Accessing SAS[®] Software Using the Virtual Lab Reservation System

To practice what you learn in the course, you can access the SAS software and the course data through the SAS Virtual Lab. The SAS Virtual Lab is hosted on Amazon Web Services (AWS), a secure cloud services environment, and will be accessed through the SAS Virtual Learning Environment (VLE). You will use the Virtual Lab Reservation System (VLRS) to create reservations of time to use the SAS Virtual Lab.

DOCUMENTATION

When you first access a course containing the VLRS, you will be asked to read the documentation and fill out a form certifying that you have read the documentation. This allows us to explain what the VLRS is all about before you begin using it. When you click on the <u>Read Documentation</u> button, the documentation will open in a separate browser tab. Please read this document thoroughly, as many commonly asked questions are addressed here.



Once you have read through the documentation, and are comfortable with the concepts presented, please select the checkbox, certifying that you have read the documentation.



The link to view the documentation will always be available in the VLRS, so you can refer back to this document whenever you wish.

KEY CONCEPTS

When using the VLRS, you will be accessing a remote server hosted in AWS. The software on this server is loaded via a server image. The first reservation you make will be made with the course base image – this has all the software and data you will need to complete the course exercises. When you are finished using the Virtual Lab, you have the option of saving or discarding your work. If you save your work, you will be given the ability to create a reservation with a saved image in subsequent visits to your course.

Each course which uses the VLRS is set up to allot a set amount of lab time to each student in class. The VLRS setup also specifies which image you will be accessing and how long to delay the start up time, based on how long the SAS services need. This delay is necessary for the SAS software to work properly. Your allotted course lab time is not reduced during this necessary start up time. It is also not reduced while the server is shutting down and your image is being saved. Your lab time will be reduced by the minute once the Virtual Lab access information is available to you. You will receive an email reminder that your Virtual Lab is ready, in addition to a notification in the course, if you happen to be looking at a page in the course.

Once you have your access information, you will be able to access your lab through your web browser. You do not need any additional software to access the SAS Virtual Lab. Once you are finished using the lab, it is important that you close the browser tab in which your lab opened and end your reservation in the VLRS. You can simply end the reservation or end the reservation and save your work. If you do not end your reservation manually the system will end your reservation and save your work when your lab duration is complete. This could result in the server shutting down while you are working, so please be mindful of your reservation time. You will get an email warning that this automated procedure will occur.

Each course which uses the VLRS allows for one saved image. When you save your work, the old image will be deleted, and the new image will take its place. Unused images will remain in the system for 8 days. You will receive an email after 6 days of inactivity telling you that your image will be deleted. Instructions for saving the unused image will be included in the email. This email will come from repliesdisabled@sas.com and will have a subject of "Inactive Image".

MAKING A RESERVATION

To make a SAS Virtual Lab reservation, simply select the duration of time you need to use the lab and the type of server image you would like to use. You can choose either the course base image or an image you have saved in a previous lab session.

RESERVATION SY	STEM
Time Allotted: 30 ho	urs
Time Left: 30 hours 0	minutes
Reserve Now Rese	rve Later
Reservation Duration	n
Select One	83
Image	
Fresh Image	8
Make Reservation	
Make Reservation	

Once you select the Make Reservation button, a confirmation message will appear in the VLRS.



The message will change a few times as the information refreshes.



Once the service start up delay has passed, you will see the browser notification if you are still in the course, and you will also receive a notification email.



If needed, close the VLE notification. You will see the link to launch your SAS Virtual Lab.

VIRTUAL LAB RESERVATION SYSTEM
Launch the SAS Virtual Lab
End Reservation End Reservation and Save
Need Help? View the Documentation

If you would prefer to schedule your lab's start time, you can do so by selecting the Reserve Later option in the reservation form.

ime Allotted: 30 hours ime Left: 30 hours 0 min	utes
Reserve Now Reserve L Start Date	ater
mm/dd/yyyy	
Start Time	
Time Zone	
Default=America/New	
Reservation Duration	
Select One	۲
Image	
Fresh Image	۲
Make Reservation	

From here, you can select a start date and time, as well as the time zone in which you want the reservation to start.

NOTE: The timezone will default to America/New York

NOTE: The scheduled start time needs to be at least one hour in the future.

As before, select the duration of time you wish to use the Virtual Lab and the type of image you would like to load into the lab. Select the Make Reservation button to schedule your reservation.

VIRTUAL LAB RESERVATION SYSTEM

Your reservation has been made successfully. The access information for your Virtual Lab will appear here when the machine is powered on and ready. Your reservation will start at 10/31/2018 12:00 Cancel Reservation

Need Help? View the Documentation

The next time you access the course, the view will change.



In both cases, you will have the opportunity to cancel the reservation before it begins.

NOTE: Scheduled reservations begin the server startup process prior to the scheduled reservation time, therefore, your Virtual Lab should be available at the requested time. You will not be able to cancel the reservation once the server start up process has begun.

ENDING YOUR RESERVATION

When you have completed your lab work, perform the following steps:

- 1. Close the browser tab that was opened when launching the SAS Virtual Lab.
- 2. Return to the course and select one of the following:
 - a. End Reservation Simply ends your Virtual Lab reservation and shuts down your server. Your work will be discarded.

b. End Reservation and Save – Ends your Virtual Lab reservation, shuts down your server and saves your work.

Both options calculate the actual duration of your SAS Virtual Lab reservation and deduct that time from your allotted lab time.

TIPS AND TRICKS

- 1. Follow the information given in your course regarding the software login and setup instructions. This information is not provided by the VLRS.
- Schedule a longer reservation than you think you might need, and when finished, select <u>End</u> <u>Reservation</u> or <u>End Reservation and Save</u>. This will allow you greater control over when your Virtual Lab session is terminated.
- 3. If you are having trouble making a reservation, ending a reservation, or accessing your Virtual Lab server, please use the Need Help link in the VLRS.
- 4. If you have questions about using the SAS software, please use the support instructions in your course.
- 5. Saving your Virtual Lab image can take up to 15 minutes. Do not make another reservation in the course during this time.
- You might want to increase or decrease the Zoom setting for your Chrome browser when working in a virtual lab session. To do so, click the vertical ellipsis (**Customize and control Google Chrome**) in the upper right corner and increase or decrease the percentage next to **Zoom**. To manually adjust the settings, use the Ctrl key in combination with the plus or minus key to increase or decrease the page magnification.