XTREMELABS

SELF-SERVICE
STUDENT GUIDE

Welcome to XtremeLabs, a service of **XtremeLabs, LLC.** This document provides Students step-by-step instructions on how to:

- *Create an account.*
- *Add course codes.*
- *Use your virtual labs through the self-service portal.*
- *Troubleshoot connectivity issues.*

Contents

System Requirements

To access the lab hosting system, your client system must meet the following requirements:

	ActiveX Requirements	HTML5 Requirements
Windows XP SP3 or later (Windows RT is not supported)	x	x
.NET Framework 3.5 or later	x	x
Browser	Internet Explorer 7+	Microsoft Edge Internet Explorer 10+ Google Chrome 39+ Safari 7+
Minimum KBps per user network bandwidth	128 KBps	256 KBps
Ideal screen resolution is above 1280 × 1024	x	x
Viewer Installation	Local Admin	N/A
TCP Port 80 and 443 open with inbound/outbound access to the Internet	x	x
For some corporate firewalls, a proxy client (such as Forefront TMG Client) may be required	x	N/A

Create a XtremeLabs Online Account

The first step to accessing your virtual labs will be to create an account on XtremeLabs portal.

1. In your browser, navigate to http://labs.xtremelabs.io.
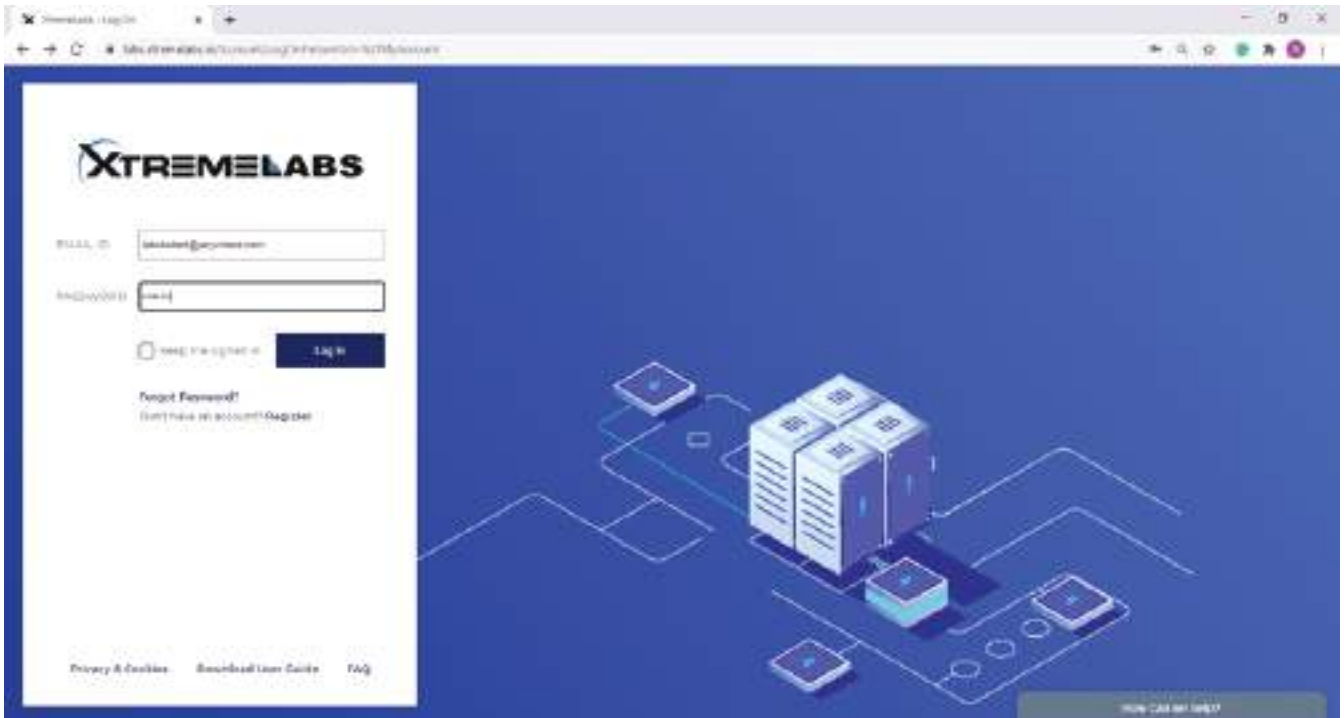
If you have an account, you can sign in. If you do not yet have an account, click *Register*.
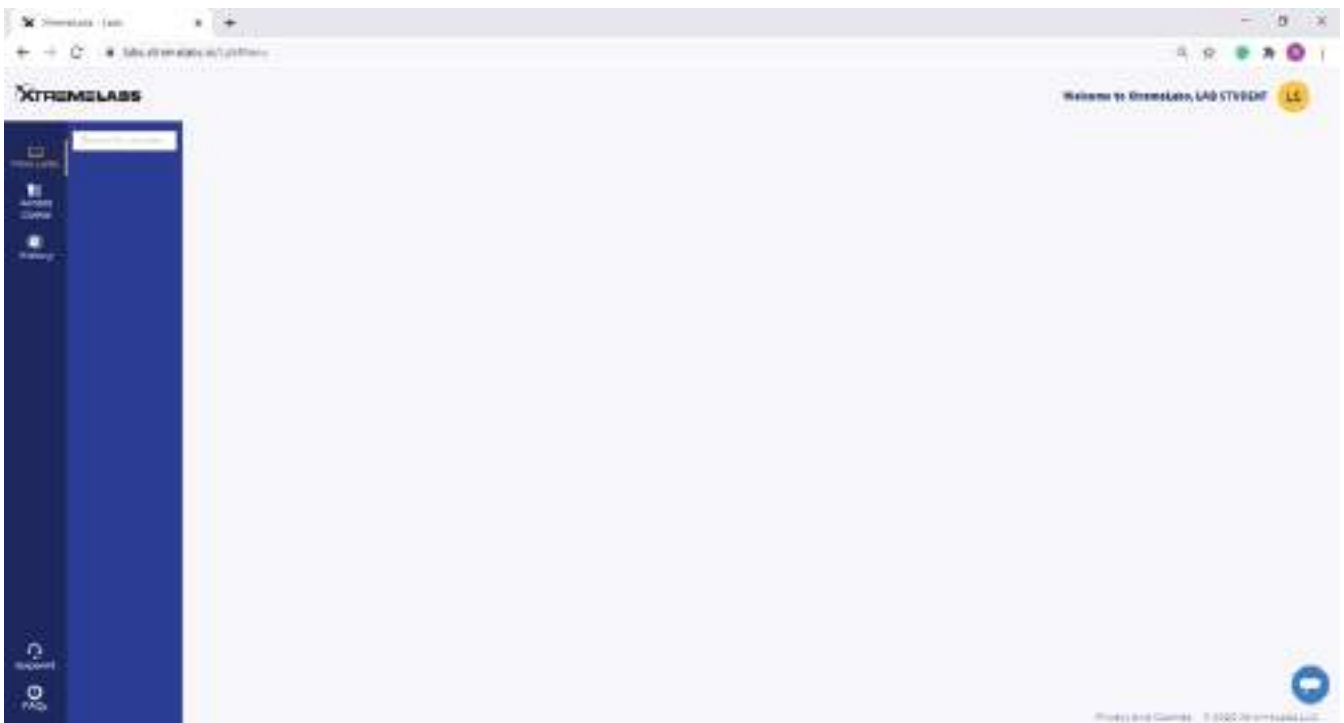
2.   To create your account, fill in the fields on the *Create an account* page.

> *Note:* The email address used to create your account is also used for password reminders. It is important to use a valid email address.

3.   Click *Sign Up*.

4.   You will be redirected to the *View Labs* page.   Before you have access to any labs, this is what the View Labs page will look like the following:


You can find instructions about adding Course Codes on the next pages. Once you have added Course Codes to your account, the labs which you can access will be listed on the *View Labs* page:
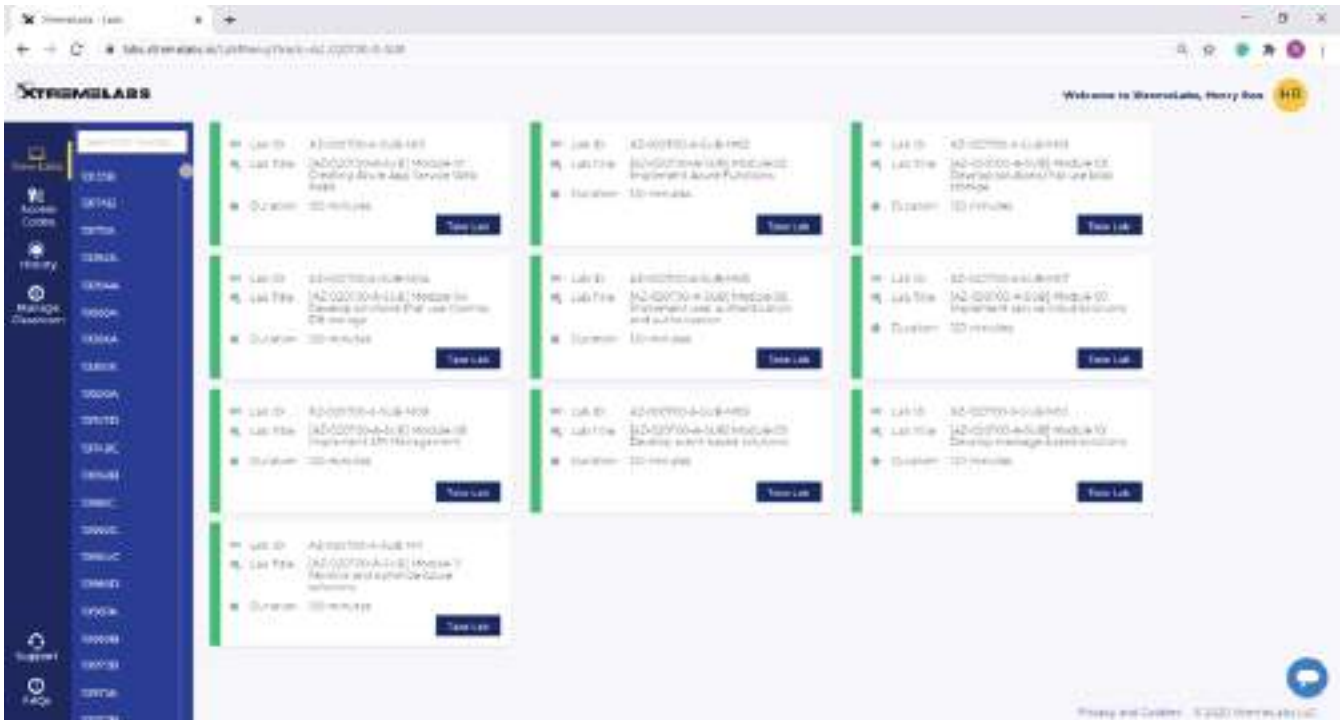
The names of labs available to you are listed in the left column. You can search for required courses by simply typing the name of that course in *search text box* which is adjacent to *View Labs* option. When a lab is selected (in this case the 10265A lab), the lab modules in that lab will be displayed as tiles on the center and right areas of the window. Each lab module tile will display the lab module's Lab ID, it's Lab Title, and the Duration of the lab module.

On some pages, you can find the chat button at the bottom left of the screen. You can connect with XtremeLabs Support by clicking on the *Chat Icon* . By clicking the live chat tab following chat window will appear before:
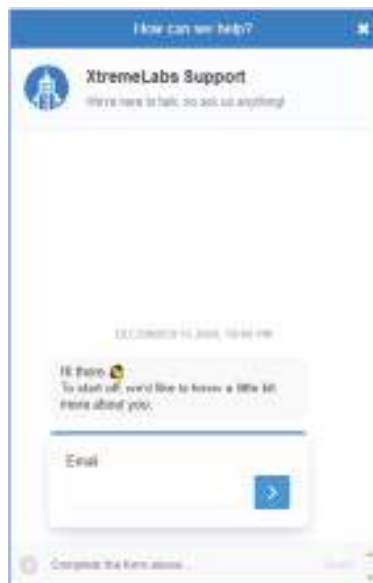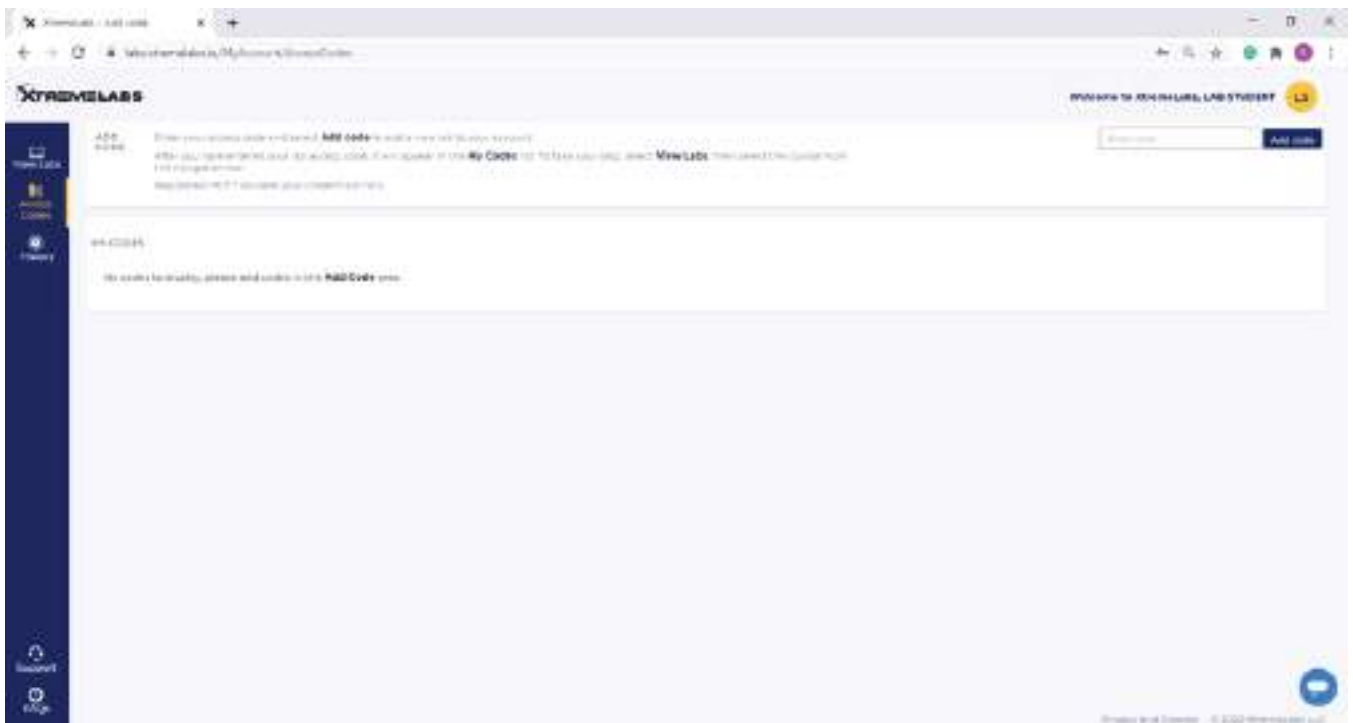
Add Access Codes

1.　　To get access to labs, you'll need to add *Access Codes* to your account. Your Instructor will provide you with access codes.

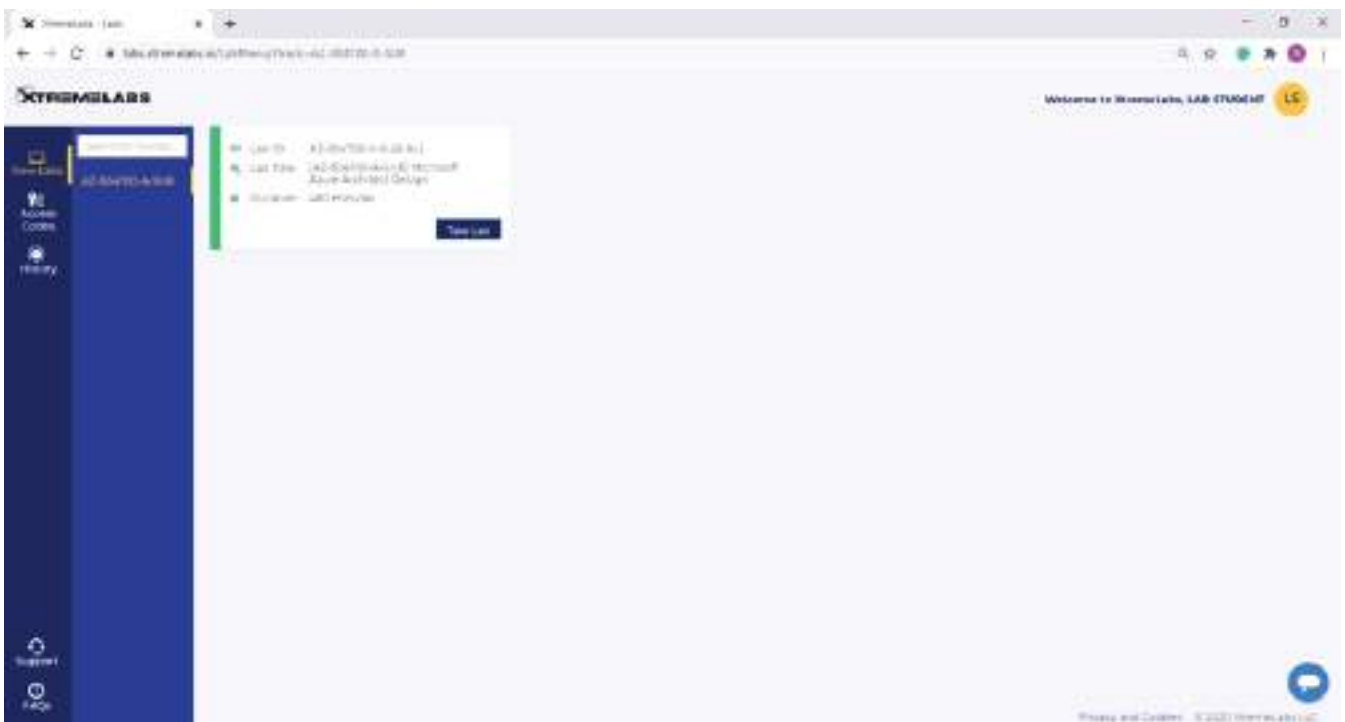To add the codes to your account, on the *View Labs* page, click the *Access Codes* icon

to open the Access Codes page.

2.　　Enter your access code in the box and click Add code. Your course will be added to the My codes listing.
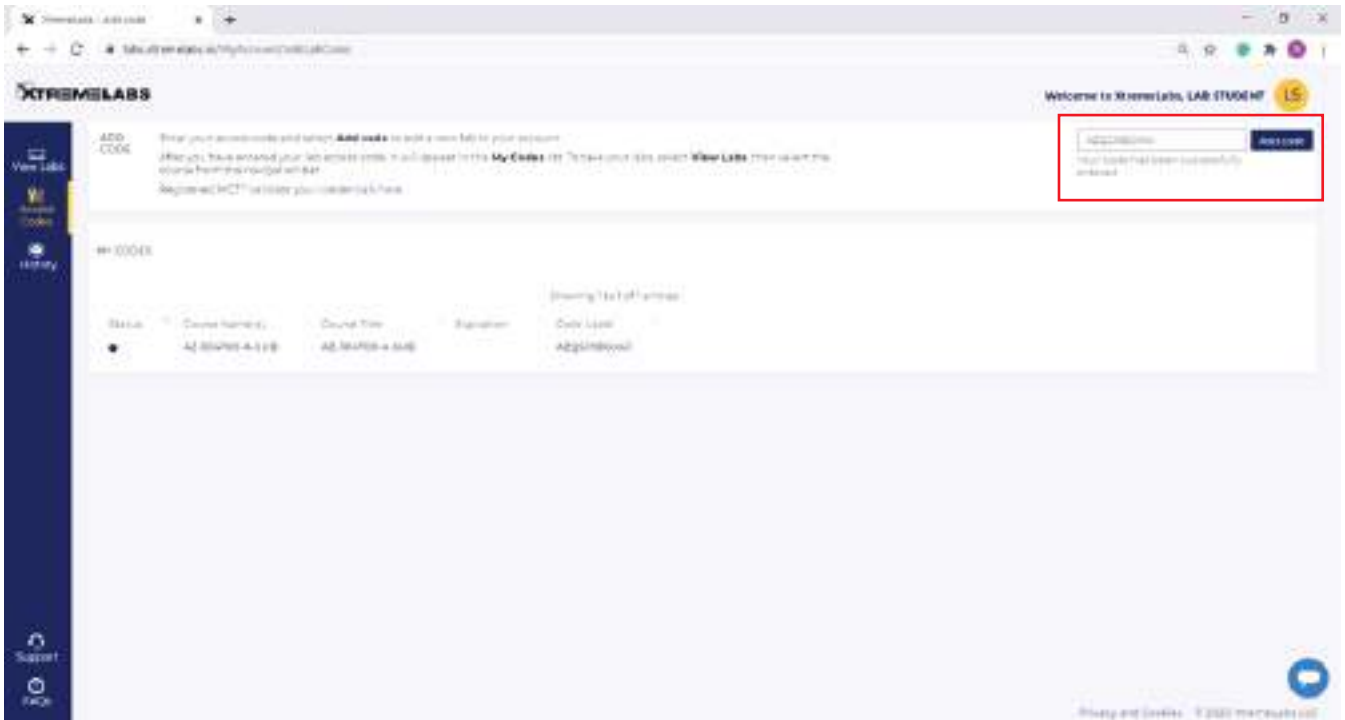
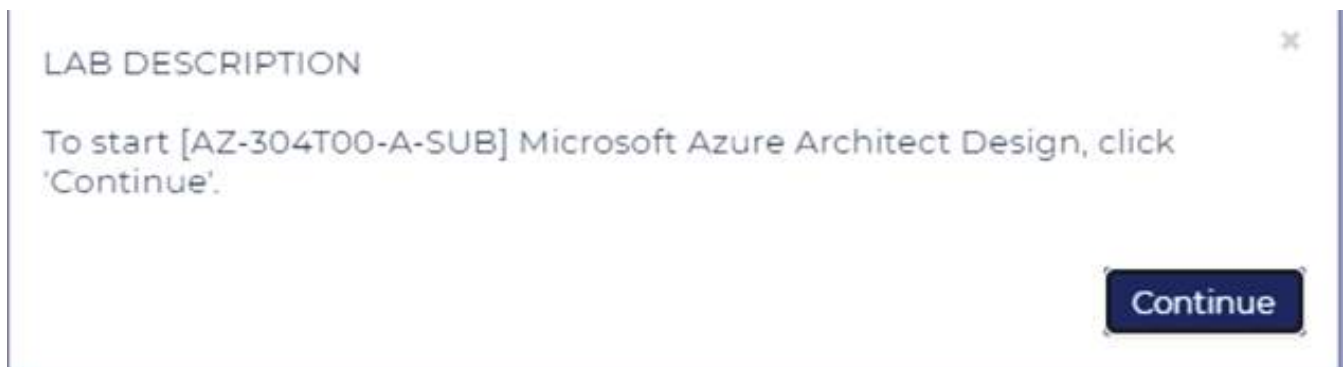3.   Note that your new lab will now be displayed in the *View Labs* page.

Note: If you do not see the labs associated with your course on your course home page, you should inform your instructor.

Take a Lab

1.	On the *View Labs* page, select an active course that is listed in the left column (see above). Then select the lab module that you want to launch by clicking on the lab module's 'Take Lab' box on the lab module's tile:

Take Lab

This will open the lab module's Lab Description box:

LAB DESCRIPTION   ×

To start [AZ-304T00-A-SUB] Microsoft Azure Architect Design, click
'Continue'.

Continue

2.	To launch the lab module, click on the 'Continue' button.
3.	While your lab environment is being prepared, a "spinner" will be displayed. Typically, it takes fewer than 30 seconds to create your unique lab environment. A large lab environment might take up to 2 minutes.

We're launching your lab

Note: If your lab takes longer than five minutes to load, refresh your browser page by pressing the *F5* key. If you still cannot access your lab, please alert your instructor.

*Note:* Some labs have been modified from the on-premises version to operate correctly in an online environment. If a lab has been altered, a "Lab Notice" message will appear after the lab loads. Clicking the *Notes* tile will launch a Lab Notes document that contains additional information regarding the changes made to the lab steps.
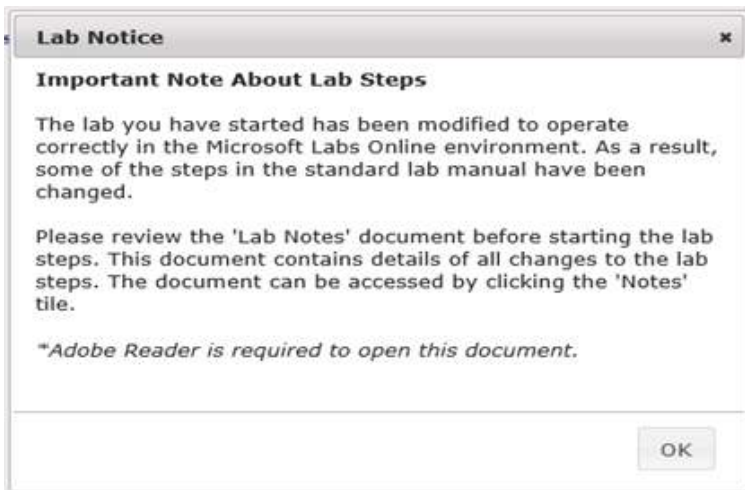
4.   Once the lab loads and the environment is ready, your lab view will be displayed.

This is how your Lab looks when you launch it.
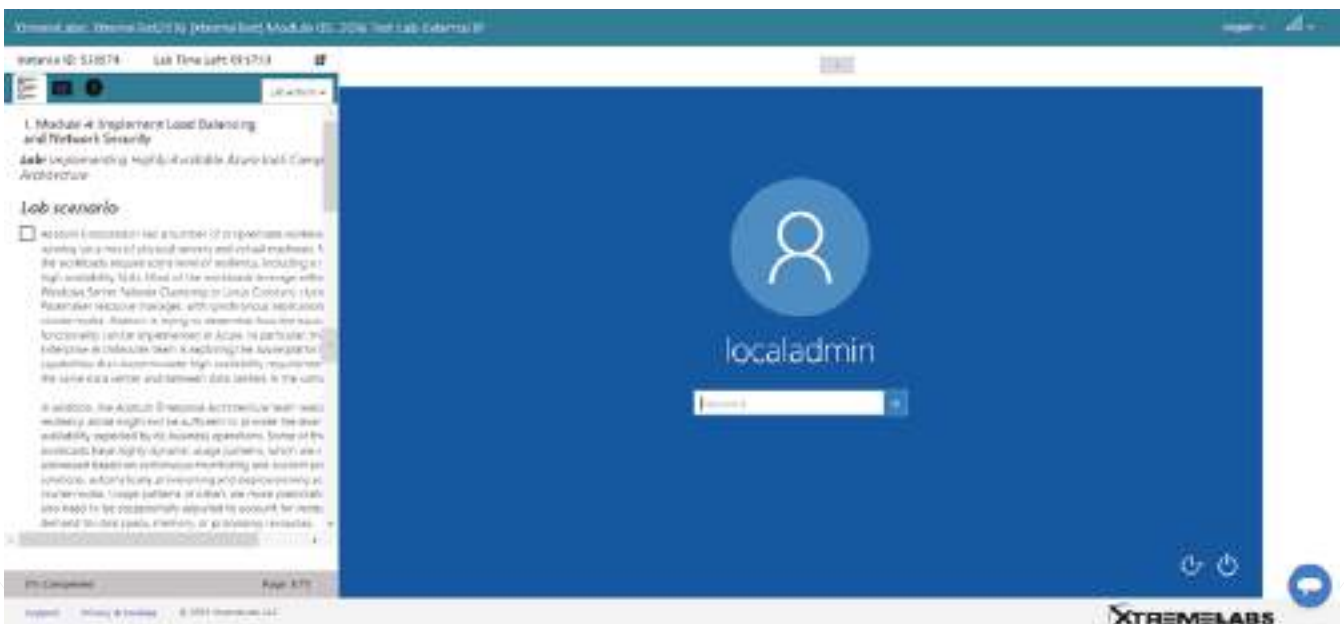
How to Navigate the Lab Environment

Once your lab view is displayed, several options are available to allow you to interact with the virtual machines provided for each lab scenario. Please note that some parts of the user interface, such as the Lab Steps Overlay, will not be available in all labs.

The lab view page has seven parts:

- Top bar
- Virtual machine window
- Lab Steps Overlay
- VM Operations
- Lab Information
- Lab Actions Menu
- Detachable Lab Steps
- Footer
- Live Support Chat
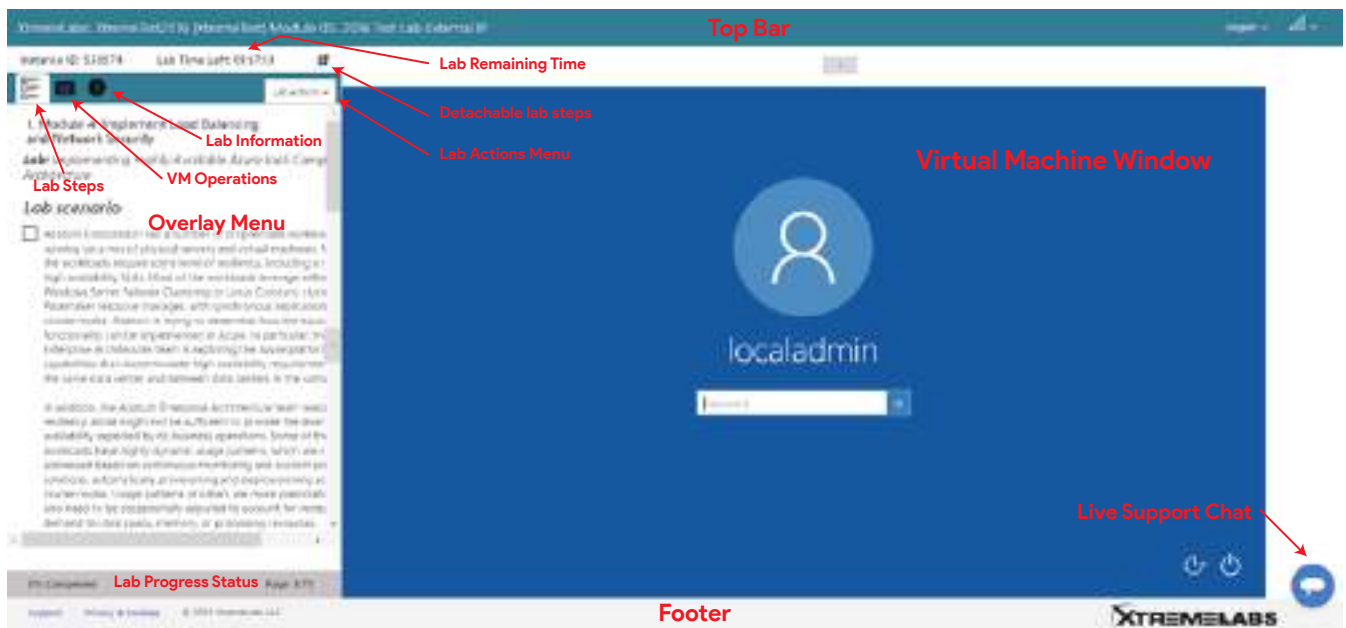
Lab Steps Overlay
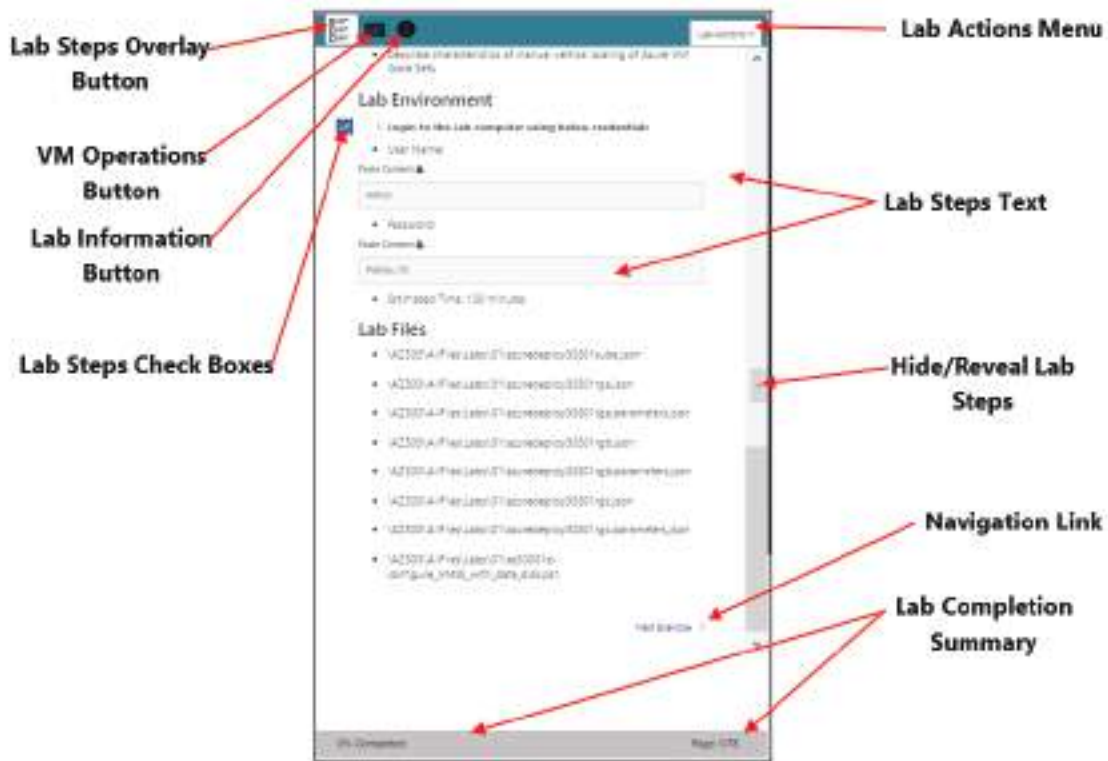
Most labs hosted by XtremeLabs include an overlay that contains the official lab steps and other information provided by the course authors. Most lab steps are organized into Tasks and Tasks are organized into Exercises. Each Task is presented on a single panel and the navigation links at the bottom of each panel move you sequentially through all the panels in the lab. Checkboxes are provided to mark your position in the sequence of lab steps.

Top Bar

The elements in the top bar are called out and described here:
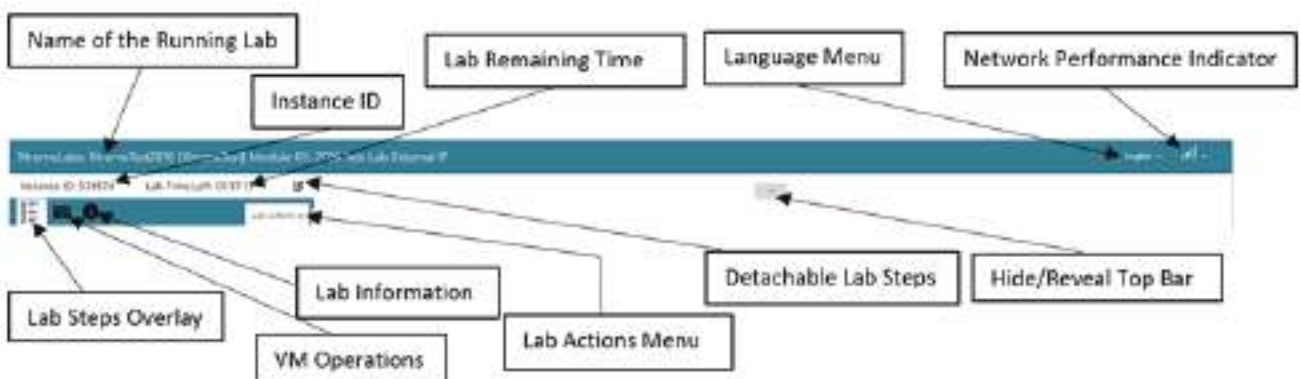
Name of running lab – This displays the name of the open lab module. If requesting support, this information will be included in the screenshot that will be send to the support team.

Hide/Reveal Top Bar button – Click this button to hide or reveal the top bar.

 Hide   Reveal

Instance ID – This contains the Instance of the open lab module. If requesting support, this information will be included in the screenshot that will be send to the support team.

Language Menu – This menu allows you to change the language according to your preference and understanding. The default language is usually English, depending on the course and your location.

Network performance indicator – The bars in this indicator show the response speed between the user's browser and the virtual machine server. The fuller the bars, the better the network performance.   A drop-down arrow displays the last ping's round-trip in milliseconds and includes a Refresh text link that initiates a new ping. The round-trip timing of the new ping is then displayed in the drop-down box and is shown in the indicator.
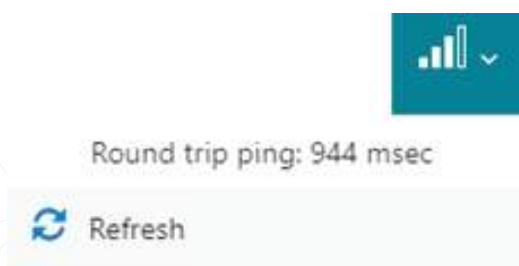
Detachable Lab Steps – ↗ This icon allows you to move lab instructions set to another tab and another available monitor.

Lab Steps/Instruction Manual – ▤ This icon allows you to move lab instructions set to another tab and another available monitor.
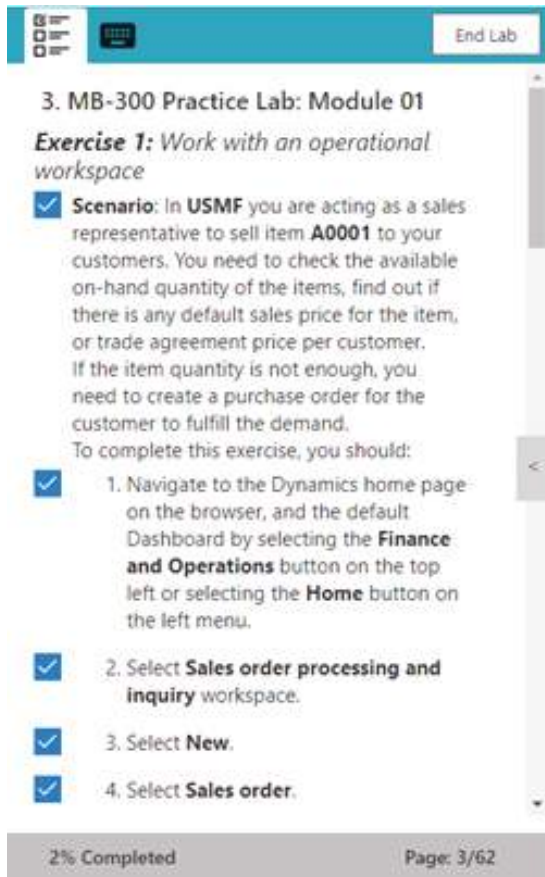
Virtual Machine (VM) Operations – ⌨ This is a button that displays the name of the current virtual machine in the running lab module. Alongside it contains all the VM operations that can be performed in the running lab module. The most common VM operations are listed below:
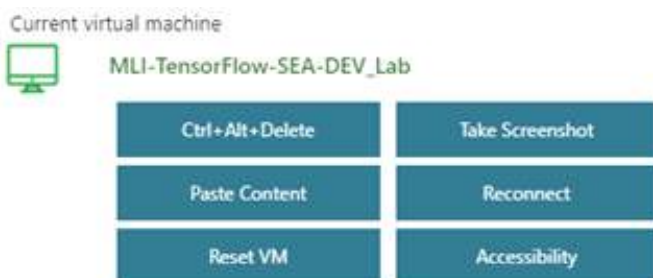
The action choices are:

- **Ctrl+Alt+Delete** – Sends this command to the virtual machine.
- **Take Screenshot** – Enable users to take screenshot of their current VM.
- **Paste Content** – Inserts the content of the client machine's clipboard into the virtual machine.
- **Reconnect** – Enables the users to reconnect the VM if it gets disconnected due to several   reasons.
- **Reset VM** – Enables the users to reset their current VMs.
- **Accessibility** – Enables the users to Invoke Narrator and starts the screen reader functionality within the current VM.

By clicking on the Accessibility Button users will see the below shown pop-up menu:
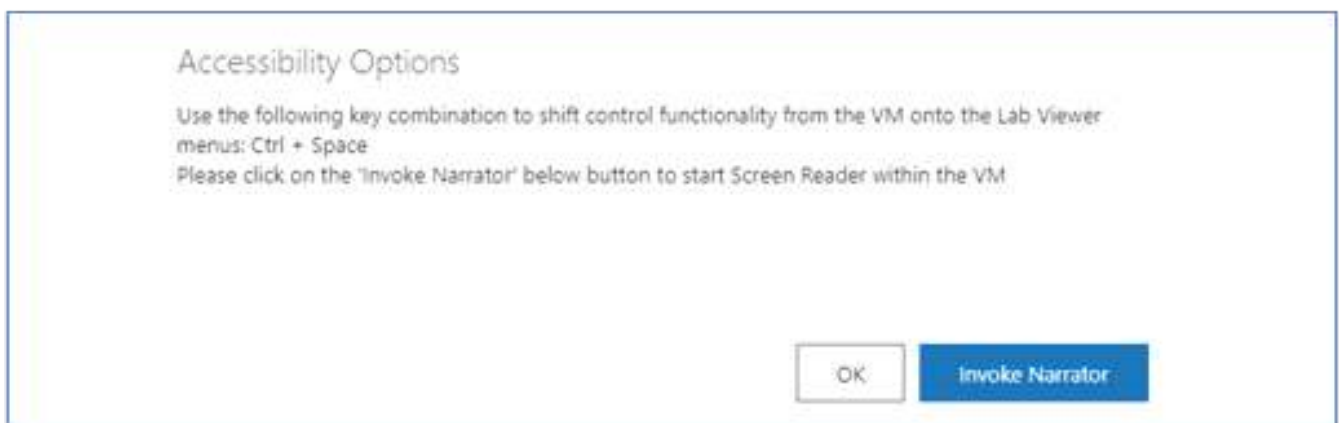
> *Note:* Please note that there might be other options in some specific labs **e.g. Revert VM, Reset VM, Windows Charm Window Keys, Add/Join Classroom.**

Click a specific virtual machine to open it in the virtual machine window. The name of the virtual machine currently in the virtual machine window is displayed above the VM operations (actions buttons). Users can choose between the other VMs as per their lab module requirements.
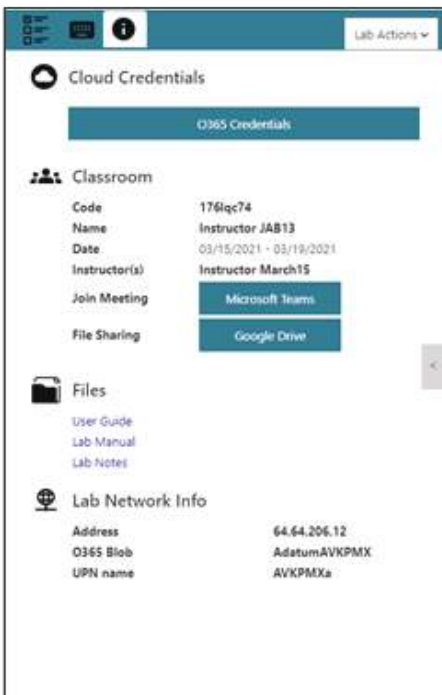
Lab Information Menu– This Menu contains the following information related to the running Lab module:

1. Cloud Credentials
2. Classroom Details
3. Files
4. Lab Network Information

1. Cloud Credentials

i. **Cloud Express Pass (Azure)** – When the launched lab requires cloud services credentials, this link will appear. Clicking on the [xxxx] Credential's link will open a pop-up window that displays the Username and Password that you will need to sign-in to the cloud service that has been created for your instance of this lab:

The Cloud Express Pass for Azure automatically generates a set of Azure credentials for you to access an Azure subscription from within the XtremeLabs Viewer UI. The Azure subscription is fully managed by XtremeLabs and does not require you to sign up for your own Azure credentials.

ii. **Cloud Express Pass (AWS)** – The Cloud Express Pass for AWS automatically generates a set of AWS credentials for you to access an AWS subscription from within the XtremeLabs Viewer UI. The AWS subscription is fully managed by XtremeLabs and does not require you to sign up for your own AWS credentials


XtremeLabs assigns these credentials to you for the duration of your lab session. When you end your lab session, your cloud resources will be torn down and deleted.

> *Note:* Any work that you have performed in your cloud subscription during your lab session will then be lost when you click **End Lab**. It is recommended that you use the **Save Lab** feature.

This pop-up also enables you to change your password. Click on the I forgot my password button.

iii.   Other Credentials – When the launched lab includes an Office 365 Tenant or a Dynamics 365 Tenant, this link will appear. Clicking on the *O365 and D365 Credentials* link will open a pop-up window that displays the Tenant's Email and Password that you will need to use this O365 Tenant that has been assigned to you for use in this lab:
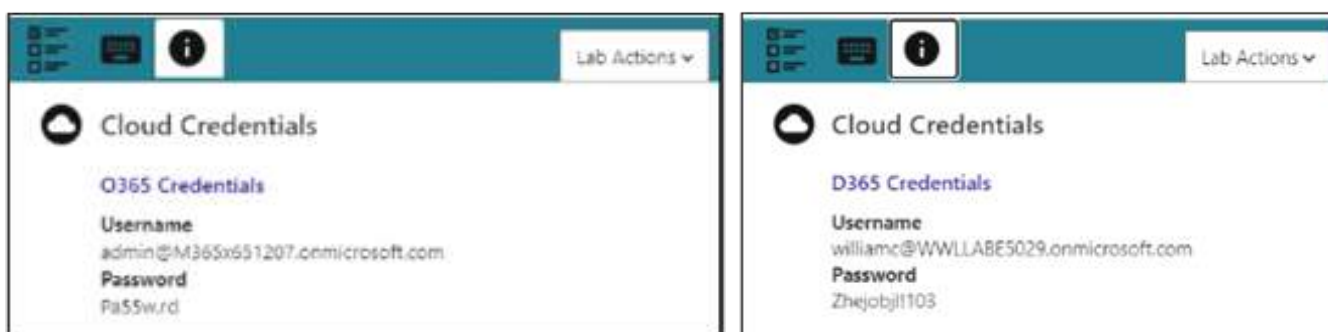
Depending on the tenant, this credential will expire in 14 to 25 days from the date it is assigned to you.

2.   Files Menu - It contains the following resources for the users:

i.   User Guide – Clicking on the *User Guide* link opens a separate window where the XtremeLabs Student User Guide (this document) can be displayed and downloaded from within XtremeLabs.

ii.   Lab Manual – When the launched lab includes a downloadable lab manual, this link will appear. Clicking on the *Lab Manual* link enables the downloading of the subject lab manual.

iii.   Lab Notes – It contains the special notes for the students provided by the instructors.

3.   Lab Network Info – ⊕ It contains the necessary information the network which is being used in the current VM operations.

⊕ Lab Network Info	
Address	64.64.206.12
O365 Blob	AdatumAVKPMX
UPN name	AVKPMXa

Lab Actions Menu `Lab Actions ⌄`   This Menu has following options for the users:

*   **End Lab**
*   **Save Lab**

End Lab – `End Lab` Click *End Lab* to close the lab and terminate the virtual machines in the lab module.

You will be prompted to confirm that you want the lab to end. Clicking on the *Confirm* button will end the lab.
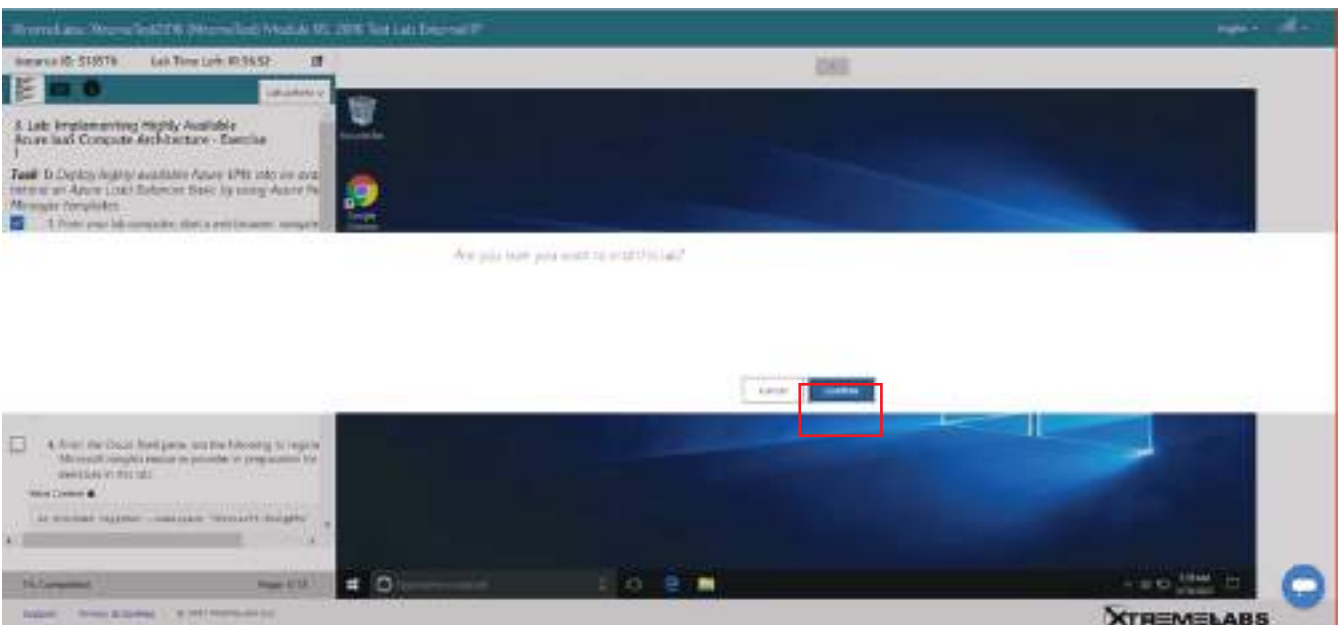
Click *Confirm* to close the lab's browser tab and return to the Labs Portal.

Note: Ending a lab means that your lab session will end and your progress will not be saved.

Save Lab

If you want to save your work and complete a lab later, Click on the *Lab Options* besides the *VM Operations Button* on the top of the *Lab Overlay* and then click *Save lab* from the top down menu.

This will save your progress and your work will be stored for up to 24 hours.

> *Note:* The *Save lab* function is not available on some labs and is only possible for labs that are associated with XtremeLabs user accounts. The Save lab link will only appear in the *Files* drop-down menu if this feature is available in your particular course for your launched lab module.

Saving the lab will take you to the *View Labs* page where a tile of your saved lab module is displayed.

During the saving process, the Lab Description pop-up will state that *"Your session is currently being saved. Please refresh the page in a few minutes to resume your lab."*
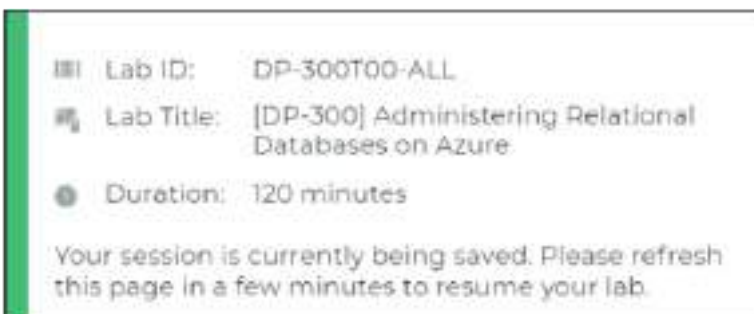
Once the saving process has been completed, the Lab Description pop-up will state the date and time that your saved lab will be available until.

LAB DESCRIPTION   ✕

To resume this session click 'Resume lab'. This saved session will be
available until Wednesday, November 18, 2020 6:21 AM PST.
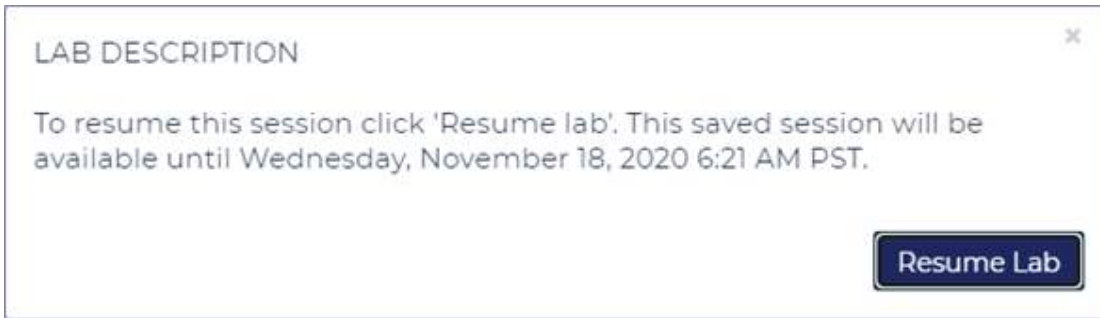
Resume Lab

You can resume the lab any time until then. After that stated date your
saved lab will be deleted.

You can resume the lab from the *View Labs* page. At the very top of the
column of labs will be a link to the Saved labs. Select that link and the tile
of the saved lab module will be displayed.

You can see it on the next page.
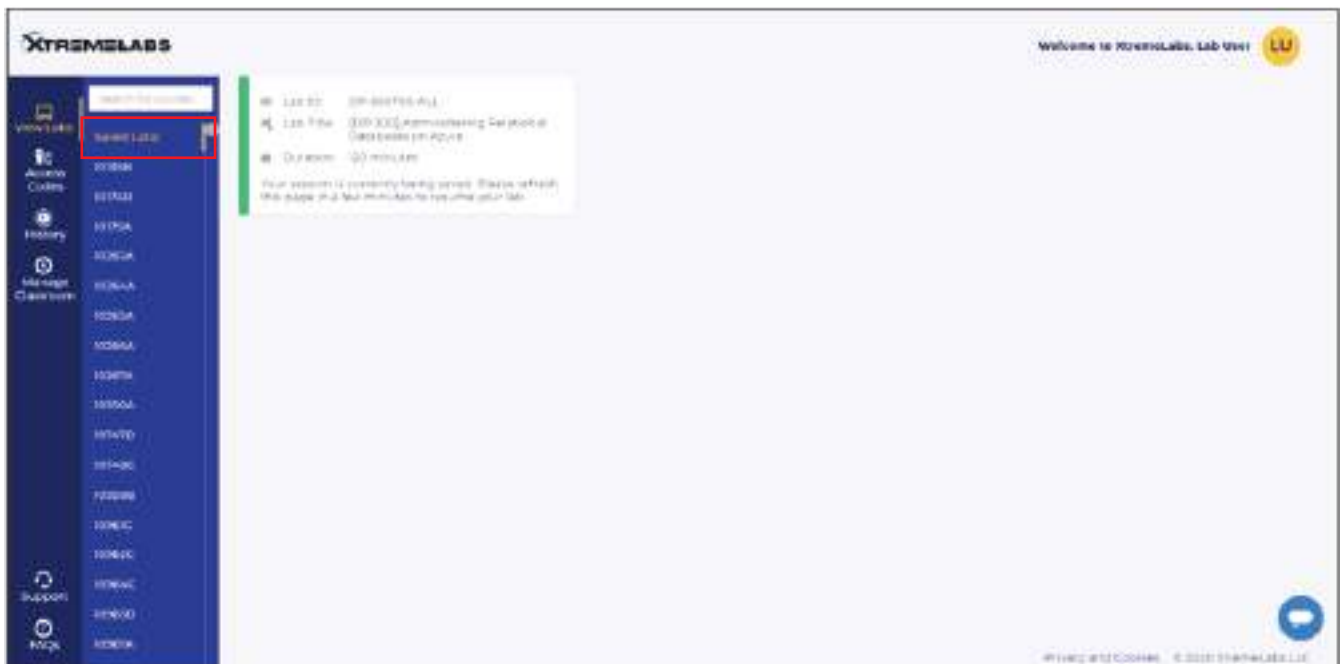
When you click the *Resume Lab* button in the lab module tile, the Lab
Description pop-up will appear. Clicking the *Resume Lab* button in the
Lab Description pop-up will restart the lab at the place where you left off.

If you have saved a lab and sign out of http://labs.xtremelabs.io and then
sign back in to the site within the lab save timeline, the *View Labs* page
will open with the *Saved Labs* entry pre-selected to remind you that you
have a saved lab waiting for you:

> **Note:** Only one lab can be saved at a time. If you already have a saved lab and you then save another, it will overwrite the first saved lab.

Virtual Machine Window

This is the large window that fills most of the lab view. This window allows interaction with the virtual machines that form the virtual labs.

Only one virtual machine can be active in this window at a time. Use the virtual machine selector (identified earlier in this guide) to switch between virtual machines in a lab module.

If the focus is within this window, the keyboard and pointing device will control the virtual machine.

> **Note:** Instructions for logging into and interacting with the VMs should be in the lab manual documentation. You can also find these instructions within the Labs environment on the left-hand side. However, the most used Administrator passwords used for Lab VMs are *Pa$$w0rd* and *Pa55w.rd*.

Once launched, labs will run for 90, 120, 180, or 240 minutes or more, depending upon the scope of the lab and the steps to be performed. At the end of this period the lab will be disconnected, and a message will be displayed. This message informs you that the lab is about to expire, and it gives you an opportunity to either end the lab or extend the lab for an additional 30 minutes:

When this message is displayed, you will have 5 minutes to click on the *Extend Lab* button before the lab is automatically ended.

You can end the lab at any time while this message is displayed by clicking on the *End Lab* button.

Note: The RDP (Remote Desktop Protocol) connection between the client machine and the virtual machine may be interrupted occasionally due to networking events, but the connection will be automatically restored. If the connection is lost, the screen will turn dark and a "Connection lost. Reconnecting..." pop-up message will appear.
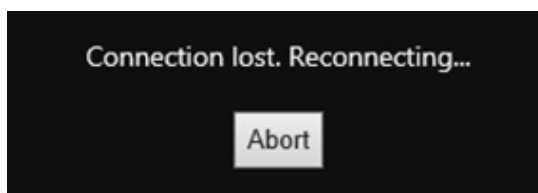
The desktop session will resume upon reconnection.

Footer
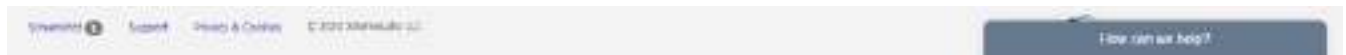
There are four elements in the Footer: The *Screenshot (Count), Support* link, the *Privacy & Cookies* link, *XtremeLabs* link and the *Live Chat Icon.*

Screenshots (Count) – click *Screenshot (count)* to see all the captured Screenshots of your current VM. All these screenshots will be visible to your instructors as well.
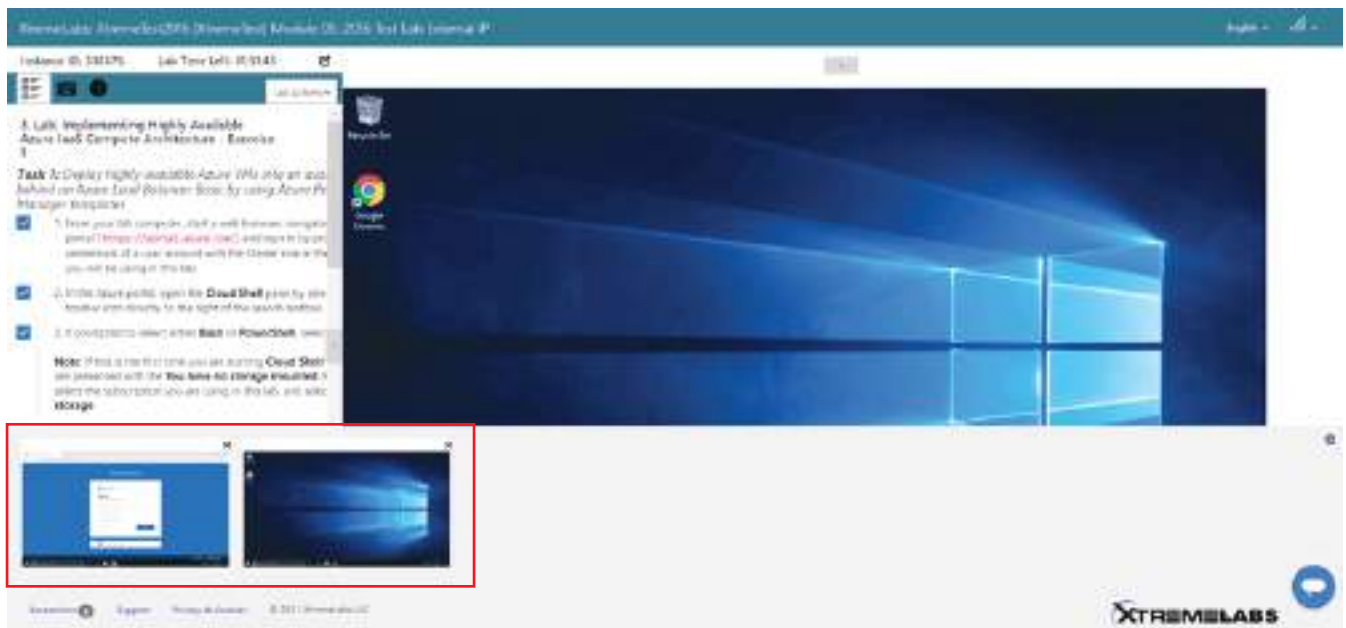

Support – Click *Support* to open a menu with two text links: General FAQs and Contact us.
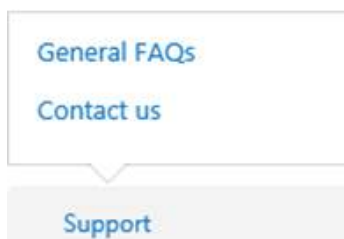
Click *General FAQs* to view a .pdf file of the Frequently Asked Questions. Click *Contact us* to open a pop-up form for sending email to the XtremeLabs support team. This form also provides the toll-free number to contact the XtremeLabs support team and a Chat now button to initiate a chat session with a Support team member who are available 24/7.

To send an email to the XtremeLabs support team, fill in the text input boxes with the appropriate information and click *Submit*. You need to check the *Attach Screenshot* checklist button if you want to report any error in your current VM. This option will automatically select the most recent machine captured screenshot.

> *Note:* that the text input boxes denoted with a red asterisk (*) cannot be left blank.

After you click Submit, you will see an acknowledgment that the email has been sent. The XtremeLabs support team will contact you shortly.
If an issue is urgent, call the XtremeLabs support team using the toll-free number provided on the form or click *Chat now* during the listed support hours. (The listed support hours are in the Pacific Time zone.)

Privacy & Cookies – This links to the Privacy Statement web page.
XtremeLabs – This links to the home page of XtremeLabs, LLC, an interactive platform where you can find much more about XtremeLabs and its offerings.
Chat Icon - XtremeLabs Live chat support allows you to request support assistance from within the account portal.

Account Settings

To make changes to your account settings, click on the *Account Settings* icon:

This will open the following submenu:

- **Name** – This allows you to change the name that the XtremeLabs platform knows you as.
- **Password** – This allows you to change the password that you use to log-in to the XtremeLabs platform.
- **RDP Preferences** - By default, all connections to lab virtual machines are made via HTML5. However, there are some networking issues that can be resolved by switching to the ActiveX RDP (Remote Desktop Protocol) control.

> **Note:** If ActiveX is selected as your RDP preference, a different user interface will be presented. You will then want to download the Student User Guide written for that UI. Go to https://labs.xtremelabs.io/LabManuals/Guides/Self-ServiceStudentGuidetoMLO_ActiveX.pdf to download this version of the Student User Guide.

> **Note:** If you select HTML5 as your preference, but the machine on which you have signed in does not support it (for example, the browser version is not recent enough), then the UI will revert to ActiveX automatically.

• **Theme** – The default user interface of the XtremeLabs platform is called Gemini. Hopefully you like it. If you'd like something a bit retro and nostalgic, you can switch to the Classic theme.

To switch between themes, make your selection using the radio buttons and then log-off and log back on to the XtremeLabs platform.

• **Delete User** – If you are done using the XtremeLabs platform and are concerned about your privacy rights, you can have all your records deleted from the XtremeLabs platform by clicking the Delete Account button found here.

Troubleshooting

If you have trouble connecting to the lab images once they have launched, the information in this section may help identify the issue.

Advanced Firewall Configuration

By default, the lab hosting system offers connections to lab virtual machine console sessions from an end user's web browser via the embedded HTML5 protocol. If you should select the ActiveX RDP connectivity feature, there may be some configuration changes that need to be made to the firewall that your network is using. This section discusses the firewall configuration required by ActiveX.

All ActiveX controls make their network connections outside of the scope of Internet Explorer. In other words, their traffic is not managed through the Internet Explorer proxy settings. Changing proxy settings on the browser will not enable the traffic. Instead, all ActiveX controls open network ports directly through the Windows TCP/IP protocol stack. This is generally seen as a key benefit of the ActiveX architecture.

The network traffic between the ActiveX control and the lab portal is running over TCP port 443. That port is typically used to transfer HTTPS traffic. However, in this case, the network protocol being transferred over port 443 is RDP. In most cases, proxy/firewall configurations are not sensitive to the protocol being transmitted over the port and this traffic flows without a problem. However, in more secure environments (and this may include your network boundary), packet inspection of traffic over port 443 may block the RDP traffic since it does not conform to the HTTPS protocol.

To enable the lab session traffic from the ActiveX control to reach the Internet via a proxy server (such as Microsoft Forefront TMG), follow the instructions in the Internet proxy/firewall client step, described next. If that does not resolve the issue, try the Firewall configuration step that follows.

- **Internet proxy/firewall client**

First, install a client proxy agent on your machine and then configure that client to connect to the Internet via the proxy/firewall server. If your network is protected by Forefront TMG, for example, you will need to install the Forefront TMG client on your machine and configure it to connect to the Internet via the gateway. The TMG client can be downloaded from the Microsoft Download Center. Other firewall/proxy products typically have an equivalent client agent.

- **Firewall configuration**

If the firewall has been configured for packet inspection (that is, the rules are sensitive to the protocols running over certain ports), then the outbound rules on the firewall need to be altered to allow the RDP protocol to run over port 443 to the specific addresses used by the lab portal. Namely:

Destination IP address ranges:
67.21.174.1   through 67.21.174.25
67.21.175.69   through 67.21.175.88
67.21.173.141   through 67.21.173.150
Destination port: TCP 443
Protocol: RDP

> *Note:* Configuration of access to port 443 for RDP traffic is beyond the scope of Internet Explorer proxy settings.

Checking Connectivity

If you have trouble accessing your labs, use the NetTest tool to check your connectivity and then provide the results to the XtremeLabs Support team for analysis. The tool is available at http://xvnettest.westus.cloudapp.azure.com/NetTestXL.exe.

After installing the tool on the computer used to access XtremeLabs, launch it with elevated rights as Administrator.

As soon as it launches, enter your name, ticket number, or active lab instance ID number and select 'Start Network Test'.
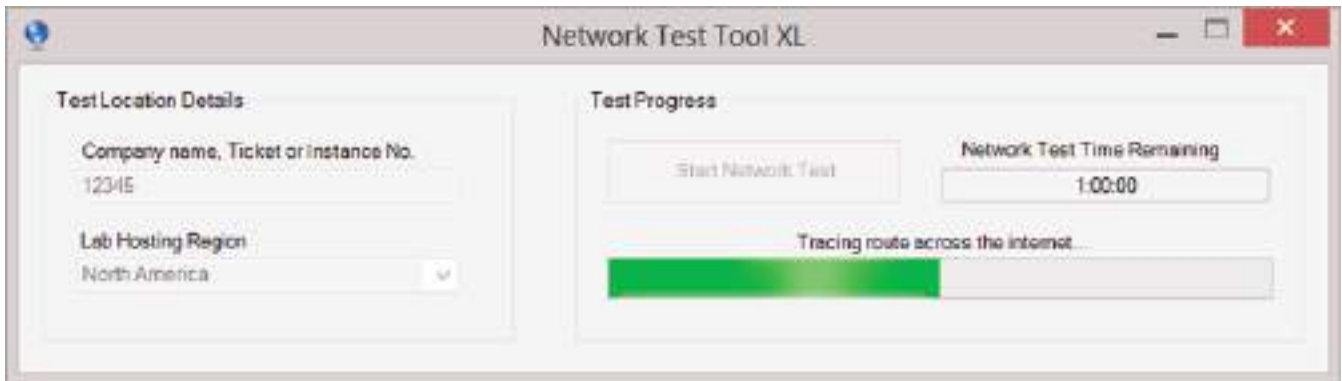
After collecting some general information, the tool will run for 1 hour gathering network data. Once the test is complete, the 'Test Progress' section will change to read 'All Tests now complete' and a folder will open with 2 files. Copy these files and send them to the support team as attachments.

> **Note:** This tool is focused on issues around using the RDP ActiveX control for session connectivity (although it also measures general network settings/connectivity). It checks the ActiveX installation and the RDP CredSSP settings, as well as firewall checks specific to running RDP through the firewall.

If there are any issues with running the RDP ActiveX control, the simplest solution may be to switch your user profile to use the HTML5 viewer. HTML5 is a per-user choice (not per machine) and currently defaults to ActiveX. The Connectivity Preference section in this document describes how to switch to HTML5.

Support

If you have technical issues with the online labs, you can contact the XtremeLabs support team. Examples of technical issues include:

•   The virtual desktop does not display.

•   The online lab runs slowly or is non-responsive.

If an issue is urgent, call the XtremeLabs support team using the toll-free number provided on the form or click the link to initiate a chat session with a team member. Chat and phone support are available during business hours. Email is available 24/7.

XtremeLabs - Support Contact Details	
Phone	+1 855-510-0488
Email	support@xtremelabs.io
Support Hours	Phone and chat: 8am-6pm PST Email: 24-hour support