

# SAS Office Analytics Server Onboard Guide

Welcome to SAS! Use the information below to learn about the SAS service VUMC IT offers to Vanderbilt University Medical Center.

## Subscription Components

Each subscription includes:

1. BASE SAS
2. SAS/GRAPH
3. SAS/STAT
4. Access to ODBC
5. Access to MySQL
6. Access to PC Files
7. Enterprise Guide
8. SAS Studio
9. Management Console

## SAS User Interfaces

SAS offers two user interfaces for Office Analytics (OA):

1. A Windows desktop client named SAS Enterprise Guide
2. A web interface named SAS Studio (<https://sas.app.vumc.org/SASStudio/>)

The remaining components run on a server hosted by VUMC IT. Customers access these components through Enterprise Guide or SAS Studio.

Follow these steps to access the download and license file for SAS Enterprise Guide:

1. Go to <http://www.vumc.org/it/vumc-software-store>
2. Log-in with your VUMC ID and password
3. Click ***Your Account/Orders*** from the drop-down menu in the upper right corner of the screen
4. Click ***View Details*** on the order receipt

## Platform Support

SAS OA supports Windows desktop clients.

Mac users can install SAS Enterprise Guide for Windows by creating a virtual machine on their Mac and installing Windows before installing Enterprise Guide. Popular products for creating a virtual machine on a Mac include Parallels Desktop for Mac and VMware Fusion.

See <http://www.pcworld.com/article/2900497/how-to-run-windows-software-in-linux-everything-you-need-to-know.html> to learn about options for running Windows applications on a Linux device.

## Browser Support

SAS Studio supports:

- Mozilla Firefox 21+
- Google Chrome 27+
- Apple Safari 6.0+ (on Apple OS X)
- Microsoft Internet Explorer 11

## VPN Requirement

All SAS OA users should connect to SSL VPN before they try to connect to SAS OA via Studio or Enterprise Guide.

See <https://www.vumc.org/enterprisecybersecurity/vpn> to learn about VPN options for Windows, Mac, and Linux devices.

## Data Storage

Customers have two options for storing data:

1. Each user has a user folder for storing data on the SAS OA server. The path to your user folder is: `F:\sasuser\<your VUMC ID>`
2. Users may store data on a network-attached device (NAS) that VUMC IT hosts in its data center.

If you need read/write access to a network attached storage device, submit the Pegasus ticket named [VUMC IT Storage - User or Dept NAS](#).

Before you can use SAS to access data on a NAS, we must create a connection between the SAS OA server and the NAS. Use the following process to submit a request for a SAS connection to a NAS:

1. Go to <http://www.vumc.org/it/vumc-software-store>
2. Log-in with your VUMC ID and password
3. Submit the *SAS NAS Connection Request* form posted under the *Service Requests* tab

## SAS Folder Structure

The SAS server houses a SASUSER folder.

- If you click on the SASUSER folder, you should find a user folder that uses your VUMC ID for the folder name. This folder should only contain your files.

- If you click on a user folder under the SASUSER folder that belongs to another user, you should not have access to any files in the folder.
- If you click on a folder that is outside the SASUSER folder, you can view the contents of these folders. These folders enable SAS users to share data with one another. These folders are open to any SAS user.

## Network Share Connections

We have created connections between the SAS OA server and the following network shares:

Network Share Connections	Address to reference in your SAS Code
<a href="#">\\vfile.vanderbilt.edu</a>	Use <a href="#">\\vfile.vanderbilt.edu</a>
<a href="#">\\bigdatavuhcifs.mc.vanderbilt.edu\</a>	Use <a href="#">\\vfile.vanderbilt.edu</a>
<a href="#">\\i10filesmb.hs.it.vumc.io\EIP</a>	Use <a href="#">\\i10filesmb.hs.it.vumc.io</a>
<a href="#">\\ds.vanderbilt.edu</a>	Use <a href="#">\\vfile.vanderbilt.edu</a>
<a href="#">\\reba.mc.vanderbilt.edu</a>	
<a href="#">\\ped-fs5</a>	
<a href="#">\\i10file.vumc.org\CQS</a>	Use <a href="#">\\i10filesmb.hs.it.vumc.io\cqs</a>

## Database Connections

Before you can use SAS to access a database, we must create a connection between the SAS OA server and the database. Use the following process to submit a request for a SAS connection to a database:

1. Go to <http://www.vumc.org/it/vumc-software-store>
2. Log-in with your VUMC ID and password
3. Submit the *SAS Data Source Connection Request* form posted under the *Service Requests* tab

We have created connections to the following databases:

Database Connections	System DSN	Pegasus Request Form for Read/Write Access
Netezza	NZSQLVUMC	MCIT NETEZZA - GENERAL REQUEST
BIProd	ORBIPRODVUMC	MCIT ORACLE - NEW USER REQUEST
QPSPROD	ORQPSRODVUMC	MCIT ORACLE - NEW USER REQUEST
CMSPRD	ORCMSPRDVUMC	MCIT ORACLE - NEW USER REQUEST
CMSUAT	ORCMSUATVUMC	MCIT ORACLE - NEW USER REQUEST
CLARITY Clone (TEST)	CCTSSQLVUMC	VUMC IT SQL SERVER - GENERAL REQUEST
CARDIOPW	ORCARDIOPWVUMC	MCIT ORACLE - NEW USER REQUEST
CLARITY CLONE (PROD)	CCPSQLVUMC	VUMC IT SQL SERVER - GENERAL REQUEST

Once we create a connection to a database, you can use SAS to access the database if you have read or read/write access to the database. Please contact the database owner to request access to the database.

## Data Transfer

SAS Enterprise Guide does not impose a file size limit on data transfers. SAS Studio limits the file size to 10 MB.

## Data Backup

VUMC IT performs nightly backups of the SAS application and user folders on the server.

Customers who store data on network shares define the backup time and frequency when they request the storage.

Each SAS user has a SAS Jobs folder on the server for scheduling jobs. Users may schedule jobs using the OS Scheduling Server via SAS Management Console.

Follow these steps to access the download for SAS Management Console:

1. Go to <http://www.vumc.org/it/vumc-software-store>
2. Log-in with your VUMC ID and password
3. Click *Your Account/Orders* from the drop-down menu in the upper right corner of the screen
4. Click *View Details* on the order receipt

SAS stores the Status Log, VBScript File, and output in the F:\sasuser\SAS Jobs folder on the server.

For example, if your VUMC ID is sawtest3 and you schedule a job named TestFlow, SAS stores the data in the following location:

- F:\sasuser\SAS Jobs\sawtest3\TestFlow

Only the user who submitted the job will have access to their SAS Jobs folder.

SAS stores the job logs in the F:\sasuser\SAS Logs folder.

## SAS Server Patching Schedule

VUMC IT posts its patching schedule at <https://www.vumc.org/it/change-management>

After we patch the servers, we reboot the servers. We reboot Friday morning after we patch the servers.

## Help Resources

1. Online Documentation:
  - a. [SAS Office Analytics](#)
  - b. [SAS® Enterprise Guide 8.1: User's Guide](#)
  - c. [Frequently Used Tasks in SAS Enterprise Guide for a SAS 9 Server](#)
  - d. [SAS Studio](#)

2. [Frequently Asked Questions](#) (scroll to the section on SAS Office Analytics)
3. [Training](#)
  - a. [Free SAS Online Training](#)
  - b. [Training](#)
  - c. [Free Tutorials](#)
  - d. [Technical Webinars](#)
  - e. [Books](#)
  - f. [Certification](#)
  - g. [Getting Started Tutorial](#)
  - h. [SAS Enterprise Guide Training Path](#)
  - i. [SAS Tutorials](#)
  - j. [SAS® Enterprise Guide®: Getting Started](#)
  - k. [SAS® Enterprise Guide®: Hidden Gems](#)
  - l. [SAS® Enterprise Guide®: Scheduling Projects](#)
  - m. [SAS® Enterprise Guide®: Tips, Tricks and Considerations for Programmers](#)
  - n. [SAS® Studio or SAS® Enterprise Guide®: What's the Best SAS® Programming Interface for Me?](#)
  - o. [SAS® Studio: An Introduction](#)
  - p. [SAS® Studio: Advanced Topics and What's New](#)
  - q. [10 Ways to Make Your SAS Code Run More Efficiently](#)
4. Other Support Resources
  - a. [SAS Enterprise Guide Fact Sheet](#)
  - b. [SAS Studio Fact Sheet](#)
  - c. [SAS Ask the Expert Sessions](#)
  - d. [SAS Studio: Help Center](#)
  - e. [SAS Technical Support](#)
  - f. [SAS Support Communities](#)
  - g. [Downloads and Hot Fixes](#)
  - h. [Documentation](#)
  - i. [Knowledge Base](#)
  - j. [Technical Papers](#)
5. Connection Resources
  - a. [Live Chat](#)
  - b. [Events](#)
  - c. [Newsletters](#)
  - d. [Blogs](#)
  - e. [SAS User Groups](#)