

How to Use SAS to Schedule Your Jobs: Part II

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Outline

- High level requirements
- Example query/report
- Saving, or moving, the file to the server
- Creating the shell script
- Scheduling the shell script

High Level Requirements

- SAS Server Installation
 - On a machine running Unix
- Terminal emulator (PuTTY)
- FTP Client (WinSCP)
- A patient System Administrator
 - For example, they may need to assist you with setting up a personal directory
 - Maybe some other Unix stuff
 - Maybe a lot of other Unix stuff

Creating a Dataset and Report

Creating a Dataset

PROC SQL;

CREATE TABLE dataset **AS**

SELECT presenter_no,
presenter,
presentation_dt

FROM presentations;

QUIT;

Printing the Report

```
ODS HTML BODY='/sas/home/keith/export/index.html'(TITLE="Demonstration for SAS") STYLE=HTMLBlue;
```

```
PROC REPORT DATA=dataset;  
  TITLE1 'Demonstration for Regina User Group';  
  TITLE2 "Last updated: " %sysfunc(date(), WORDDATE) "at" &theTime;  
  TITLE5 "List of Presenters";  
  DEFINE presenter_no / 'Presenter Number';  
  DEFINE presenter / 'Presenter Name';  
  DEFINE presentation_dt / 'Presentation Date';  
RUN;
```

```
DATA _null_ ;  
  IF nobs = 0 THEN DO;  
    FILE PRINT;  
    PUT 'No presentations have occurred today today';  
  END;  
STOP;
```

```
SET dataset nobs=nobs;  
RUN;
```

```
ODS HTML CLOSE;
```

Example Report Output

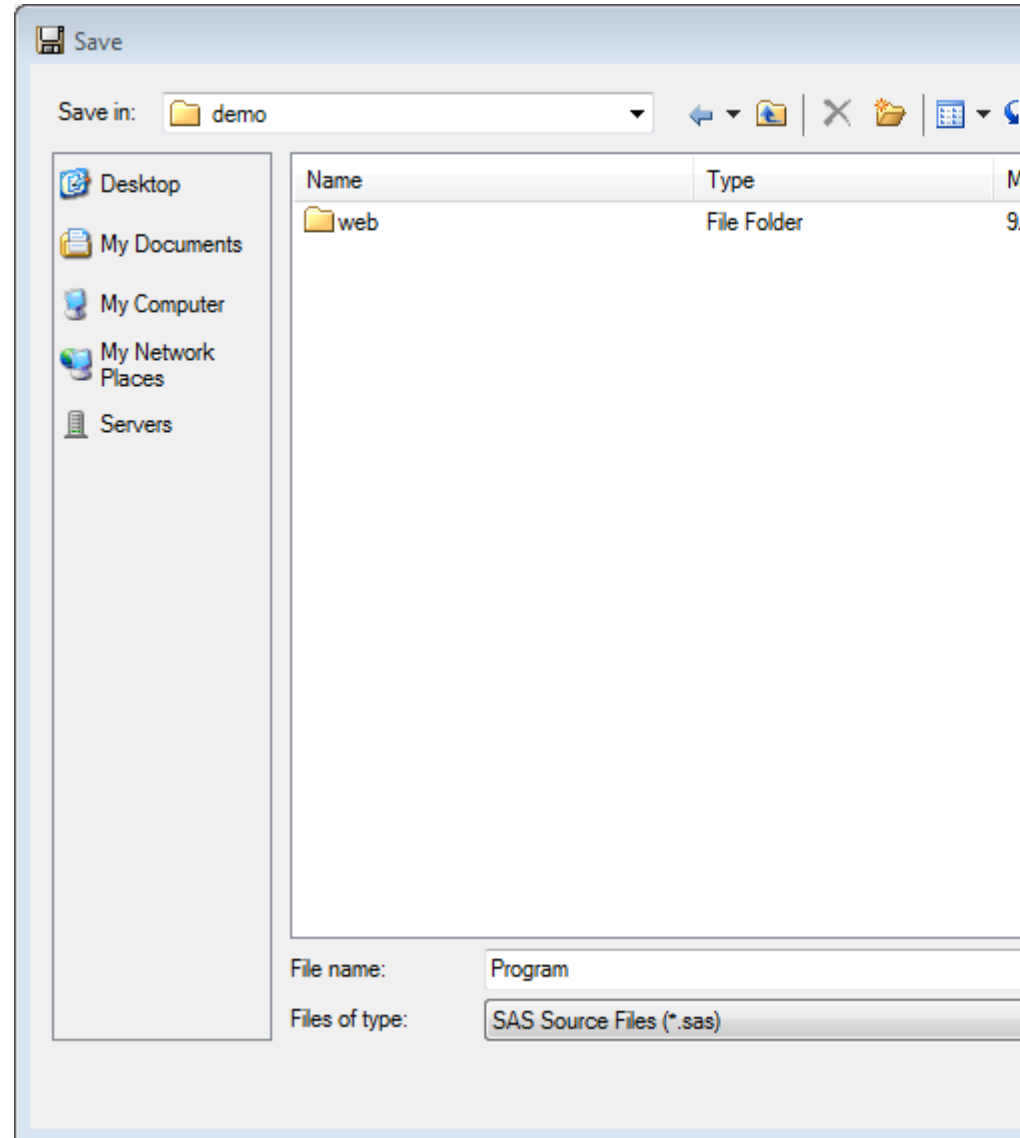
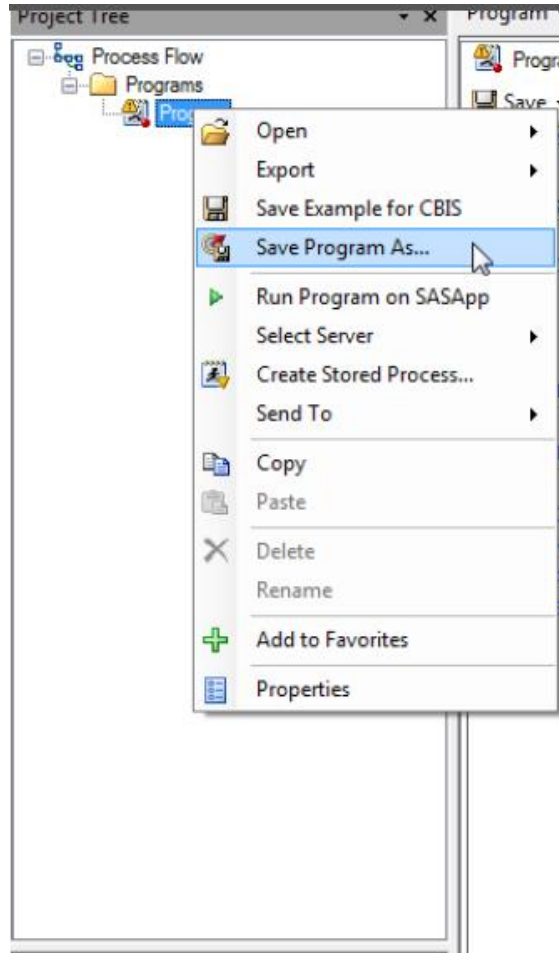
- [Report before it runs](#)
- [Report after it runs](#)

Saving or Moving Your Query

Saving/Moving Program to the Server

- The SAS code must be moved to the server before it can be scheduled to run.
- There are a couple ways to do this:
 - Right-clicking code and saving the .sas file on the server in Enterprise Guide
 - Using FTP (WinSCP)

With Enterprise Guide



With WinSCP

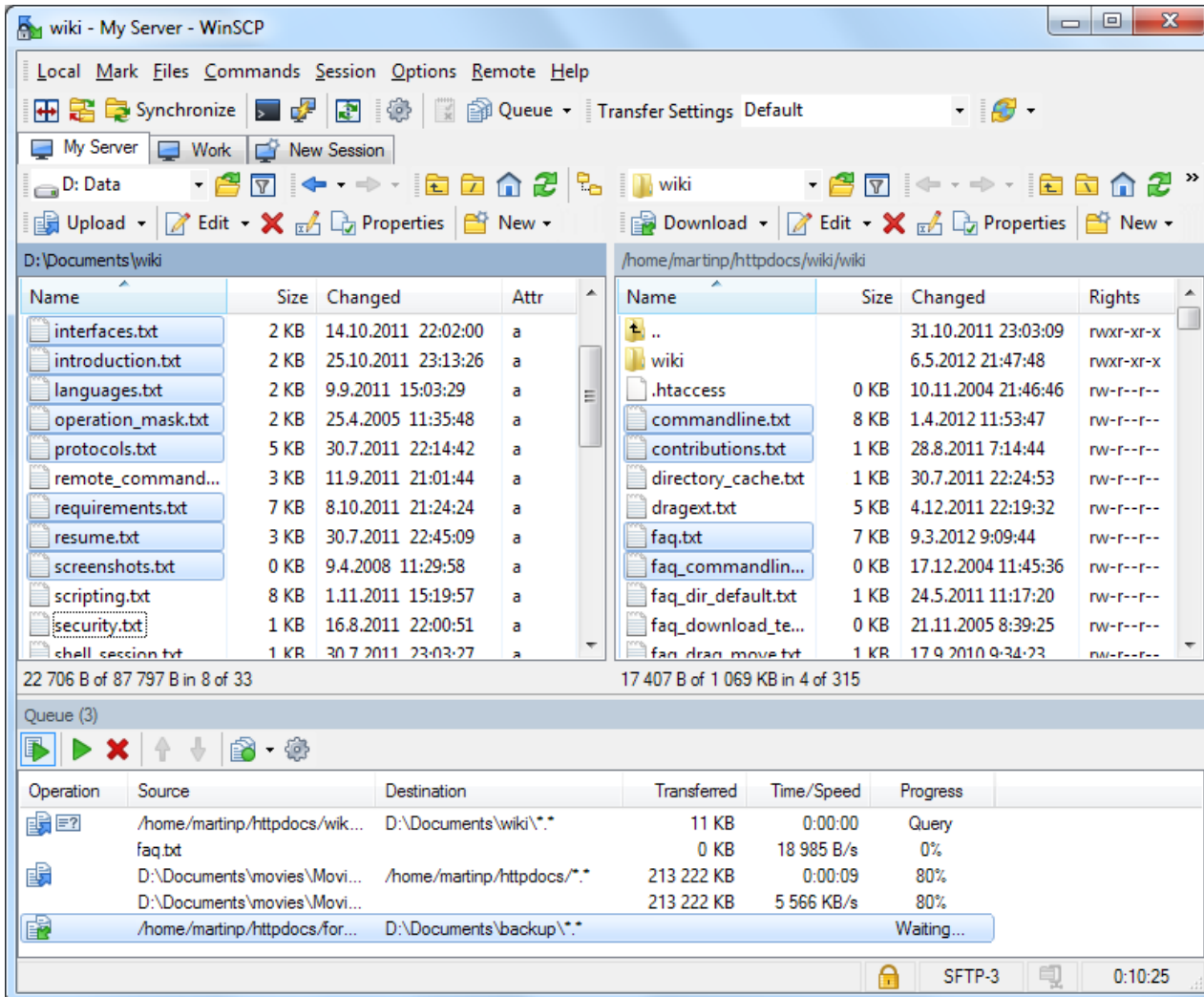


Image from: <https://winscp.net/pad/screenshot.png>

Creating a Shell Script

```
#!/bin/ksh
```

```
#####
```

```
LD_LIBRARY_PATH=/your/sysadmin/knows/this/part  
export LD_LIBRARY_PATH
```

```
echo "Change directory to: /sas/home/keith/export/demo/"
```

```
cd /sas/home/keith/export/demo/
```

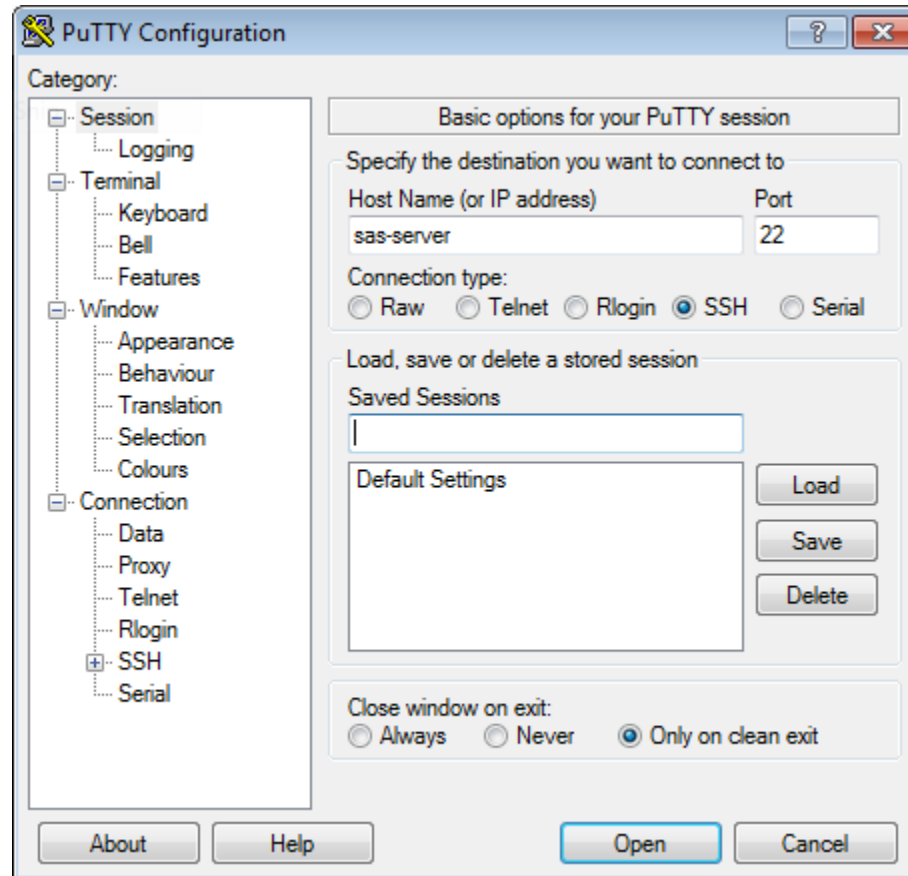
```
echo "Run code"
```

```
/appl/SAS/SASFoundation/9.4/sasexe/sas demo.sas
```

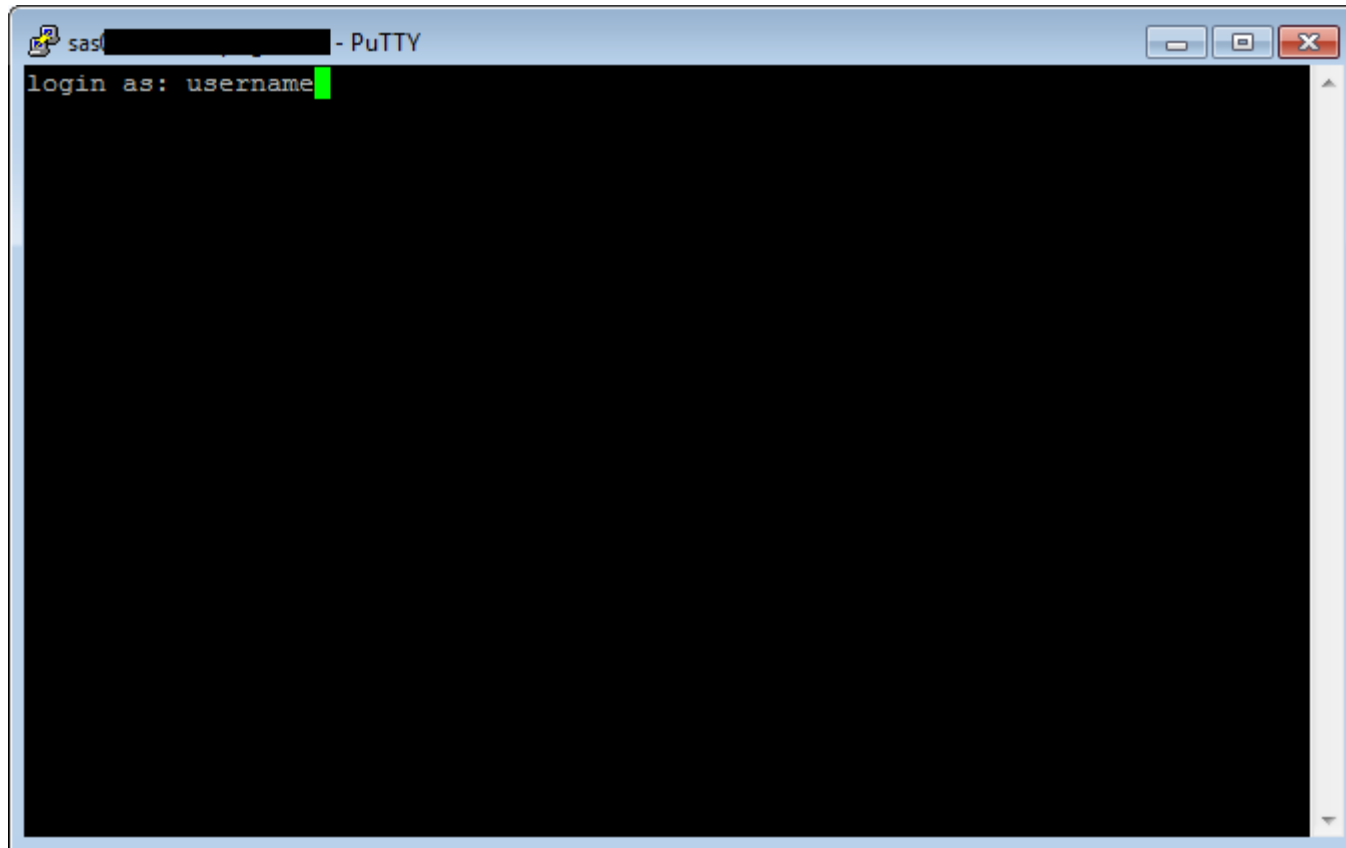
```
echo "Complete"
```

Scheduling the Shell Script

Logging into SAS with PuTTY



Logging into SAS with PuTTY



Creating a Crontab

- Once logged into the SAS Server in PuTTY the command **crontab -e** allows me to create a crontab entry.
- Vi is the default editor in our environment.

Creating a Crontab

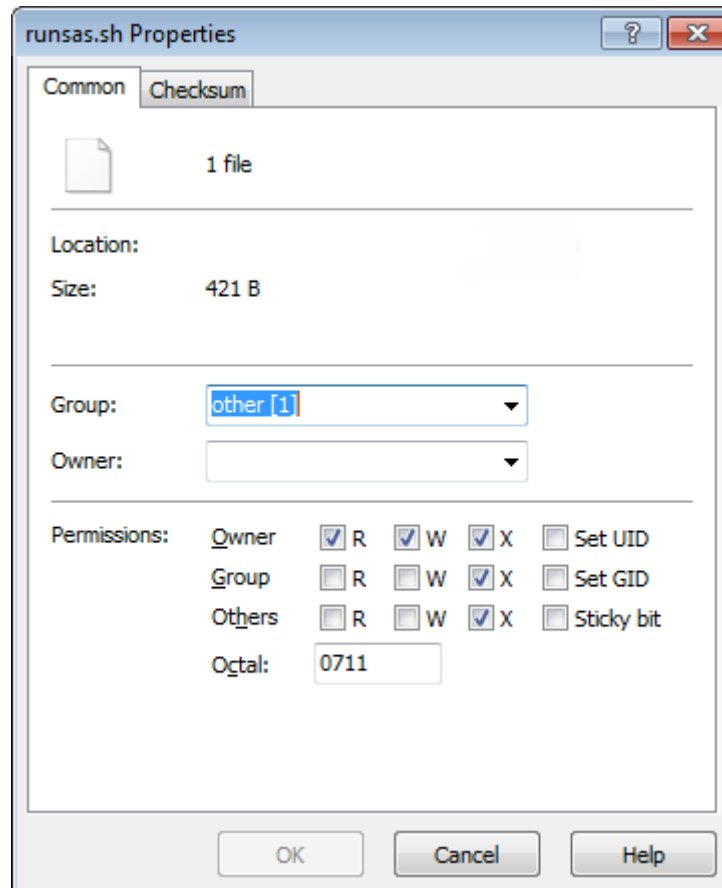
```
* * * * * /sas/home/keith/export/demo/script.sh
```

```
30 * * * 1-5 /sas/home/keith/export/demo/script.sh
```

```
0 0 1 * * /sas/home/keith/export/demo/script.sh
```

Granting Permission

- You will need to grant cron permission to run your script



Questions?