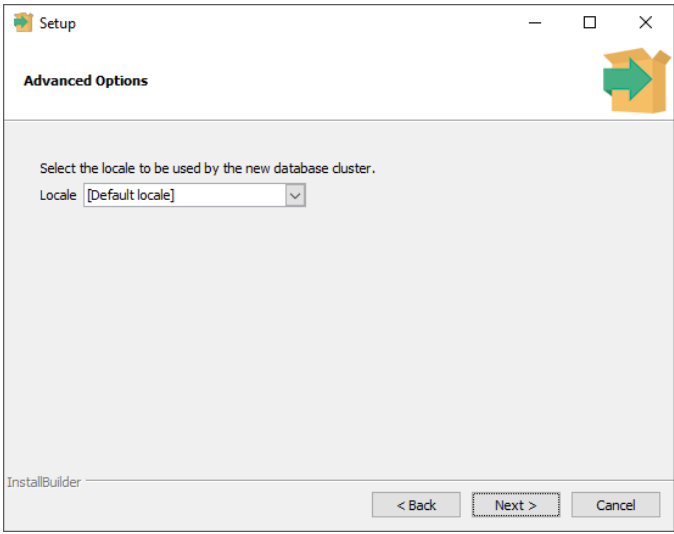
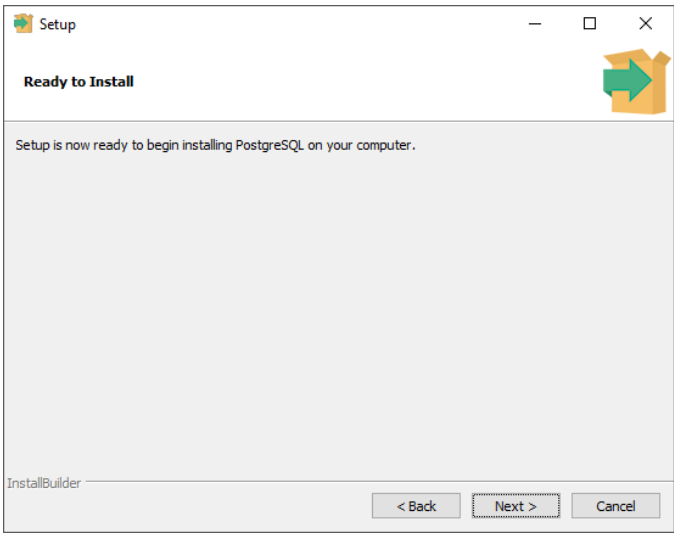
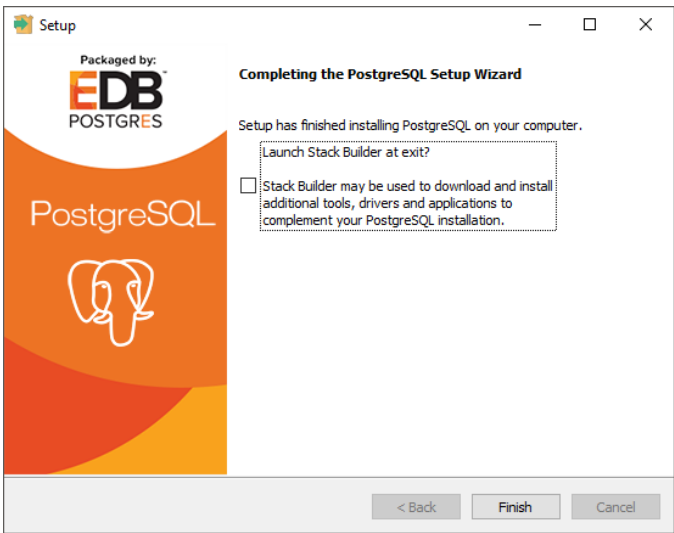
As mentioned in Chapter 2, it is possible to use several versions of PostgreSQL database.

PostgreSQL Installation

The following table explains how to install a PostgreSQL installer downloaded from [internet](#).

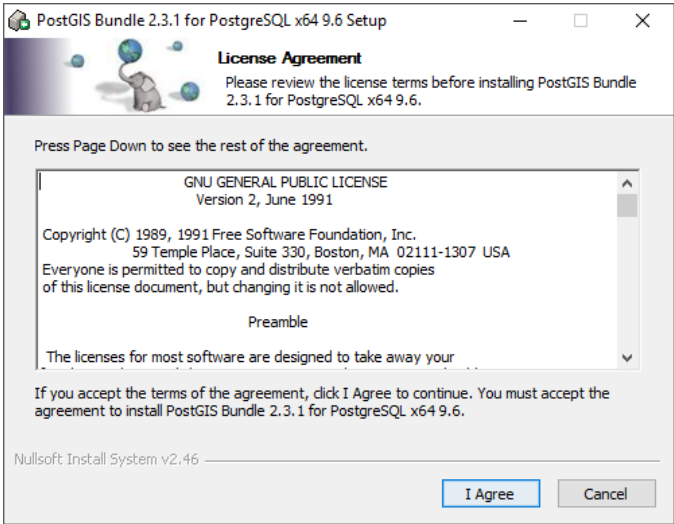
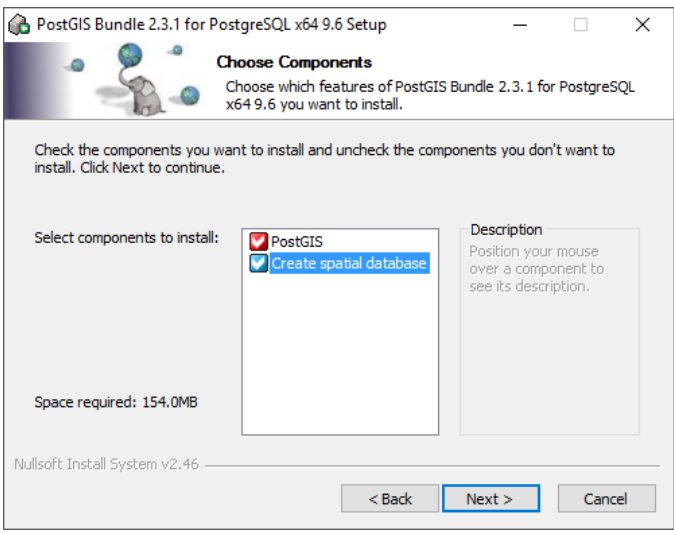
Installation step	Screen
Run the database installation program e.g. postgresql-XX.X-X-windows-x64.exe	
Start of installation Click Next	 <p>The screenshot shows the 'Setup - PostgreSQL' window. It features the EDB PostgreSQL logo and the PostgreSQL elephant icon. The text reads: 'Welcome to the PostgreSQL Setup Wizard.' At the bottom, there are buttons for '< Back', 'Next >', and 'Cancel'.</p>
Accept the default installation folder Click Next	 <p>The screenshot shows the 'Setup - PostgreSQL' window at the 'Installation Directory' step. It includes a green arrow icon pointing right. The text says: 'Please specify the directory where PostgreSQL will be installed.' Below this, the 'Installation Directory' field contains the path 'C:\Program Files\PostgreSQL\9.6'. At the bottom, there are buttons for '< Back', 'Next >', and 'Cancel'.</p>

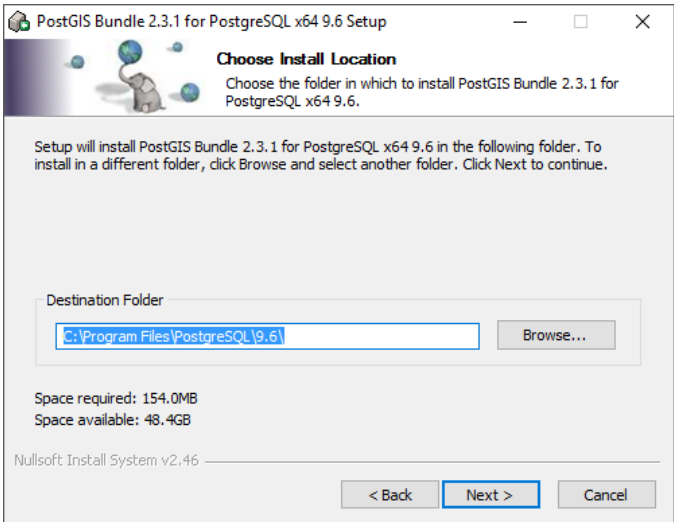
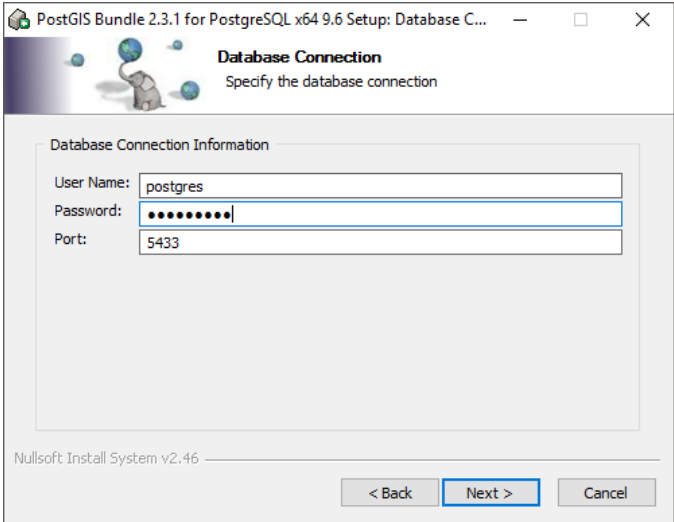
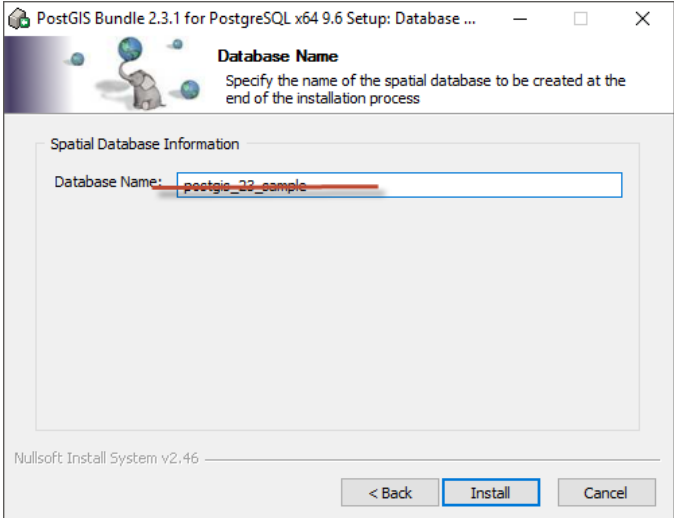
Installation step	Screen
<p>Accept the default data folder.</p> <p>Click Next</p>	
<p>Type in a password of your choice for the “postgres” user (the administrator for the database server).</p> <p>Note: Do not forget this password</p> <p>Click Next</p>	
<p>Accept the default port number (5432)</p> <p>Click Next</p>	

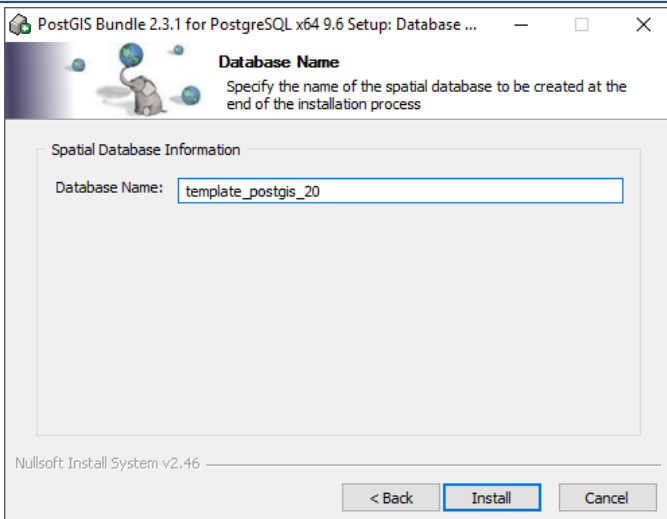
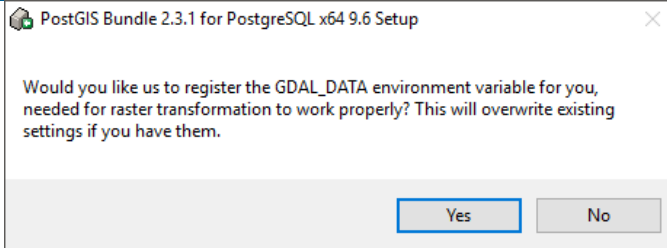
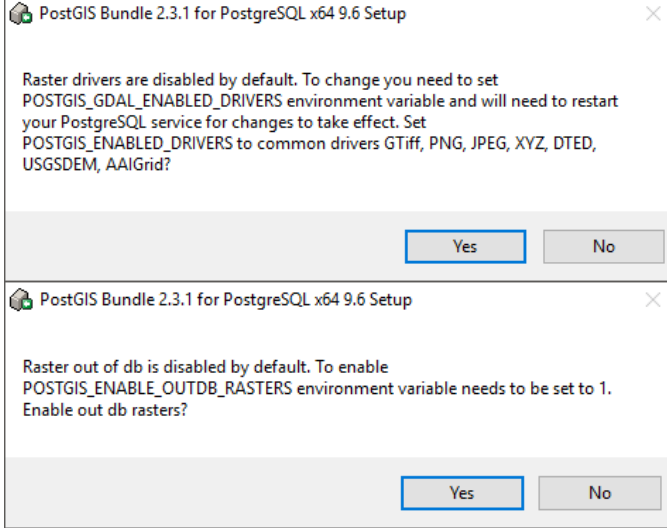
Installation step	Screen
<p>Leave the "Locale" as "Default Locale"</p> <p>Click Next</p>	
<p>Click Next</p>	
<p>The database server installation has finished</p> <p>Click off the "Launch Stack Builder at exit?" option and then click Finish</p>	

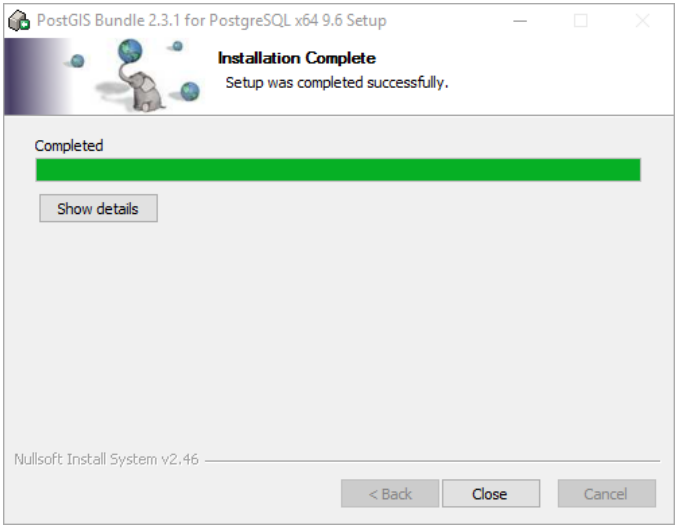
PostGIS Manual Installation

The following table explains how to install PostgreSQL exemplified by using a PostGIS postgres-bundle-pgXXx64-setup-X.X.X-X.exe installer from [internet](#).

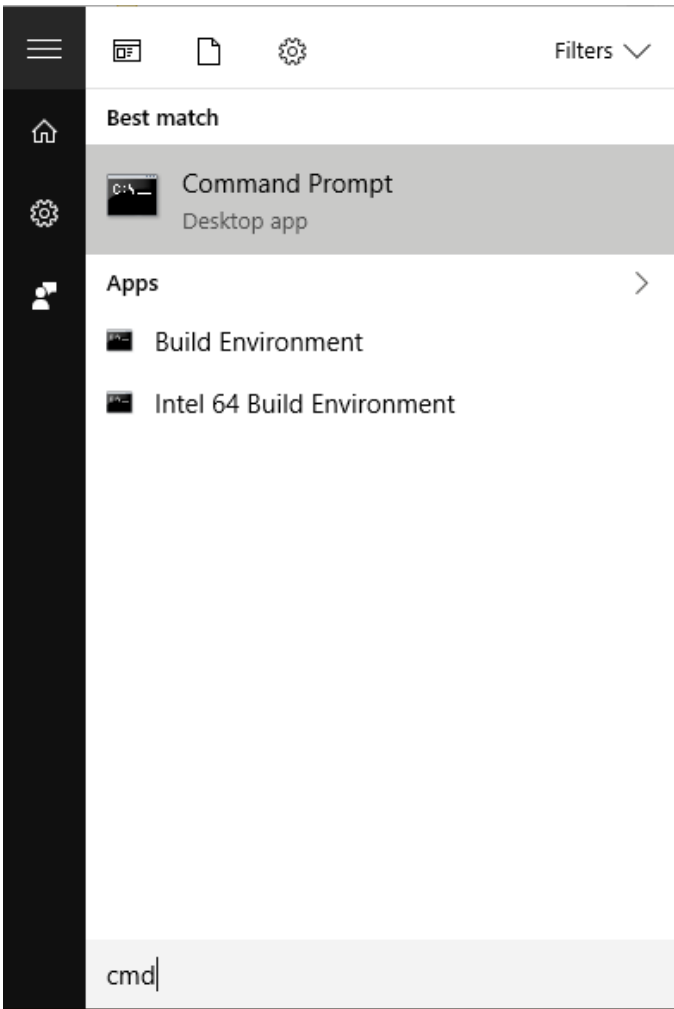
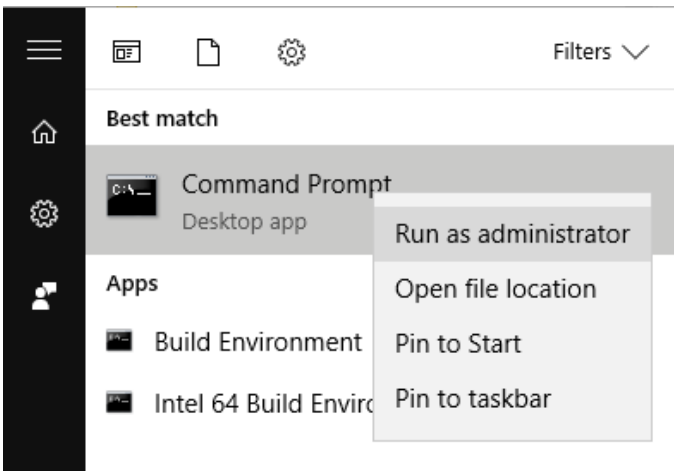
Installation step	Screen
Run the PostGIS installation program (e.g. postgres-bundle-pg96x64-setup-2.3.1-1.exe)	
Start of installation Click I Agree	 <p>The screenshot shows the 'License Agreement' window for PostGIS Bundle 2.3.1 for PostgreSQL x64 9.6. It includes the GNU General Public License (Version 2, June 1991) text and a scrollable area for the full license. At the bottom, there are 'I Agree' and 'Cancel' buttons.</p>
Check "Create spatial database" Click Next	 <p>The screenshot shows the 'Choose Components' window for PostGIS Bundle 2.3.1 for PostgreSQL x64 9.6. It lists components to be installed, with 'PostGIS' and 'Create spatial database' checked. A description box for 'Create spatial database' is visible on the right. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.</p>

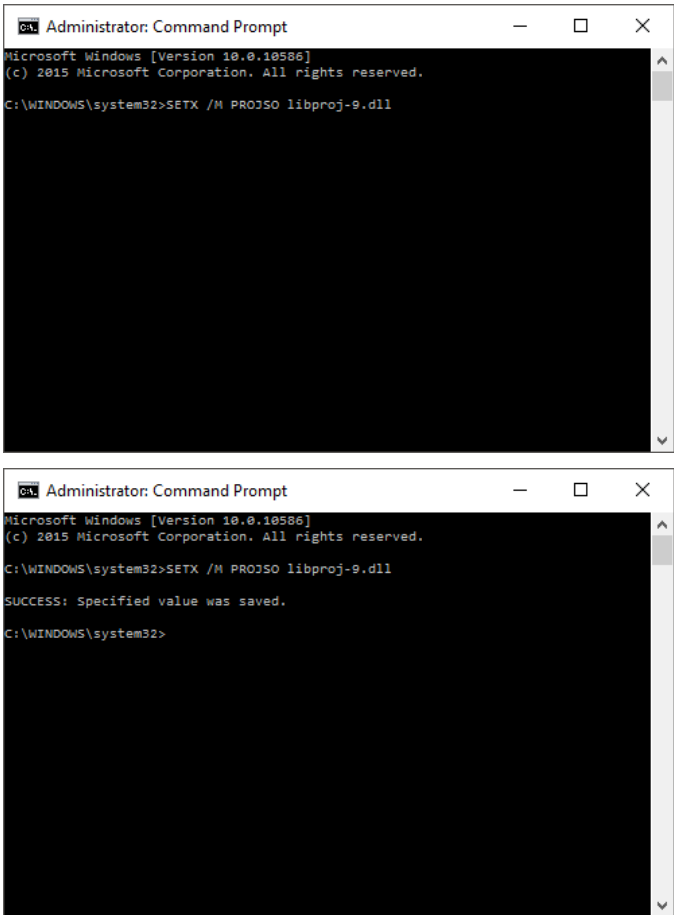
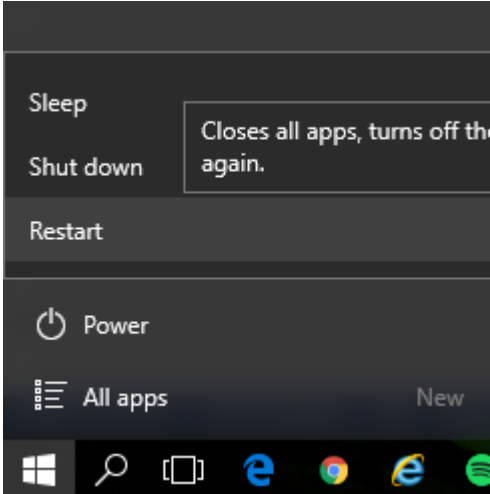
Installation step	Screen
<p>Accept the default folder.</p> <p>Click Next</p>	 <p>The screenshot shows the 'Choose Install Location' window of the PostGIS Bundle 2.3.1 for PostgreSQL x64 9.6 Setup. It prompts the user to choose the folder for installation. The default destination folder is 'C:\Program Files\PostgreSQL\9.6\'. The window also indicates that 154.0MB of space is required and 48.4GB is available. The 'Next >' button is highlighted.</p>
<p>Type in the password that was specified for the "postgres" user when installing the PostgreSQL database server</p> <p>Click Next</p>	 <p>The screenshot shows the 'Database Connection' window. It prompts the user to specify the database connection. The 'User Name' is 'postgres', the 'Password' is masked with dots, and the 'Port' is '5433'. The 'Next >' button is highlighted.</p>
<p>Rename the Spatial database:</p> <p>template_postgis_20</p>	 <p>The screenshot shows the 'Database Name' window. It prompts the user to specify the name of the spatial database to be created. The 'Database Name' field contains 'template_postgis_20'. The 'Install' button is highlighted.</p>

Installation step	Screen
	 <p>The screenshot shows the 'Database Name' window of the PostGIS Bundle 2.3.1 for PostgreSQL x64 9.6 Setup. It prompts the user to 'Specify the name of the spatial database to be created at the end of the installation process'. The 'Spatial Database Information' section contains a text box with 'template_postgis_20' entered. At the bottom, there are '< Back', 'Install', and 'Cancel' buttons.</p>
<p>Yes, to the GDAL_Data environment variable</p> <p>Click Yes</p>	 <p>The screenshot shows a dialog box asking: 'Would you like us to register the GDAL_DATA environment variable for you, needed for raster transformation to work properly? This will overwrite existing settings if you have them.' At the bottom, there are 'Yes' and 'No' buttons.</p>
<p>Yes, to both set of environment variables</p> <p>Click Yes</p>	 <p>The screenshot shows two sequential dialog boxes. The first asks: 'Raster drivers are disabled by default. To change you need to set POSTGIS_GDAL_ENABLED_DRIVERS environment variable and will need to restart your PostgreSQL service for changes to take effect. Set POSTGIS_ENABLED_DRIVERS to common drivers GTiff, PNG, JPEG, XYZ, DTED, USGSDEM, AAIGrid?'. The second asks: 'Raster out of db is disabled by default. To enable POSTGIS_ENABLE_OUTDB_RASTERS environment variable needs to be set to 1. Enable out db rasters?'. Both dialog boxes have 'Yes' and 'No' buttons.</p>

Installation step	Screen
<p>The installation has finished</p> <p>Click Close</p>	 <p>The screenshot shows a Windows-style window titled "PostGIS Bundle 2.3.1 for PostgreSQL x64 9.6 Setup". The window has a standard title bar with minimize, maximize, and close buttons. The main content area features a green progress bar at the top, followed by the text "Installation Complete" and "Setup was completed successfully." Below this is a "Show details" button. At the bottom of the window, there is a footer that reads "Nullsoft Install System v2.46" and three buttons: "< Back", "Close", and "Cancel".</p>

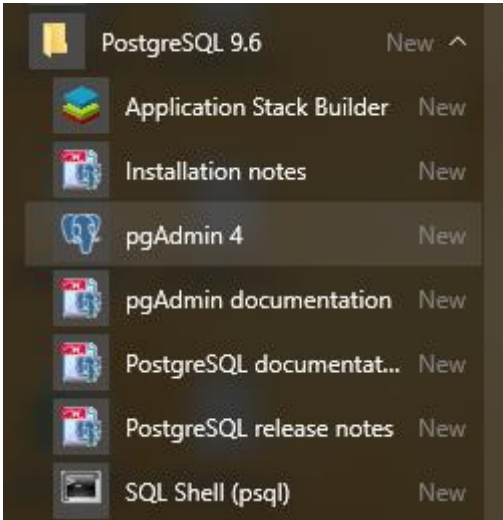
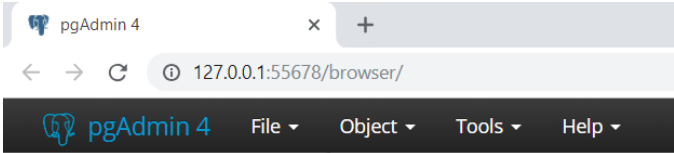
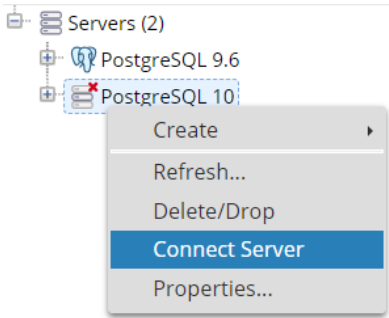
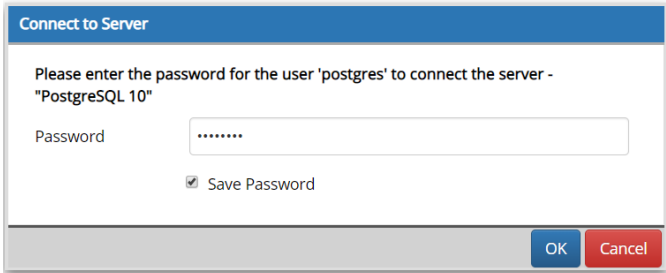
Configuration of PostGIS

Installation step	Screen
<p>Open the Windows Command Prompt</p> <p>Click the Windows Start Menu and type "cmd"</p>	
<p>Right-click on cmd.exe and choose Run as administrator</p>	

Installation step	Screen
<p>In the command prompt type SETX /M PROJSO libproj-9.dll and press enter</p>	 <p>The first screenshot shows an Administrator Command Prompt window with the text: "Microsoft Windows [Version 10.0.10586] (c) 2015 Microsoft Corporation. All rights reserved. C:\WINDOWS\system32>SETX /M PROJSO libproj-9.dll". The second screenshot shows the same window after execution, displaying "SUCCESS: Specified value was saved." and the prompt "C:\WINDOWS\system32>" again.</p>
<p>Restart the computer to make the environment variable available to PostGIS</p>	 <p>The screenshot shows the Windows Start menu with the power button icon. A menu is open showing options: Sleep, Shut down, Restart, Power, All apps, and New. A tooltip is visible over the 'Shut down' option, stating: "Closes all apps, turns off the computer again."</p>

APPENDIX B: Advanced PostgreSQL Database management tool

The PostgreSQL database password provided during installation can be stored in the database for easy access in the future. It is an optional configuration.

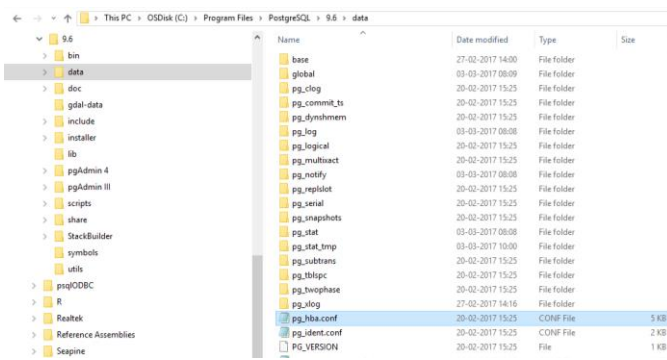
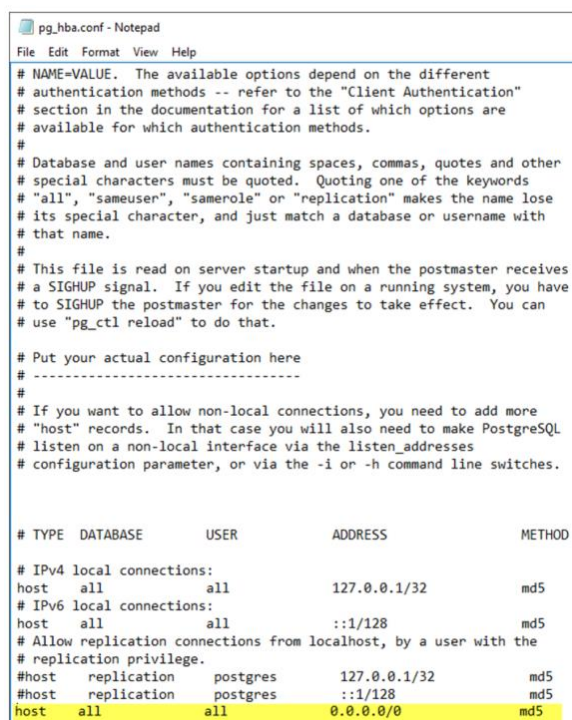
Installation step	Screen
Start the pgAdmin 4 database administration tool from the Windows Start menu	
An internet browser opens	
Right click the database server entry for localhost under the Servers node to access "Connect Server"	
<p>Provide the password for the "postgres" user and check on the "Store password" option</p> <p>Note: Clicking on "Store password" leads to a warning.</p> <p>Click OK on the warning dialog</p>	

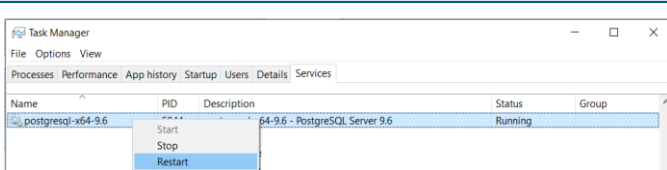
APPENDIX C: Configuring the PostgreSQL Database Server for remote access

IMPORTANT: This is only needed if the database server shall accept connection from remote computers.

The section describes how to configure the PostgreSQL database server for running in corporate mode.


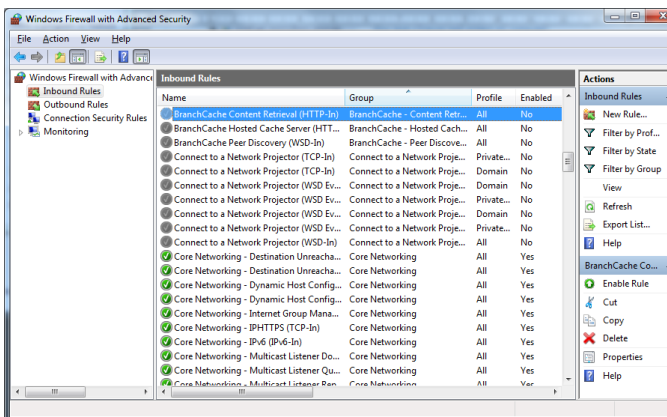
Start by enabling password save as shown in APPENDIX B.

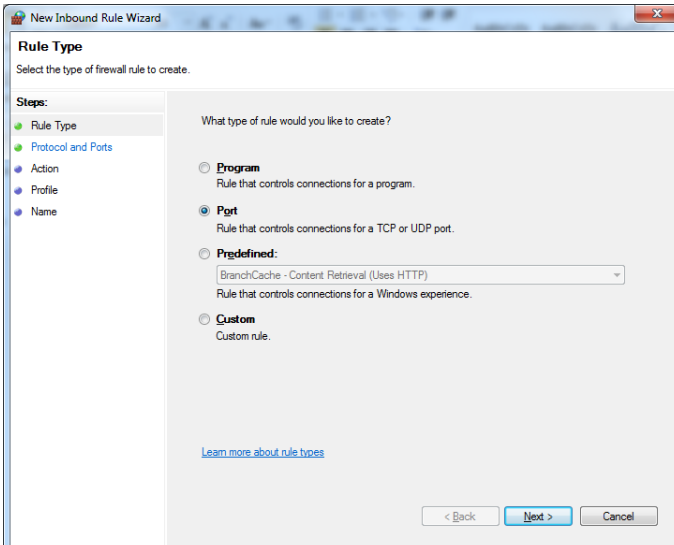
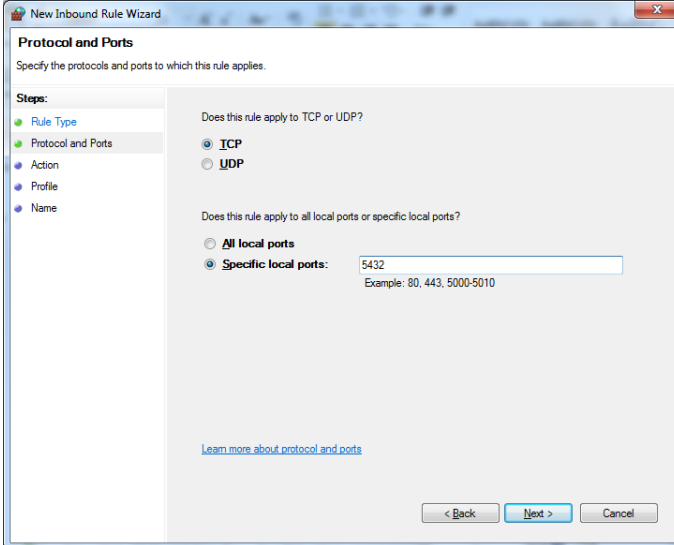
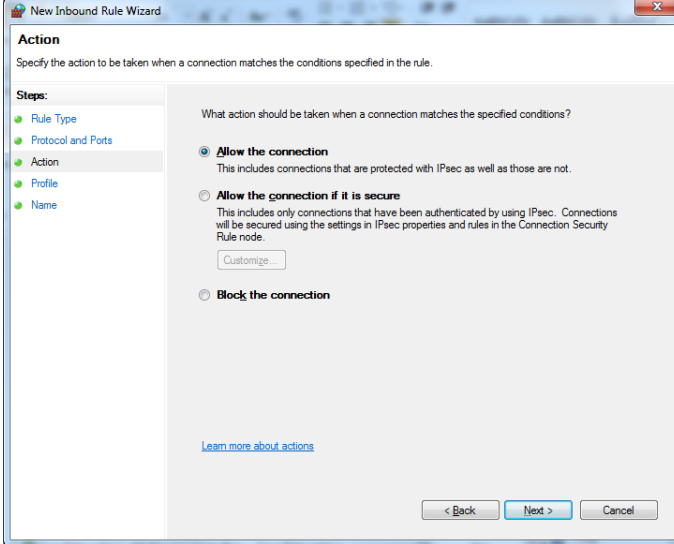
Installation step	Screen
<p>Locate the pg_hba.conf file in the data folder (C:\Program Files\PostgreSQL\10\data) and open it in an editor e.g. Notepad</p>	
<p>Insert a new line to open up for all non-local connections to database as shown on the right</p> <p>host all all 0.0.0.0/0 md5</p> <p>Adjust spaces!</p> <p>Save the configuration.</p>	 <pre> # NAME=VALUE. The available options depend on the different # authentication methods -- refer to the "Client Authentication" # section in the documentation for a list of which options are # available for which authentication methods. # # Database and user names containing spaces, commas, quotes and other # special characters must be quoted. Quoting one of the keywords # "all", "sameuser", "samerole" or "replication" makes the name lose # its special character, and just match a database or username with # that name. # # This file is read on server startup and when the postmaster receives # a SIGHUP signal. If you edit the file on a running system, you have # to SIGHUP the postmaster for the changes to take effect. You can # use "pg_ctl reload" to do that. # Put your actual configuration here # ----- # # If you want to allow non-local connections, you need to add more # "host" records. In that case you will also need to make PostgreSQL # listen on a non-local interface via the listen_addresses # configuration parameter, or via the -i or -h command line switches. # TYPE DATABASE USER ADDRESS METHOD # IPv4 local connections: host all all 127.0.0.1/32 md5 # IPv6 local connections: host all all ::1/128 md5 # Allow replication connections from localhost, by a user with the # replication privilege. #host replication postgres 127.0.0.1/32 md5 #host replication postgres ::1/128 md5 host all all 0.0.0.0/0 md5 </pre>

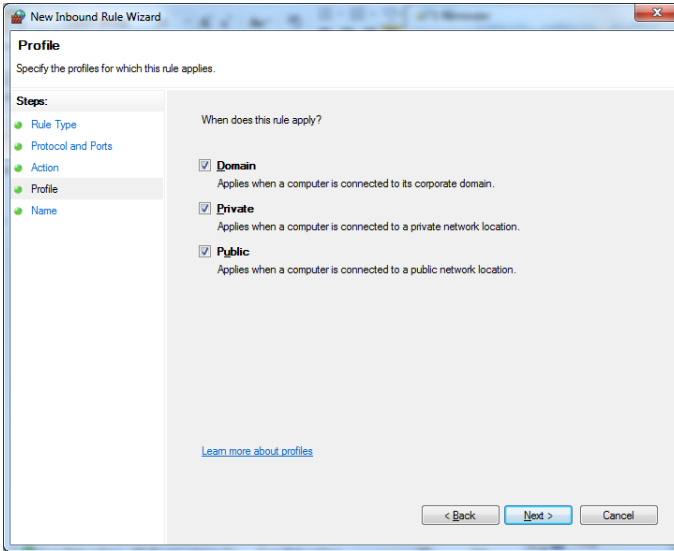
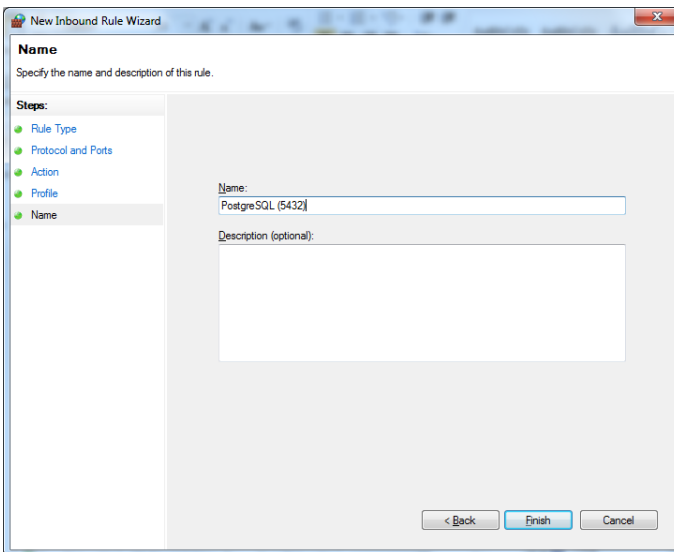
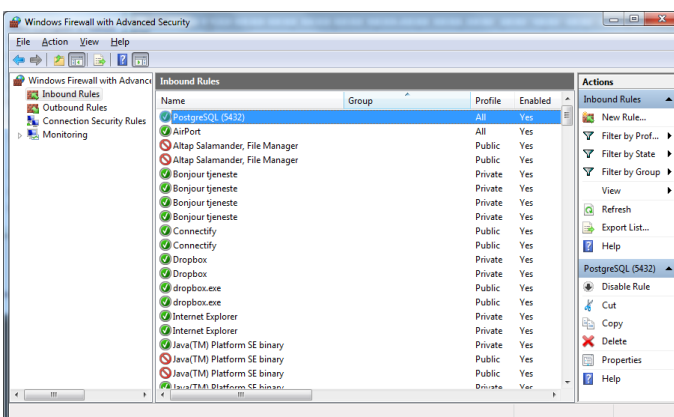
Installation step	Screen
Restart the services to apply the update	

Configuring the Windows Firewall for remote access to MIKE OPERATIONS

The section describes how to configure the Windows firewall for MIKE OPERATIONS running in enterprise mode.

Installation step	Screen
<p>Open the Firewall applet in the Windows Control Panel</p> <p>Click Advanced Settings</p>	
<p>Select Inbound Rules</p> <p>Click New Rule in the Actions panel to the right</p>	

Installation step	Screen
<p>Select Port</p> <p>Click Next</p>	 <p>The screenshot shows the 'New Inbound Rule Wizard' window at the 'Rule Type' step. The 'Steps' list on the left includes 'Rule Type', 'Protocol and Ports', 'Action', 'Profile', and 'Name'. The main area asks 'What type of rule would you like to create?' with three options: 'Program' (selected), 'Port', and 'Predefined'. The 'Port' option is selected, and the 'Predefined' dropdown shows 'BranchCache - Content Retrieval (Uses HTTP)'. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.</p>
<p>Select TCP, Specific local ports and enter 5432 (or the port number specified when installing PostgreSQL)</p> <p>Click Next</p>	 <p>The screenshot shows the 'New Inbound Rule Wizard' window at the 'Protocol and Ports' step. The 'Steps' list on the left includes 'Rule Type', 'Protocol and Ports', 'Action', 'Profile', and 'Name'. The main area asks 'Does this rule apply to TCP or UDP?' with 'TCP' selected. Below, it asks 'Does this rule apply to all local ports or specific local ports?' with 'Specific local ports' selected. The 'Specific local ports' text box contains '5432'. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.</p>
<p>Select Allow the connection</p> <p>Click Next</p>	 <p>The screenshot shows the 'New Inbound Rule Wizard' window at the 'Action' step. The 'Steps' list on the left includes 'Rule Type', 'Protocol and Ports', 'Action', 'Profile', and 'Name'. The main area asks 'What action should be taken when a connection matches the specified conditions?' with three options: 'Allow the connection' (selected), 'Allow the connection if it is secure', and 'Block the connection'. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.</p>

Installation step	Screen
<p>Click on for all profiles</p> <p>Click Next</p>	 <p>The 'New Inbound Rule Wizard' window is shown at the 'Profile' step. It asks 'Specify the profiles for which this rule applies.' The 'Steps' list on the left includes Rule Type, Protocol and Ports, Action, Profile (selected), and Name. The main area shows three checked options: Domain (Applies when a computer is connected to its corporate domain.), Private (Applies when a computer is connected to a private network location.), and Public (Applies when a computer is connected to a public network location.). There is a link 'Learn more about profiles' and buttons for '< Back', 'Next >', and 'Cancel'.</p>
<p>Specify a rule name – e.g. “PostgreSQL (5432)” – and a description</p> <p>Click Finish</p>	 <p>The 'New Inbound Rule Wizard' window is shown at the 'Name' step. It asks 'Specify the name and description of this rule.' The 'Steps' list on the left includes Rule Type, Protocol and Ports, Action, Profile, and Name (selected). The main area has a 'Name:' field containing 'PostgreSQL (5432)' and a 'Description (optional):' text area. Buttons for '< Back', 'Finish', and 'Cancel' are at the bottom.</p>
<p>The new rule is now added to the list of Inbound rules</p>	 <p>The 'Windows Firewall with Advanced Security' window is shown, displaying the 'Inbound Rules' list. The newly created rule 'PostgreSQL (5432)' is at the top, with a green checkmark icon, indicating it is enabled. Other rules like 'AirPort', 'Bonjour tjeneste', and 'Connectify' are also listed. The 'Actions' pane on the right shows options for the selected rule: 'New Rule...', 'Filter by Prof...', 'Filter by State', 'Filter by Group', 'View', 'Refresh', 'Export List...', 'Help', 'Disable Rule', 'Cut', 'Copy', 'Delete', 'Properties', and 'Help'.</p>

APPENDIX D: Troubleshooting

Event Manager will not start (System.PlatformNotSupportedException)

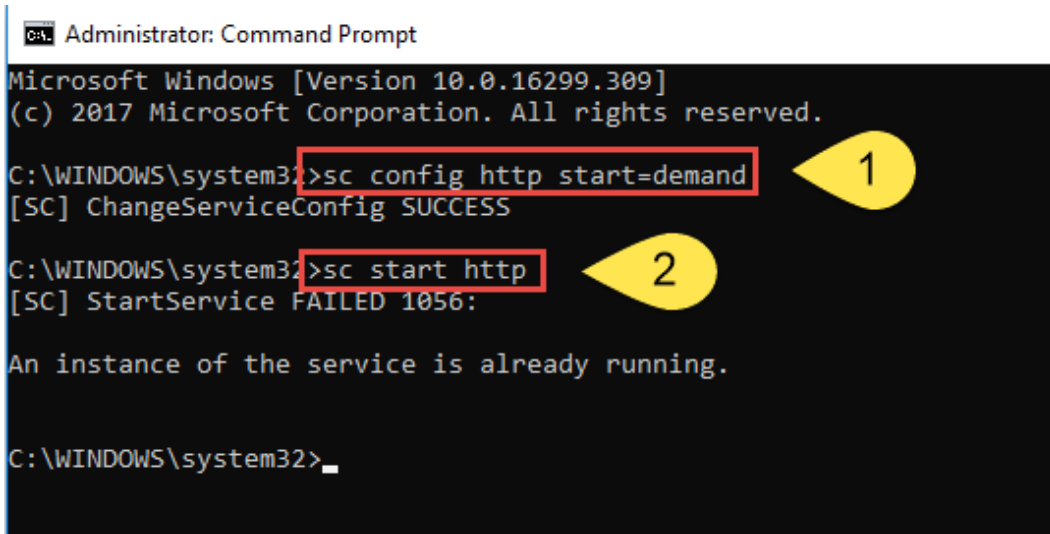
If the DHI Event Manager is not starting during the installation, the installation cannot complete and will roll back.

The following stack trace can be found in the Windows Event Viewer.

```
Service cannot be started. System.PlatformNotSupportedException: Operation is not supported on this platform.
  at System.Net.HttpListener..ctor()
  at System.ServiceModel.Channels.SharedHttpTransportManager.OnOpen()
  at System.ServiceModel.Channels.TransportManager.Open(TransportChannelListener channelListener)
  at
System.ServiceModel.Channels.TransportManagerContainer.Open(SelectTransportManagersCallback selectTransportManagerCallback)
  at System.ServiceModel.Channels.TransportChannelListener.OnOpen(TimeSpan timeout)
  at System.ServiceModel.Channels.HttpChannelListener`1.OnOpen(TimeSpan timeout)
  at System.ServiceModel.Channels.CommunicationObject.Open(TimeSpan timeout)
  at System.ServiceModel.Dispatcher.ChannelDispatcher.OnOpen(TimeSpan timeout)
  at System.ServiceModel.Channels.CommunicationObject.Open(TimeSpan timeout)
  at System.ServiceModel.ServiceHostBase.OnOpen(TimeSpan timeout)
  at System.ServiceModel.Channels.CommunicationObject.Open(TimeSpan timeout)
  at DHI.Solutions.EventManager.Service...
```

To solve the System.PlatformNotSupportedException issue:

- a. Start a command prompt "as administrator".
- b. Run "sc config http start=demand"
- c. Run "sc start http" (to make sure that the http service is running)



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.16299.309]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>sc config http start=demand
[SC] ChangeServiceConfig SUCCESS

C:\WINDOWS\system32>sc start http
[SC] StartService FAILED 1056:

An instance of the service is already running.

C:\WINDOWS\system32>
```

Template_postgis_20 does not exist

After making a fresh installation of MIKE OPERATIONS, when trying to create a new database, if you receive an error message mentioning a missing database model "template_postgis_20", it means that PostGIS was not installed correctly.

```

User workspace_read already existed. been updated
(1 ligne)

DROP FUNCTION
SET
SET
SET
SET
SET
CREATE FUNCTION
        dss_alter_system_manager
-----
User workspace_member already existed. been updated
(1 ligne)

DROP FUNCTION
SET
SET
SET
SET
SET
SET
CREATE FUNCTION
        dss_alter_system_manager
-----
User workspace_reviewer already existed. been updated
(1 ligne)

DROP FUNCTION
ERREUR: La base de données modèle À template_postgis_20 À n'existe pas
"C:\Program Files\PostgreSQL\9.6\bin\psql.exe" -d postgres -h localhost -p 5432 -U postgres -c "CREATE DATABASE 'barragemike'"
PostGIS20
Restore.bat could not create "barragemike", does it already exist?
-----Restore Database 'barragemike' Done-----

```

The solution is to reinstall PostGIS (see APPENDIX A). The download file can be found [online](#).