# Statgraphics for AWS

Traditionally, analytical applications such as Statgraphics have been run on user's desktops and laptops. Having local control over one's applications provides a desirable level of flexibility and predictability. However, when users have multiple computers it can be advantageous to place the software and associated data in the cloud so that it may be accessed from anywhere as needed. Also, for a large organization, placing software in the cloud reduces the time required to keep everyone's computers up to date.

Statgraphics has recently developed a new version of its software designed to run in cloud environments such as Amazon's Web Services (AWS). Identical in functionality to the local client version, the software is streamed using any HTML5 browser or via Amazon's AppStream2 client. When streamed through a browser, users may access data on the server or in their OneDrive for Business or Google Drive for Business accounts. When accessed using Amazon's AppStream 2.0 client, files on the local client are also available for reading and writing.

To access applications installed in AWS, an organization proceeds as follows:

- Step 1: An AWS AppStream2 **image** is created. This image will be used to create a virtual machine for each user. When creating an image, the operating system, number of CPUs and amount of RAM are selected.
- Step 2: A **fleet** is then created to control access to the image. The fleet controls the maximum number of users that can access the image simultaneously, whether the virtual machines are created on demand or are always available, and the maximum duration of a user session.
- Step 3: A **stack** is then created and attached to the fleet. The stack actually streams the images. It also controls whether users can save files on the server, whether they can access OneDrive and Google Drive, and whether or not they can use the clipboard to copy and paste.
- Step 4: A **user pool** is created with email addresses of users who can access the stack. Invitations are sent to each user proving them with a URL to access the program.

## Using Statgraphics Online from a Browser

Once the AWS implementation has been created, users may access the program through any HTML5 browsers. The first screen they will see lists the various application that have been made available in the image. If only Statgraphics has been installed, the screen will appear as shown below in which they must enter their email address and a password:

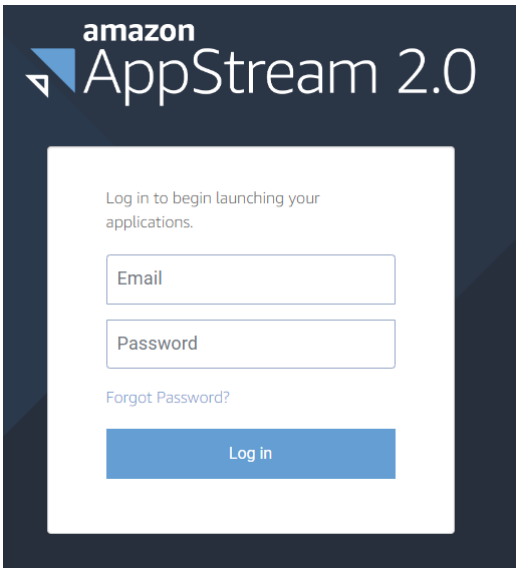


Figure 1: Logon screen

They will then see a list of applications that re available in the image that was created:

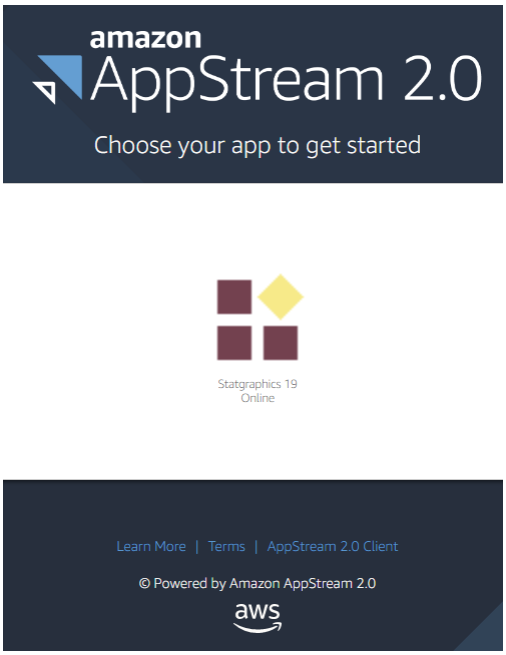


Figure 2: Screen for selecting application

If they select Statgraphics, the main program will load in their browser. If the fleet has been set up as always on, Statgraphics will load immediately. Otherwise, it may take up to 2 minutes to prepare the virtual session:

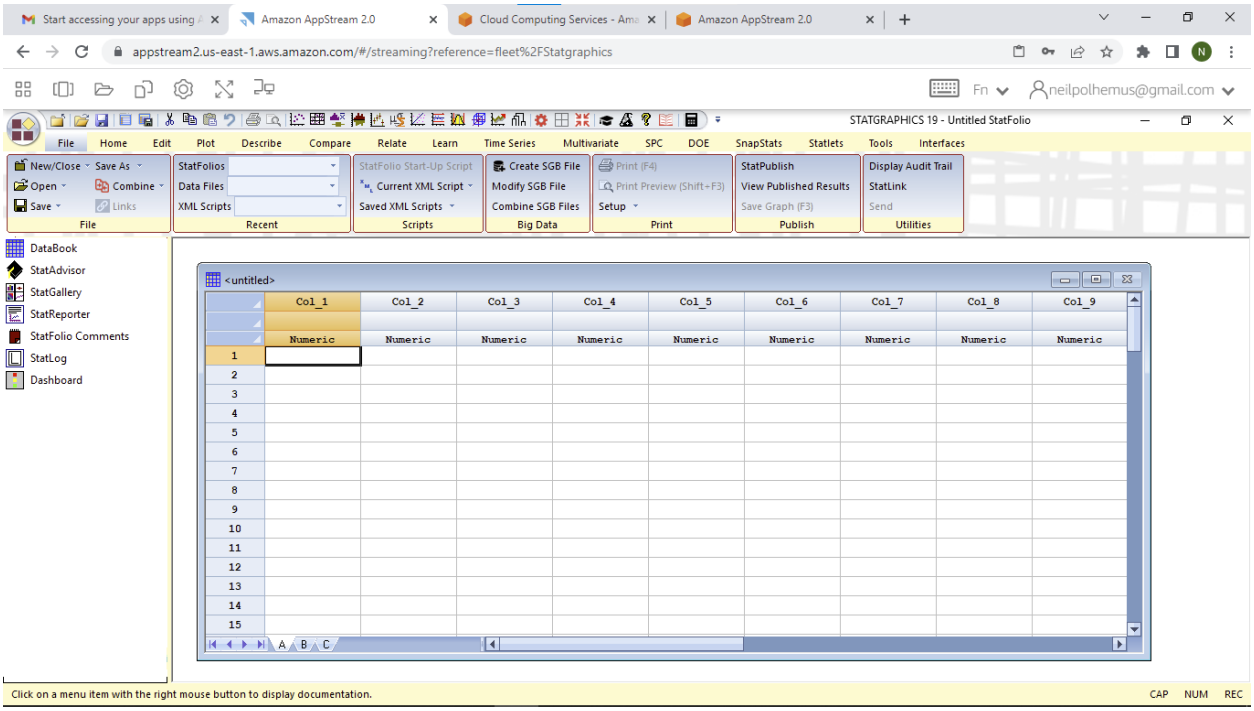


Figure 3: Statgraphics session running in Google Chrome

Statgraphics operates the same from within the browser as it does on a user desktop, with the following exceptions:

1. When opening a file, the *File Open* dialog box gives the following choice of locations for the file:

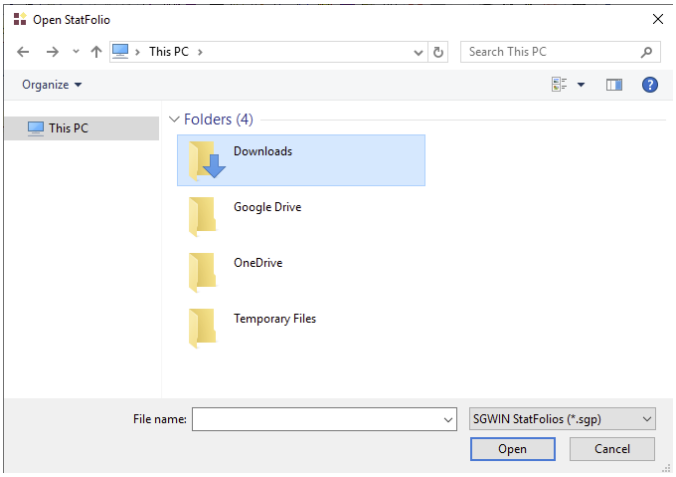


Figure 4: File open dialog box

   Files on the local client can be downloaded to the *Temporary Files* folder or to a *Home* folder if the fleet permits local storage. Otherwise, files may be opened directly from OneDrive for Business and Google Drive for Business.

2. *Copy* and *Paste* operations are only possible within Statgraphics, not between Statgraphics and the client machine. The best method for uploading tables and graphs to the local client is to first

copy them to the StatReporter and then upload that file. Alternatively, direct copy and paste is permitted when Statgraphics is accessed through the *AWS Appstream Client* rather than through a browser.

It should be noted that system options such as graphics fonts and colors are associated with a particular users and persist from one session to another.

## Using Statgraphics Online from the AWS Appstream Client

AWS provides a client application that Windows and MAC users may download to their desktops which accesses Statgraphics Online directly without having to use a browser. It starts by requesting the URL given to a specific user when the user was first added to the user pool:


It then requests the user's email address and password, after which Statgraphics is opened within that app. The advantages of running from the app over using a browser are 2-fold:

1. Users may open files directly from their client machine without downloading them or using OneDrive or Google Drive (although those options are still available).
2. Graphs and tables may be copied directly into applications such as Word or Excel running on the user's local machine.