

Banner 9

ZSPNEL1 – Reconcile Nelnet Planned Amounts

This process is both a Nelnet report and a reconciliation process. Depending on the parameter values, it identifies all Nelnet students for a given semester or identifies discrepancies between the Nelnet and Banner planned amounts (NELP memos). **ZSPNEL1 is run for one semester at a time.**

The BPL must work with Nelnet to generate a one-time Windows public/private key on the User's desktop. See the Technical Setup information located in the back of this document.

Each day, Monday through Friday, between 12:00 – 1:00 PM EST the Nelnet NBS Enrollment File (E29 file) is prepared and is available for download. It must be SFTPed from Nelnet (see the User instructions in the back of this document) and then uploaded to the Banner directory /u01/app/banner/dataload/general using the GUAUPLP Banner upload process. Depending on the parameter values, the process can be run either as a report or as a reconciliation process. In AUDIT mode it identifies whether the NELP memo should be added, updated or expired. In UPDATE mode, Banner NELP memos are synchronized to the Nelnet planned amount. Note: the time stamp in the E29 file is depicted in CST not EST.

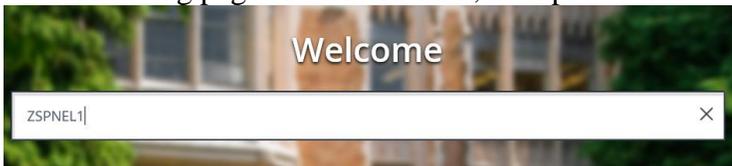
The E29 file name appears on the report heading. It is critical that you use the current file you just downloaded to ensure accurate results and that you remove old files in /u01/app/banner/dataload/general periodically.

The process first reports or reconciles Nelnet (E29 file) to Banner. NELP memos can be added, updated or expired. On an add, USERID, activity date, the Nelnet planned amount, the expiration date (parameter value), term code and a Bill indicator = Y is generated. On an update, USERID, the Nelnet planned amount, expiration date and activity date is updated. On an expired memo, USERID, activity date and the expiration date is updated (expiring the memo) with yesterday's date. Totals are provided based on the selection of students being processed.

Next the process reconciles Banner to Nelnet identifying any students who are in Banner but not loaded in Nelnet (E29 file). All students for the semester are considered. No update process is applicable.

A population selection (popsel) can be used with this process. Only the students in the popsel are considered.

On the landing page enter ZSPNEL1, then press enter.



In Process Submission select **Go**



In the Printer Control Section – Enter **Database**

Alt Page Down to go to next section or click on the down arrow at the bottom of the page.



Enter your Parameter Values. Each Parameter is defined in red.

Process Submission Controls GJAPCTL 9.3.10 (PROD-PEL)

Process: ZSPNEL1 Reconcile Nelnet Planned Amts Parameter Set:

PRINTER CONTROL

Printer: DATABASE Submit Time: PDF Font Size: Special Print: MIME Type: None Delete After Days: Lines: 55 PDF Font: Delete After Date:

PARAMETER VALUES

Number *	Parameters	
01	Banner Term Code	Enter Term Code you wish to process
02	File Name	E29 file name uploaded to /u01/app/banner/dataload/general (file name only)
03	Expiration Date	Expiration Date for new and update memos (default 31-DEC-2099, must be within date range on STVTERM)
04	Status (A, T, I or % (all))	Processing type (default %) % - all planned amounts in the E29 file, A – active plans only, T – terminated plans only, I - inactive plans only
05	Discrepancies Only(Y/N)	Report only or show discrepancies only(default Y) Y – Shows discrepancies only (reconciling plans), N – Shows all plans
06	Update (Y/N)	Audit or update? (default N) Y – Updates planned amounts, N – Audit mode only
07	Selection Identifier	Selection Identifier, Application Code, Creator ID and User ID
08	Application Code	Optional - All four parameters must be entered. All students in the population selection are considered. Enter the name of the population selection you wish to use. Enter the application code for the population selection. Enter the banner id that created the population selection. Enter the banner id of the user that will be running ZSPNEL1
09	Creator Id	
10	User	
11	Enter Lines per Page	Enter the lines per page (default 55).

Note:

ZSPNEL1 Outputs

There will be a log and lis file. They are located in /u02/jobsub/PROD/gurjobs directory on your Banner box.

After you have entered your parameters **Alt Page Down** to go to next section or click on the down arrow at the bottom of the page.



Press F10 to save or select the SAVE button at the bottom right corner to run the process.



Once the process is run you will see informational message in the top right corner of your page. It will also identify the sequence number.

ADD RETRIEVE RELATED TOOLS 2

Your request is being processed.

Sequence number is: 874690

To view your .log and .lis file, click the RELATED tab at the top right of the page and then select Review Output [GJIREVO]

ADD RETRIEVE RELATED TOOLS 2

Review Output [GJIREVO]

Click on the ... to view your .log or .lis file.

Your sequence number will be showing. (If the process is complete)

elucian Saved Output Review GJIREVO 9.3.7.1 (PROD-PEL)

Process: ZSPNEL1 Reconcile Nelnet Planned Amts Number: 874690

File Name: ... Beginning Date: Saved

Lines:

Get Started: Complete the fields above and click Go. To search by name, press TAB from an ID field, enter your search criteria, and then press ENTER.

Available Files

Output File Name	Record Count	Date Saved
zspnel1_874690 lis	17	03/21/2019 02:46:45 P
zspnel1_874690 log	21	03/21/2019 02:46:45 P

Cancel OK

You will see your available files.

Select either your .log file or .lis file

Then click OK

Below is sample output information of your .log, and .lis file.

This example shows ZSPNEL1.log file

```
Process: ZSPNEL1 Reconcile Nelnet Planned Amts Number: 874690 File Name: zspnel1_874690.log Beginning Date Saved: 21-MAR-2019 Lines: 21
SAVED OUTPUT REVIEW
PARAMETER (1) = [THMOORE]
PARAMETER (2) = XXXXXXXX
PARAMETER (3) = 874690
PARAMETER (4) = ZSPNEL1
Successfully Connected to Oracle in ZSPNEL1
Successful run of ZSPNEL1
Version 2.0
21-MAR-2019

Process Term          201714
Nelnet Term Code      OX999
Nelnet File Name      nelnet.txt
Expiration Date       08-MAY-2017
Status Code (A,T,I,% %
Discrepancies only   (Y/N) Y
Update (Y/N)         (Y/N) Y
Selection Identifier
Application Code
Creator ID
User ID
Lines Per Page        000000059
30 Per Page
```

To go back and look at the .log file, click the Start Over button on the top right hand corner of the page.

[Start Over](#)

You can select your lis file to review.

This example shows ZSPNEL1.lis file

```
DATE: 21-MAR-2019 TCSG Pelican Group - PROD PAGE: 1
nelnet.txt Reconcile Nelnet Plans for Status Type % (08-MAY-2017) OX999 UPDATE
ID S PLAN NAME NELNET BANNER HRS FLAG BALANCE AUTH/MEMOS COMMENTS
910084515 A AABCCZ ANGELA AGUILAR 1629.00 1629.00 08-MAY-2017 0 105.00-.00 No NELP memo - ADD
910124508 A AABBCY Chelsea Mcmanus 79.50 79.50 08-MAY-2017 12 YES 40.00-.00 No NELP memo - ADD
910124502 A AABBCY Faye Mitcham 719.00 719.00 08-MAY-2017 7 NO 381.00-.00 No NELP memo - ADD
910233974 A AABBCY Elaine Heifner 1030.00 ID not in Banner or Popsel
910155445 A AABBCZ Caroline Snow 187.00 ID not in Banner or Popsel
910065952 A AABBCY ROBIN ARTEAGA 490.00 490.00 08-MAY-2017 0 .00 .00 No NELP memo - ADD
222222209 T AABBCY name to reject 1031.00 ID not in Banner or Popsel
Total Active 4134.50 2917.50
Total Terminated 1031.00 .00
nelnet.txt Reconcile Nelnet Plans for Status Type % (08-MAY-2017) OX999 UPDATE
Students in Banner but not in the NELNET file:
910124518 Dyuandra Sunup 100.00 30-DEC-9999 0 .00 300.00
910044310 Alexis Williams 300.00 31-DEC-9999 0 .00 .00
20 Per Page
```

If you click the X at the top left,  you will go back to Process Submission Control GJAPCTL – Process ZSPNEL1.
NOTE:

ZSPNEL1.lis - Informational/Error Messages:

File Name does not exist in /u01/app/banner/dataload/general – displayed in the log file when parameter 2 doesn't match the file name uploaded to that directory (always check your log file for error messages)

ID not in Banner or Popsel – displayed when the ID in the E29 file doesn't match SPRIDEN or when a student in the population selection doesn't exist. Information from the E29 file will print. This normally happens when a student establishes a Nelnet plan with their social security number.

Plan Inactive – expire NELP – displayed when the Nelnet plan is inactive and an active NELP memo exists in Banner. The NELP description shows NELP PENDING-EXPIRED in TSADETL.

Plan Terminated – expire NELP – displayed when the Nelnet plan is terminated and an active NELP memo exists in Banner. The NELP description shows NELP PENDING-EXPIRED in TSADETL.

Plan Increase – update NELP – displayed when the Nelnet payment plan is greater than the Banner payment plan. The NELP description shows NELP PENDING-INCREASED in TSADETL.

Plan Decrease – update NELP – displayed when the Nelnet payment plan is less than the Banner payment plan. The NELP description shows NELP PENDING-DECREASED in TSADETL.

No NELP memo – ADD – displayed when the active Nelnet plan exists and no active NELP Banner memo exists

Multiple NELPS - Verify – displayed if more than one active NELP exists for the student for a given term (this must be corrected)

Active Plan - \$0 Verify – displayed if a Nelnet payment plan exists and a Banner payment plan with a \$0.00 amount exists (this can occur if the decrease for the student account goes to \$0)

Suggested Steps:

To identify all students on a Nelnet plan set parameter 4 to % (all plans) and parameter 5 = N (all planned amounts). This will provide you with a grand total for your Nelnet planned amounts.

To identify the reconciling items only set parameter 4 to % and parameter 5 = Y.

You may also run reports for terminated or inactive accounts, when applicable.

E29 Enrollment File

NBS Enrollment File Format E29 For Enterprise Usage

Here is an example of a possible two-row E29 data file from Nelnet's Enterprise system:

```
A|297416|00184775722      |Melissa Paris      |0121864|0000000|0000000|000|0000000|000|09282012|050004|0000000|0121864|1|201810      |0000000
A|625374|01548726812      |Patrick Carling    |0144000|0000000|0000000|000|0000000|000|09282012|050004|0000000|0144000|1|201810      |0000000
1  2          3          4          5          6          7          8          9          10         11         12         13         14         15         16         17
```

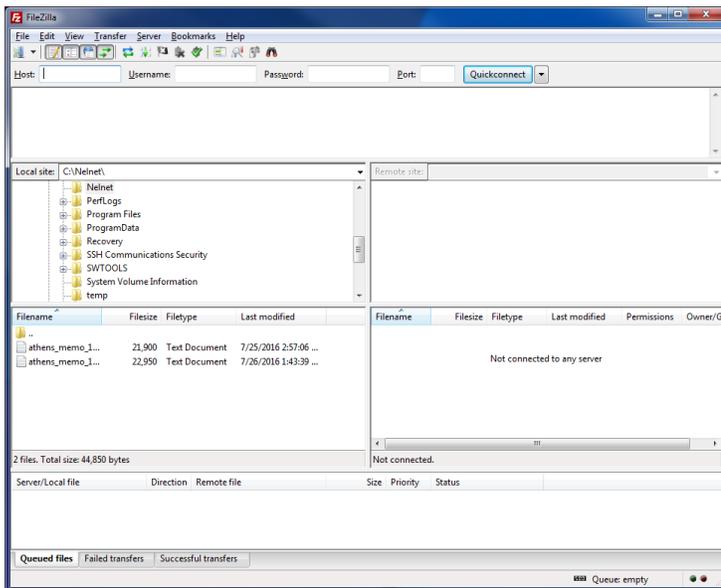
1. Agreement Status (A = Active, I = Inactive, T = Terminated)
2. Agreement Number (This is the last six digits of the actual Enterprise agreement#)
3. Student ID
4. Responsible Party Name
5. Original Contract Amount
6. Nelnet Current Agreement Balance
7. Previously FACTS Payment Amount → Not used by the Enterprise system
8. Previously # Remaining Payments → Not used by the Enterprise system
9. Previously Reattempt Amount → Not used by the Enterprise system
10. Previously Reattempt Count → Not used by the Enterprise system
11. Current Date (MMDDYYYY)
12. Current Time
13. Gross Payments (Total paid & remitted + attempted/not yet remitted)
14. Gross Adjustments (Charges less Credits applied to agreement since creation)
15. Gross Adjustment Indicator (0 = Positive, 1 = Negative)
16. Institution Term Code (Your ERP's term code, configured into our system) → Previously was FACTS ID#, which was only 5 characters in length, now it is 20.
17. Gross Deposits for Modified Guarantee/Guarantee schools' use only

And here are the field length specifications for each column:

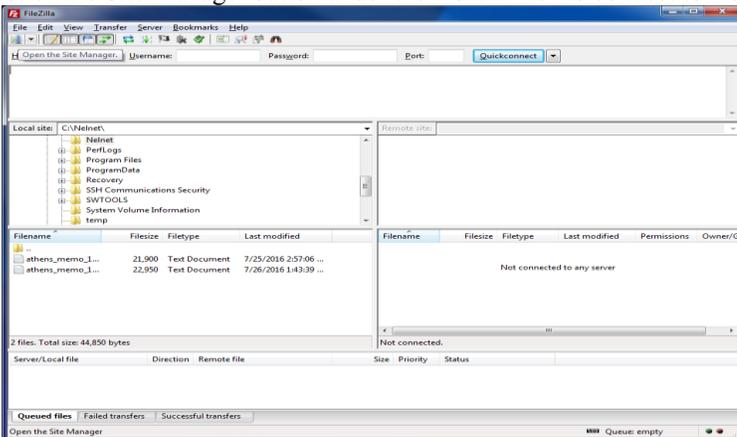
1. Field Length = 1
2. Field Length = 6
3. Field Length = 25
4. Field Length = 25
5. Field Length = 7
6. Field Length = 7
7. Field Length = 7
8. Field Length = 3
9. Field Length = 7
10. Field Length = 3
11. Field Length = 8
12. Field Length = 6
13. Field Length = 7
14. Field Length = 7
15. Field Length = 1
16. Field Length = 20
17. Field Length = 7

User Instructions for getting the Enrollment (E29) file

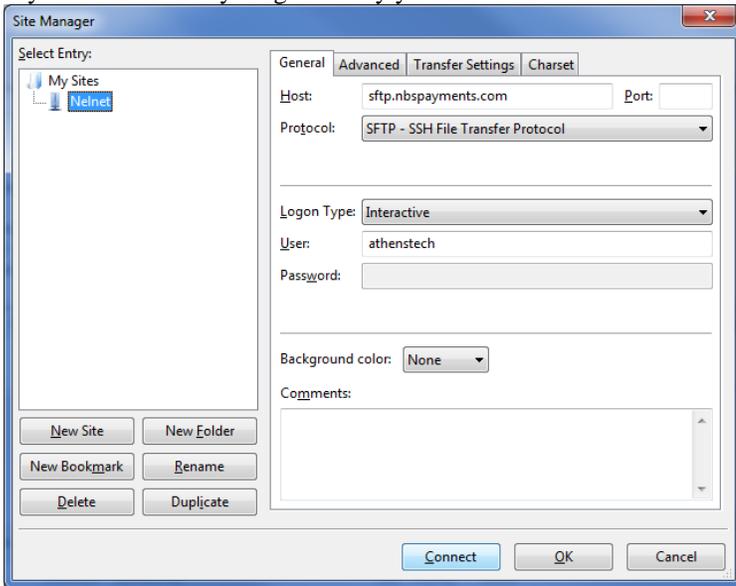
Once your BPL sets up the technical side and the FileZilla process is ready to run, login to FileZilla.



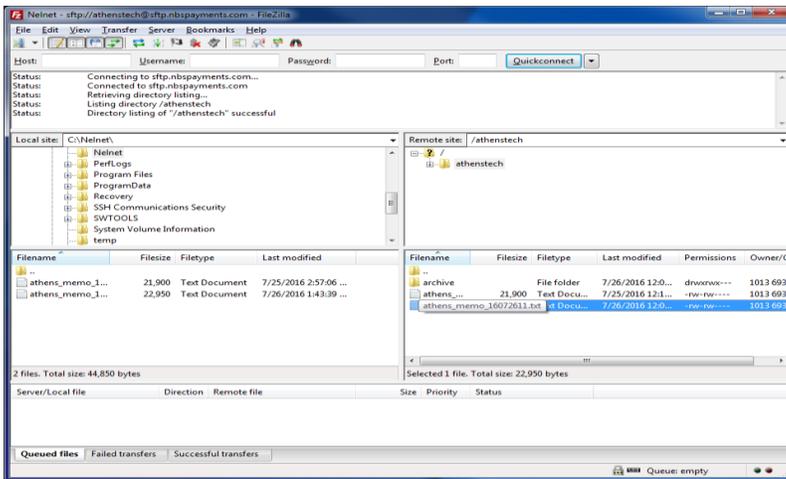
Click the Site Manager button under the word "File" to connect to Nelnets's server.



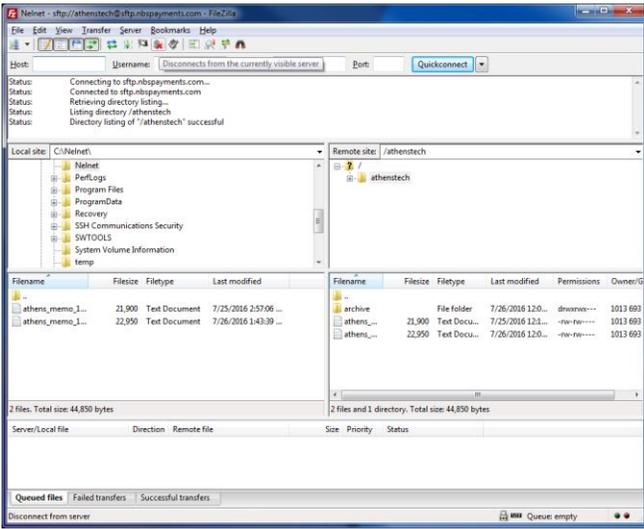
If your BPL set everything correctly you should be able to click connect at the bottom of the screen without entering a password.



Once you connect, you will be automatically logged into Nelnet's server. The left half of the screen is your desktop and the right half of the screen are the Nelnet files. You will then navigate to the "prod" directory. The file type is a text document and the file name includes the current date.



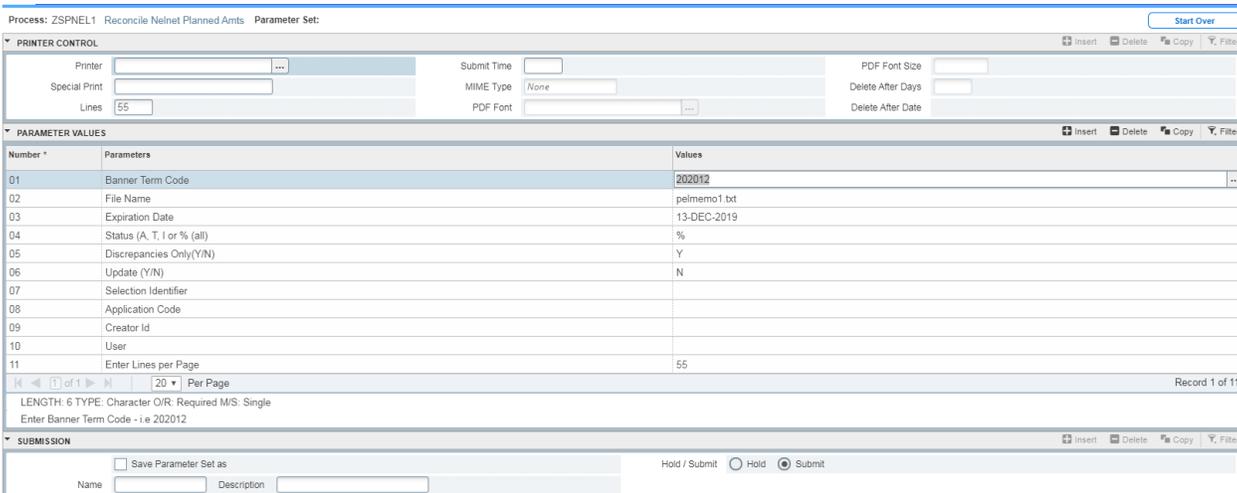
Once you see the current day's file, drag the file to the left side of the screen in the designated folder you have created for the Nelnet (ZSPNEL1) process. After dragging your file from Nelnet's server, disconnect by selecting the red X under the word "Bookmarks" at the top of the FileZilla page.



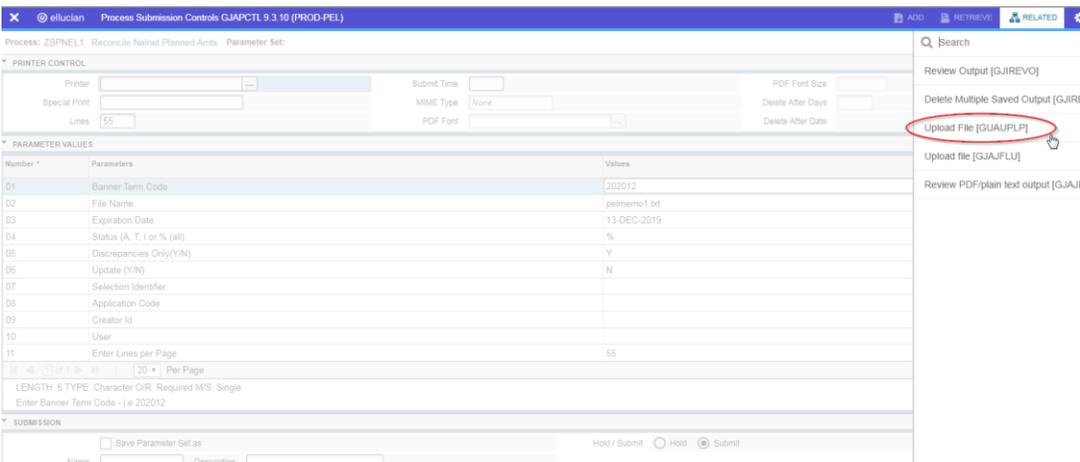
Now that you have the file on your desktop you are going to place the file into the Banner box. Option 1 allows you to use ZSPNEL1 to place the file into the /u01/app/banner/dataload/general location. Option 2 uses a ssh sftp process to place the file from your desktop to the Banner box.

Option 1

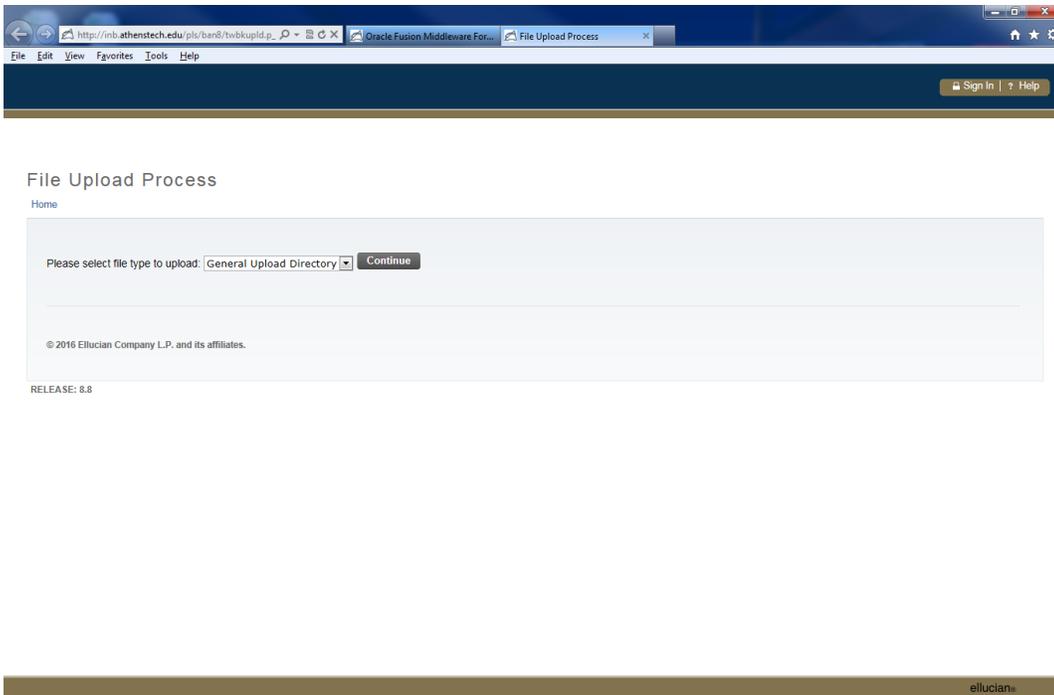
After disconnecting from FileZilla, go to ZSPNEL1 in Banner



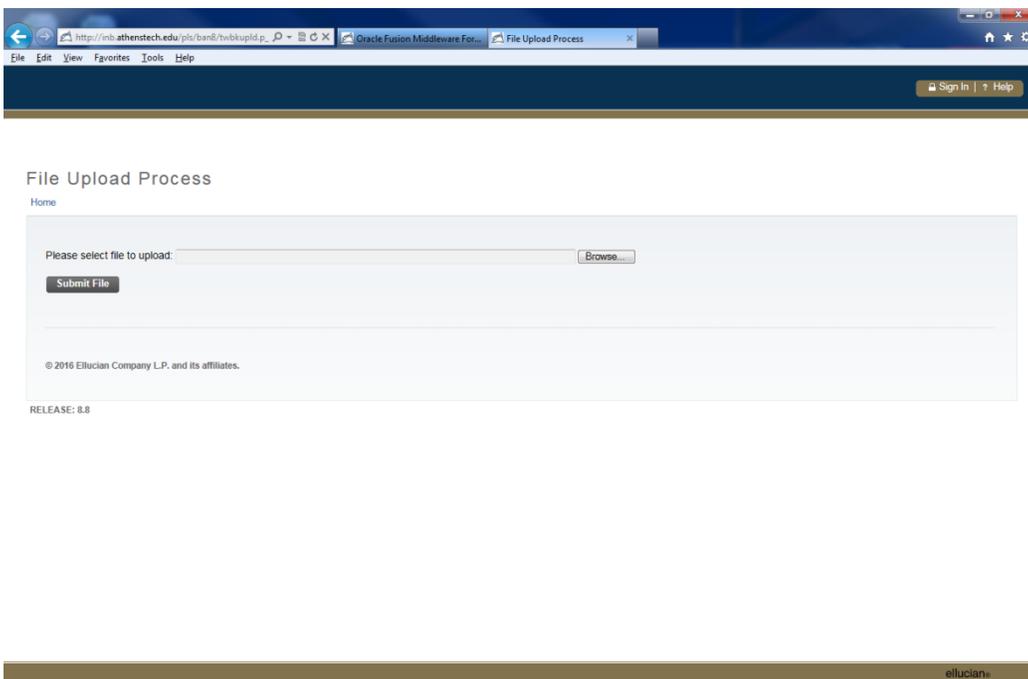
Go to Related and choose Upload File (GUAUPLP) to upload the Nelnet (E29) file into your /u01/app/banner/dataload/general directory

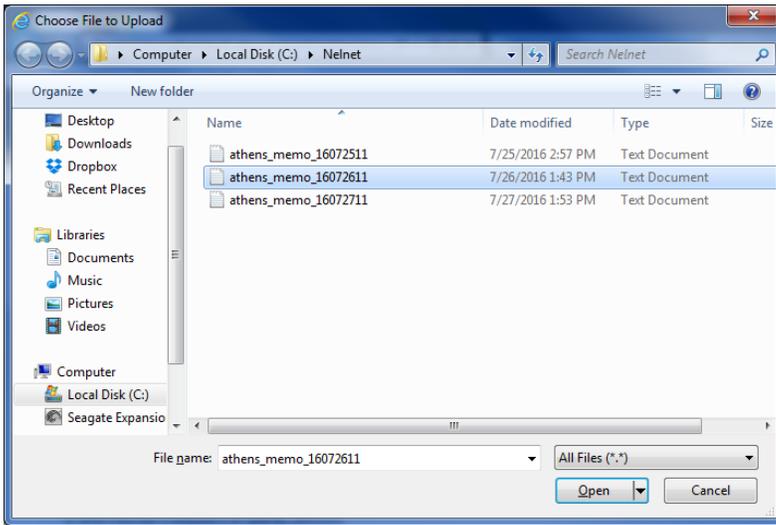


Choosing this will take display the below image in your browser. The file type should always be “General Upload Directory” and click Continue.

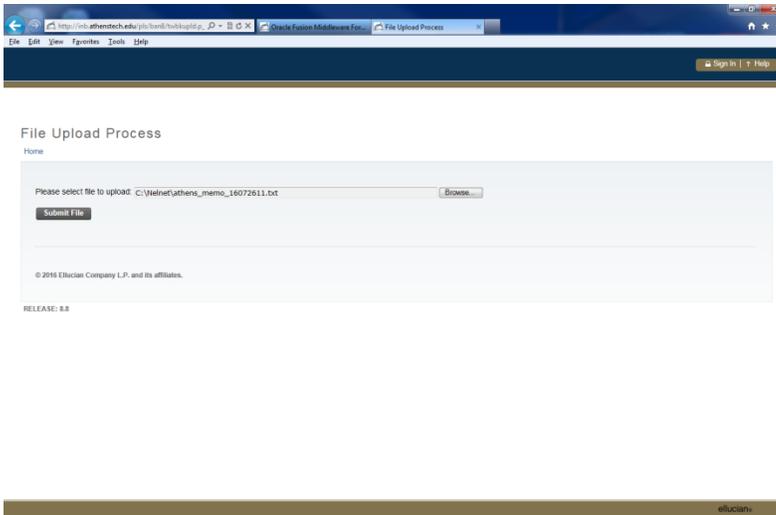


Once you click continue, the image below will be displayed in your browser. Click Browse and find your Nelnet (E29) text file that you transferred from FileZilla.





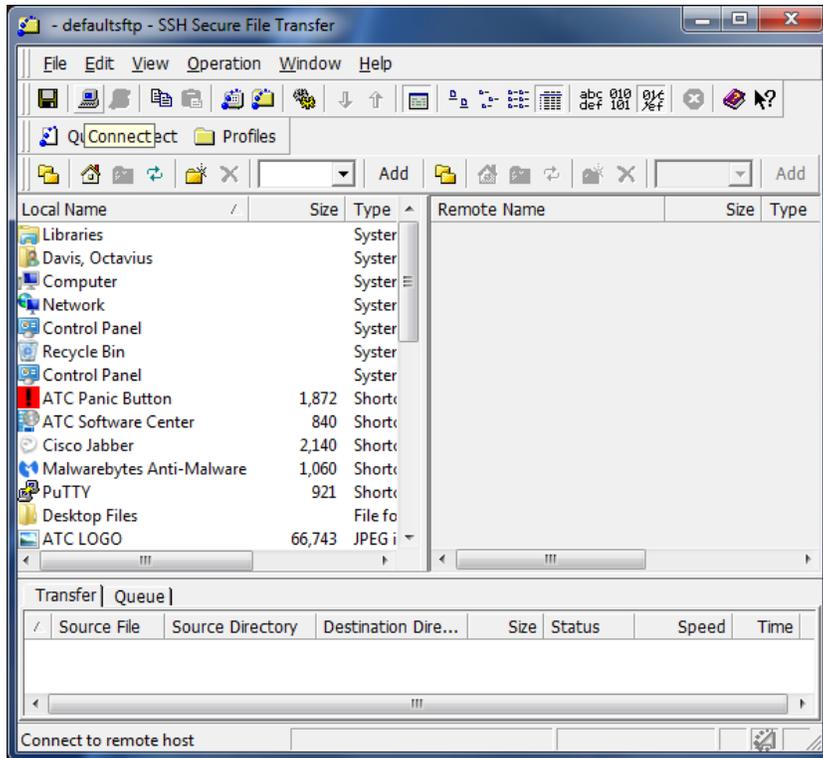
Once you locate the file, click Open and the image below will be displayed.



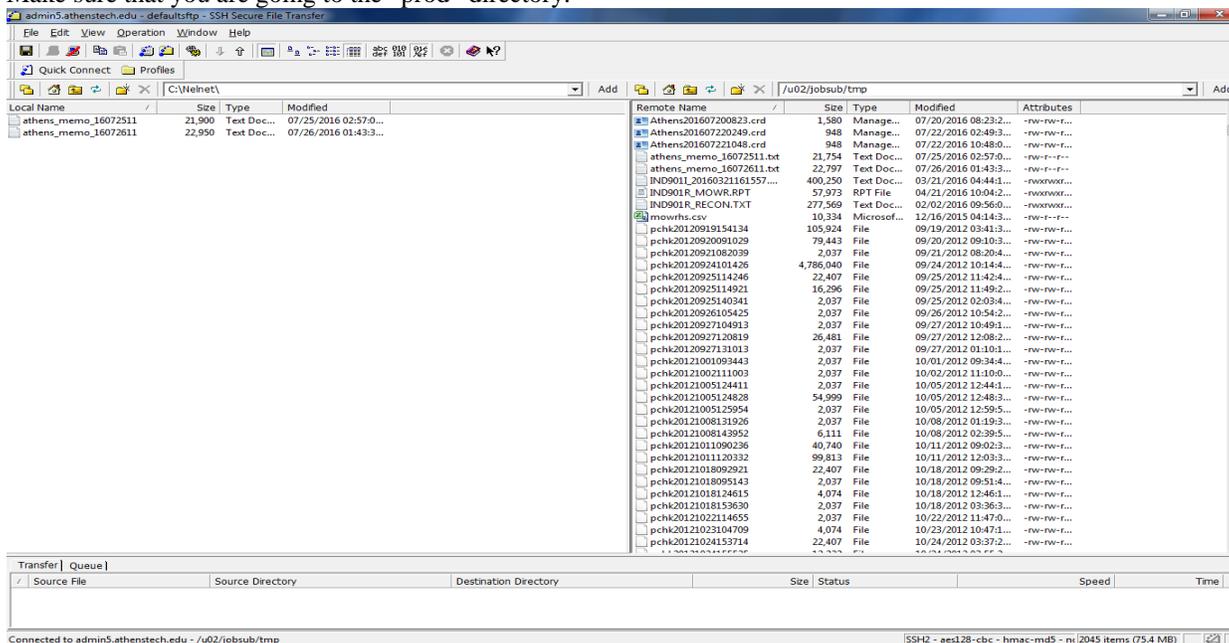
Click Submit File and the image below will be displayed confirming that the file was successfully uploaded in the /u01/app/banner/dataload/general directory. Good luck!!!!

Option 2 (not necessary if you used option 1 above)

After disconnecting from FileZilla, log into SSH – Secure File Transfer.



Make sure that you are going to the “prod” directory.



After connecting to SSH, locate the Nelnet (E29) file you received from FileZilla and drag it into your /u01/app/banner/dataload/general directory. Once you drag the file, disconnect from SSH and now you may run your ZSPNEL1 process. Good luck!!!!

Technical Setup

Creating the public/private key pair would be considered Step One in getting this whole process started. Step Two would be sending Nelnet the public key in the pair. Then they will set up the college SFTP user on the server and give you the username, and the process can get started. When you are ready to communicate with Nelnet, please notify either Debbie Drazdowski or Angela White. Normally, the sftp url is sftp.nbspayments.com.

For public-key encryption, the BPL (or technical staff) generates two keys together, a public encryption key and a private decryption key. The message is encrypted with the public key, and can only be decrypted with the private key. Only technical staff should be performing these steps. It is important to protect the private key (just like any password). Once set up on a laptop/computer the process is somewhat limited to that computer in which it has been set up on but the keys could be moved to another PC and FileZilla could be set up there.

NOTE: Once a new key has been generated on a machine, NelNet will need to be notified. The new key will need to be emailed to NelNet. Currently, Jeremy Sperling is the contact person. His email address is jeremy.sperling@nelnet.net. Then NelNet will add it to the college's setup.

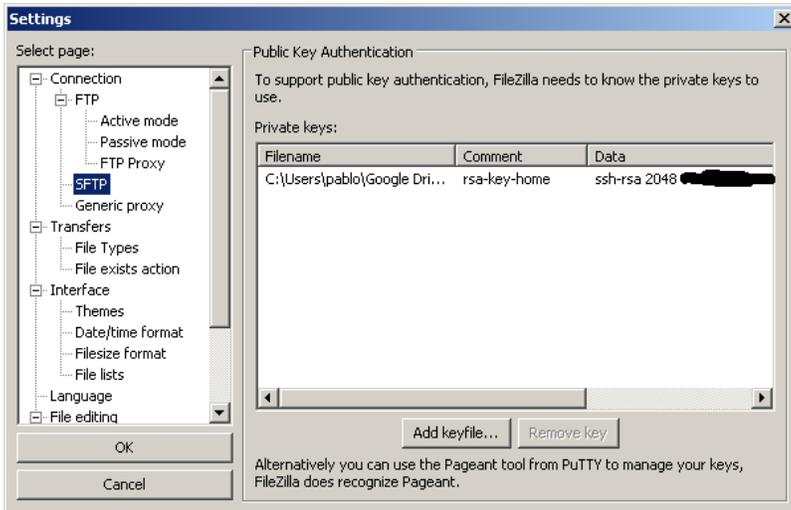
To generate a set of RSA keys with PuTTYgen (from a website):

1. Start the PuTTYgen utility, by double-clicking on its .exe file;
2. For **Type of key to generate**, select **SSH-2 RSA**;
3. In the **Number of bits in a generated key** field, specify either **2048** or **4096** (increasing the bits makes it harder to crack the key by brute-force methods);
4. Click the **Generate** button;
5. Move your mouse pointer around in the blank area of the **Key** section, below the progress bar (to generate some randomness) until the progress bar is full;
6. A private/ public key pair has now been generated;
7. In the **Key comment** field, enter *any* comment you'd like, to help you identify this key pair, later (e.g. your e-mail address; home; office; etc.) -- the key comment is particularly useful in the event you end up creating more than one key pair;
8. Optional: Type a passphrase in the **Key passphrase** field & re-type the same passphrase in the **Confirm passphrase** field (if you would like to use your keys for automated processes, however, you should *not* create a passphrase);
9. Click the **Save public key** button & choose whatever filename you'd like (some users create a folder in their computer named *my_keys*);
10. Click the **Save private key** button & choose whatever filename you'd like (you can save it in the same location as the public key, but it should be a location that only you can access and that you will NOT lose! If you lose your keys and have disabled username/password logins, you will no longer be able log in!);
11. Right-click in the text field labeled **Public key for pasting into OpenSSH authorized_keys file** and choose **Select All**;
12. Right-click again in the same text field and choose **Copy**.

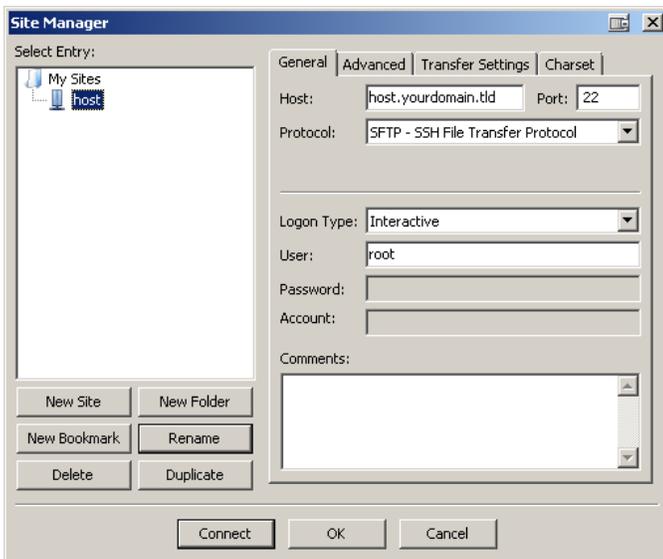
NOTE: PuTTY and OpenSSH use different formats for public SSH keys. If the **SSH Key** you copied starts with "---- BEGIN SSH2 PUBLIC KEY ...", it is in the wrong format. Be sure to follow the instructions carefully. Your key should start with "ssh-rsa AAAA"

Filezilla

1. Open the FileZilla client.
2. From the top of the home screen, click on **Edit** and select **Settings**.
3. On the left side of the menu, expand the **Connection** section and highlight **SFTP**.



1. Click on the **[Add keyfile...]** button and browse your local machine's directories and select your Private Key file.
2. Then, again from the top of FileZilla's home screen, click on **File** and select **Site Manager**.
3. Finally, on the left side of the Site Manager, click on the **New Site** button and type a unique name under **My Sites** that will allow you to easily identify this particular remote server in the future.



1. Now, under the **General** tab, fill in the **Host** (with either an IP address or FQDN) and **Port** fields (default is 22).
2. In the **Protocol** dropdown menu, select **SFTP - SSH File Transfer Protocol**.
3. In the **Logon Type** dropdown menu, select **Interactive**.

Note for PuTTY users with passphrase-protected public keys: If your original **.ppk** file is password-protected, FileZilla will convert your **.ppk** file to an unprotected one when importing the key into FileZilla. As of version 3.0.10, a password-protected key file is not yet supported.