Edit Linux Lab files remotely with Sublime Text

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# 1 Introduction

## Purpose

The purpose of this instructions document is to allow students to use Sublime Text 3 to remotely edit files on the Linux Lab computers via another computer. The intended audience is anyone that wishes to use Sublime Text 3 to edit files on Linux Lab computers.

## Scope

This document will cover how to install the necessary SFTP package and configure it. Some potential pitfalls will be addressed. It will *not* cover how to install Sublime Text 3, how to create directories in the Linux Lab, or how to create files in Sublime Text 3. It will likewise not cover any version of Sublime Text besides Sublime Text 3 (e.g., Sublime Text 2).

## Definitions

**JSON** (JavaScript Object Notation)

A standard data format that allows for easy key-value pair storage and retrieval.

**SFTP** (Secure File Transfer Protocol)

A network protocol that uses SSH (i.e. a secure shell) to securely transfer files.

# 2 List of Materials

You will need a computer with internet access.

The computer you use must have Sublime Text 3 installed.

You must have valid login credentials for the Linux Lab.

You must know how to create files and directories on Linux Lab computers.

3 Directions

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| 3.1 Install Package ControlStep 1 Go to https://packagecontrol.io/installation in a web browser (see Figure 1).  **Step 2**  Copy all the text from the grey box to your clipboard.  **Caution!**  If you select the wrong tab (wrong version of Sublime Text), you will get an error in step 5. | **Package Control Website**  Screen Shot 2015-03-06 at 7.54.06 AM.png  (Figure 1. Source: screenshot taken by our team) |

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| Step 3 Open the console in sublime text by selecting “View” > “Show Console” in Sublime Text 3’s main menu bar (see Figure 2). | **Show Console**  Screen Shot 2015-03-06 at 8.34.29 AM.png  (Figure 2. Source: screenshot taken by our team) |
| **Step 4**  Paste your clipboard contents into the console and press enter (see Figure 3).  **Info**  You should get a dialog window prompting you to restart Sublime Text.  If you get an error, you probably incorrectly performed step 3, and need to begin again from that point. | **Sublime Text Console**  Screen Shot 2015-03-06 at 7.55.41 AM.png  (Figure 3. Source: screenshot taken by our team) |
| **Step 5**  Close Sublime Text and open it again. If you are prompted again, repeat this step until you are no longer prompted (see Figure 4). | **Restart Prompt** Screen Shot 2015-03-06 at 2.22.59 PM.png  (Figure 4. Source: screenshot taken by our team) |

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| **3.2 Install SFTP Package**  **Step 6**  Open the command palette by selecting “Tools” > “Command Palette” from the main menu (see Figure 5). | **Open Command Palette**  command palette.png  (Figure 5. Source: screenshot taken by our team) |
| **Step 7**  Type “Install Package” and press enter (see Figure 8).  **Info**  The control palette will disappear while the list of available packages populates. | **Install Package**  Screen Shot 2015-03-06 at 7.58.29 AM.png  (Figure 6. Source: screenshot taken by our team) |
| **Step 8**  Wait for the list of packages to load (This should take under a minute).  **Warning!**  If you are not connected to the internet, this step will fail. If this occurs, verify your connection, and begin again at step 6. | **Install SFTP**  Screen Shot 2015-03-06 at 8.04.24 AM.png  (Figure 7. Source: screenshot taken by our team) |
| **Step 9**  In the dialog that opens, type “sftp” and press enter (see Figure 7).  **Step 10**  Close Sublime Text 3 and open it again. | |

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| **3.3 Prepare Systems For Sync**  **Step 11**  Create a directory on your account in the Linux Lab (You will sync Sublime Text to this directory).  **Step 12**  Create a directory on your local computer to hold your school files.    **Step 13**  Use Sublime Text to open the directory you just created by clicking “File” > “Open Folder” in Sublime Text’s main menu. | **Open Folder**  open.png  (Figure 8. Source: screenshot taken by our team) |
| **Info**  In OS X, you won’t have the “Open Folder” option. Instead, select “Open…” (see Figure 8). | |
| **Step 14**  Select “Project” > “Save Project As…” in Sublime Text’s main menu and provide a name for it (see Figure 9). | **Save Project**  save project.png  (Figure 9. Source: screenshot taken by our team) |
| 3.4 Configure Systems to SyncStep 15 In Sublime Text’s sidebar, right click on the directory you created in step 13 and select “SFTP/FTP” > “Map to Remote…”. A new configuration file will open. Step 16 Edit the configuration file (see Figure 10 for reference).  Edit line 9 to be "upload\_on\_save": true,”  Edit line 14 to be "confirm\_sync": true,  Edit line 17 to be "host": "157.201.194.222", | **Configure Sublime**  Screen Shot 2015-03-06 at 8.13.38 AM.png  (Figure 10. Source: screenshot taken by our team) |
| Edit line 18 to be "user": "YOUR USERNAME HERE", replacing “YOUR USERNAME HERE” with the username you use to connect to the linux lab. Edit line 19 to be "password": "YOUR PASSWORD HERE", replacing “YOUR PASSWORD HERE” with the password you use to log in to your account on the linux lab.Edit line 20 to be "port": "215",Edit line 22 to be "remote\_path": "/home/BYU-I EMAIL/DIRECTORY FROM STEP 11", replacing “BYU-I EMAIL” with the first 8 characters in your BYU-I email address and “DIRECTORY FROM STEP 11” with the directory you created on the Linux Lab in step 11.Save the configuration file.Caution The comma at the end of each edited line is important. If you exclude it you will not be able to sync. | |
| Step 17 Right click on the name of the directory in Sublime Text’s sidebar and select “New File”. Enter “Hello” in the editor. | |
| Step 18 Select “File” > “Save As” from Sublime Text’s main menu. Enter the name “hello.txt” as the filename, and click “Save”. The saved on the computer you are using, and an identical file will be created in the directory you linked Sublime Text to on the Linux Lab computer. | |
| Step 19 Log on to a Linux Lab computer. Navigate to the directory you created and connected Sublime Text to in steps 12 and 17. | |

# 4 Troubleshooting

**4.1**

If you have the error ImportError: No module named 'urllib2', you probably selected the wrong version of Sublime Text in step 2. Go back to step 2 and be sure the tab labelled “SUBLIME TEXT 3” is selected. Continue the directions from there.

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| **4.2**  If you receive an error dialog stating that you have invalid login credentials, (see Figure 11) go back to step 16 and ensure you entered all the information correctly. | **Invalid Credentials**credentials.png  (Figure 11. Source: screenshot taken by our team) |

**4.3**

If you receive the error “Sublime SFTP connection timeout” when you save a file, you are likely not connected to the internet. Verify your internet connection and try the save again.