

Overview

This guide steps through installing the software bundle for Server Design. The bundle includes Eclipse – an integrated development environment used for developing Java application. Students will use this to create their own multiplayer server which is playable in Minecraft. You will also be given access to voucher codes which you can redeem to create Minecraft accounts for students to use during the course.

Because installation and verification can take up to an hour, we recommend installing the necessary software before students begin the course or plan to devote the first course session to installation.

Contents

System Requirements.....	1
Creating Minecraft Accounts.....	2
Frequently Asked Installation Questions.....	2
Download the Course Software Bundle.....	3
Verify the Installation.....	5
Eclipse and 3 rd Party Sites.....	9
Support.....	9

System Requirements

Important!

Because students must access their saved project files from one session to the next, students need:

- Access to the same computer each session
- To be able to save files to the desktop

Hardware

- PC or Mac (not tablet or Chromebook)
- Windows 11, 10, 8, 7, or Vista, or Mac: OS 10.8 or higher, 64-bit (after 2008)
- CPU: Intel(R) Pentium(R) N3530 (or better)
- 4 GBs of RAM
- 7 GBs free disk space

Graphics

- GPU: (Integrated) Intel HD Graphics (Bay Trail) or Radeon HD 6230 (or better)
- GPU: (Discrete) GeForce 710 or Radeon HD 6450 (or better)
- Graphics card must have OpenGL 3.2 compatible graphics with 1 GB RAM (or better)
- Using a monitor that allows for at least a 1280 x 768 resolution

Network

- Speeds of at least 1mbps

Other

- Headphones
- Mouse w/ scroll wheel
- Latest version of Java installed
- Must allow access to private network for local servers

Enhanced Experience (Optional)

The requirements above are minimum requirements. For a smoother performance, substitute the CPU and GPU requirements with the recommendations below:

- GPU (Integrated): Intel HD Graphics 4000 (Ivy Bridge) or AMD Radeon R5 series (Kaveri line) with OpenGL 4.4
- GPU (Discrete): Nvidia GeForce 400 Series or AMD Radeon HD 7000 series with OpenGL 4.4
- CPU: Intel Core i3-3210 3.2 GHz / AMD A8-7600 APU 3.1 GHz or equivalent

Creating Minecraft Accounts

When it comes to installing Minecraft, you'll need *license codes* so that you can create the needed Minecraft accounts properly so that students can login to the Minecraft client. First, you'll want to make sure the students taking the Server Design course are set up correctly in a Classroom on the Apex Learning site. Then, you'll want to obtain the *Classroom ID* of the classroom that the Server Design students are in. If you do not have access to the Server Design classroom on your profile, the next best way to view the Classroom ID is to ask the teacher that will be teaching the course to log in to their Apex Learning account. From there, they'll just need to hover over the Classroom on their dashboard to see the ID appear.

The screenshot shows the Apex Learning dashboard for a teacher. The 'Classrooms' section lists 11 classrooms. The first classroom, 'Blaise's awesome class', is highlighted. A red box highlights the Classroom ID 'V6102341' in the 'ID' column. A red arrow points from a callout box 'Hover over classroom in dashboard' to the classroom name, and another red arrow points from a callout box 'Classroom ID should display here' to the ID field.

Once you've got the Classroom ID for the Server Design class, send it to Apex Learning support and we can look into providing you with the necessary codes you'll need to set up the Minecraft accounts students will be using throughout the course.

Frequently Asked Installation Questions

How long will it take to complete the installation?

The installation process for the Server Design software can take up to an hour, depending on the internet connection.

What if the student won't have the same computer every day?

The software bundle needs to be installed on all computers the student may use. Additionally, student projects will need to be moved from the last computer they worked with to the new computer each time.

What if students want to work on their projects from another computer? / How can students ensure they have access to their project files?

Contact Apex Learning support. We will work with you to find a suitable method of moving projects between computers.

Why can't students save project files to a network location, or a cloud based storage solution like Google Drive or OneDrive?

The Server Design course software uses static file paths which are generated during the installation process. Moving course files to a network storage, or cloud storage, location will break these static file paths and cause resources, such as course assets, to not link properly in Eclipse and potentially corrupt the student's project.

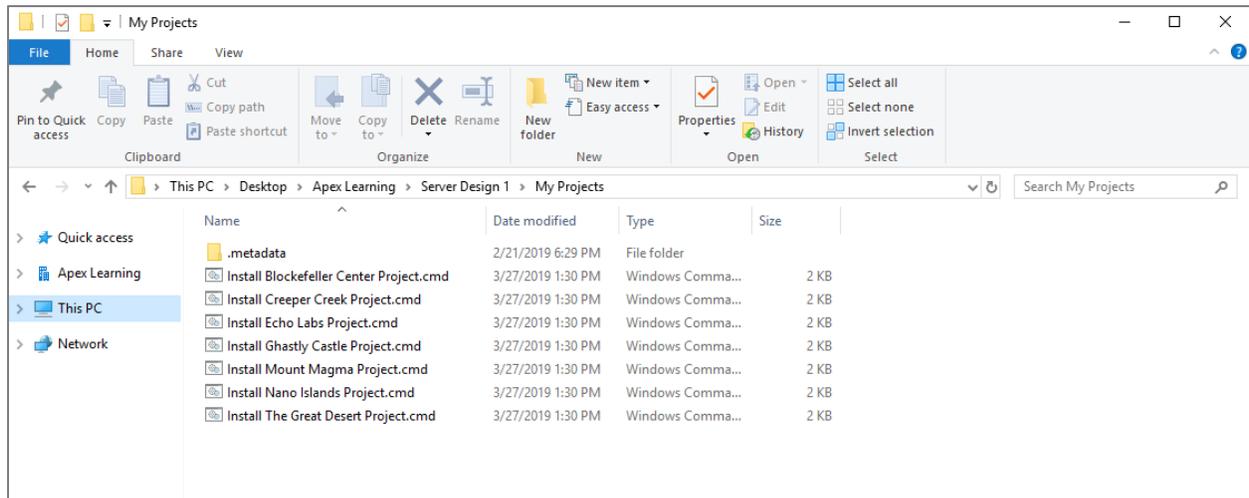
Download the Course Software Bundle

Students can download the software bundle from the first page of the course (Unit 1 Overview).

If an administrator will install the software, follow these steps.

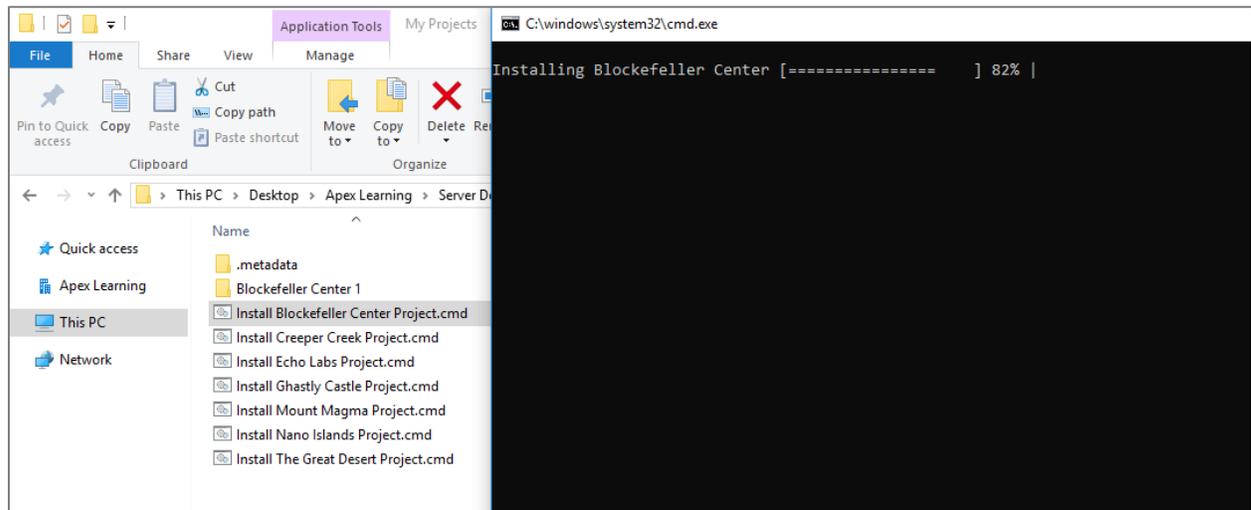
1. Download Eclipse and the rest of the course software:
 - o PC installer- <https://downloads.apexlearning.com/SD1/SD1-Server-Design-10.1.3.exe>
 - o MAC installer- <https://downloads.apexlearning.com/SD1/SD1-Server-Design-10.1.3.dmg>
2. Install the software on the computer the student will be using.
 - a. Run Installer once the download completes.
 - b. When the installer window appears, click the *Next* button.
 - c. In the following window, click the *Next* button to begin the installation process.
 - d. Close the "Successful Install" Dialog window.
3. Verify content
 - a. Navigate to *Apex Learning > Server Design 1 > My Projects* folder on the desktop. If using Windows 11 your *Apex Learning* folder may be saved under *C:\Users\User Name\Desktop*
 - b. Validate that you see the following files & folder: *.metadata, Install Blockefeller Center Project.cmd, Install Creeper Creek Project.cmd, Install Echo Labs Project.cmd, Install Ghastly Castle Project.cmd, Install Mount Magma Project.cmd, Install Nano Labs Project.cmd, Install The Great Desert Project.cmd*

IMPORTANT: If you are on a MAC, you'll see the files using a **.command** file extension instead of **.cmd**

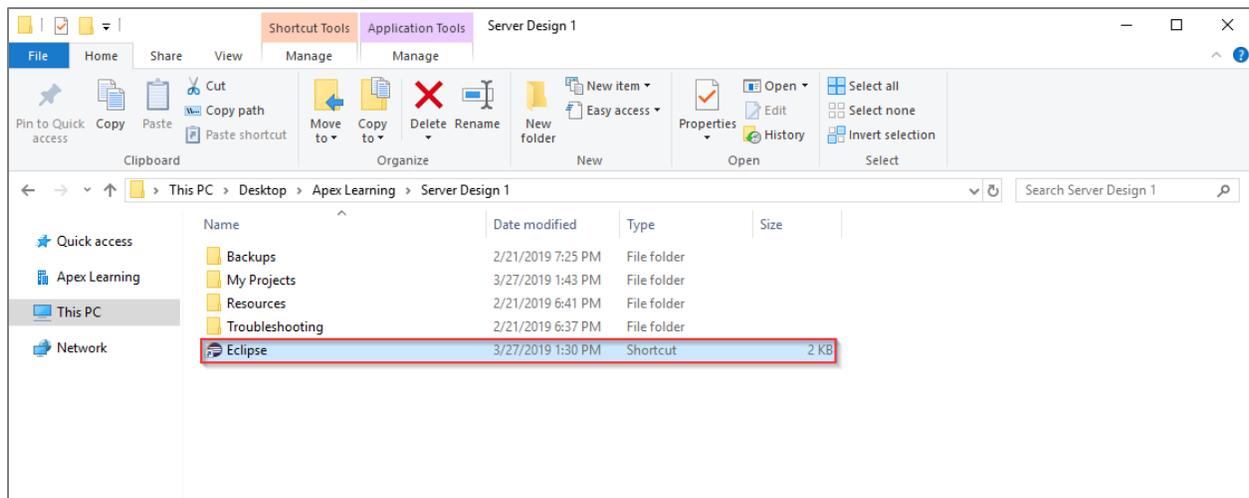


- c. Double click the *Install Blockefeller Center Project.cmd* file. At that point, you should see a new window appear showing you the project's installation process. The installation may appear to be stuck at a certain point but let it continue to 100%.

IMPORTANT: If you are on a MAC, you'll see *Install Blockefeller Center Project.command* instead



- d. Once you see the command prompt (or Terminal window on MAC) disappear, you'll want to go into the *Apex Learning > Server Design 1* folder and double click the *Eclipse* shortcut to open it



Verify the Installation

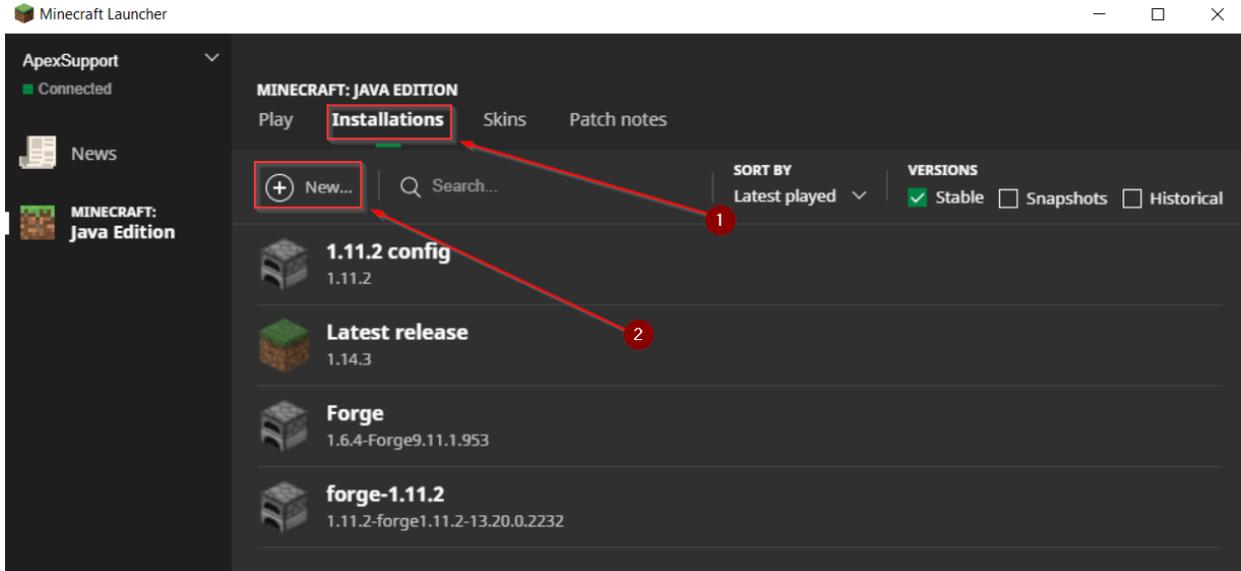
- Now, you'll want to open the Java Edition of Minecraft that you'll need for the student to access to the course files. If Minecraft is not currently installed on your system, go ahead and take a look at the following link: <https://www.minecraft.net/en-us/download/>

IMPORTANT: If you already have the Java Edition of Minecraft installed on the computer, skip to step 3.

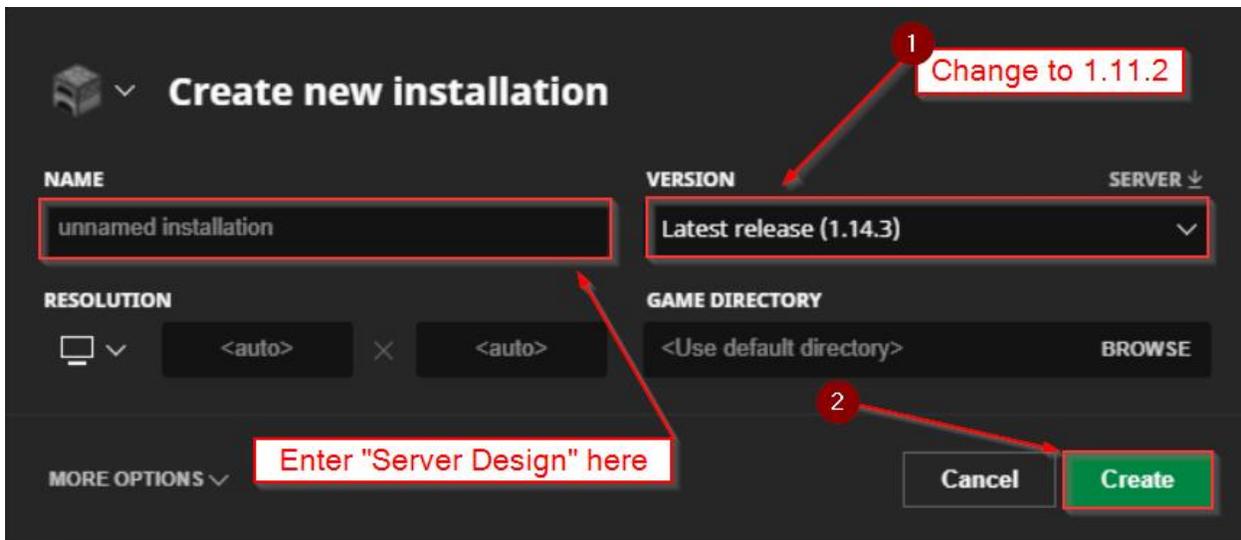


- After clicking the green *DOWNLOAD* button on the page previously mentioned, you'll notice that a file named **MinecraftInstaller.msi** is downloaded. You'll want to open this file to officially begin the install process for Minecraft.
 - In the "Minecraft Launcher Setup window" that appears after opening the **MinecraftInstaller.msi** file, you'll want to click the **Next** button.
 - In the "Destination Folder" section, click the **Next** button.
 - On the "Ready to install Minecraft Launcher" page, click the **Install** option.
 - In the "Completed the Minecraft Launcher Setup Wizard" window, click *Finish* to close the installer.

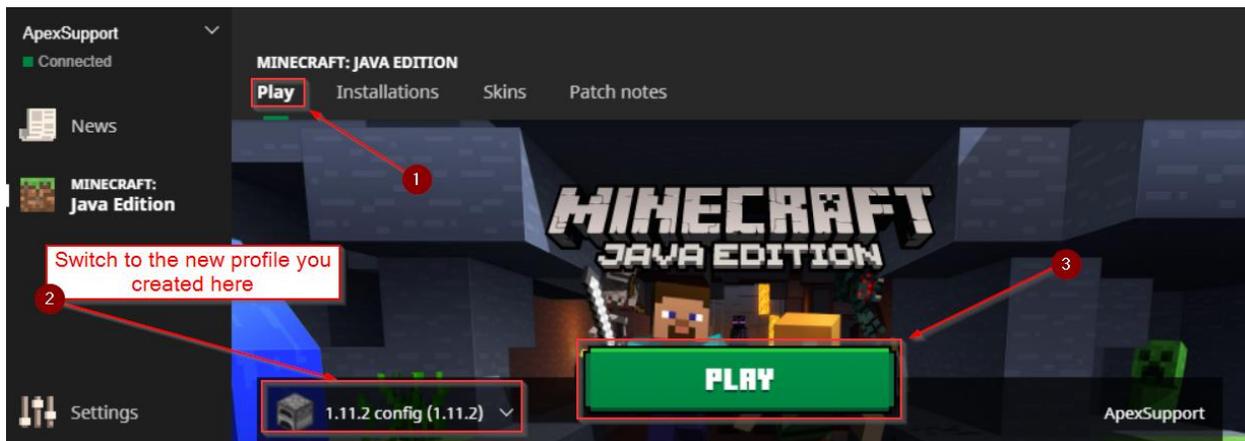
- If Minecraft is not already open, go ahead and open it on the computer. When it first opens, **you'll need to login to one of the Minecraft accounts you previously created**. If you have not yet created any Minecraft user accounts, refer to the *Creating Minecraft Accounts* section of this document.
- Once you're logged in to a Minecraft account, you'll want to click the *Installations* button on the top toolbar in the Minecraft launcher. From there, Click the '+' next to the **New...** option.



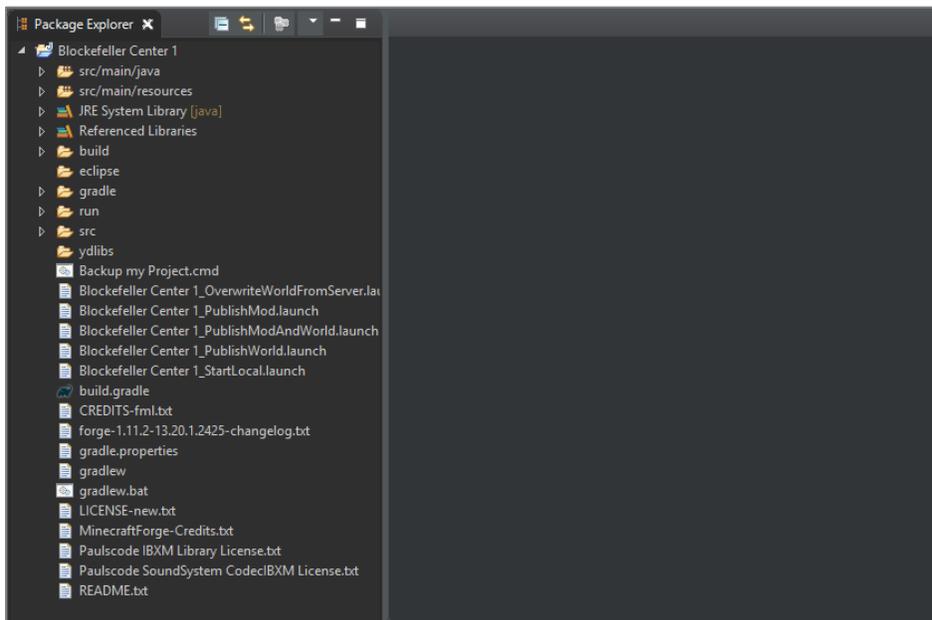
- In the popup menu, you'll want to enter *Server Design* in the *Name* field. Then, you'll want to change the **Version** field to **1.11.2**. After making that change, click the green **Create** button.



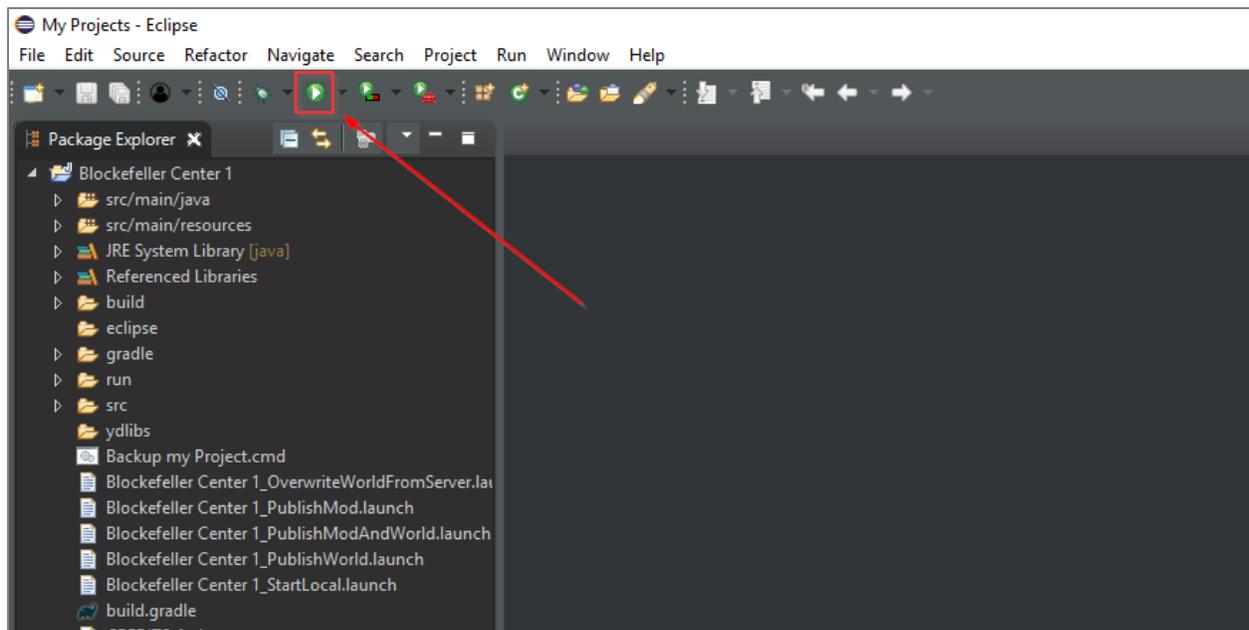
- Click the *PLAY* tab on the top toolbar in the Minecraft launcher. Towards the bottom of the Minecraft launcher, you should see a green 'PLAY' button and a downward facing arrow on the left side of the 'PLAY' button. Click the downward facing arrow and select the new profile you just created. The new profile should appear as *Server Design* in the expandable menu. After selecting the new profile, click the green 'PLAY' button to launch Minecraft.



7. While Minecraft is launching, navigate to the Eclipse program you opened previously on your computer. From here, you'll want to go ahead and expand the *Blockefeller Center 1* package in the **Package Explorer** window. You should see the same files listed below on your end:



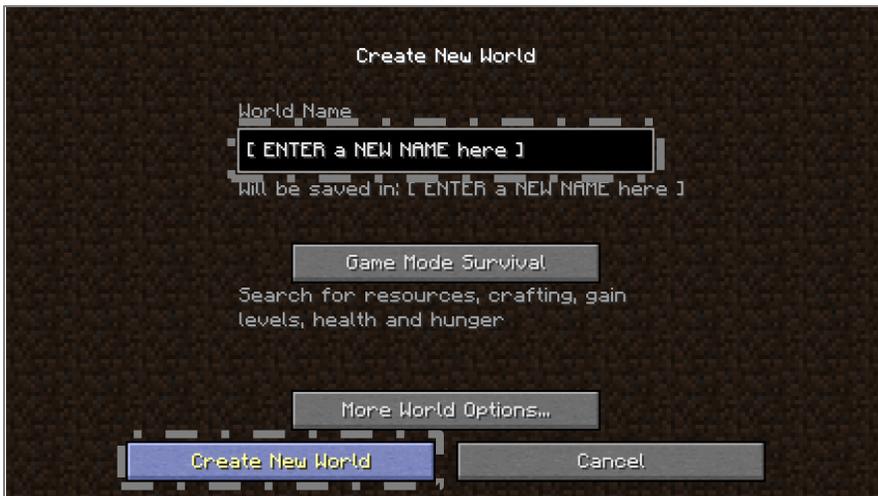
8. Click the **Run** button (▶) in Eclipse to start the server project. For testing purposes, we'll only be running the server in Eclipse to make sure it starts properly and will not join it in Minecraft. You should see a new console window appear after a few seconds. This will log the different processes the workspace goes through while starting the server project. This standalone console window should remain open for as long as the server is running in Eclipse. Once the server is shutdown, the window will disappear.



9. By this time, Minecraft should have fully launched. In the main menu of Minecraft, you'll want to click the *Singleplayer* option.



10. Click the *Create New World* button.
11. Enter a World Name and click the *Create New World* button. Minecraft will load.



12. Test for smooth, glitch, and crash-free gameplay by using keyboard keys W, A, S, D, and spacebar to navigate, move your player character around the world.

W = Forward

D = Right

A = Left

Space Bar = Jump

S = Backwards

If the Minecraft world loads extremely slowly, there is a large amount of lag during play, or Minecraft crashes shortly after a New World is created, please contact Apex Learning Support to confirm performance benchmarks are consistent with the expectations of a high-quality student experience.

Installation Complete! If the above steps worked, you have properly installed the software and content required for Server Design.

Eclipse and 3rd Party Sites

Students using Eclipse may discover options to navigate away from the tool to related websites via the Help menu. To ensure students do not gain access to online forums or other potentially questionable content and remain focused on the work they need to complete, we suggest clients block access to the following URLs:

- <https://www.eclipse.org/forums/>
- <https://wiki.eclipse.org/IRC>

Students will have access to a Marketplace through the Help menu where students can search for and download projects, tools, themes, etc. This happens within the software and cannot be blocked.

Support

Online Help is available to site coordinators, teachers, and students by signing in to Apex Learning and selecting Help in the main menu.

The Apex Learning Support team is available Monday – Friday, 7:00 AM – 9:00 PM Central Time.

- 1-800-453-1454 option 2
- support@apexlearning.com
- Chat is available via online Help