Amazon Workspaces is a VDI (Virtual Desktop Infrastructure) that allows a user to securely connect to a cloud compute instance. SEAS Computing has bundled Solidworks, Comsol, and/or Abaqus as applications which authorized SEAS users may utilize.

Before you start using the Virtual Desktop (VD), please take note of the following:

- **The VDs are to be used for the intended purposes only, i.e. class work if the VD is for a class.**
- **All commercial software made available on the VD should be used only for academic course work in the class for which the VD is made available. They may not be used for thesis work.**
- **All the VDs will be decommissioned at the end of class. Please transfer any material you want to keep out of the VD. Otherwise, it will be lost.**
- **Please close any licensed applications (comsol, solidworks, abaqus, etc.) once you are done with your work. That way the licenses will become available for other users.**

### Connecting to your virtual desktop

If your class is given access to SEAS Virtual Desktops (VD), follow the instructions below.

1. **Login to your class Canvas site.**

2. **Look for a VDI button (VDI_AWS or Comsol_VDI) on the canvas landing page for your class and click on it.**

3. **Follow the instructions on the new page that opens.**

As the instructions say, you can either use a client for your operating system (only Mac and Windows clients are available) or login from the web (only Chrome and Firefox). If you are using web access, you need the registration code. You can get it by going to your class canvas and following step (2) above.

For Linux, Web Access is the only viable option. Web Access can also be used on Mac (not on Safari) or Windows.

4. **Please make sure to check your spam folders in case Amazon AWS informs you that a mail has been sent and you did not receive it.**

For any password difficulties, you should be able to click on "Forgot Password?" that appears on the login page and follow the instructions.

**A note about email:** The email where you will receive notification is the one you use for Harvard Key. If you do not have a Harvard Key, it depends on the nature of your association with Harvard and the email in Harvard records. If you have XID, then the email is the one you used for obtaining XID.
File Transfers

You cannot transfer files from the VD to your local machine directly. You can transfer files as attachments to your email. You can also use Google Drive/OneDrive/Dropbox. You should be able to install Dropbox client or work via a browser. Please try to transfer files as soon as you can. If the machine is decommissioned or has to be recommissioned for a user due to technical difficulties, all the files on the machine may be lost.

VPN:

You do NOT have to be on VPN to access any license servers for Solidworks/Comsol. We built the VDI infrastructure to already have access to the license servers. Use your workspace as you would any lab machine.

Connection Difficulties (please read before you contact us)

A. Problem: You did not receive an invitation email from Amazon

   Solution: It may be in your spam folder. If you are using, for example gmail (including g.harvard.edu), check your spam folder. Once you locate the email in your spam folder, click the 'NOT SPAM' button on top of the email. This sends the email to your inbox and activates any links.

B. Problem: Invitation link does not work

   Solution: The link expires when you clicked on it earlier and set up your password. If you have done that and remember your password, you should be able to download the client (unless you have already done that) and login. If you have not downloaded the client:

   - download and install at https://clients.amazonworkspaces.com
   - enter the registration and user name from the email with the expired link.
   - enter the password (if you do not remember the password, see below)

C. Problem: I don’t remember my password

   Solution: You should have the client downloaded and installed. If not, see Problem B above. Once you have the client installed:

   - click 'forgot my password' on the workspaces client
   - enter your user name and captcha, and you will receive an email with a 'reset password' link (see below if you did not get email).
   - once you get the email from Amazon, you should be able to reset password by clicking on the reset password link.

   Note: If you did not get the email:
   - the email may be in your SPAM folder. Gmail makes it go to spam.
   - if in spam folder, click on the email and click the 'not spam' button on top of the email
   - now the email will be in your inbox, and the link will now be active.
   - after clicking on the reset password link, you will be able to change your password.

Abaqus Instructions for ES 128

The VD is basically a windows machine in the cloud. If you click on Windows icon on the bottom left (the one with four colored "flag" on it), it will open a panel with "All programs" at the bottom. If you click on "All Programs" it will display the program folders and you will see "Abaqus 6.12-1" folder. You will find the usual CAE and VIEWER programs (screen shot vd-abaqus-01).
If you already have the input (.inp) files, you can run them by opening a command window. To do so,

--- go to the folder where you have the input files
--- while pressing the shift key with left hand, press the right mouse button.
--- select "Open command window here" (screen shot vd-abaqus-02).

You can run abaqus with the usual commands "abaqus job=..... input=...."

**Help on VDI**

If you encounter difficulties with VDI, you should contact your TFs first. If you are unable to do so or if the TFs cannot resolve it, please send an email to help@seas.harvard.edu. Use "SEAS VDI difficulties" in your subject line. Please do not send software specific questions (COMSOL, SOLIDWORKS, ABAQUS, etc.) to this address.