

QATIP Intermediate

Azure Lab0

Lab Setup

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Lab Objectives

In this lab, you will:

- Sign up to qa.learnondemand.net if you do not have an existing account
- Redeem the provided key to gain access to your lab environment
- Launch your lab environment to access your virtual machine
- Download class files into your lab virtual machine
- Launch and configure Visual Studio Code (VSC) in your lab virtual machine ahead of running subsequent labs

Teaching Points

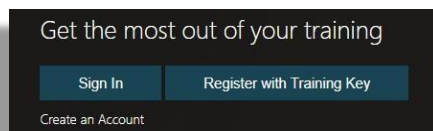
This lab will give you access to your lab environment. It should be run at the beginning of the class before attempting any other labs. The lab environment has a time limit of six hours after which it will be decommissioned. At this point you will need to run this lab again.

Before you begin

This is the first lab of the class and is actioned from your local machine. It is recommended that you close any open applications and browser sessions before beginning.

Task1 Set up your Labs environment

1. Complete steps 2 to 4 **once** only during the class.
2. Navigate to: <https://qa.learnondemand.net/>
3. If you already have an account, then click **Sign In** and redeem the key provided to you by your instructor.
4. If you do not have an account, then click **Register with Training Key** and provide your details and key as requested.

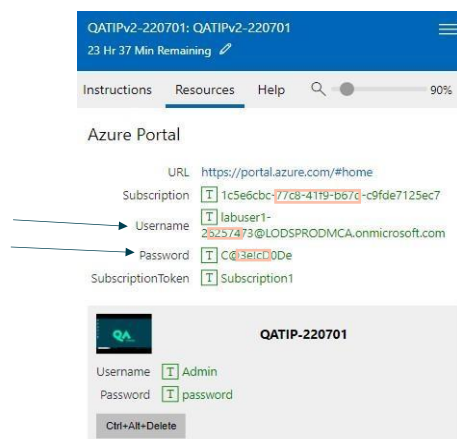


5. Having signed in, select your course (click **My Training** on the top menu if required)
6. Scroll down and click **Launch** to provision your lab environment. This will take a few minutes to launch. The lab environment consists of a remote virtual machine. All work for this course will be performed on this virtual machine. You will use pre-installed VSC as your Integrated Development Environment (IDE) to write and action terraform files. Azure will be accessed through a web browser, also on this machine, to view the results of your work.

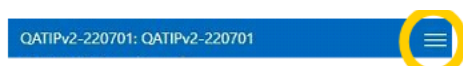
Note: You can change the display settings to best fit your screen resolution if required.



On the right-hand side of the window notice the menu containing your Azure username and password...



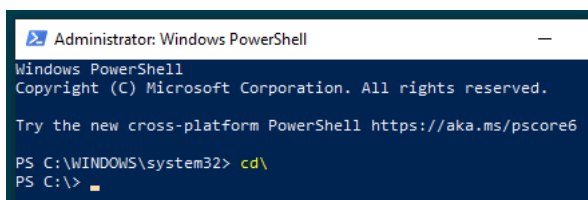
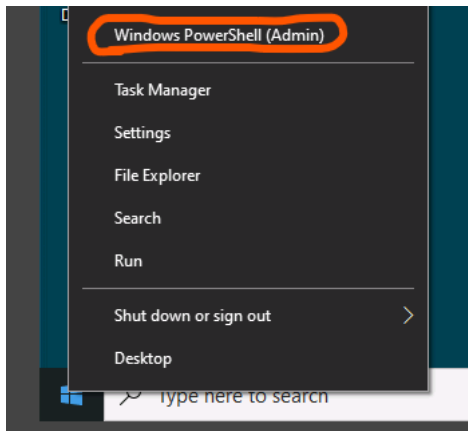
7. In the VM, open a new web browser session and browse to <https://portal.azure.com/#home>
8. Login to Azure using the provided Username (starting labuser1-) and password. (Clicking on the T will paste the information into the desktop sessions current cursor position).
9. Copy these details into a notepad document and save it on the virtual machine desktop for future convenience
10. You can use the menu option to detach the information pane from the virtual machine display...



11. This pane can then be minimized to free up display space. The menu also allows you to save your lab environment and 'stop-the-clock' when the instructor is teaching and demonstrating. When you are ready for your next lab, you can resume it through the [qa.learnondemand](#) portal.


Task 2 Installing Class Files

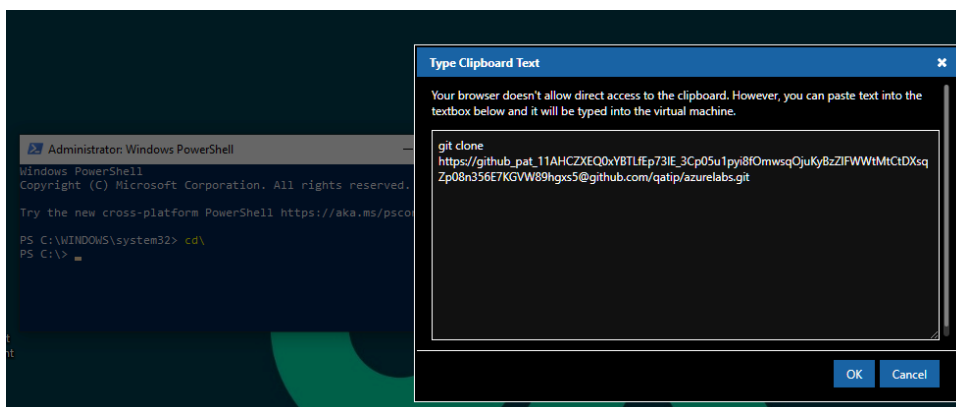
1. In the remote VM, open an Admin PowerShell session and navigate to the root of the C drive..



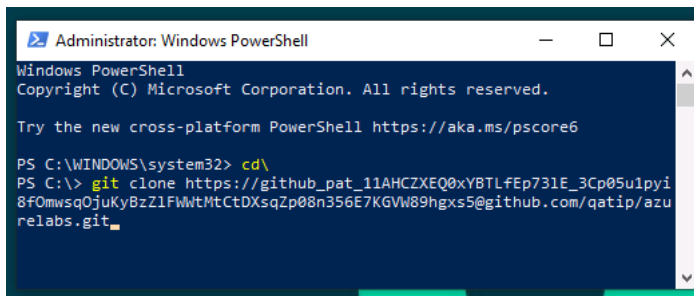
2. Security prevents direct copy/paste from your local machine into the remote environment. Therefore, to download class files onto the virtual machine; Copy the following command onto your local clipboard.

git clone <https://github.com/qatip/azureintlabs.git>

In your remote session, click on the 'lightning bolt'  (top left of the screen), select **Type text**, **Type clipboard text** and then paste your clipboard content.



3. Clicking on OK will then paste this content to your current cursor position...

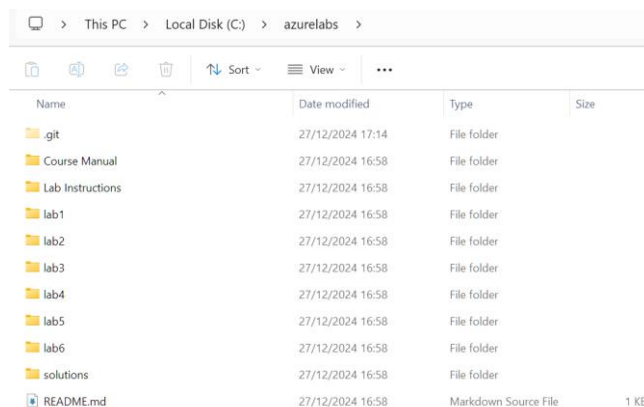


```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\WINDOWS\system32> cd\
PS C:\> git clone https://github.com/qatip/azure-tf-int
PS C:\> relabs.git
```

4. Press enter and when the cloning completes, you should now have a C:\azure-tf-int folder containing the course manual, lab instructions, lab files and solution files...

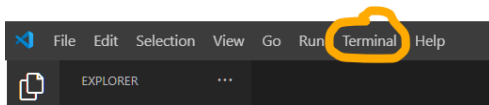


5. Close the PowerShell session window.
6. You can now open the course manual and lab instructions PDFs using the same web browser used to navigate to the Azure portal to avoid desktop clutter. Copy and paste works as expected 'within' the virtual desktop so there is no need to use 'lightning bolt' again. **Use ctrl+c to copy from the PDF or website and use ctrl+v to paste into the terminal. Right-clicking in the terminal will also paste in the current clipboard content.**

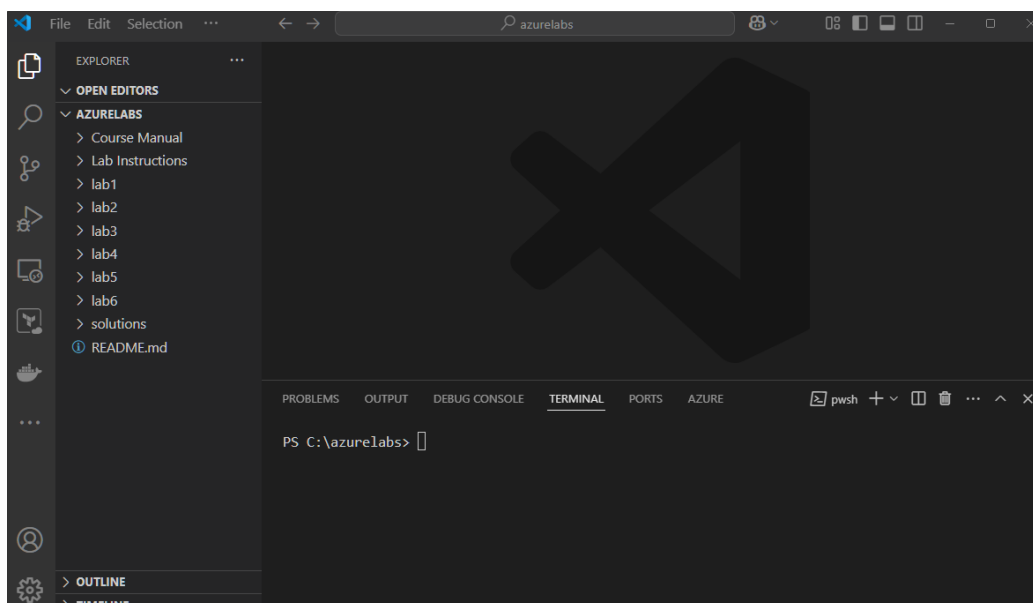
Task 3 Configuring your IDE

1. In the VM, open VSC using the desktop shortcut.
2. If required, change your colour scheme and *Mark Done*.
3. *Close the getting started window.*
4. On the left-hand vertical menu, choose the 5th Icon, *Extensions* (ctrl + Shift + x).

5. Search for **Terraform**.
6. Choose the terraform extension by *Hashicorp* and click *install*.
7. Once complete *close the page*.
8. Navigate back to the top extension on the left-hand bar menu - **EXPLORER**
9. Open the **azurelabs** folder; **File, Open Folder**, navigate to and select the **C:\azure-tf-int** folder. Select 'yes' to trust the authors of files in this folder.
10. Start a terminal session by selecting Terminal, New Terminal..



11. Close any 'getting started' files and you should now see your lab folders and have a terminal session open....



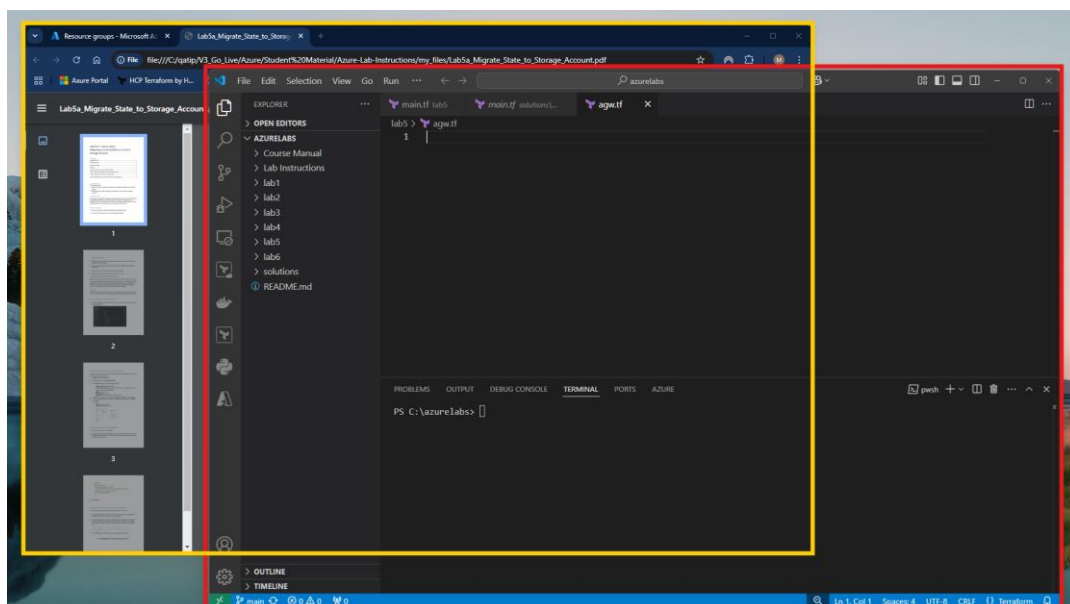
12. As you perform each lab and execute commands in your terminal session, ensure that you move into the appropriate directory using the CD command, so when completing Lab1 for example; "**cd c:\azurelabs\lab1**"

Task 4 Logging into Azure for Terraform

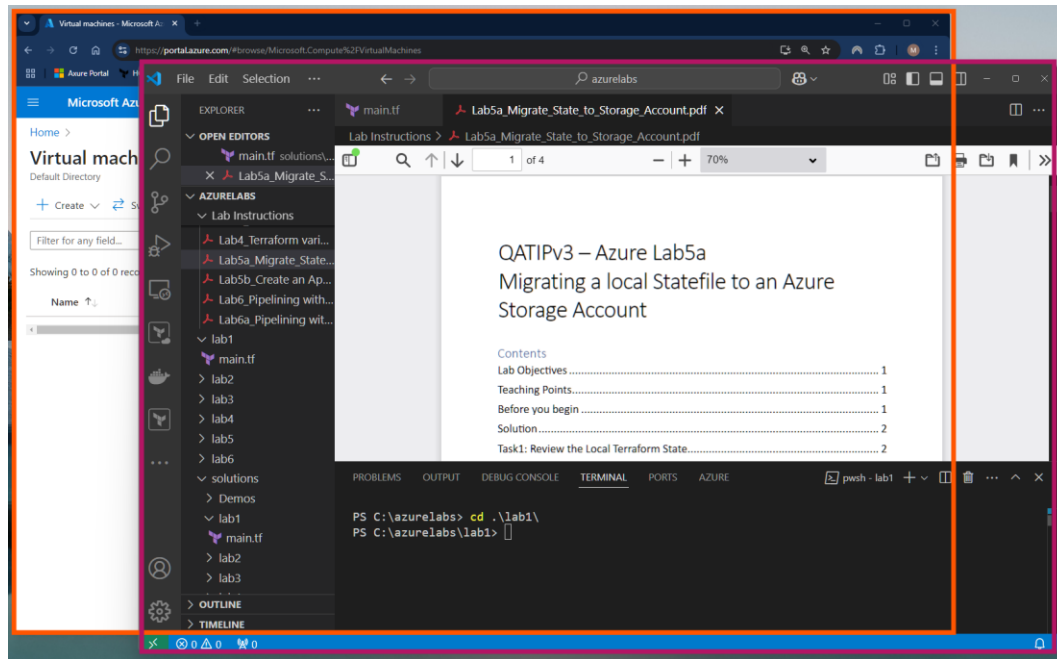
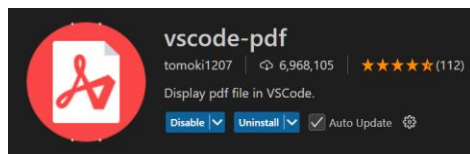
1. When required to run Terraform commands from the IDE terminal, you will need to authenticate to Azure unless you already have an active session.
2. Type “**az login**” in your terminal session
3. A new web browser tab should open, prompting you for credentials
4. In the login dialog box, use your Username/Password as noted earlier
5. If you get an error recognising the account, close the tab and return to the terminal. Wait 30 seconds and try again (you may need to Ctrl + Z to kill the batch job in the terminal)
6. When successfully authenticated you may close the browser tab

Task 5 Arranging your remote desktop

1. In order to avoid the frustration of desktop clutter, it is suggested you arrange your desktop as shown below. In this way you can easily switch between your web browser, in which you can view your course manual, lab instructions, the Azure portal and any other web resources, and the VSC interface, in which you will create, and action terraform files.



Alternatively you can install the vscode-pdf extension into VSC which will then allow you to view PDFs within the IDE itself...



Congratulations, you have completed this lab