MOVES 2014
Installation Guide

Introduction

Welcome to MOVES 2014, the latest release of the Motor Vehicle Emissions Simulator (MOVES) model developed by the United States Environmental Protection Agency (EPA). MOVES 2014 supersedes MOVES 2010b and integrates the most up-to-date data and inventory methods to assist in on-road, mobile source emissions inventory development. This Installation Guide will walk the user through the installation steps within the MOVES 2014 Installation Suite and assist in setting up MOVES 2014. The MOVES2014 Installation Suite installs three major components needed for MOVES2014 to run:

Java
MySQL
MOVES2014 Application

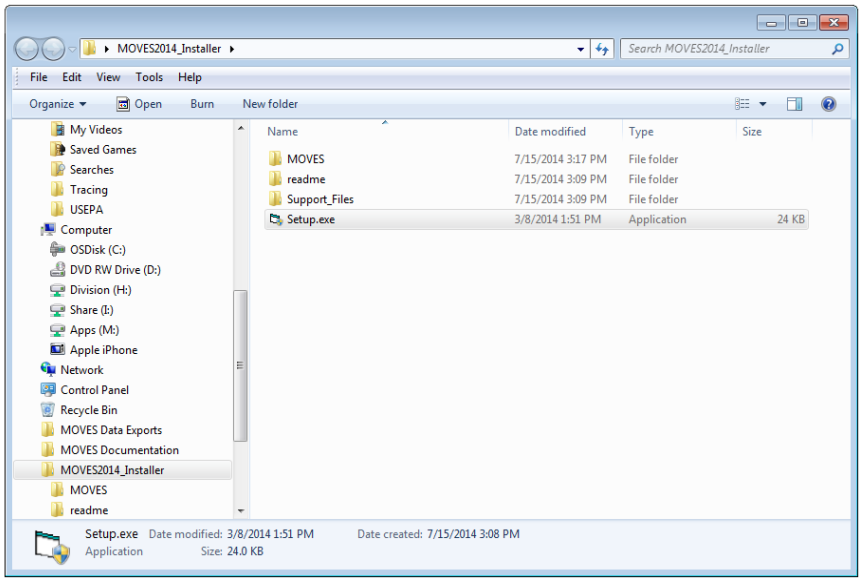
Some of the components may already be installed on your computer, in which case, the MOVES2014 Installation Suite will skip those steps in the installation process. For example, you may already have Java or the ODBC Connector installed.

System Requirements

Microsoft Windows XP or newer operating system
Elevated System Privileges or Administrative Rights on your computer (***very important***)
Internet connection
Adobe Reader

Getting Started

ATTENTION: If you are a MOVES2010b user, back-up any existing MySQL data before starting this process.



Extract the downloaded zipped MOVES2014_Installer folder. Pick an easy location, like the desktop, as your extraction location.

Once extracted, locate the folder. Open the folder and double-click the Setup.exe file within the folder.

NOTE: If prompted, click *Yes* on the "User Account Control" window.

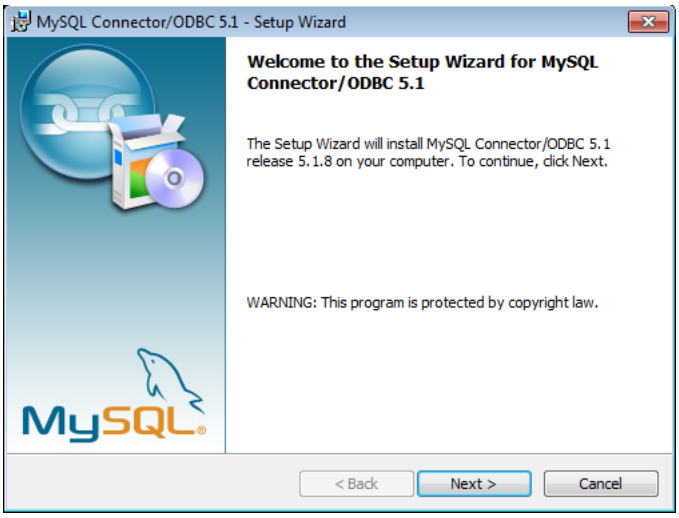
This will open the MOVES2014 Installation

Click *Continue.*

The MOVES2014 Installation Suite will now check if the ODBC Connector is currently installed. If the ODBC Connector is already installed, you will be directed to the MOVES2014 Installation Suite main screen, skip to **Exploring the MOVES2014 Installation Suite** on page 5.

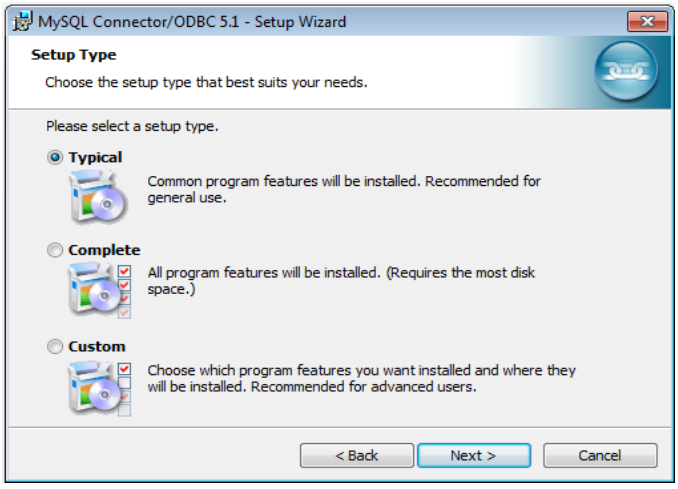
If the ODBC Connector is not installed, you will see the screen at left. Click Continue to proceed to the MySQL ODBC Connector installation.

NOTE: If prompted, click Run on the "Open File – Security Warning." This will open the MySQL Connector/ODBC 5.1 – Setup Wizard



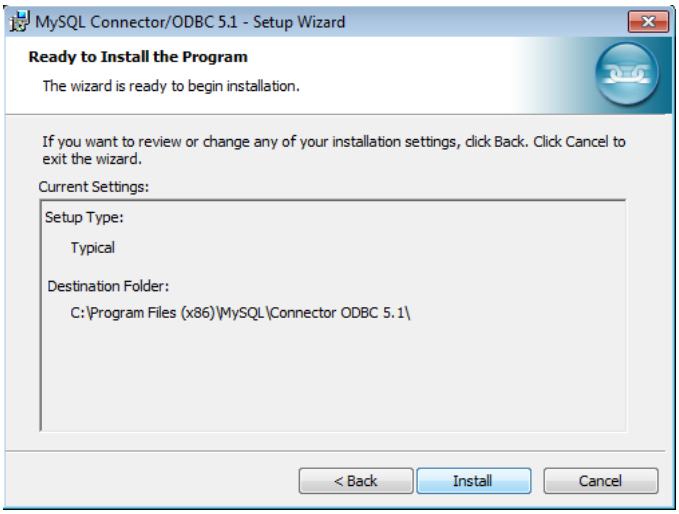
A DOS window will be running in the background.

Click *Next >* to continue.



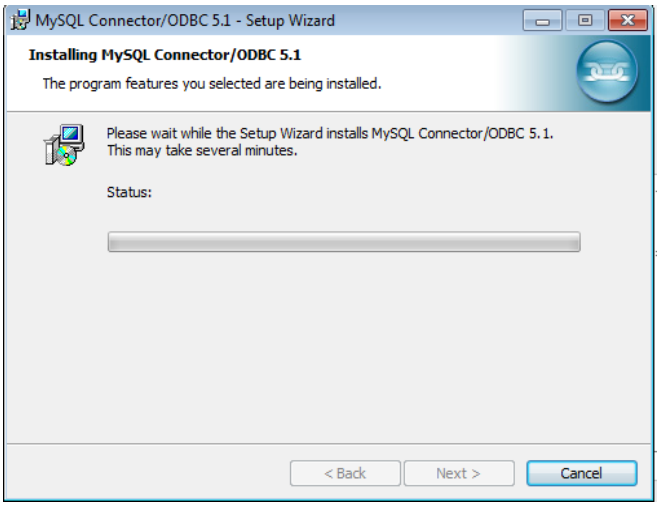
Select the Typical radio button.

Click *Next >*.

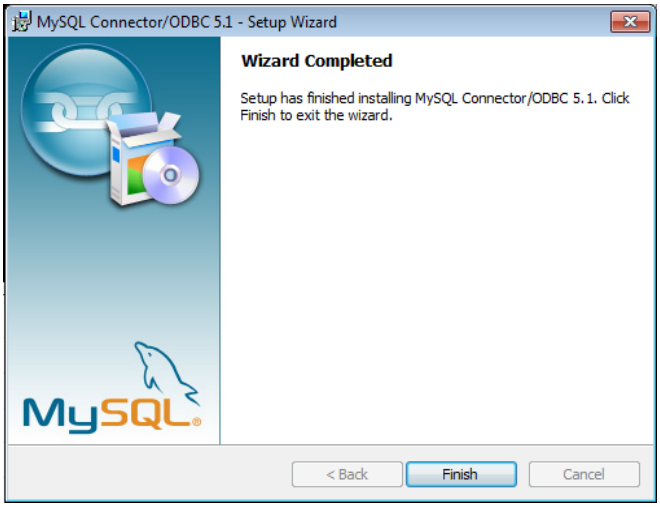


You should see the following two windows open on your screen.

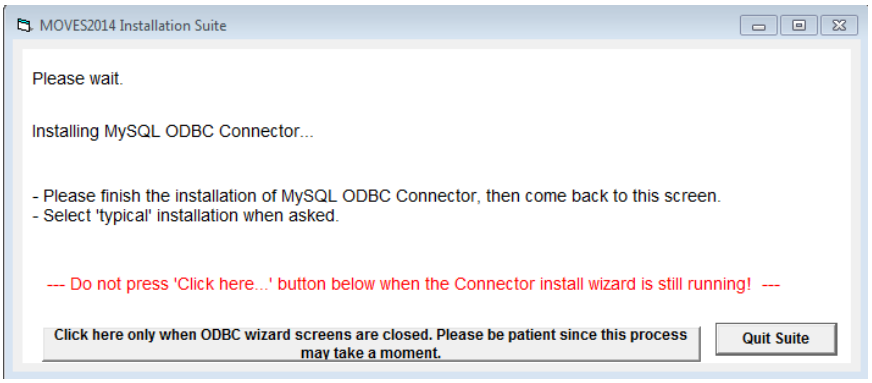
Click *Install*.



Clicking Install will display the installation status bar.



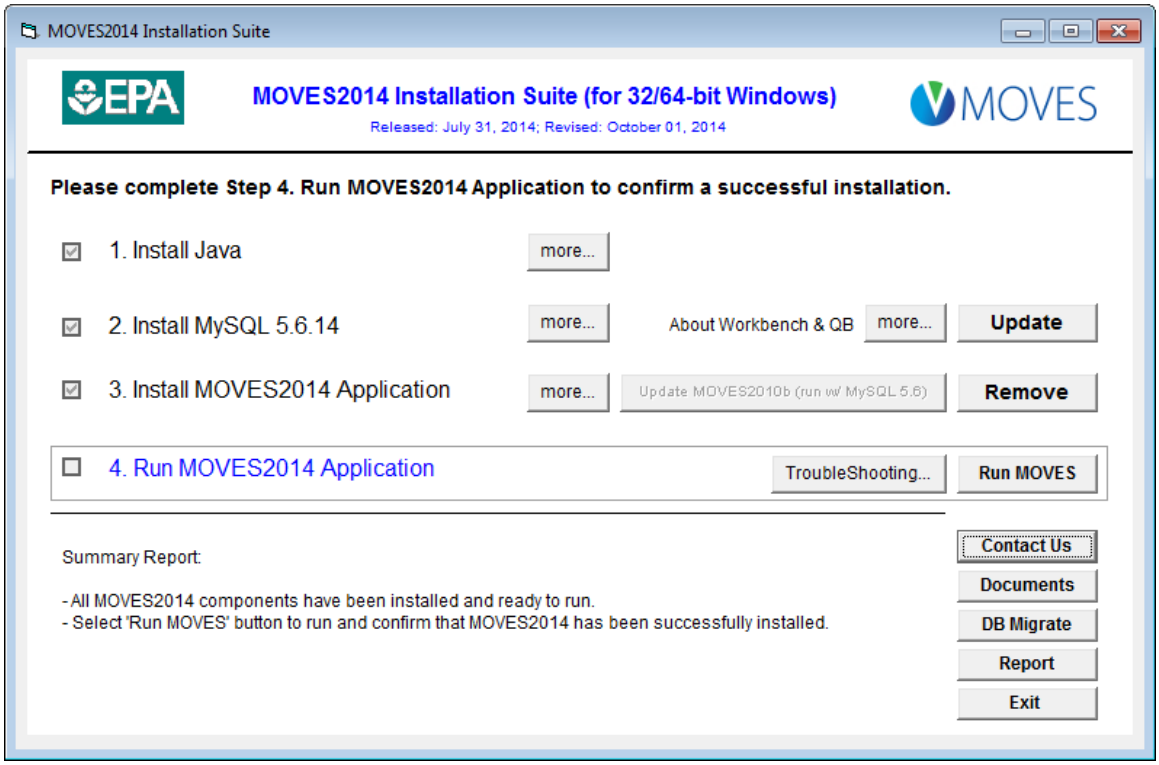
Once the MySQL Connector/ODBC 5.1 – Setup Wizard is complete, click the Finish button to return to the MOVES2014 Installation Suite window.



Click the *Click here only when…* button to enter the MOVES2014 Installation Suite.

Exploring the MOVES2014 Installation Suite

The Installation Suite main screen, below, installs the software components required for MOVES2014 to function properly: Java, MySQL and the MOVES 2014 application. Therefore, the MOVES2014 Installation Suite has four primary steps 1. Install Java, 2. Install MySQL, 3. Install the MOVES2014 Application, and 4. Run the MOVES2014 Application. To the left of each step is a check box indicating the status of the software installation. A check mark indicates that the software has been successfully installed and that the step is complete. Some components may already be installed on your computer (indicated by a check mark in the box), therefore, the MOVES2014 Installation Suite will skip those steps in the installation process. Clicking the "more…" button gives the status of the installation and information about the current version of the software installed on the local machine. Clicking the "Install" button will initiate the individual software's installation process.



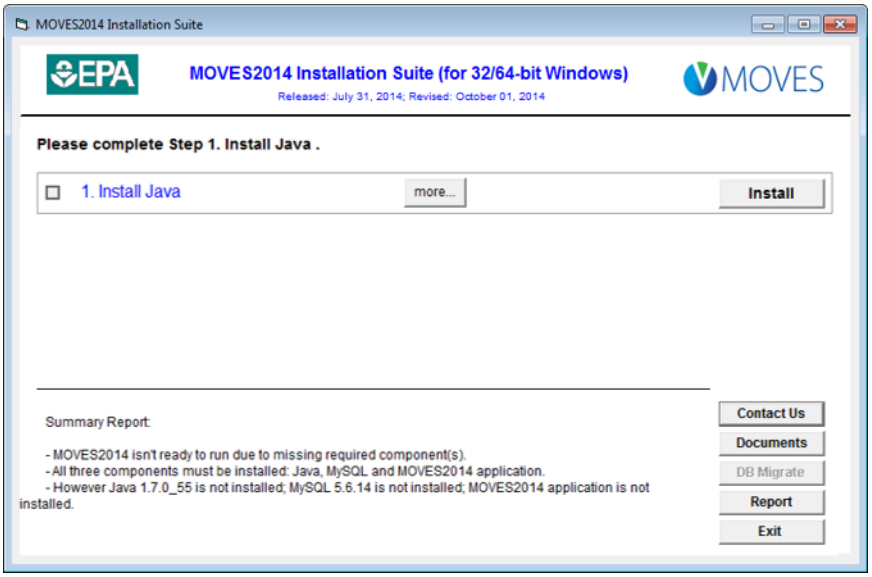
Other buttons on the MOVES2014 Installation Suite include Contact Us, Documents, DB Migrate, Report, and an Exit button. Below is a short description of these feature buttons.

Contact Us- brings the user to a screen that provides a contact email address and contact website.
Documents- brings the user to a screen that allows access to various user and reference documents.
DB Migrate- migrates databases from previous versions of MySQL to the current version.
Report- generates an error report that can be used with addressing installation issues.
Exit- exits the installation suite.

Next Steps

If the box to the left of "1. Install Java" is unchecked, proceed to Step 1. Install Java on page 6 of this Installation Guide. If the box is checked, proceed to Step 2. Install MySQL on page 11 of this Installation Guide.

Step 1: Install Java



If the box is unchecked, click the Install button to the right of "1. Install Java."

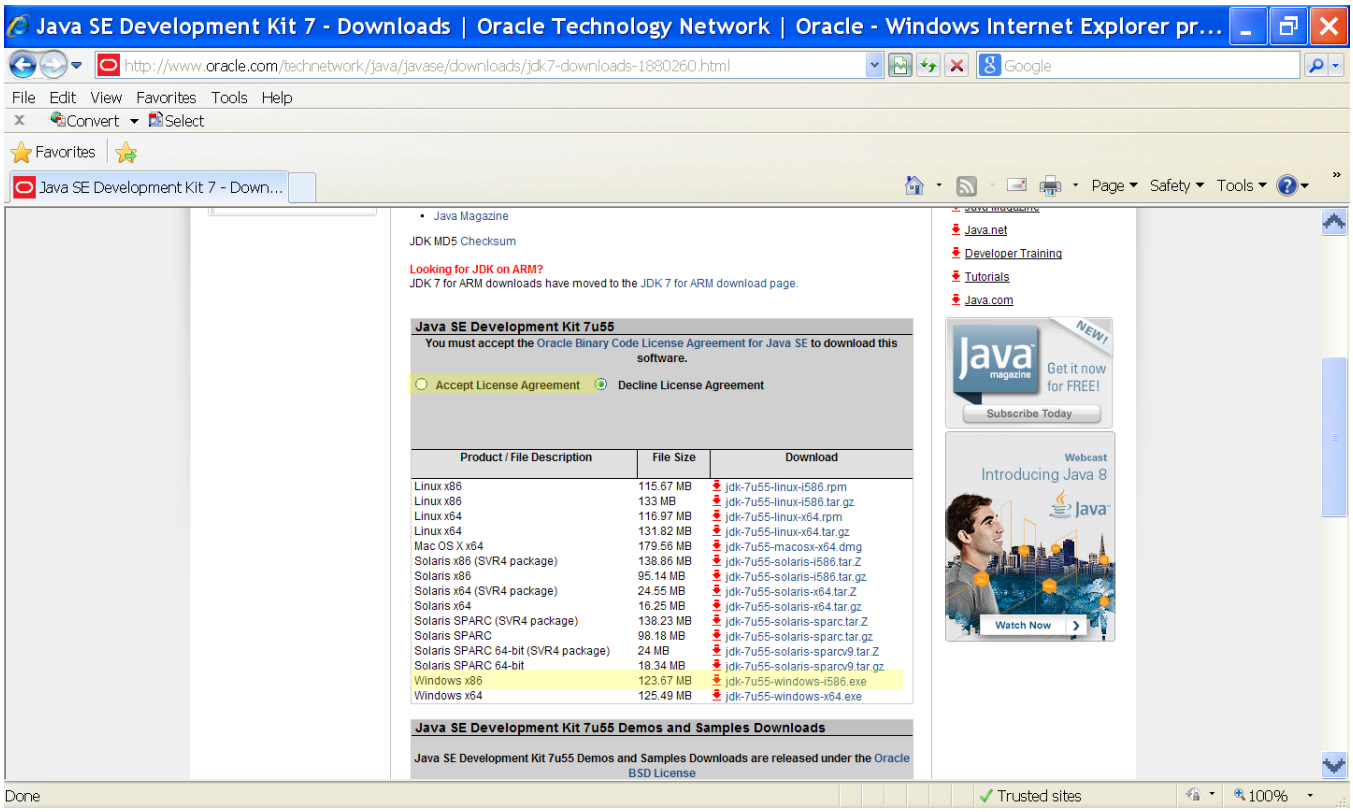
NOTE: If Java is already installed, the box to the left of "1. Install Java" will be checked. If this is the case, proceed to Step 2. Install MySQL on page 11 of this Installation Guide.

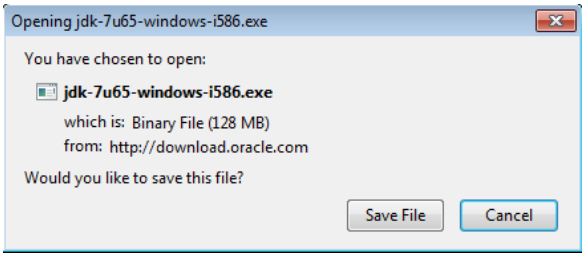
You are now at the Download and Install Java window. If you have already downloaded but not installed Java, skip to step 3. in the window. If you have not yet downloaded Java, begin at step 2. in the window. Clicking the hyperlink next to 2.2 will direct you to the Oracle/Java web page. See the next page for download instructions. If the button fails to launch the Oracle/Java web page, use the URL below.

URL:
http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html

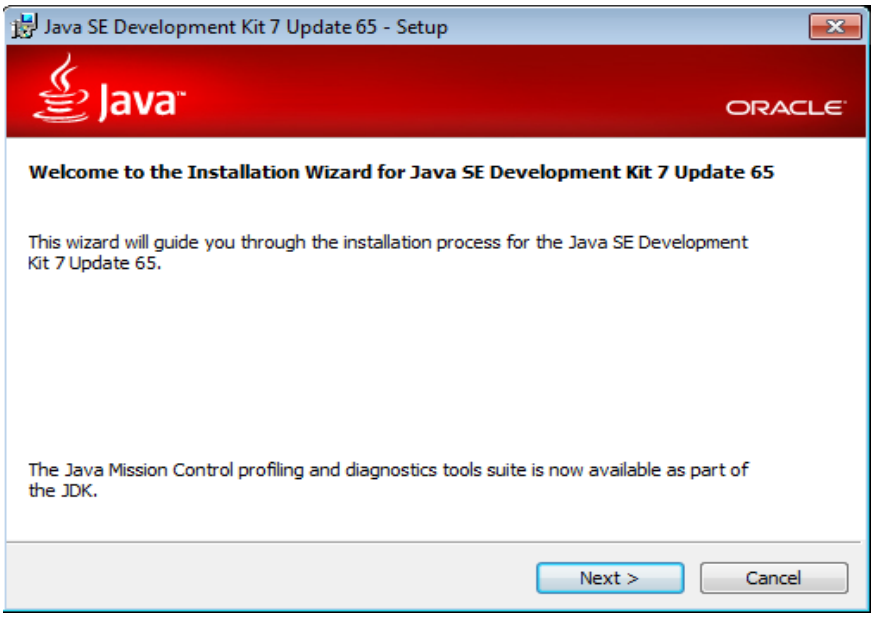
Java Download and Install Step 2.2. The “Java SE Development Kit 7 - Downloads” screen should appear.

Scroll down approximately 1/3 of the way down the page to the License Agreement section and click the *Accept License Agreement* radio button. Find “Windows x86” and click the hyperlink text “jdk-7u**XX**-windows-i586.exe” where **XX** equals 65 or greater (most recent release) to begin downloading the java installer.

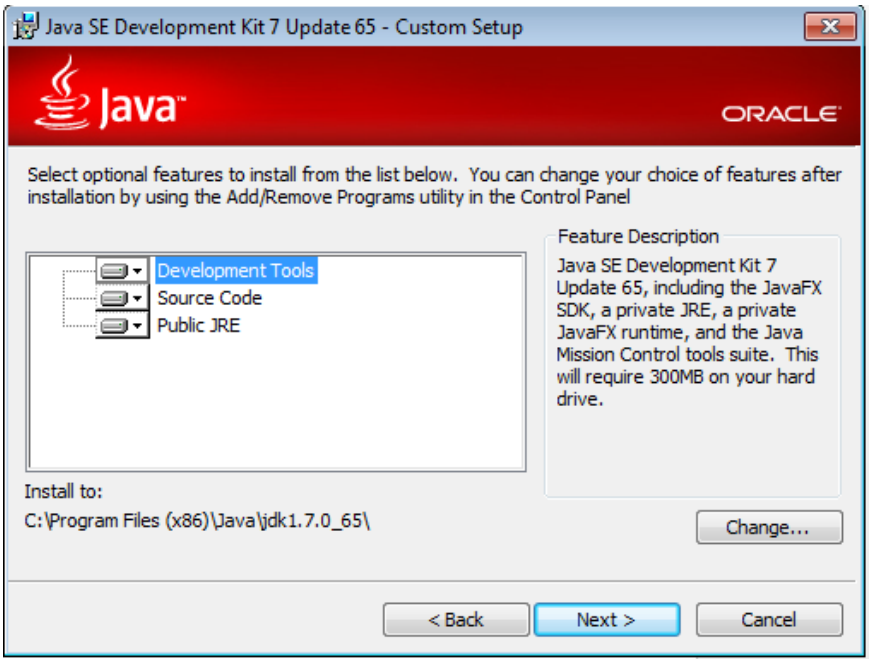




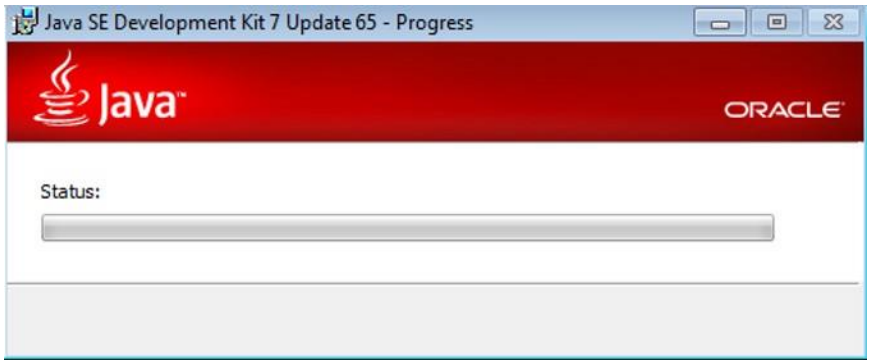
Start downloading the .exe file and save it on your local drive by clicking Save File. Locate the file on your local machine and double-click the downloaded file. This will initiate the Java SE Development Kit 7 Update 65 (or later) installation and setup wizard.



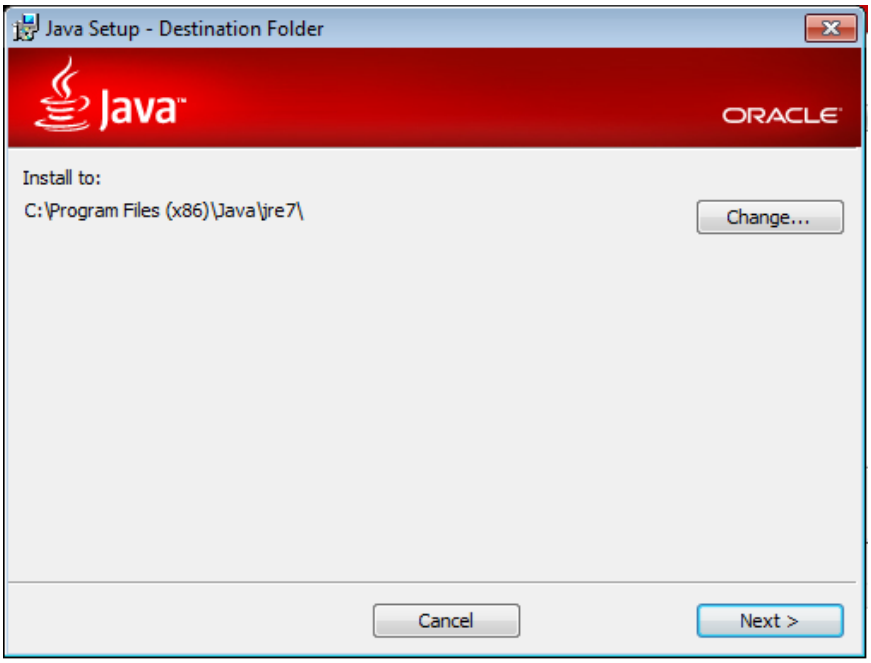
At the Java SE Development Kit 7 Update 65 welcome window, click *Next >*.



At the Custom Setup screen, do not make any changes and click *Next >*.



You will see a Java installation progress screen. Allow this to complete. Once finished, you will be directed to the “Java Setup – Destination Folder” screen.

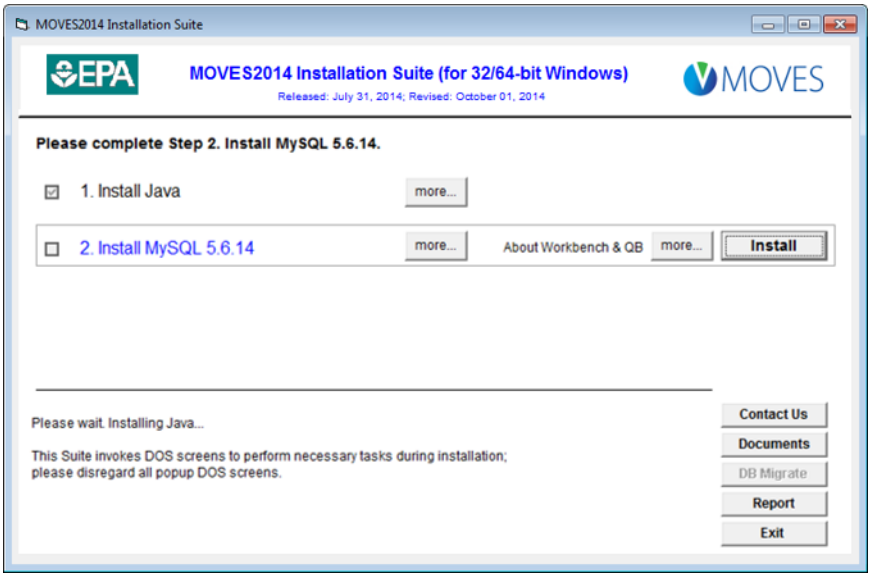


Do not change the default installation location and click *Next >*.

An installation progress window will open. Allow the Status bar to complete. When the program is finished installing, you will be automatically directed to a final screen.

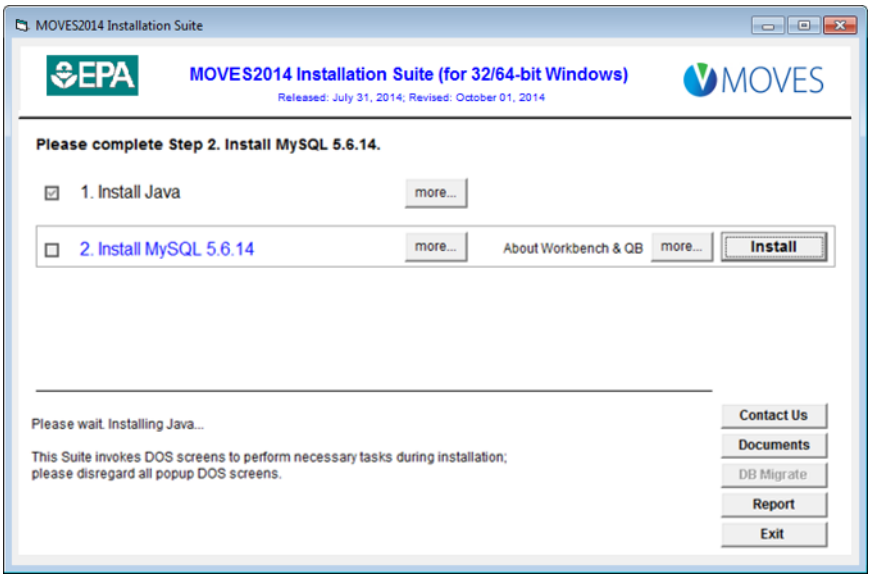
Next Steps. Click *Close* to return to the Download and Install window.

Click *Go back to Main Screen*.

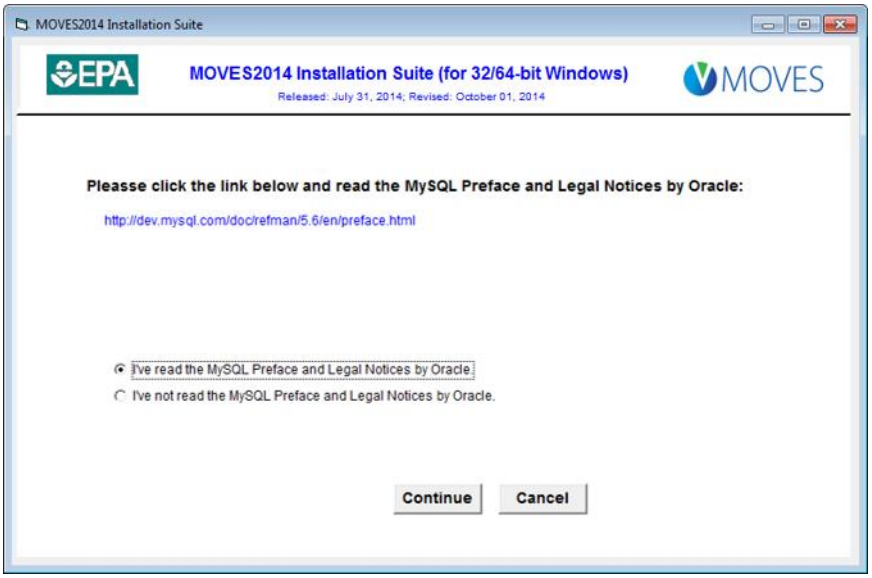


If you successfully installed Java, the box next to Step 1. Install Java will be checked. If the box is checked, proceed to Step 2. Install MySQL 5.6.14.

Step 2: Install MySQL

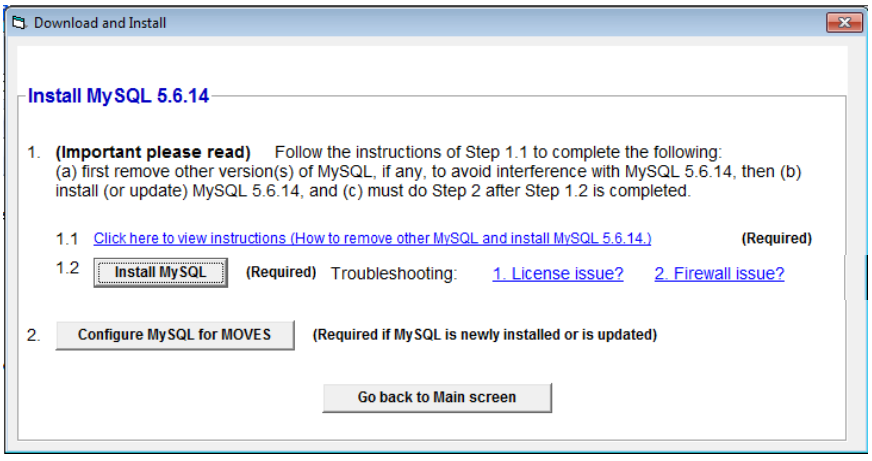


Begin by clicking the *Install* button to the right of 2. Install MySQL 5.6.14.

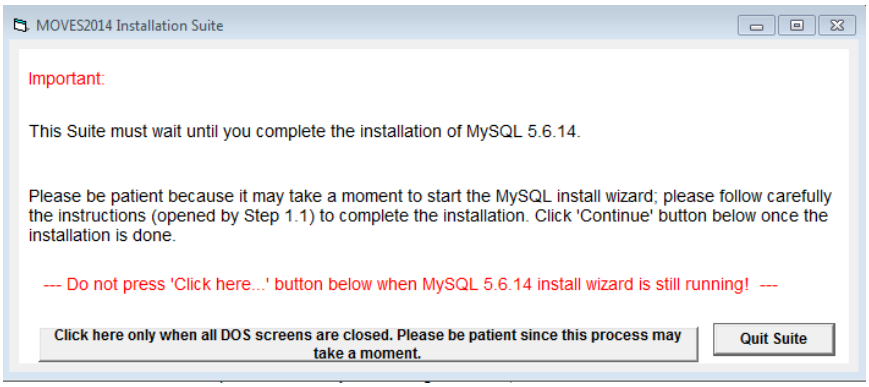


Click the hyperlink to read the MySQL Preface and Legal Notice.

Click the radio button next to "I've read the MySQL Preface and Legal Notices by Oracle." Click Continue.

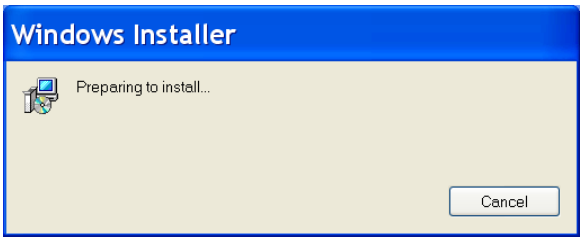


Click the *Install MySQL button.*

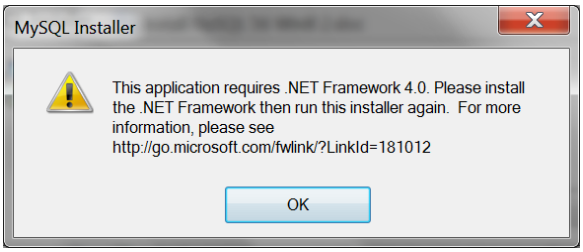


Clicking the Install MySQL button will open a series of windows: The MOVES2014 Installation Suite message window (at left), a DOS window, and the MySQL Installer window which will change throughout the operation. Leave the message window at left open in the background.

NOTE: If prompted, click Run on the "Open File – Security Warning." This will open the MySQL Installer.

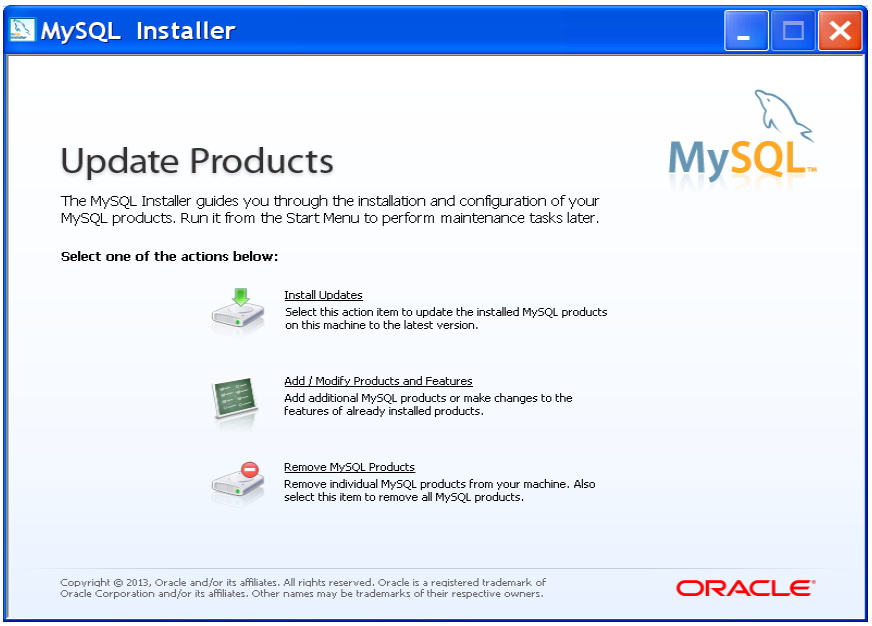


The Windows Installer window will open and display the message "Preparing to install…"

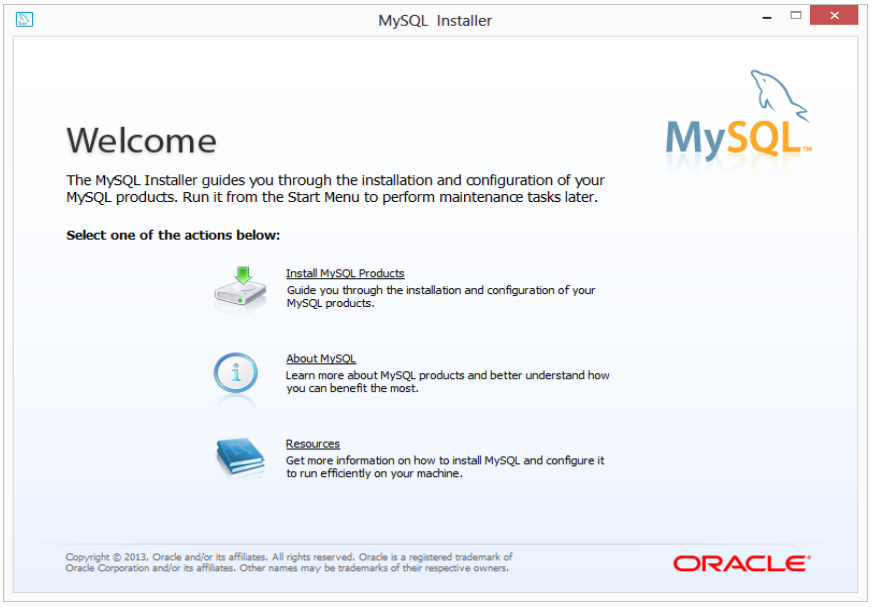


NOTE: If MySQL Installer prompts you to install .NET Framework, quit the MOVES2014 Installation Suite and ask your IT support to download and install Microsoft .NET Framework.

ATTENTION: Look at the images below to determine which step to take next. The exact image on your screen may vary slightly.



If your screen says "Update Products" followed by the items "Install Updates", "Add/Modify Products and Features", and "Remove MySQL Products", **proceed to step 2a on page 14.** If not, look at the next image.

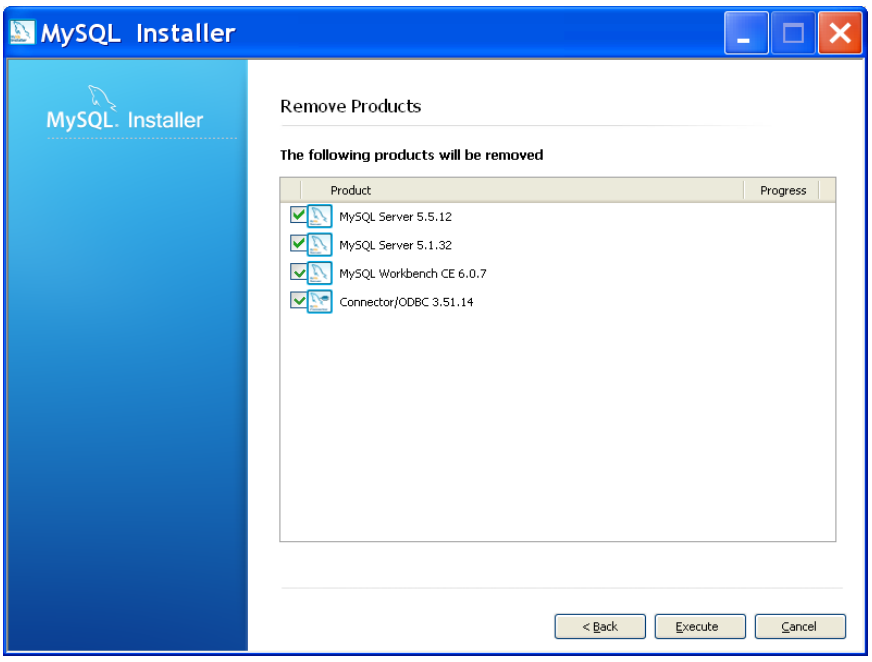


If your screen says "Welcome" followed by the items "Install MySQL Products", "About MySQL", and "Resources", **skip to step 2b on page 19**.

Step 2a: Remove Previous Versions of MySQL

If you see the screen at left, there are or were previous versions of MySQL on your local machine. Therefore, you must completely remove previous versions of MySQL and its components before proceeding.

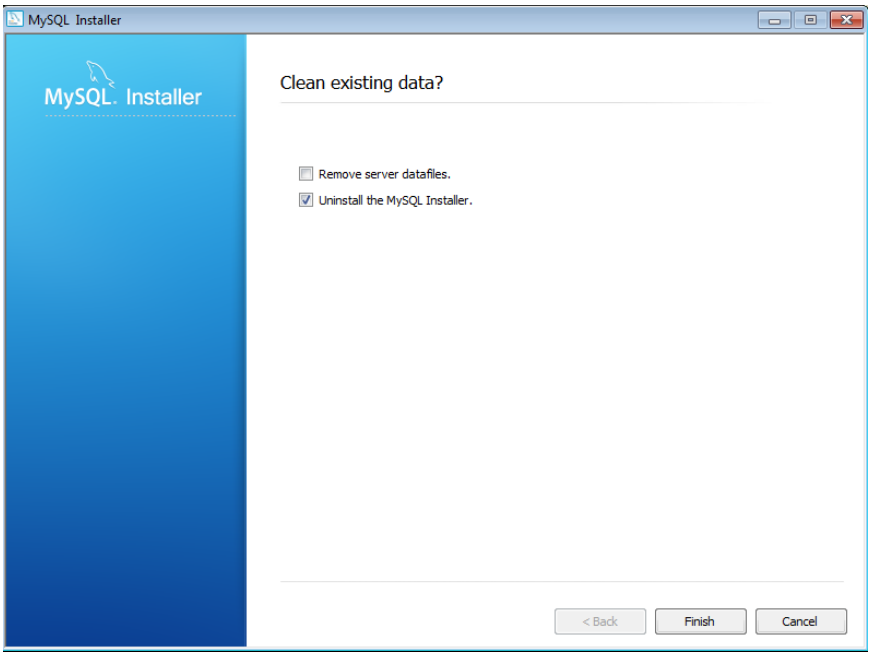
Click "Remove MySQL Products".



The example screen at left shows two older MySQL versions, 5.1 and 5.5. Remove previous versions and other existing components including any versions of the Connector/ODBC.

Click the checkbox next to each item. Ensure all items are checked.

Click *Execute*.



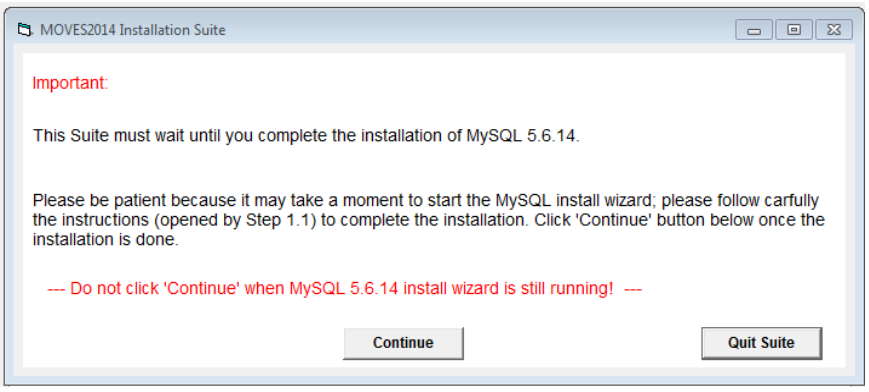
The final screen of the removal process asks “Clean existing data?”

Ensure your data is already backed up.

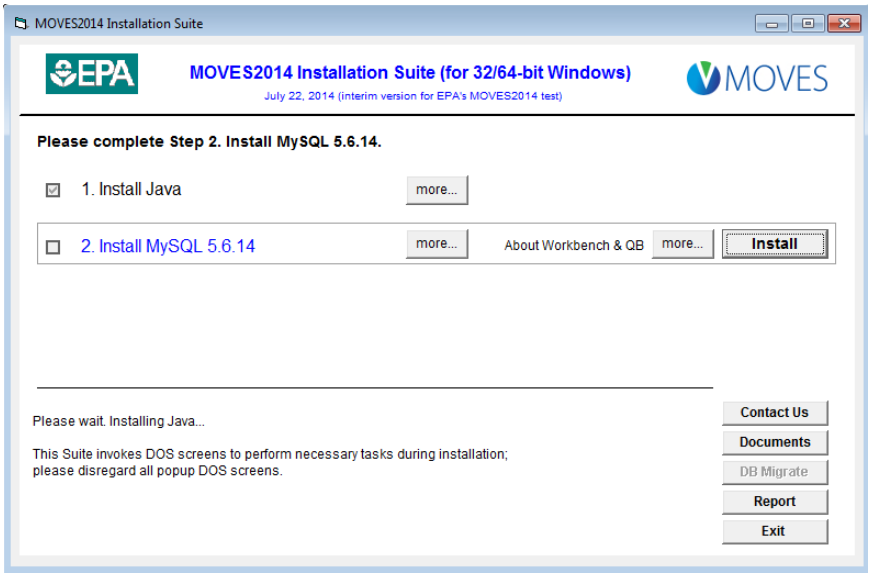
Do not check “Remove server datafiles.”

Check “Uninstall the MySQL Installer.”

Click *Finish.*



Click “Quit Suite”.



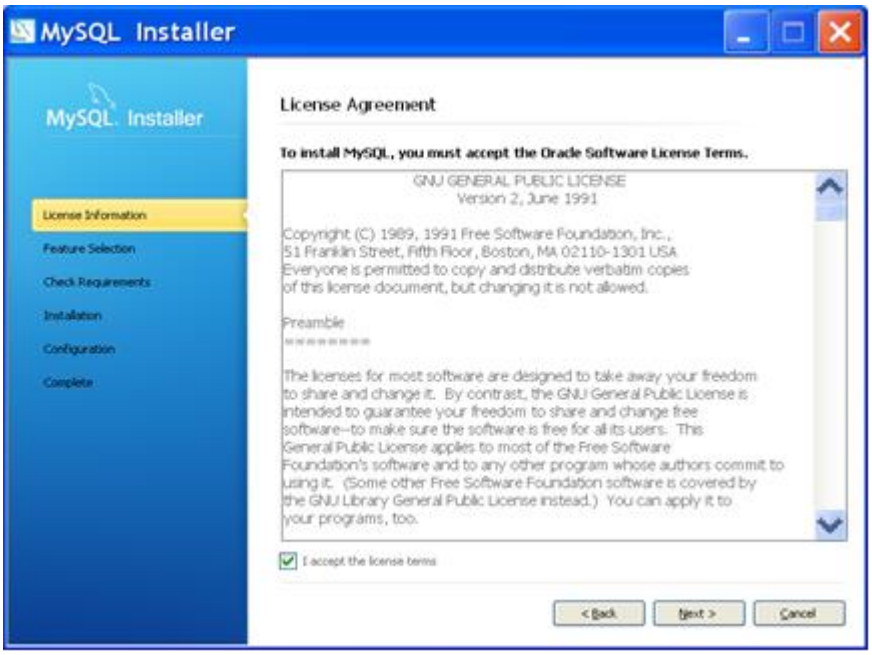
Restart the MOVES2014 Installation Suite.

Follow the MySQL ODBC Connector installation process.

When you arrive back at the MOVES2014 Installation Suite main screen, click the “Install” button of “Step 2. Install MySQL 5.6.14”.

Advance through the “Open File – Security Warning” and Installer screen and proceed to the next page, page 16, of this Installation Guide.

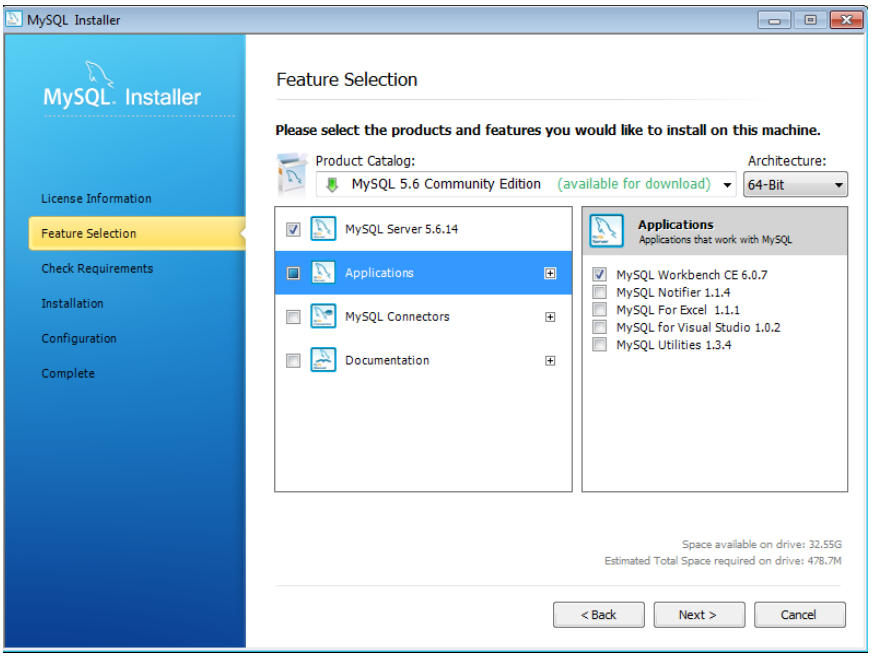
Click “Add / Modify Products and Features”.



Read the License Agreement.

Check the “I accept the license terms” check box.

Click *Next >*.



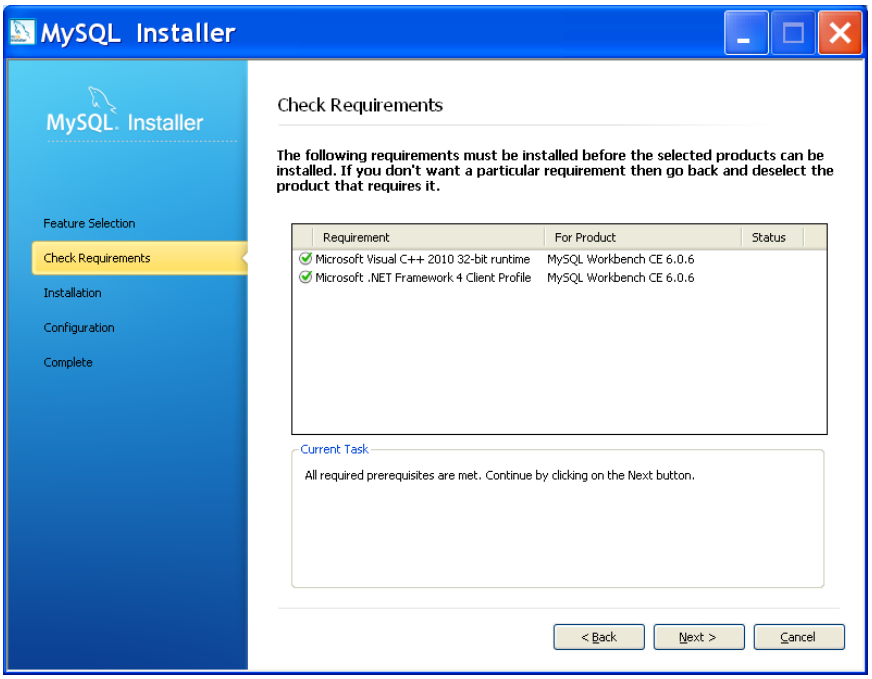
Check the box of "MySQL Server 5.6.14". This will select all server features.

Click the word "Applications".

Uncheck all features except **"MySQL Workbench CE 6.0.7".**

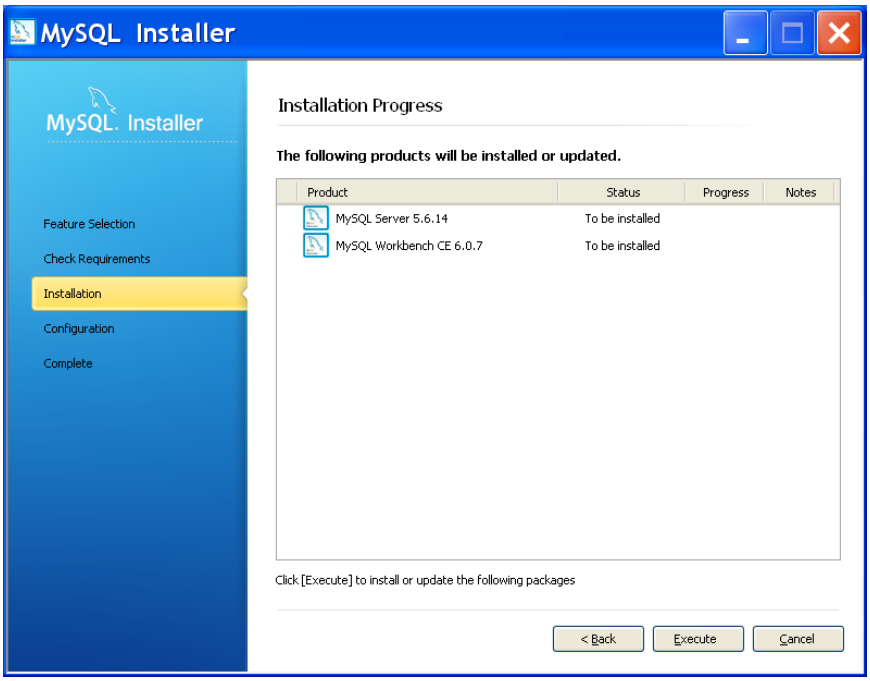
Ensure your screen looks like the screen at the left.

Click *Next >*.



You should see a screen similar to the screen at left. There may or not be additional requirements to install.

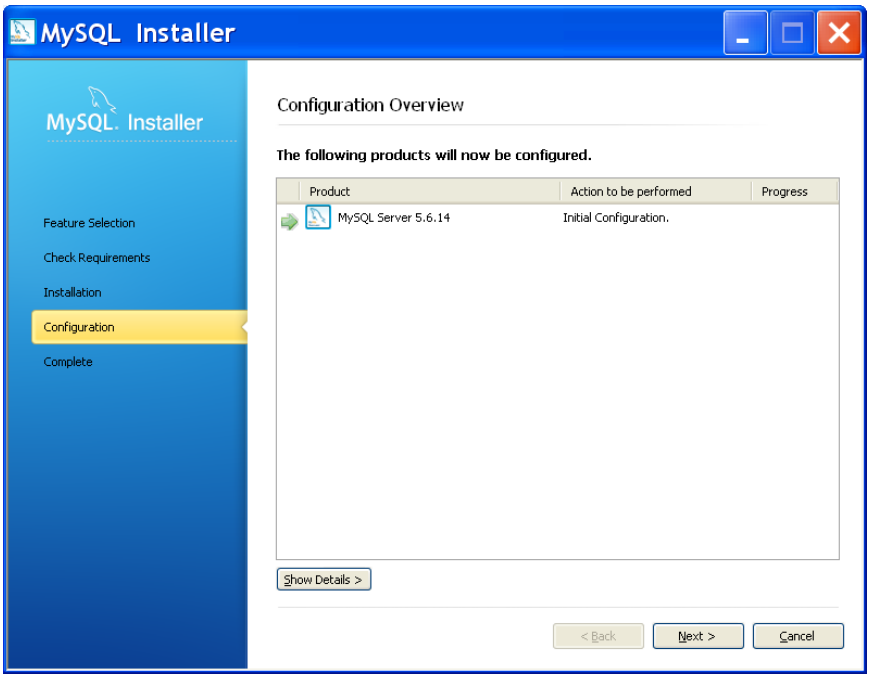
Click *Next >*.



You may see more or fewer items displayed by MySQL 5.6.14 Installer as it will determine what's needed for your installation.

Click *Execute.*

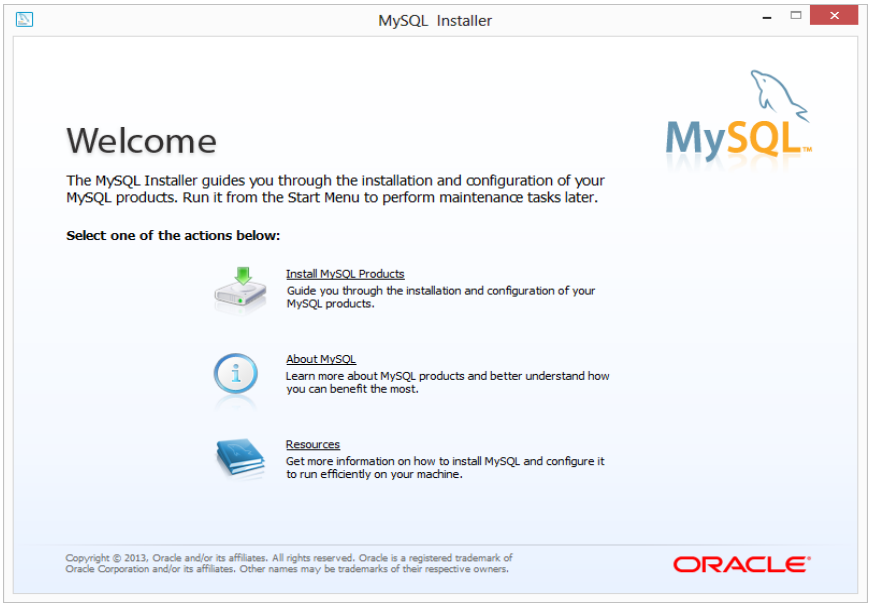
The Execute button will turn into a grayed-out *Next >* button. Allow the products to be installed completely. When the *Next >* button is no longer grayed-out, click *Next >*.



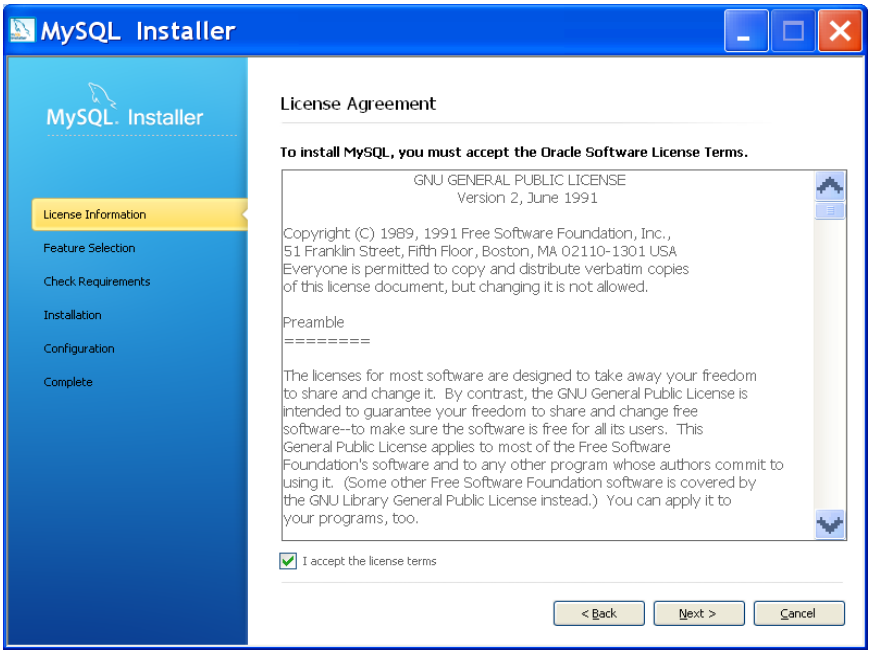
Click *Next>*.

Stop and skip to page 23 to continue the MySQL server Configuration.

Step 2b: Install MySQL



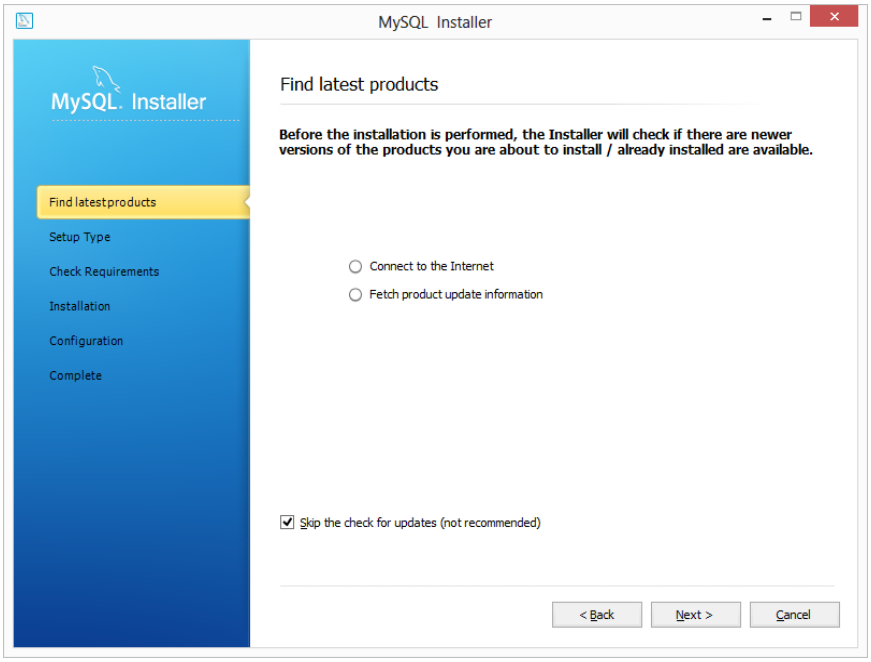
At the MySQL Welcome screen, click “Install MySQL Products”.



Read the License Agreement.

Check the “I accept the license terms” check box.

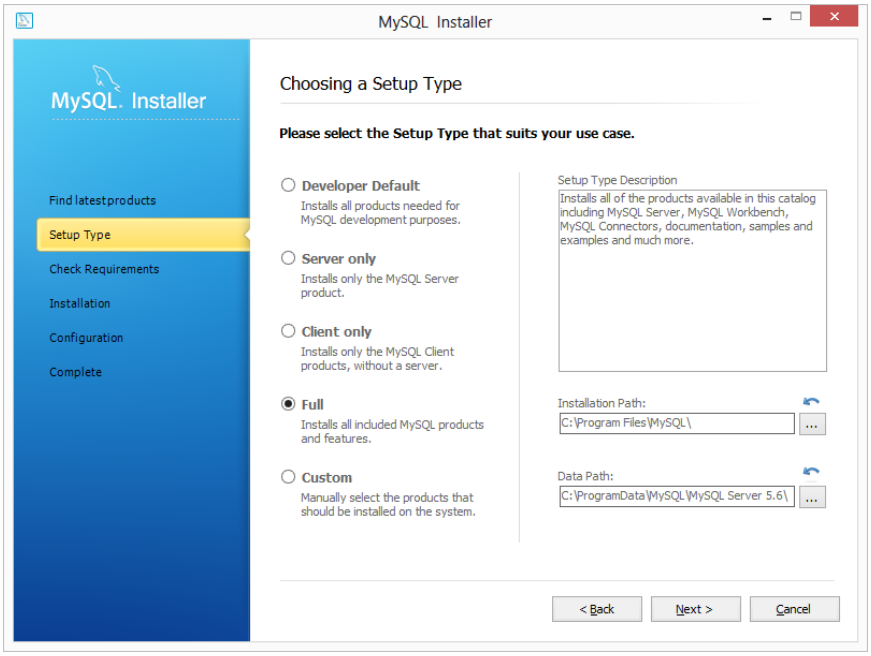
Click *Next >*.



This screen checks for newer versions of the MySQL software. Skip this process. **Do not** choose "Connect to the Internet" or "Fetch product update information."

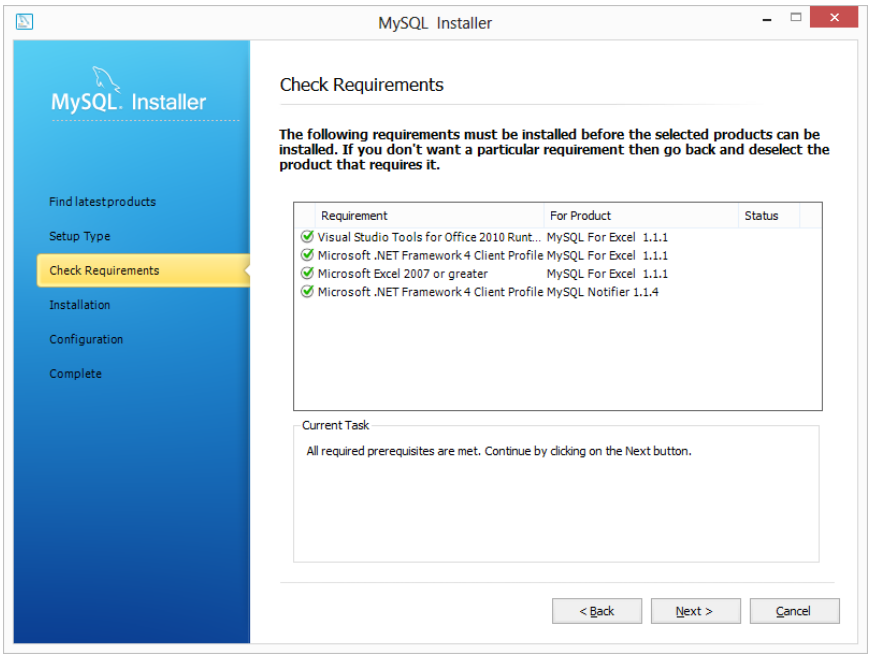
Check the box next to "Skip the check for updates (not recommended)".

Click *Next >*.



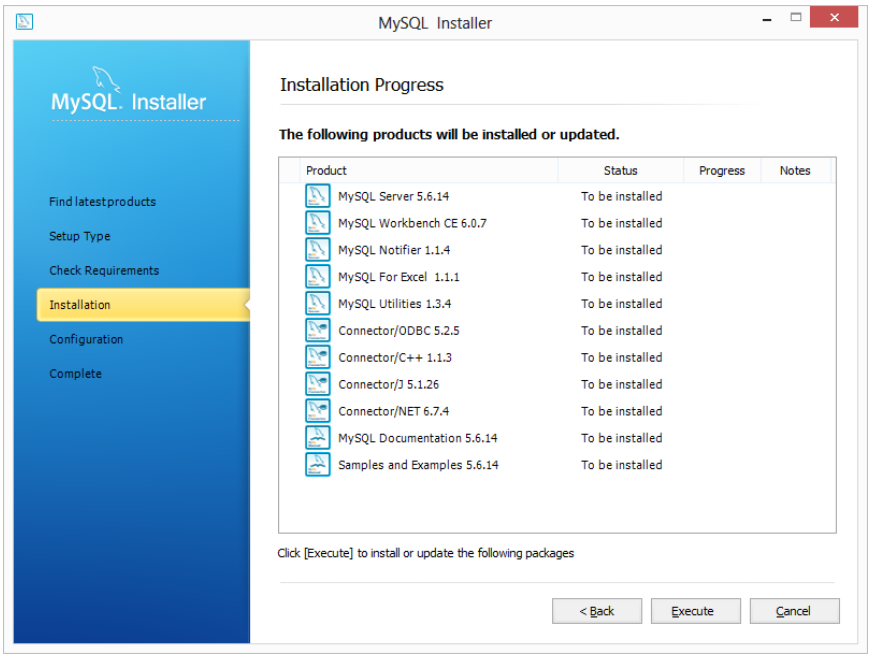
You are now at the Choosing a Setup Type screen. At Setup Type, choose "Full". Next, check the "Installation Path" and "Data Path". We recommend accepting the default "Installation path". However, we suggest changing the "Data Path" to the file root corresponding to your operating system in the table below. Click *Next >* after you have applied the appropriate "Data Path".

Operating System	Suggested Data Path
Windows XP, or 2003 Server	C:\Documents and Settings\All Users\Application Data\MySQL\MySQL Server 5.6\
Windows 7, 8, or 2008 Server	C:\Users\Public\MySQL\MySQL Server 5.6\

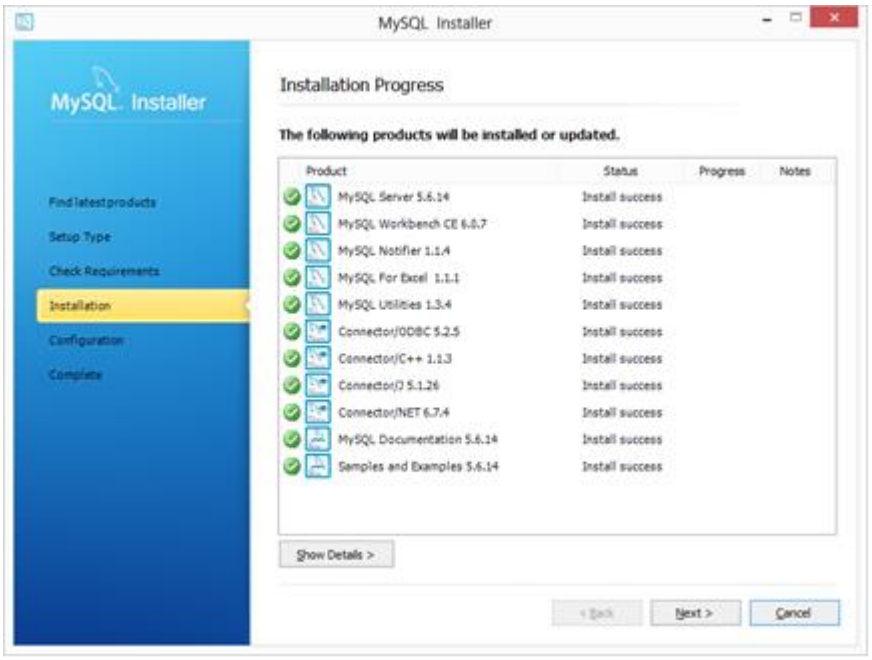


The MySQL will now check for software requirements. Select appropriate requirement-options as requested by the Installer. The screen at left is just an example. Select "Execute" to install additional software requirements. Note: If the "Current Task" text reads "All required prerequisites are met…"

Click *Next >*.

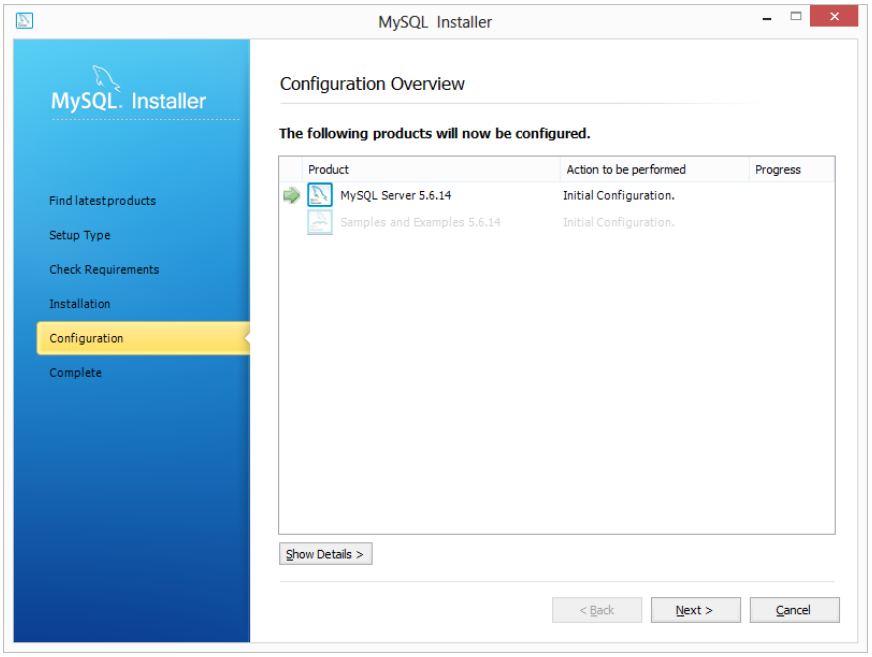


The Installer will list all applications to be installed. Click *Execute* to begin the installation process.



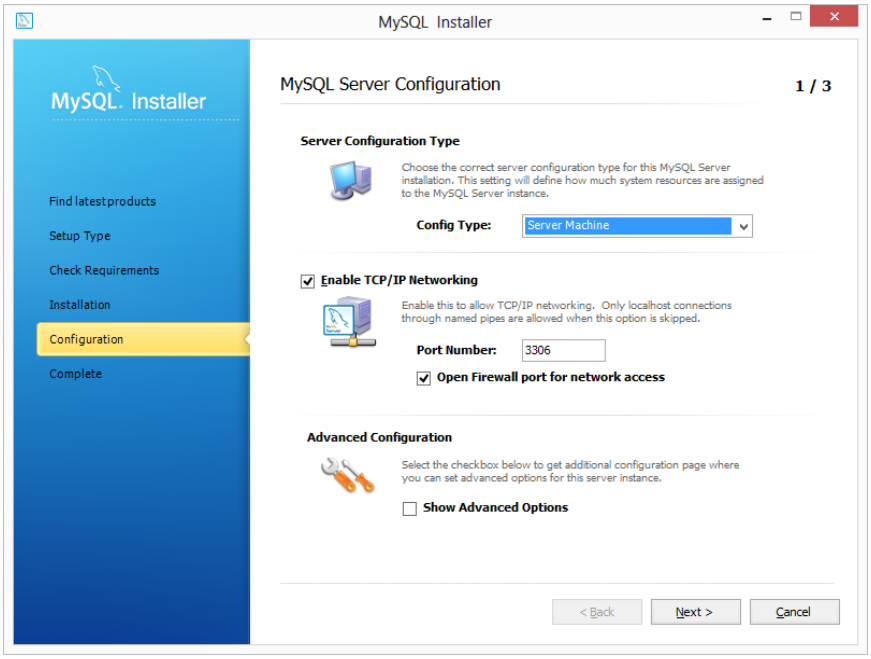
Wait until all are applications are successfully installed.

When the installation is complete, click *Next >* to continue.



To begin configuring MySQL, click *Next >*.

ATTENTION: The processes for both Step 2a and 2b converge at this step in the MOVES2014 Installation Guide.

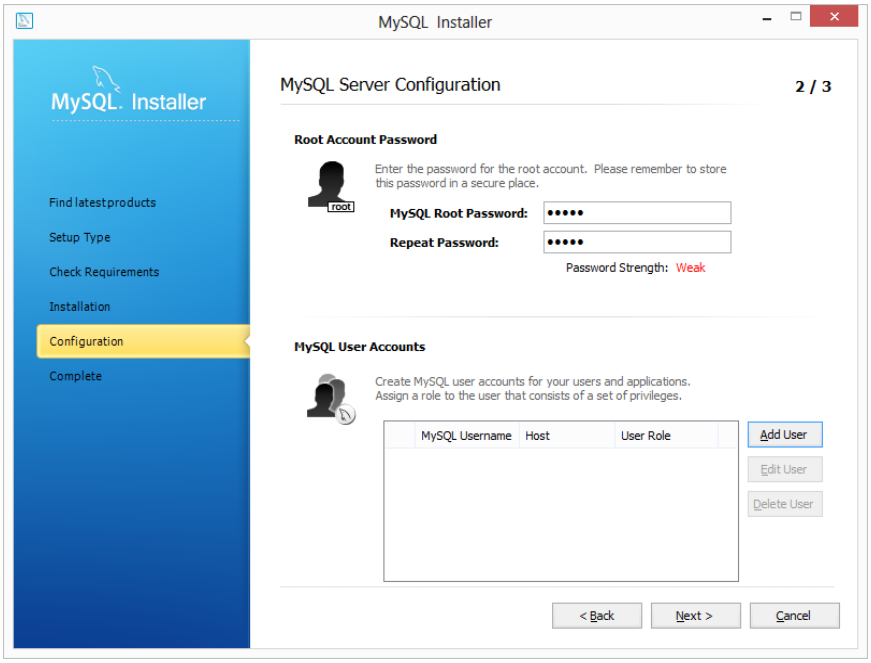


The Server Configuration Type "Config Type" drop down has three options. Read the descriptions and select the one that fits your environment. If you are unsure of which "Config Type" suits you, select "Server Machine".

Use the default "Port Number". **Do not** change it. Next, ensure that "Open firewall port for network access" is checked.

Leave "Show Advanced Option" unchecked.

Click *Next >* to continue.



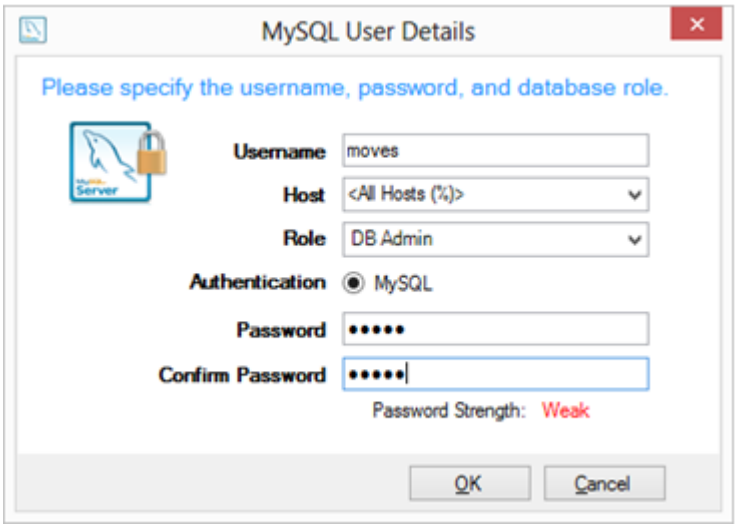
This screen will ask you to set up the MySQL Root user password. You can change the Root password by using MySQL Workbench or by executing a password-change SQL command after MOVES2014 is installed.

Note: You may see a field for "Current Root Password", type "moves" (lowercase, no " ").

In the "MySQL Root Password" field type "moves" (lowercase, no " ").

In the "Repeat Password" field type "moves" (lowercase, no " ").

Click *Add User*.



At the MySQL User Details screen, specify the username, password, and role.

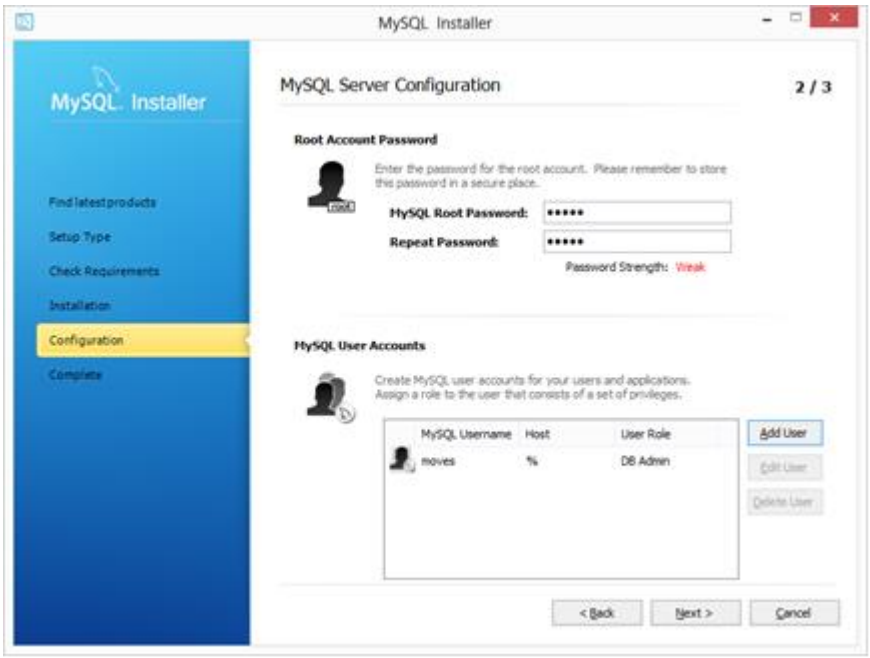
In the "Username" field type "moves" (lowercase, no " ").

In the "Role" field, select "DB Admin" from the dropdown.

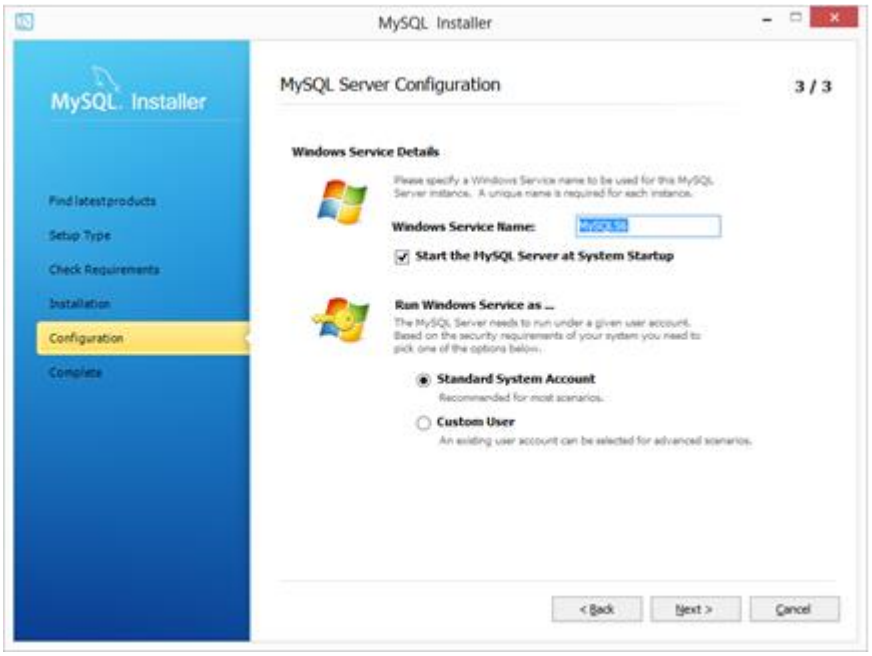
In the "Password" field, type "moves" (lowercase, no " ").

In the "Confirm Password" field, type "moves" (lowercase, no " ").

Click "OK" to return to the previous screen



After successfully creating a new "moves" user with role of "DB Admin", click *Next >*.

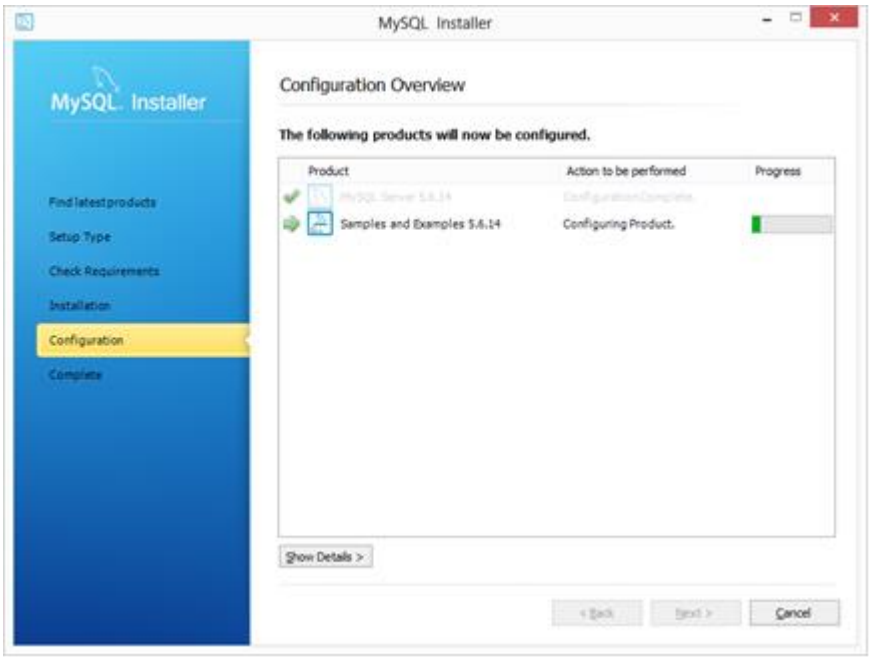


The default Windows Service Name is “MySQL56”, we recommend not changing it.

Make sure “Start the MySQL Server at System Startup” is checked.

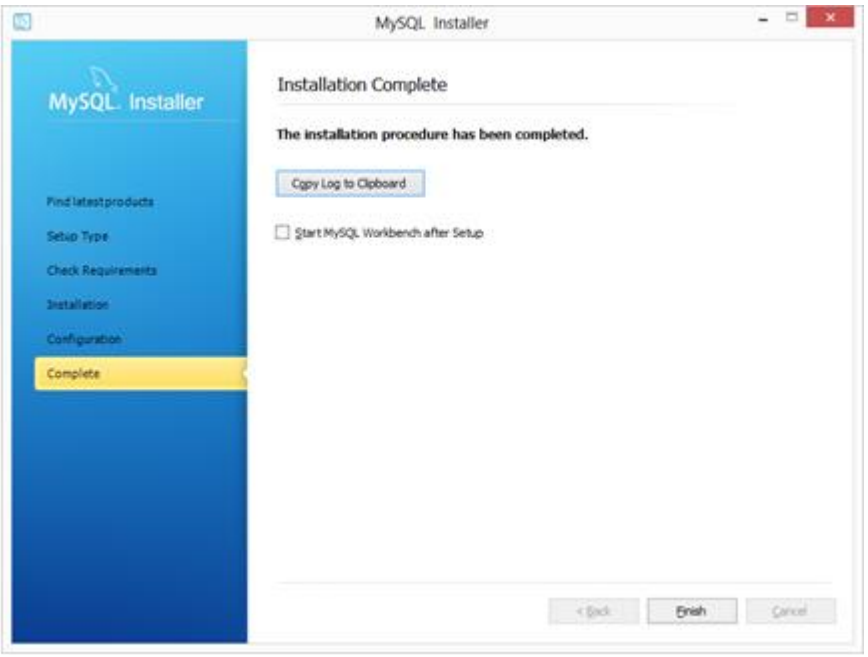
Select the radio button next to “Standard System Account”.

Click *Next* >.



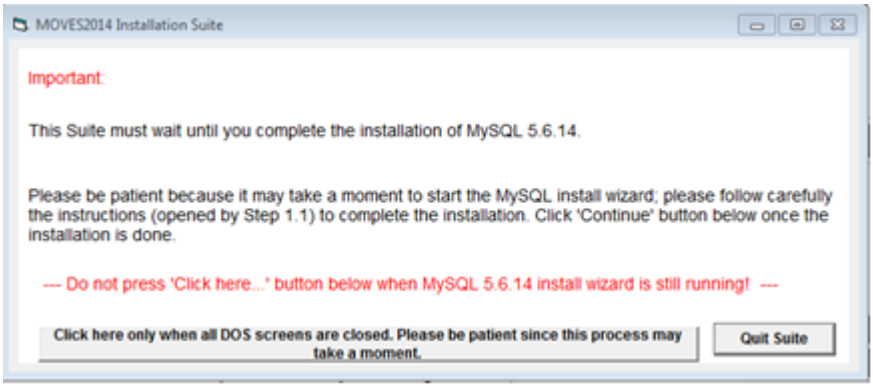
You may have more or less items to configure. Wait until the MySQL Configuration is completed.

Click *Next* >.

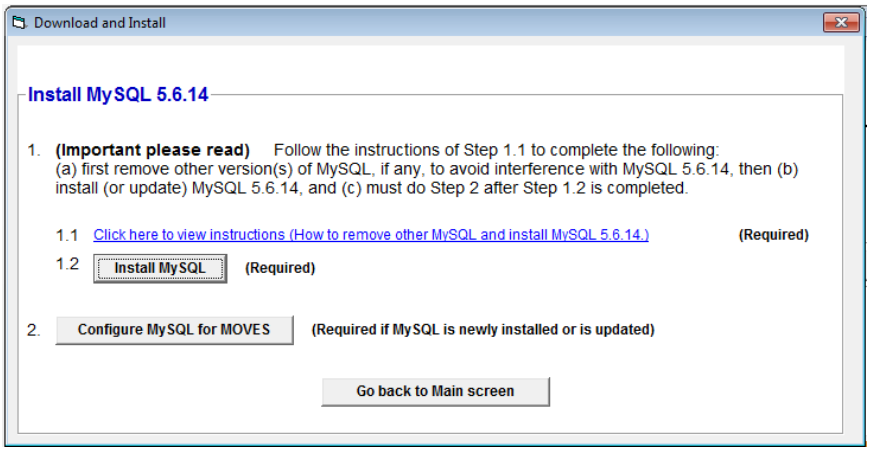


This is the last screen indicating MySQL 5.6.14 installation has completed. It is not necessary to run MySQL workbench at this time, please **uncheck** "Start MySQL Workbench after Setup."

Click *Finish* to return to the MOVES2014 Installation Suite message window.

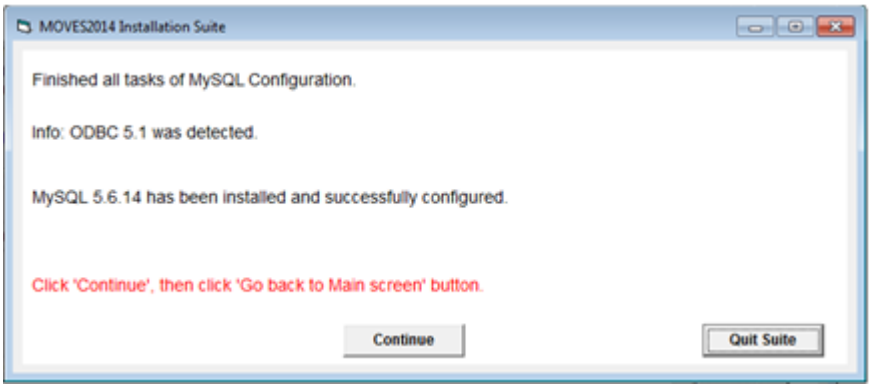


Click the *Click here only when…* button to close the MOVES2014 Installation Suite message window and return to the MySQL Download and Install window.

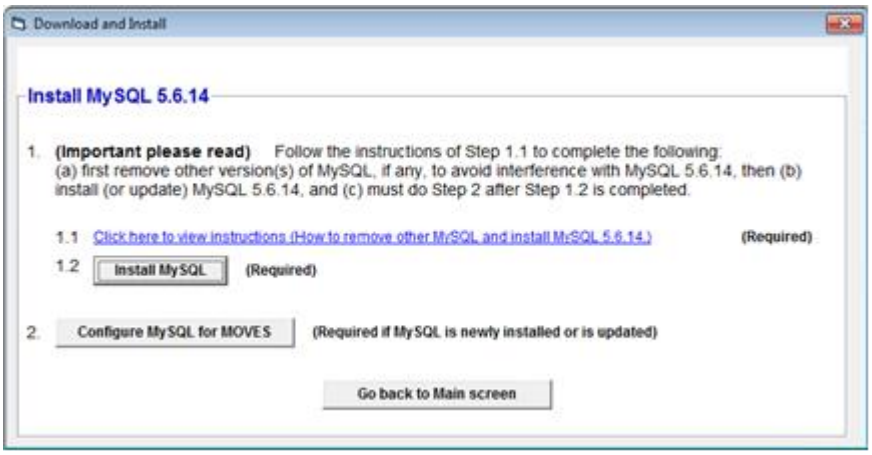


At the MySQL Download and Install window, click the *Configure MySQL for MOVES* button. This will open a new configuration window and DOS window.

Wait a few moments for the application to configure MySQL.

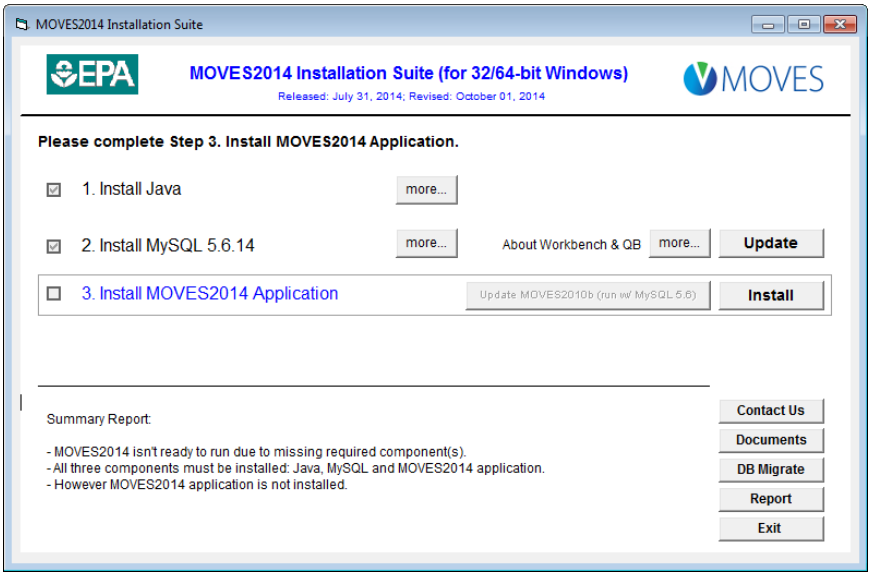


When prompted, click *Continue* to return to the MySQL Download and Install window.

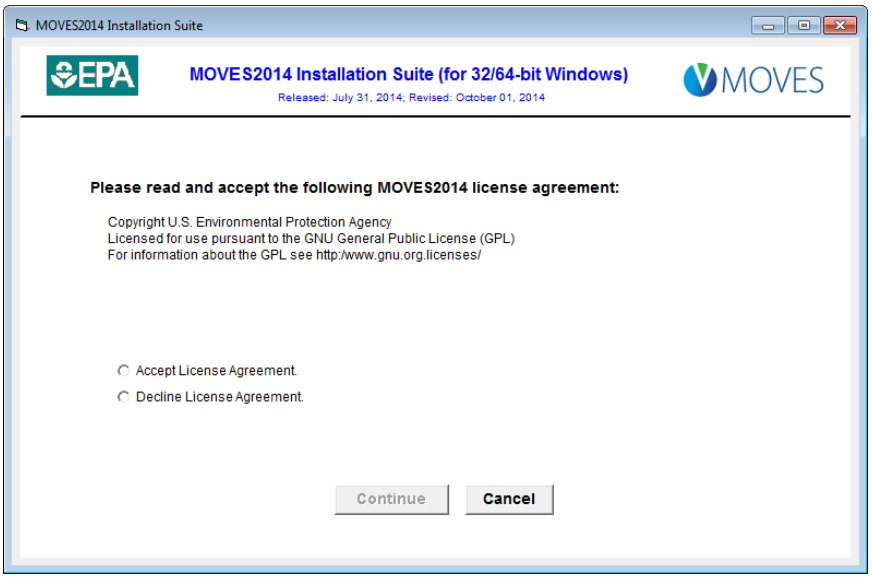


Click *Go back to Main screen* to return to the MOVES2014 Installation Suite.

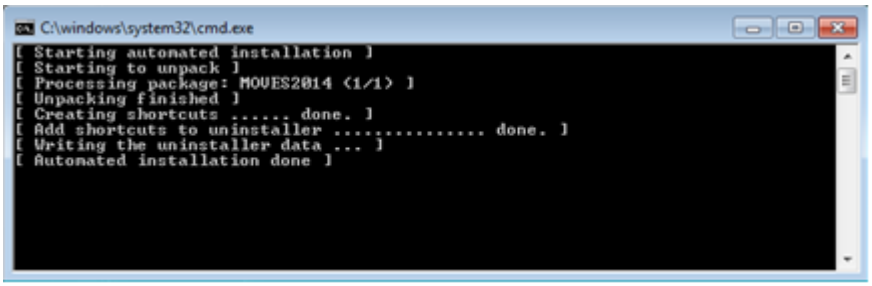
Step 3: Install the MOVES2014 Application



Begin by clicking the *Install* button to the right of the text "3. Install MOVES2014 Application."

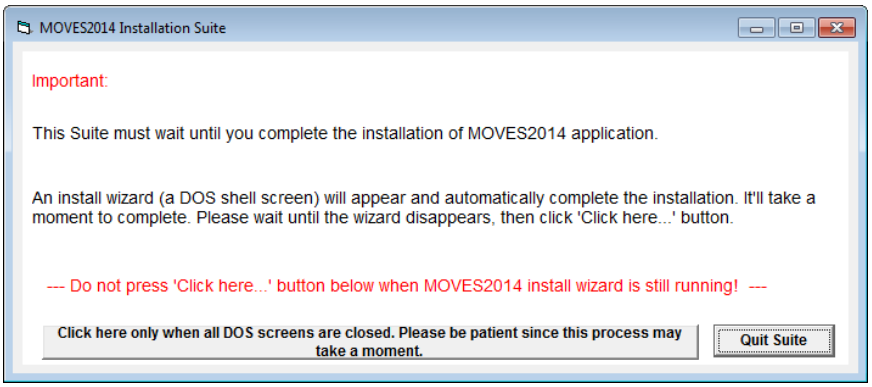


This will open the license agreement window. Click the "Accept License Agreement" radio button, then click *Continue*.



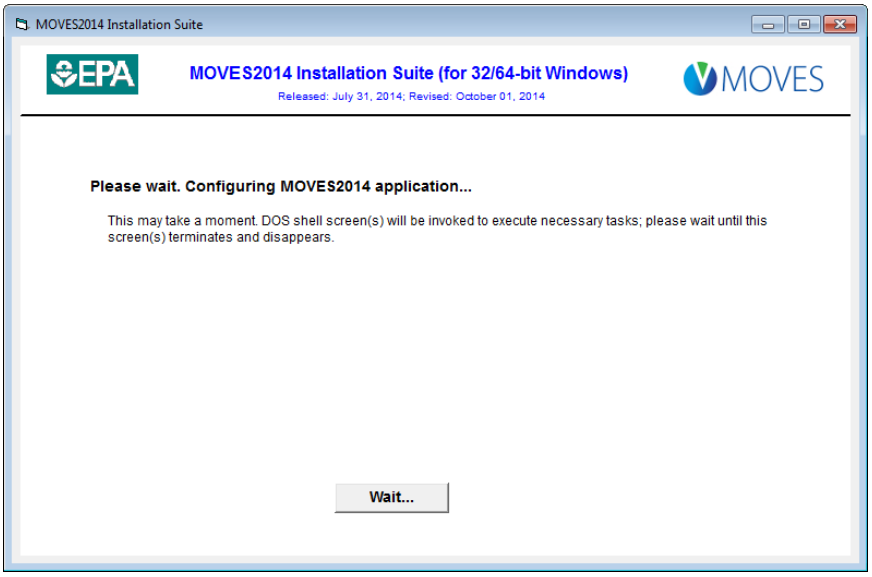
This will begin the installation indicated by a DOS window and a message window. This screen may appear frozen or idle at times, but it is still working. Please be patient.

WARNING: Do not continue until the DOS window closes.



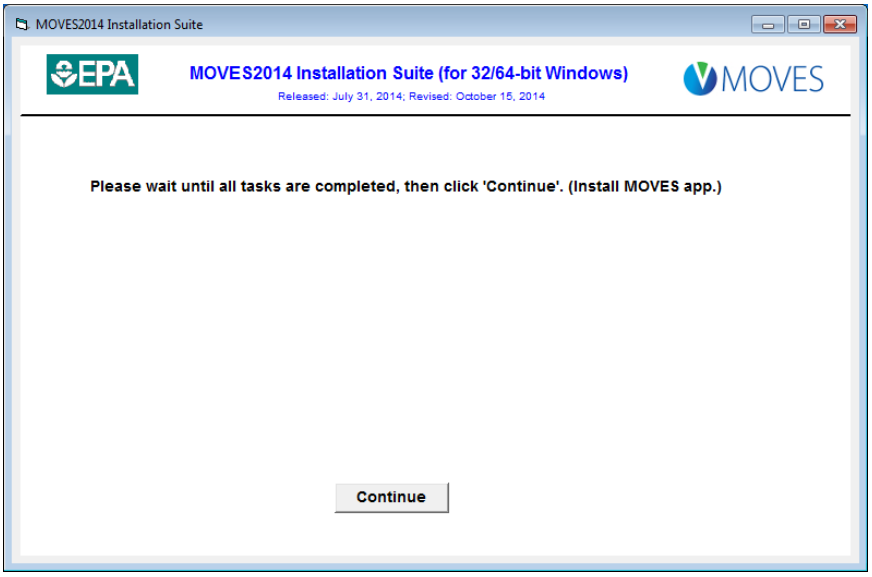
WARNING: Do not continue until the DOS window closes.

When the DOS window automatically closes, click "*Click here only when all DOS screens are closed. Please be patience since this process may take a moment*."



When you see this screen, be patient. A DOS window will open to configure MOVES2014 and unzip the database. The DOS window will read "!!! Unzipping MOVES default database. It may take a moment. Please wait…" This process is critical to allow MOVES 2014 to function properly. Currently, the Installation Suite is unzipping the MOVES 2014 default database.

The Installation Suite will close this window automatically when the DOS window closes

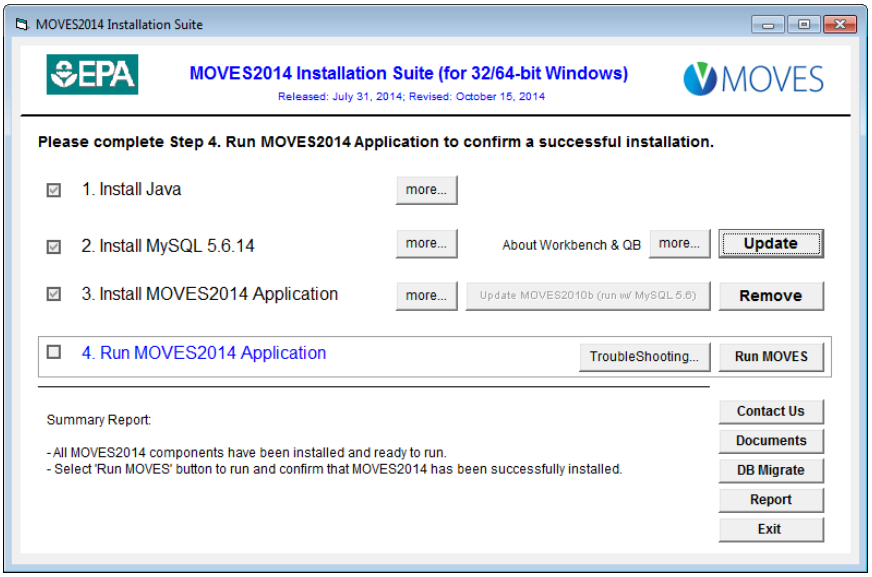


One last DOS window will open reading "Modify ACL of MOVES2014", allow this to run and close. You have finished installing the MOVES2014 Application.

Click *Continue* to return to the MOVES2014 Installation Suite.

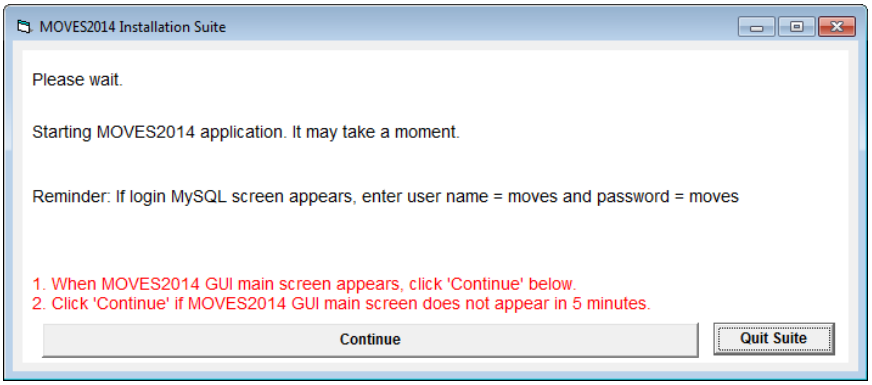
Step 4: Confirm the Successful Installation of MOVES2014

The last recommended step is to run the MOVES2014 application to confirm a successful installation.



Click the *Run Moves* button to the right of "4. Run MOVES2014 Application".

NOTE: You may get a Windows Firewall message. Click *Allow.*



This window will appear. Follow the directions in red at the bottom of the window.

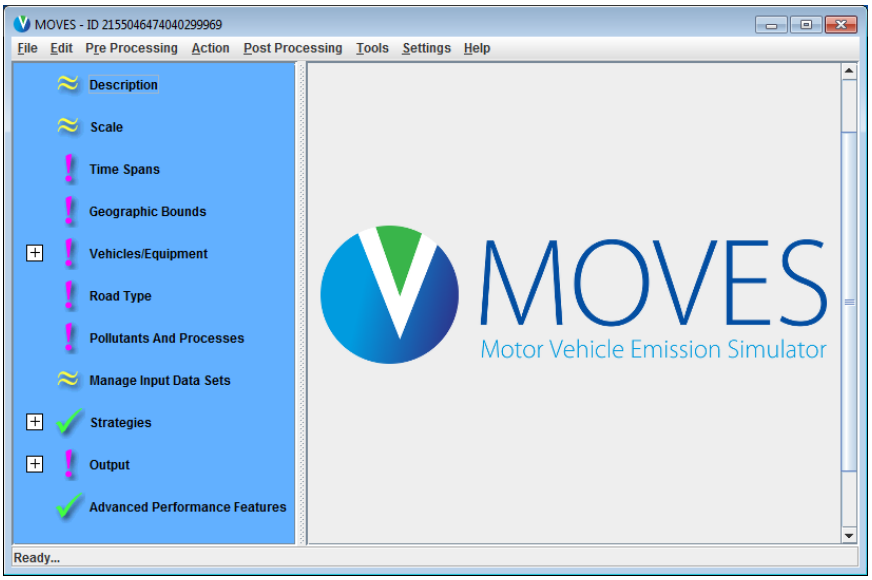
This will open a DOS window followed by the Set Database Login window.

In the "User" field type "moves" (lowercase, no " ").

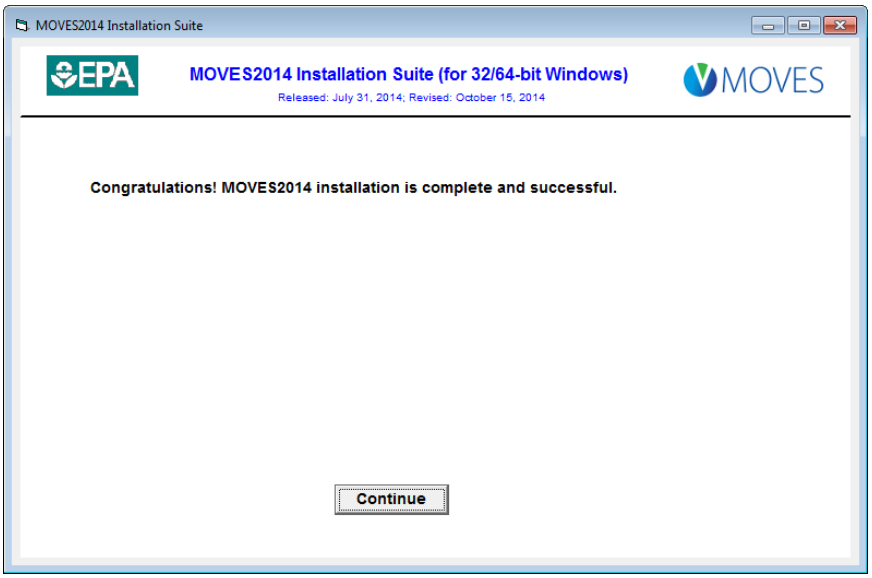
In the "Password" field type "moves" (lowercase, no " ").

Click *Login*.

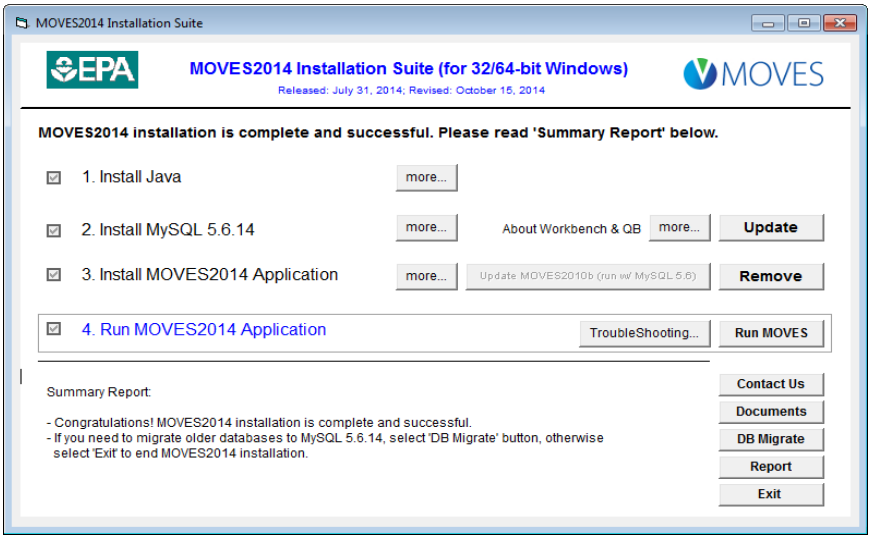
Click *OK*.



Welcome to MOVES 2014! This is the program's Graphical User Interface (GUI). Interface (GUI). The MOVES2014 User Guide and the User Interface Reference Manual provide information on how to use this interface to run MOVES.



Click *Continue* to close this window.

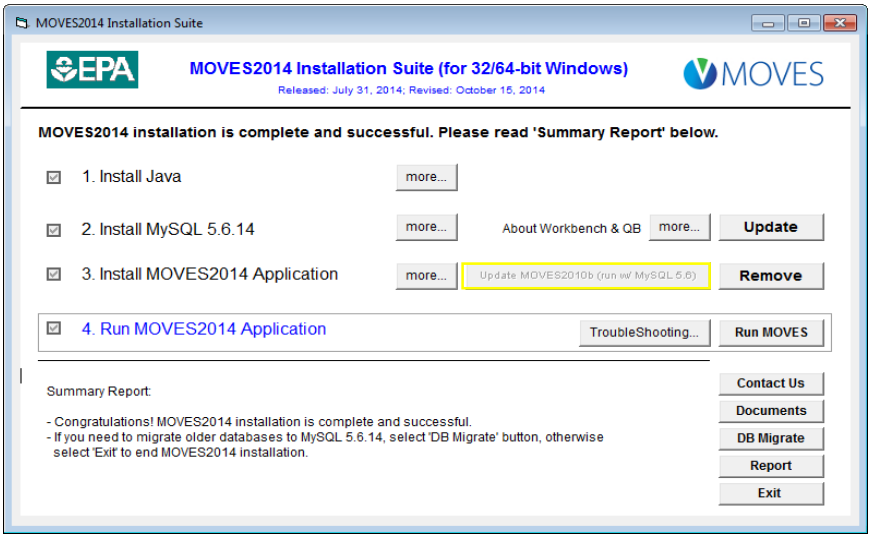


You may now exit the MOVES2014 Installation Suite. Click *Exit*. A final screen will ask "Are you sure you want to quit MOVES2014 Installation Suite?" Click *Yes* if you want to exit.

Congratulations, you have successfully installed MOVES2014!

Please consult the User Guide and Reference Manual for detailed instructions on how to use MOVES2014.

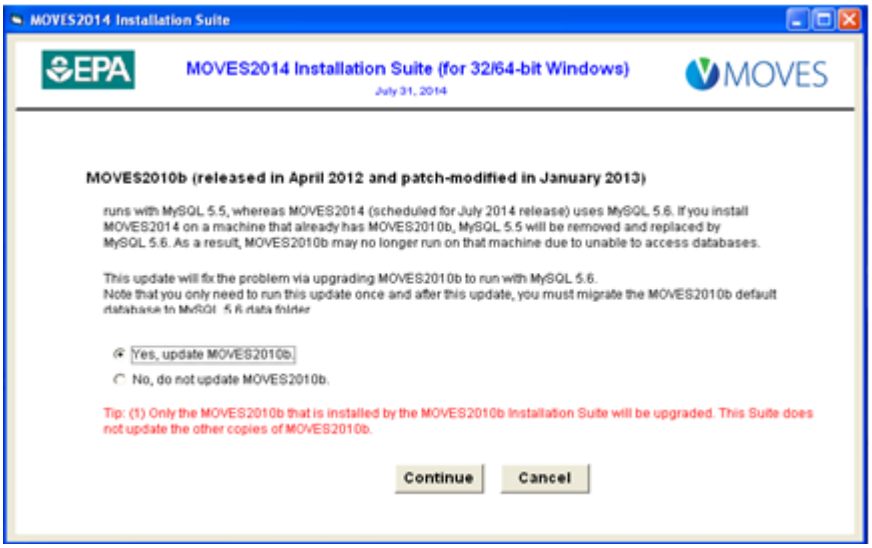
Optional: Update MOVES2010b to run in MySQL 5.6



For existing MOVES2010b users who would like to maintain use of MOVES2010b, it may be beneficial to update MOVES2010b to work with MySQL 5.6.

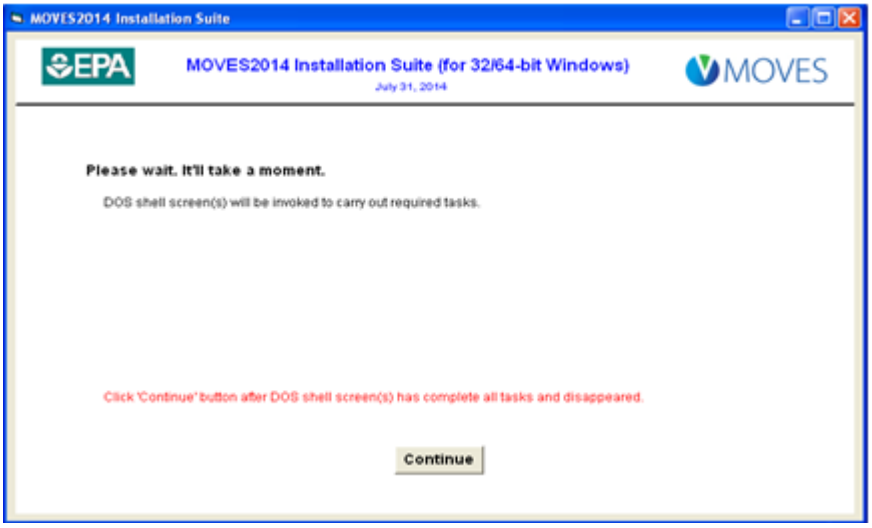
Click the *Update MOVES2010b* button (highlighted at left) to begin the update.

NOTE: This button will only appear if you have successfully installed MOVES2014 and have MOVES2010b installed.



Click the "Yes, update MOVES2010b" radio button.

Click *Continue.*

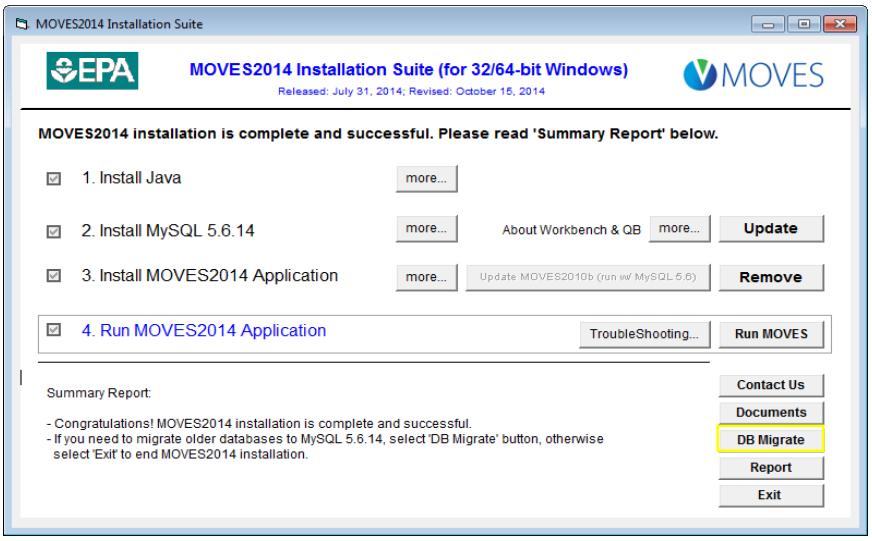


A DOS window will open to perform the update. The DOS window will close when the update is complete.

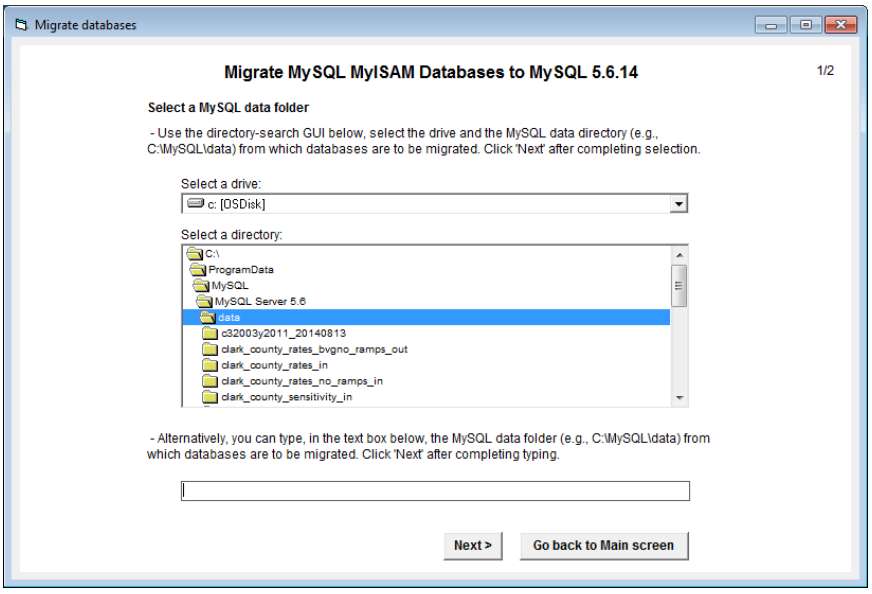
Click *Continue.*

This will return you to the MOVES2014 Installation Suite main screen. You may now continue with other optional steps or exit the suite.

Optional: Database Migration

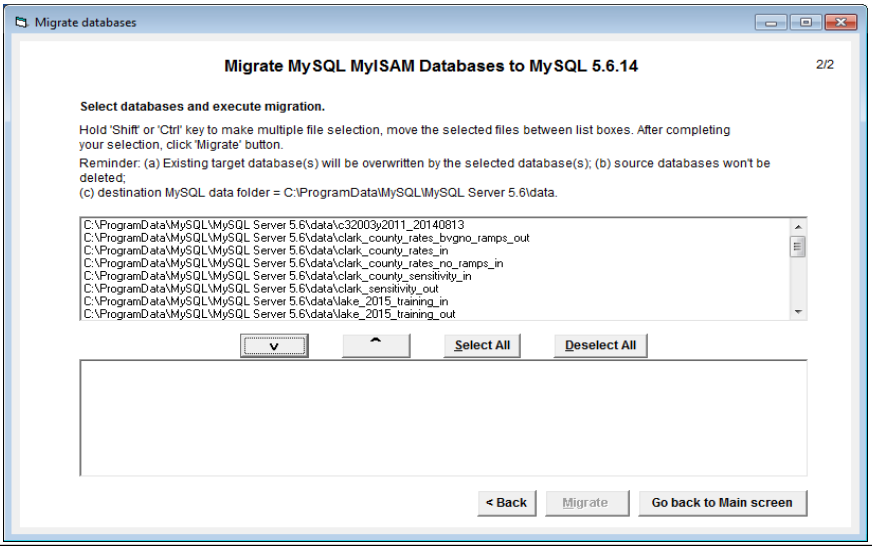


You may want to bring existing MySQL databases into MySQL 5.6. For example, migrating databases created by MySQL 5.5 into MySQL 5.6. To do this, click the *DB Migrate* button (highlighted at left) to perform the database migration.



Find and select your current MySQL data folder.

Click *Next.*



Select the files you wish to migrate then click the v button (downward arrow). When all of the files you wish to migrate appear in the lower text frame, click *Migrate*.

A window will open asking "Would you like to start migrating database(s)?" Click Yes if you would like to continue.

A DOS window will run to complete the process.

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