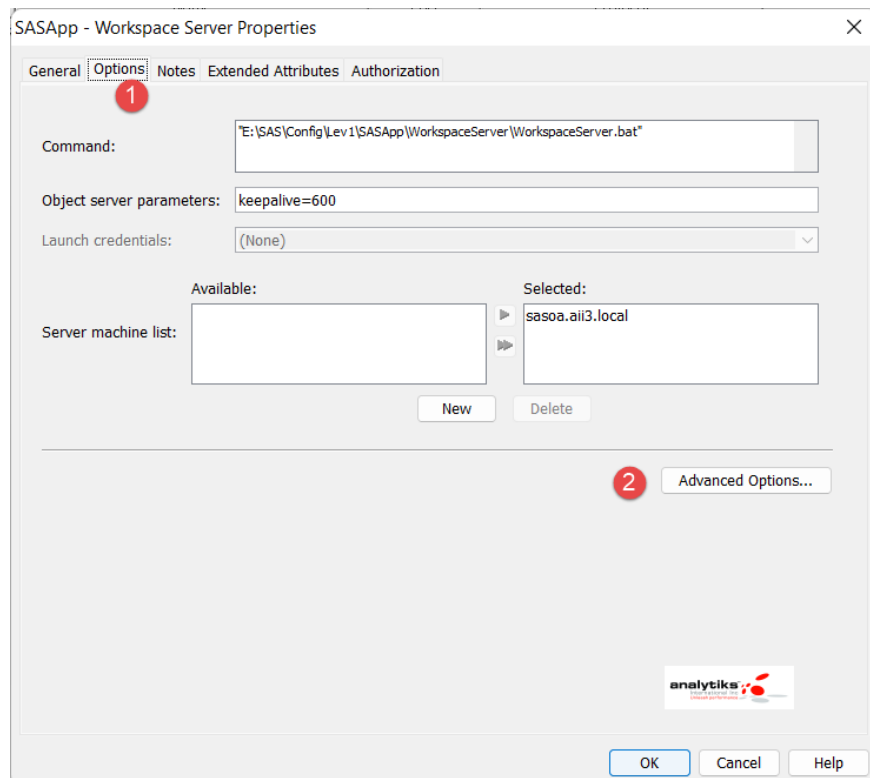
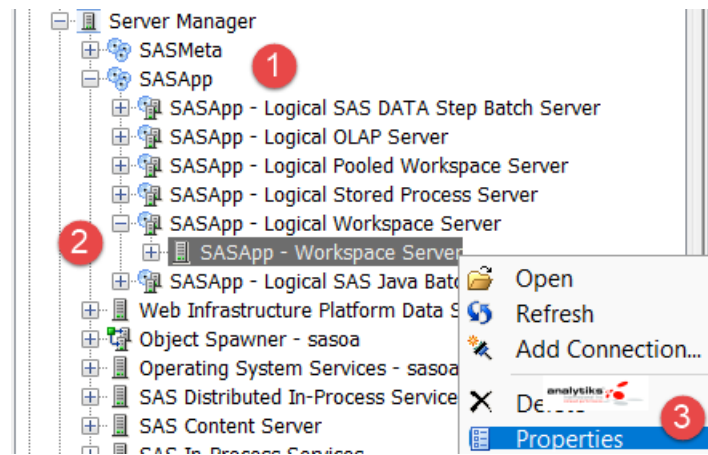
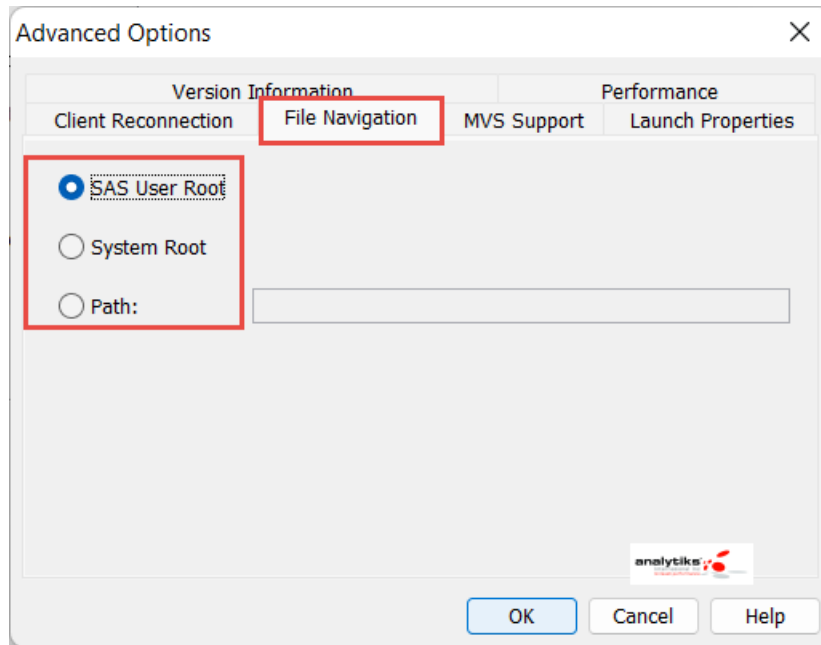


How to Provision Multiple Directories When Enabling SAS Workspace Server File Navigation

SAS end user often request access to different filesystem while using SAS clients such as the SAS Studio, SAS Enterprise Guide and or SAS Add-On for Microsoft Office. Usually the process is straight forward. A SAS Administrator using SAS Management Console, would navigate to SASApp → (Logical) SAS Workspace Server → Workspace Server (properties) → Options → Advance and selecting the “**File Navigation**” tab.





The **File Navigation** tab contains the following options:

- **SAS User Root** specifies that the initial directory for the SAS session should be the same as the SAS user root directory.
- **System Root** specifies that the initial directory for the SAS session should be the same as the system root directory.
- **Specify Path** specifies that the initial directory for the SAS session should be the directory that is specified in the associated field.

In many cases selecting SAS User Root is not enough for the end user who may need to access multiple drives. Giving System Root is often frowned upon by the SAS Administrators due to unwarranted security exposure. The third option, Specify Path is often preferred. However, this option requires **single value** for the path. On Linux systems, creating soft links to multiple directories is the solution. However, what is the work around on a Windows Server? The answer still is soft links. How? Is what we will provide below.

Microsoft provides a handy command **mklink** to enable soft link creation. This command is used with the switch **/J** (junction) that allows linking multiple drives into one single soft link directory which could be placed in any secure location on the server. The path to this directory is specified in the "**Specify Path**". Once the Object Spawner is re-started, multiple selected drives are surfaced in the SAS clients and accessible to the end user. *Here we are assuming that the end users have appropriate access to these drives.*

Working Example

A SAS 9.4 TS1M7 platform on windows 2016 Standard server has multiple drives (storage) available; C, D, S, F, G, and E. Drives **D** and **E** need to be available for SAS end users via SAS clients. Following are the steps that were taken by an Administrator on the Windows Server:

1. Start DOS CMD shell as Administrator
2. A folder **f:\filenavigation** was created. This will hold the soft link. *F drive was selected as an appropriate location by the administrator.*
3. Navigate to **f:\filenavigation** and run these commands: (**Note** target drives d and e, with 'junction' switch /j was used)

```
mklink /j d d:\
```

```
mklink /j e e:\
```

```
E:\filenavigation>mklink /j e e:\
Junction created for e <<==>> e:\
```

Figure 1: Partial output shown

4. The value **f:\filenavigation** was then added to the 'Specify Path' for the **SAS Workspace Server**

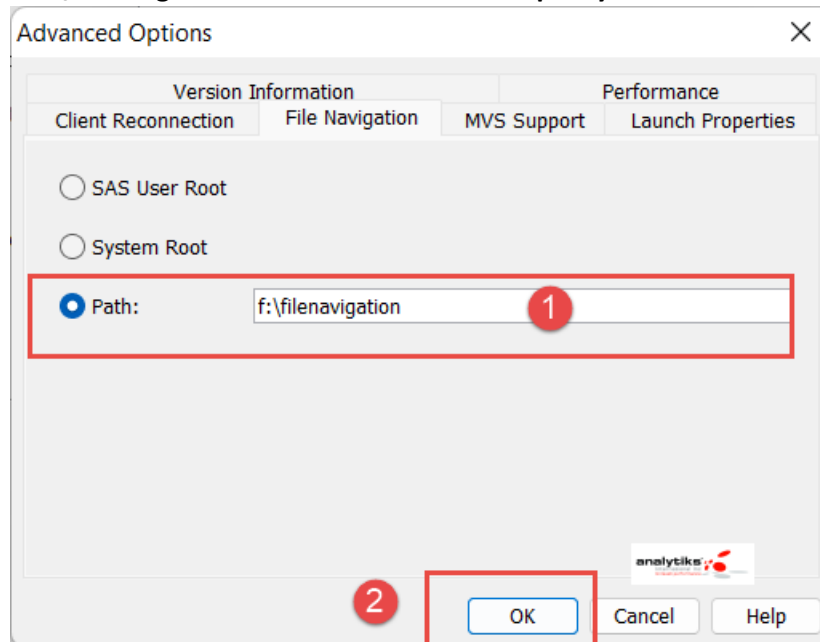
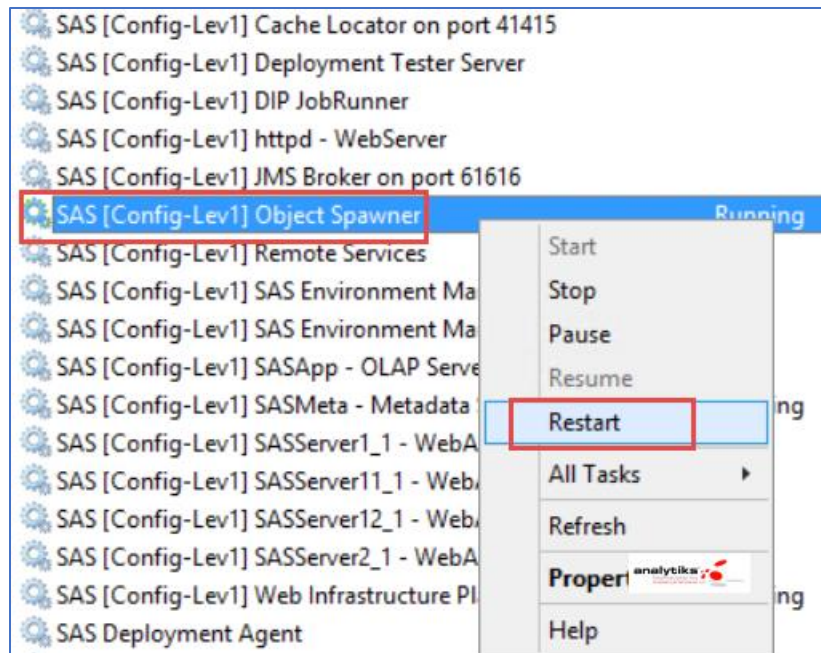


Figure 2: Using soft link to surface multiple drives

5. **Re-start** SAS Object Spawner Service from Local Services



The target Drives now appear in SAS Enterprise Guide Session

