

Marist z/OS Knowledge Center – Hints & Tips

GENERAL INFORMATION ABOUT USERIDS

Instructor userids start with KC02, while student userids start with KC03. Note that the third position of the userid is the number zero '0', not the letter 'O'.

The Instructor USERID has RACF authority to look at the Students Datasets while the Students do not have the authority to look at the instructors datasets.

The Instructor has the ability to RESET their Student USERIDs

GO to Panel 6 (ISPF Command Shell) .

Enter the following to reset a REVOKED Students USERID:

ALTUSER KC03nnn PASSWORD(KC03nnn) RESUME

The following rules apply to 3270 passwords:

- Passwords must be at least six characters in length.
- Passwords cannot be more than eight characters in length.
- Passwords can only be alphanumerics (i.e., either numbers or letters).
- Passwords are NOT case sensitive in this system.

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LOGGING ON TO THE MARIST HUB SYSTEM

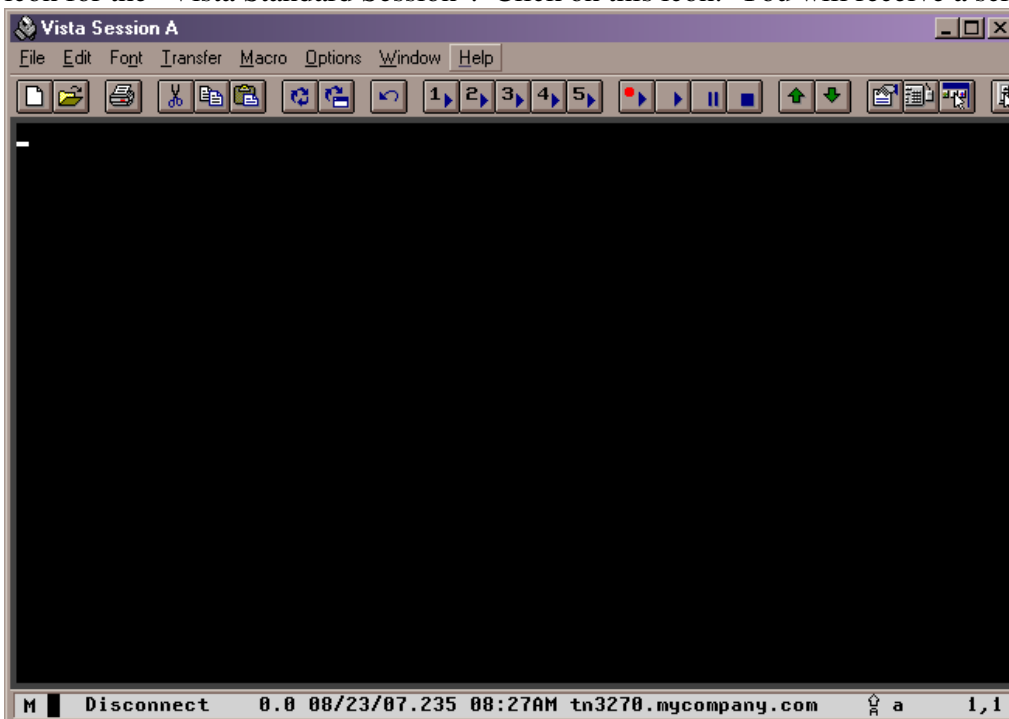
Before you can connect to ZOSKCTR7(MARIST HUB), you will need to obtain or own one of the following 3270 emulation programs:

- Hummingbird
- VistaTN3270 <http://www.tombrennansoftware.com/order.html>

Access ZOSKCTR7 using PORT 1023. If PORT 1023 does not work, you can try the 'backdoor' using PORT 80. You will have to personalize the emulation software according to your hardware definition. To Reach ZOSKCTR7 system on PORT80 go to: portforward.kctr.marist.edu

USING VISTA EMULATION PACKAGE SOFTWARE

Download and then install by running the program. After you install you should have an icon for "Vista 124.exe". Next, start this program and install the software. After the install you will have a folder which has an icon for the "Vista Standard Session". Click on this icon. You will receive a screen that looks like:



Click on Help menu option and then Enter-Registration-Code.

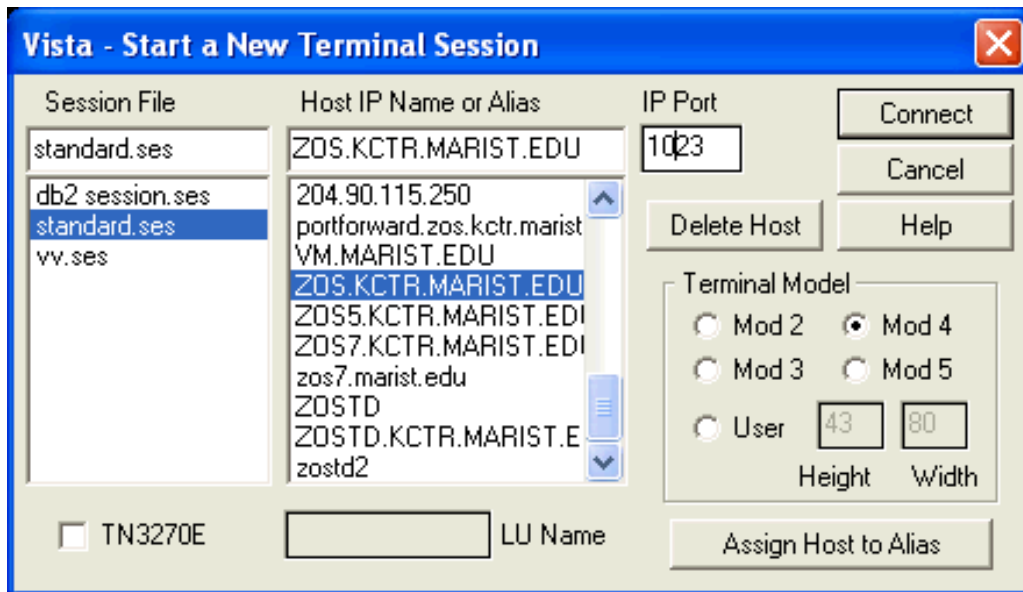
Enter the name and code as follows: **Marist College Student License 844E6D2164.**

You will now need to click on the Vista icon (I move this icon to the desktop to use for startup of TSO) and setup your terminal definition to connect to the mainframe hub at Marist College.

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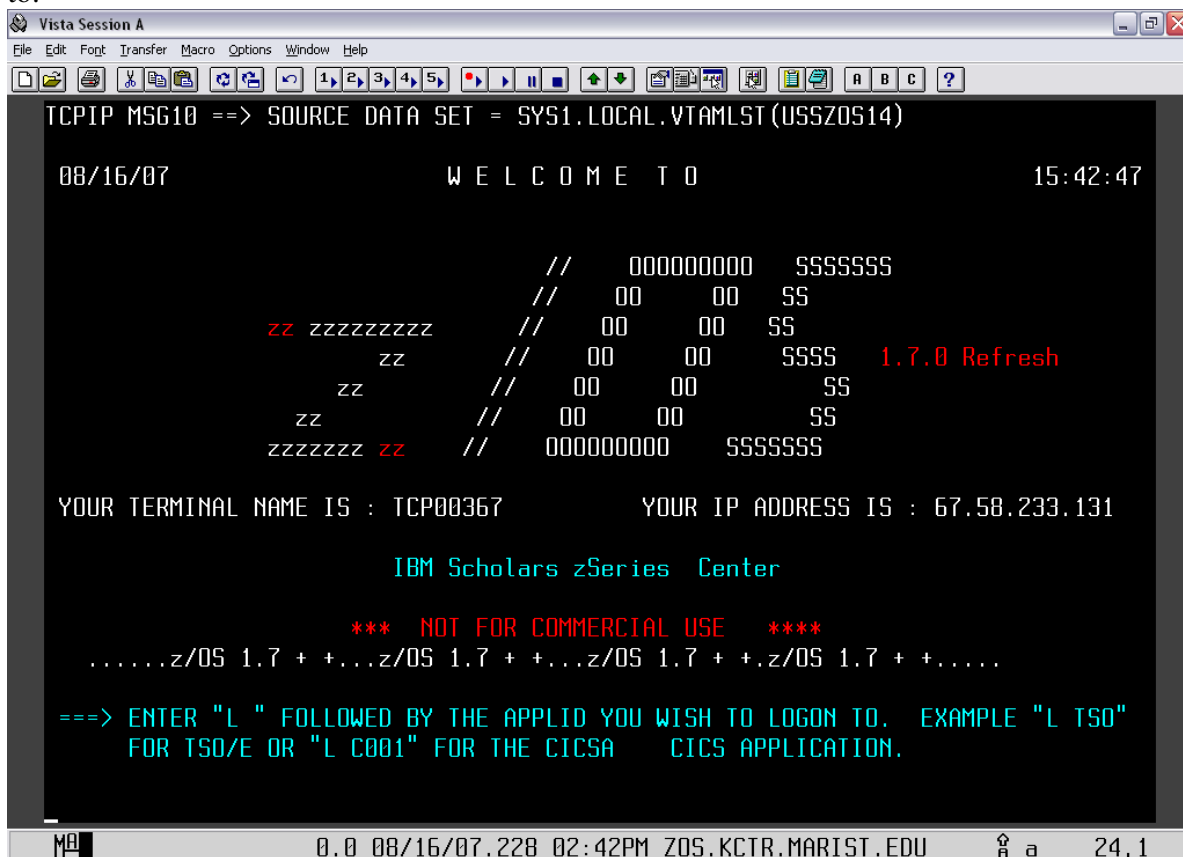
VISTA

The following Terminal Definition should be used when you are connecting to ZOSKCTR – AFTER ENTERING FOLLOWING – CLICK CONNECT.



SIGNING ONTO TSO

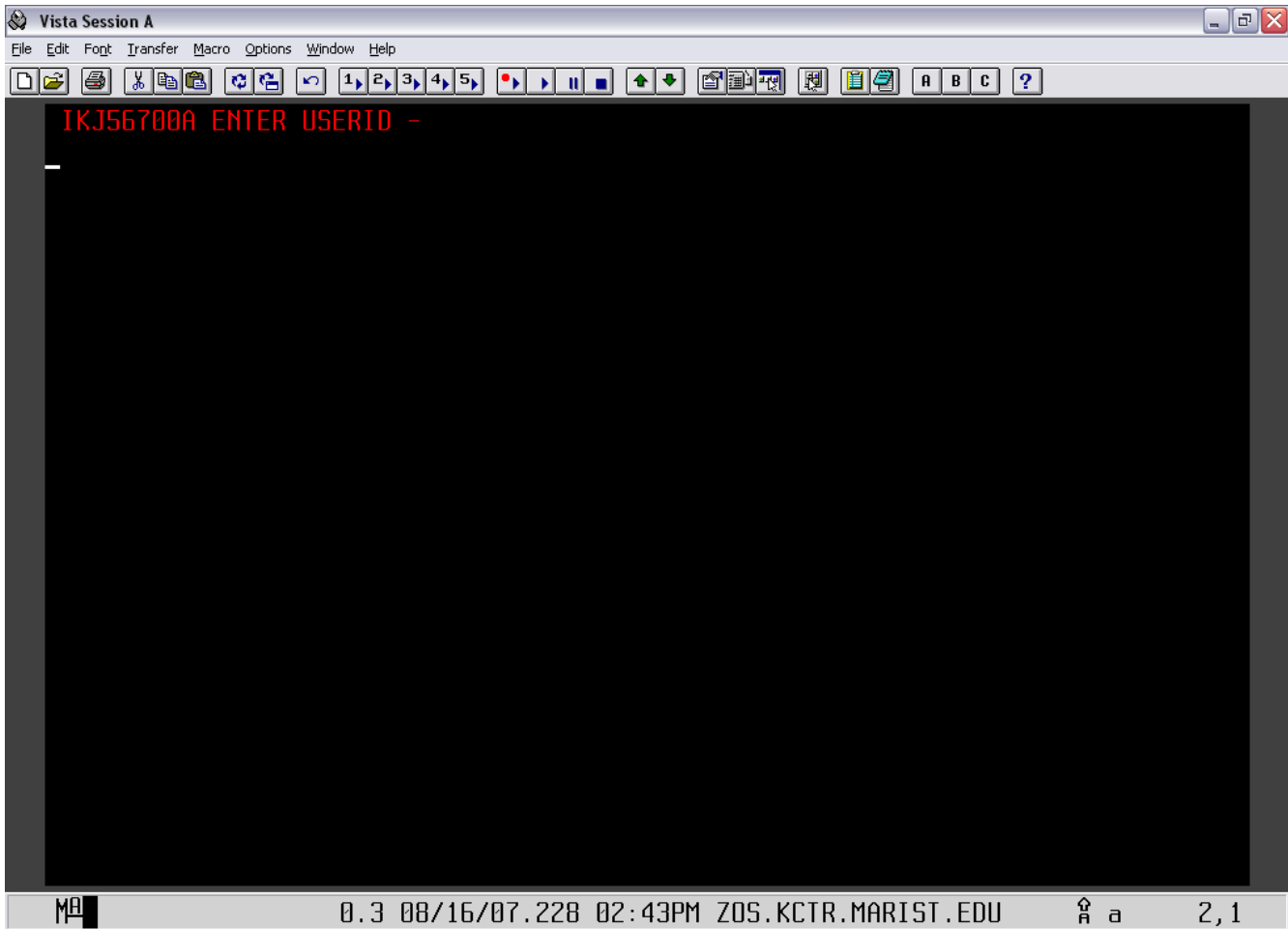
Start the Vista Standard Session by double-clicking on the icon. You should now have a screen that is similar to:



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The cursor is positioned at the bottom of the screen. Key in "L TSO" and then hit the **CTRL** key (NOTE: this is the enter key in TSO).

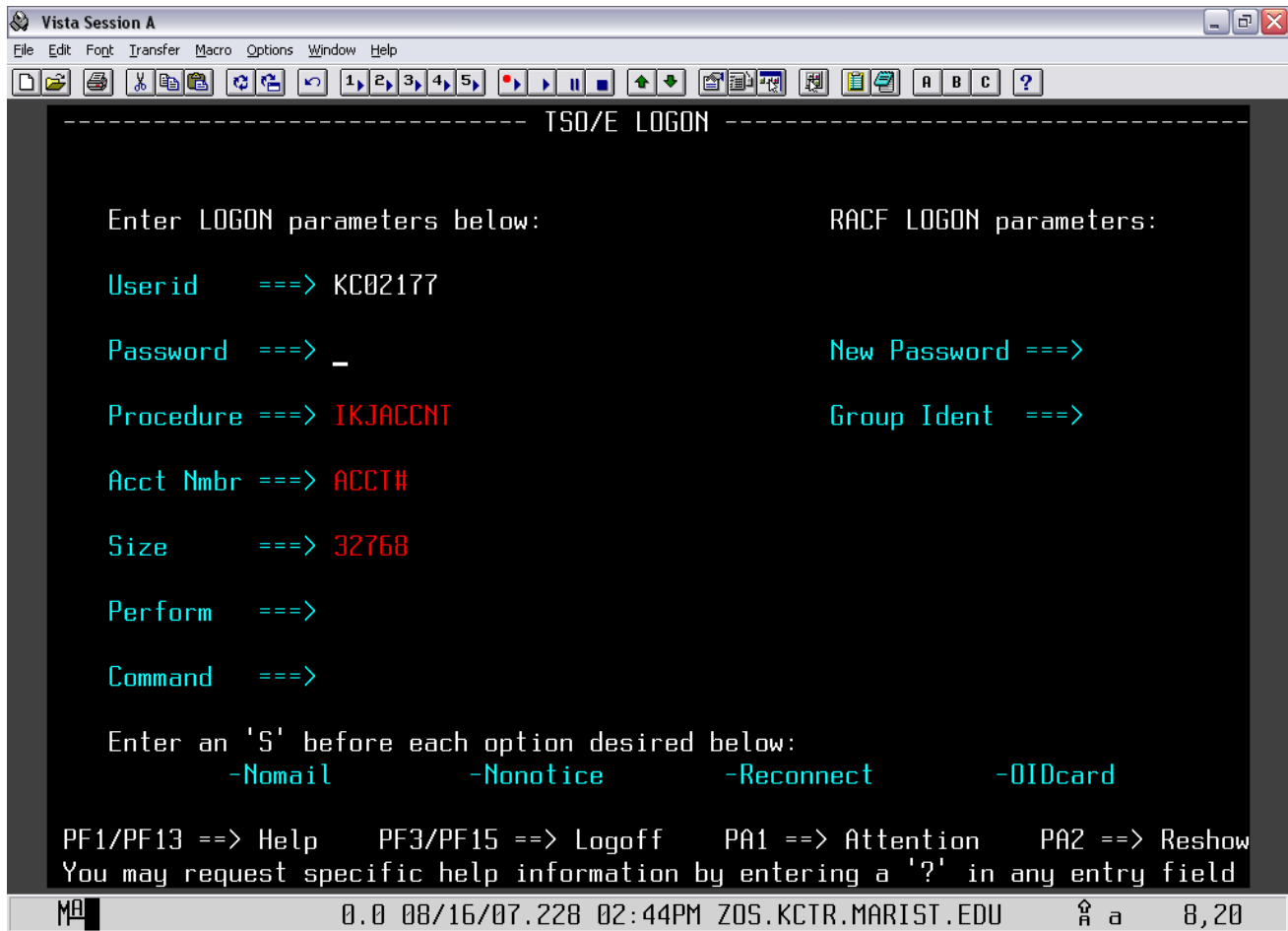
The next screen begins your signon:



Enter the userid given to you by your instructor and then the CTRL key.

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You will next get a screen that looks like:

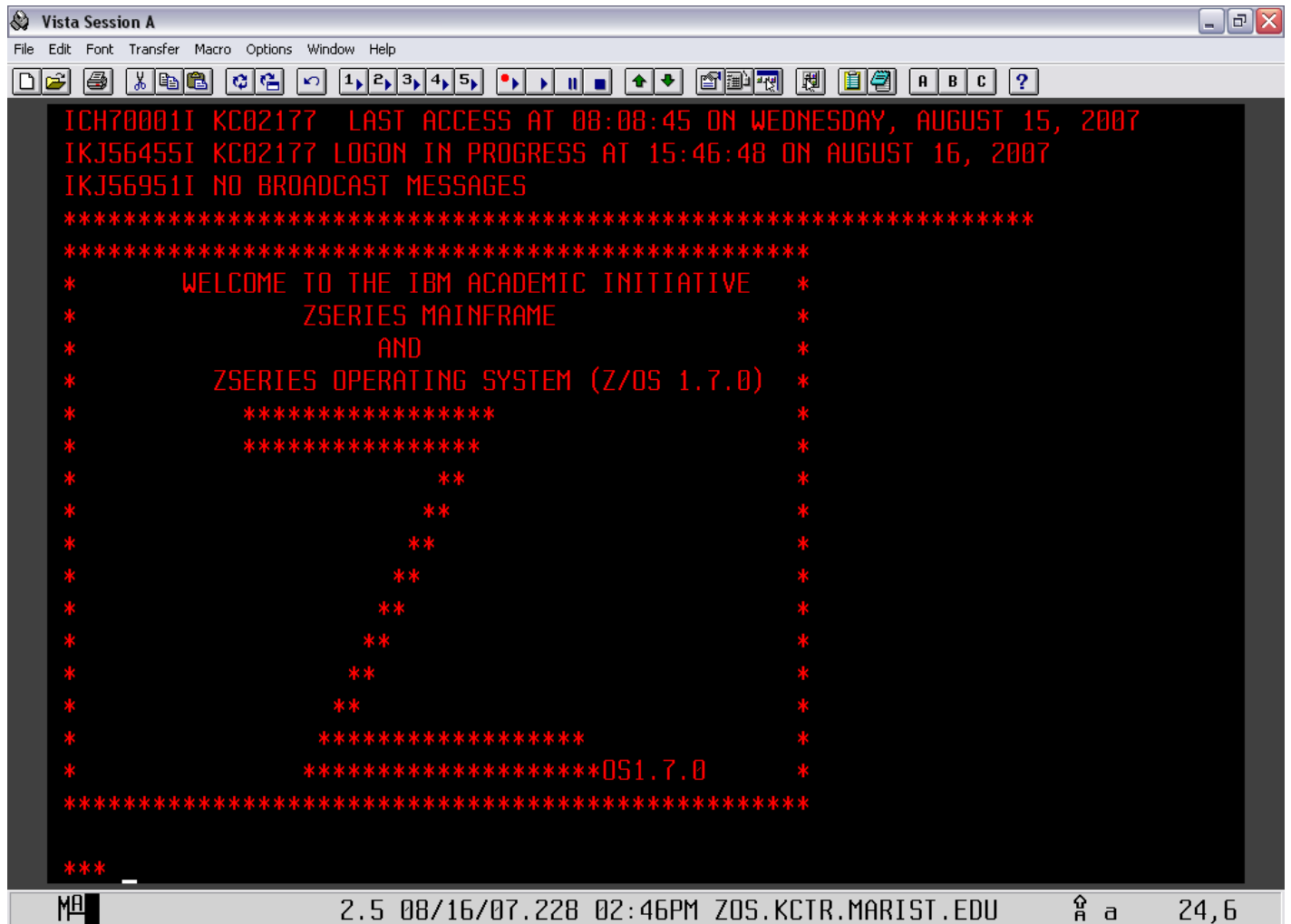


The cursor is positioned in the password field. For your first time, the password is the same as the userid. You will be asked to choose a new password. This account is yours and yours alone. Sharing your account with another student will be considered dishonest.

After you have entered and/or changed your password hit the CTRL key.

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You will now see this screen:



The screenshot shows a terminal window titled "Vista Session A" with a menu bar (File, Edit, Font, Transfer, Macro, Options, Window, Help) and a toolbar. The terminal displays the following text in red on a black background:

```
ICH70001I KC02177 LAST ACCESS AT 08:08:45 ON WEDNESDAY, AUGUST 15, 2007
IKJ56455I KC02177 LOGON IN PROGRESS AT 15:46:48 ON AUGUST 16, 2007
IKJ56951I NO BROADCAST MESSAGES

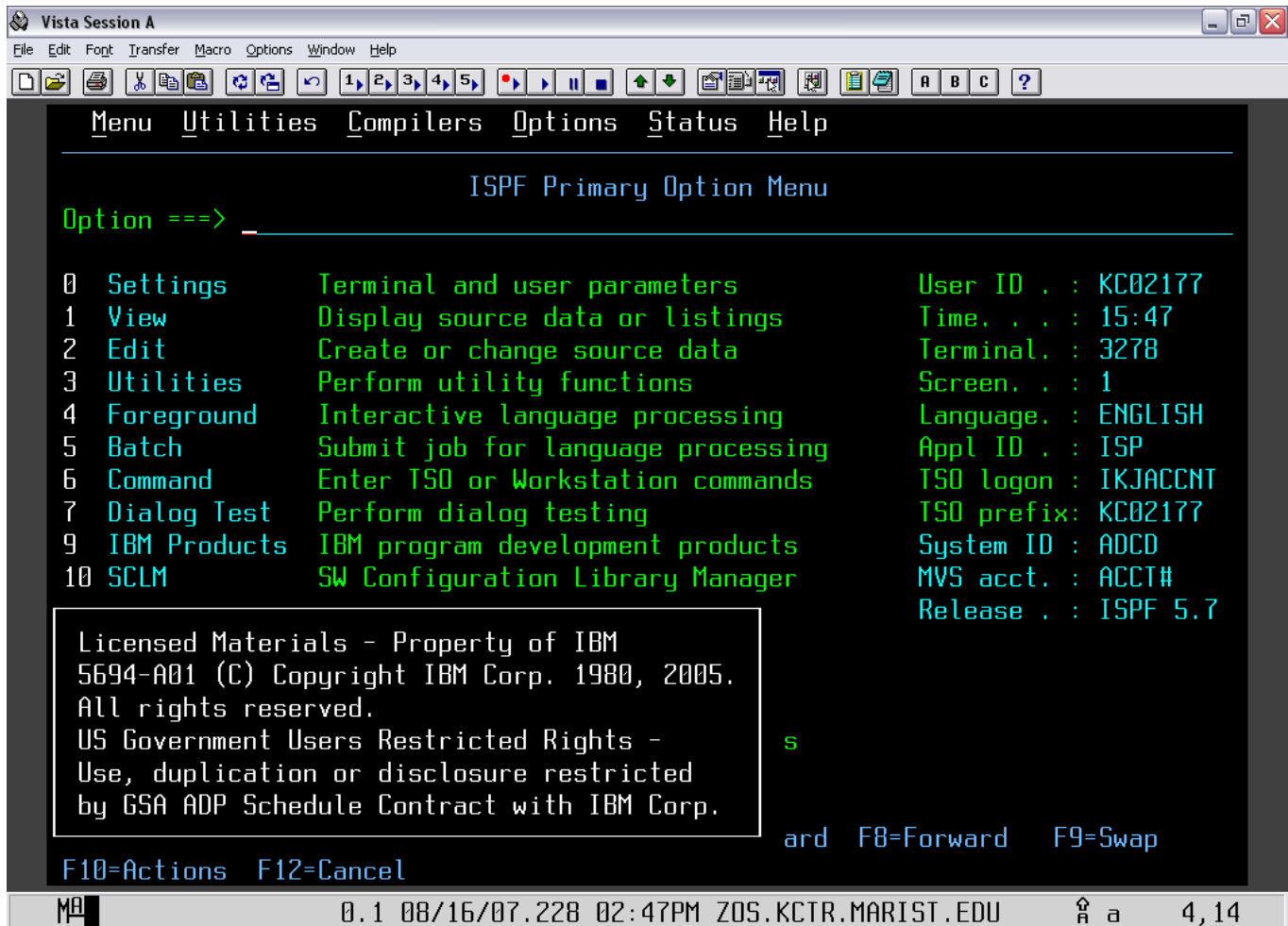
*****
*****
*      WELCOME TO THE IBM ACADEMIC INITIATIVE      *
*      ZSERIES MAINFRAME                          *
*      AND                                          *
*      ZSERIES OPERATING SYSTEM (Z/OS 1.7.0)      *
*      *****                                  *
*      *****                                  *
*      **                                         *
*      **                                         *
*      **                                         *
*      **                                         *
*      **                                         *
*      **                                         *
*      **                                         *
*      **                                         *
*      **                                         *
*      *****                                  *
*      *****OS1.7.0                           *
*****
***
```

The bottom of the window shows a status bar with the following information: **MA** 2.5 08/16/07.228 02:46PM ZOS.KCTR.MARIST.EDU **â a** 24,6

Hit the CTRL key again.

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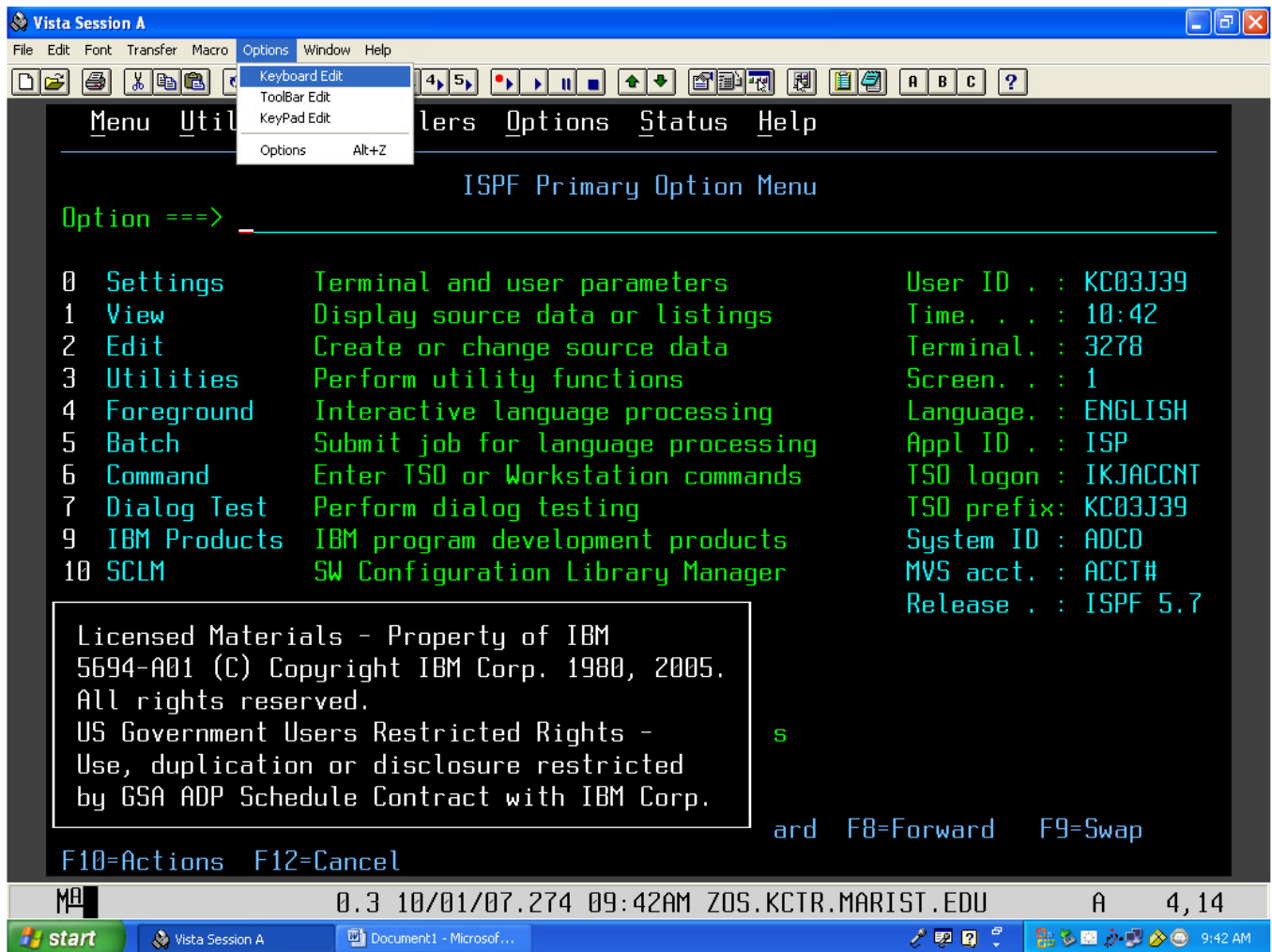
Now you are in TSO and should have a screen that looks like:



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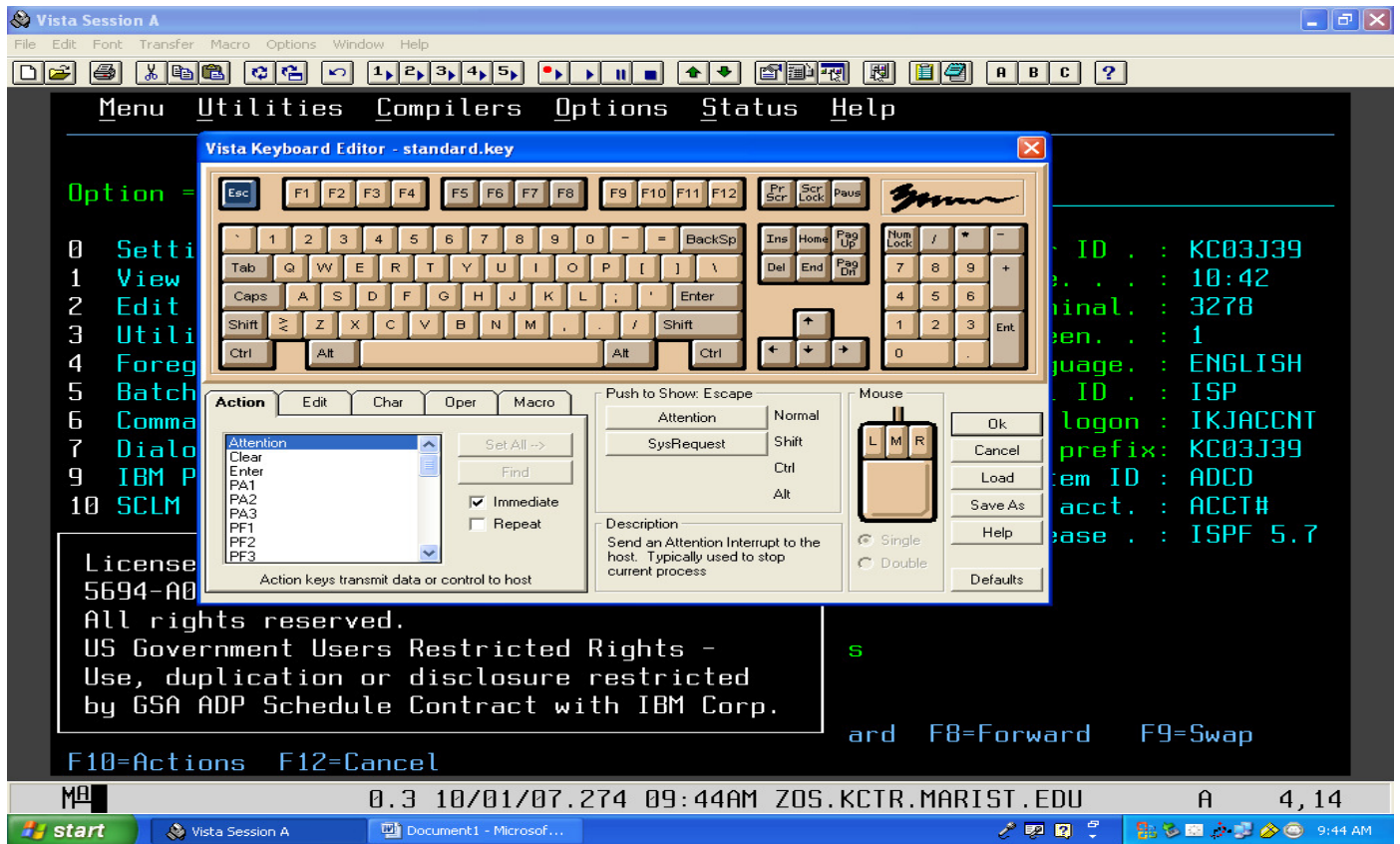
EDIT KEYBOARD “ENTER” KEY

1.) First, you need to open TSO and logon. Once you have done that, you will get to the Primary Option Menu. At the top of the page, find where it says Options and click on it. Then, click the option keyboard edit (as shown below).



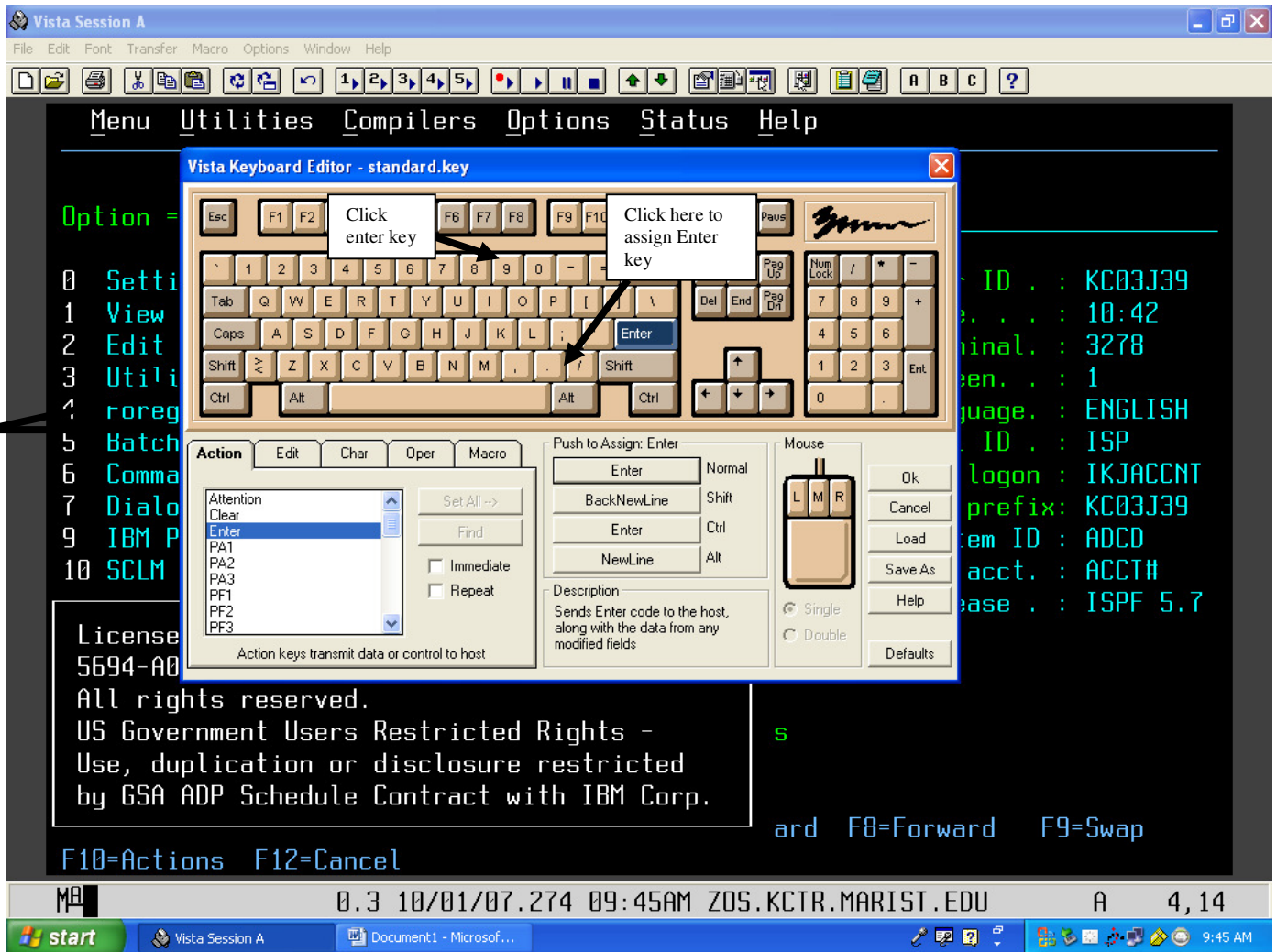
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2.) Once you have clicked on the Keyboard Edit button, the following will appear.



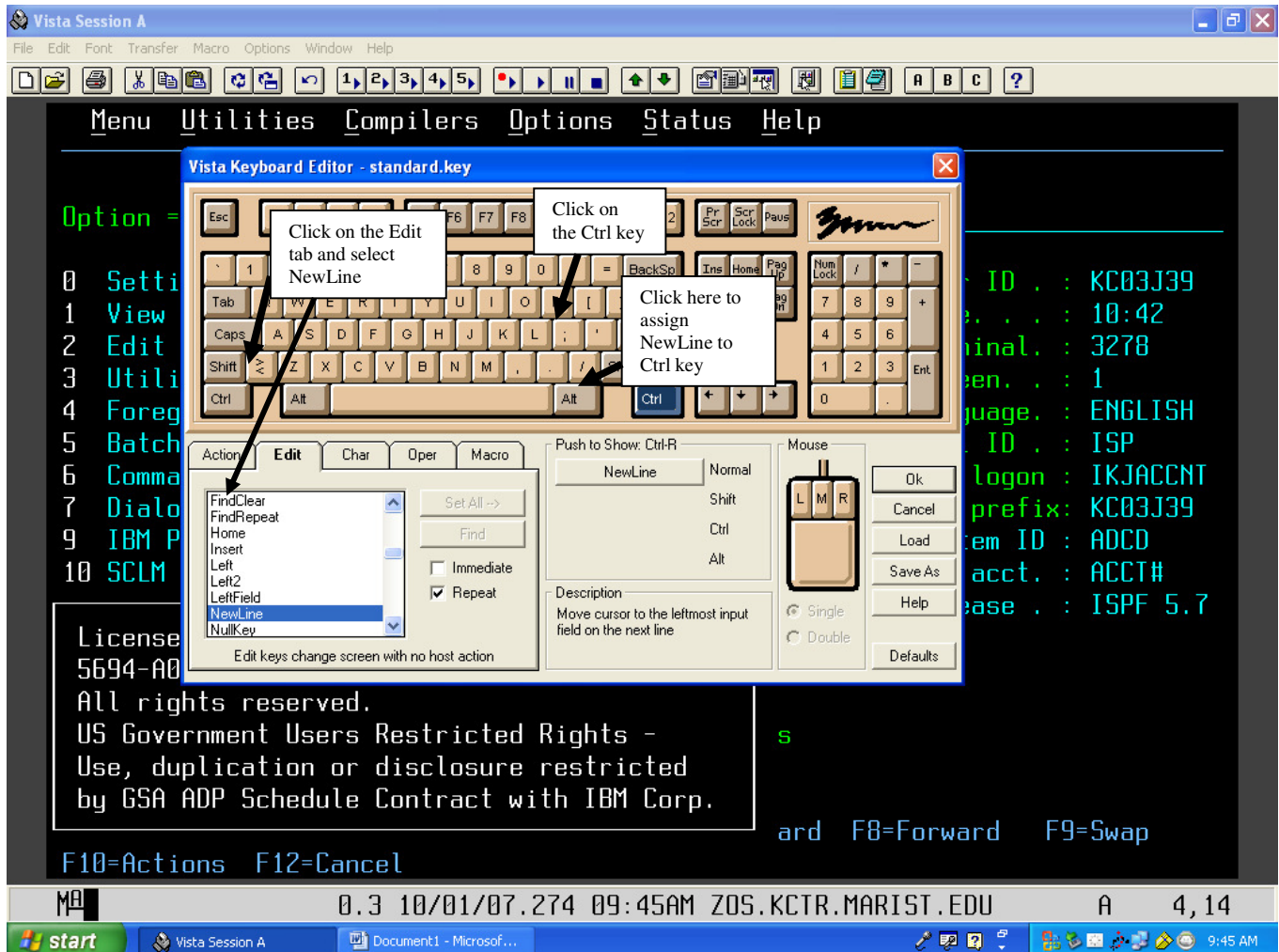
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3.) Next, click on the Enter button (it will highlight in blue). At the bottom left of this window you will see a set of tabs labeled 'Action, Edit, Char, Oper, Macro'. Make sure you are in the Action tab and find where it says Enter. Click on the word enter, under where it says 'Push to Assign Enter' click on the button to the left of the word Normal. The word Enter will then appear in this button.



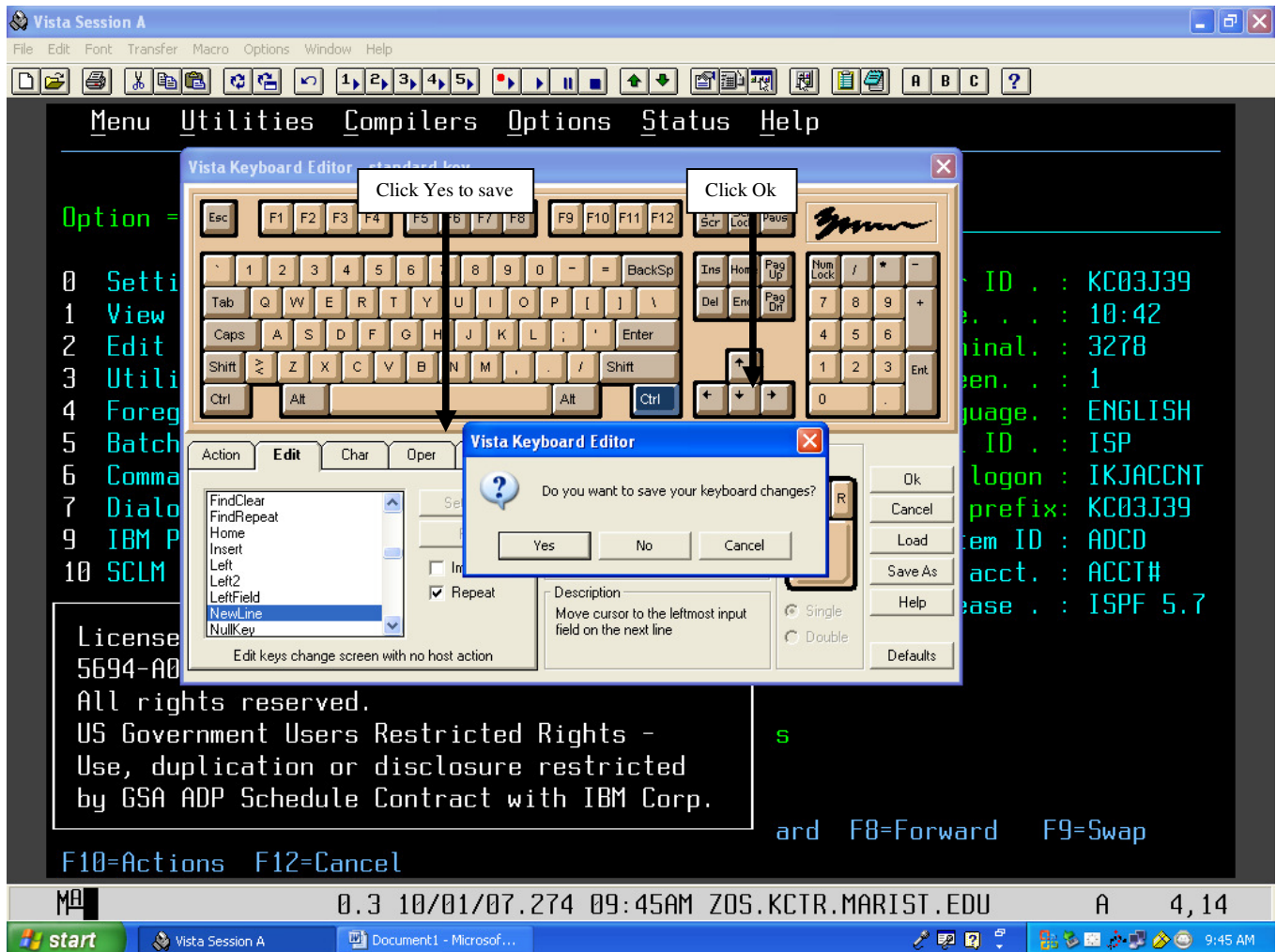
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4.) To assign the function (New Line) to the Ctrl key, click on the Ctrl key as shown below. In the bottom left box, click on the tab Edit and then on the word New Line. Next, under where it says Push to Assign Ctrl-R, click on the button to the left of the word Normal.



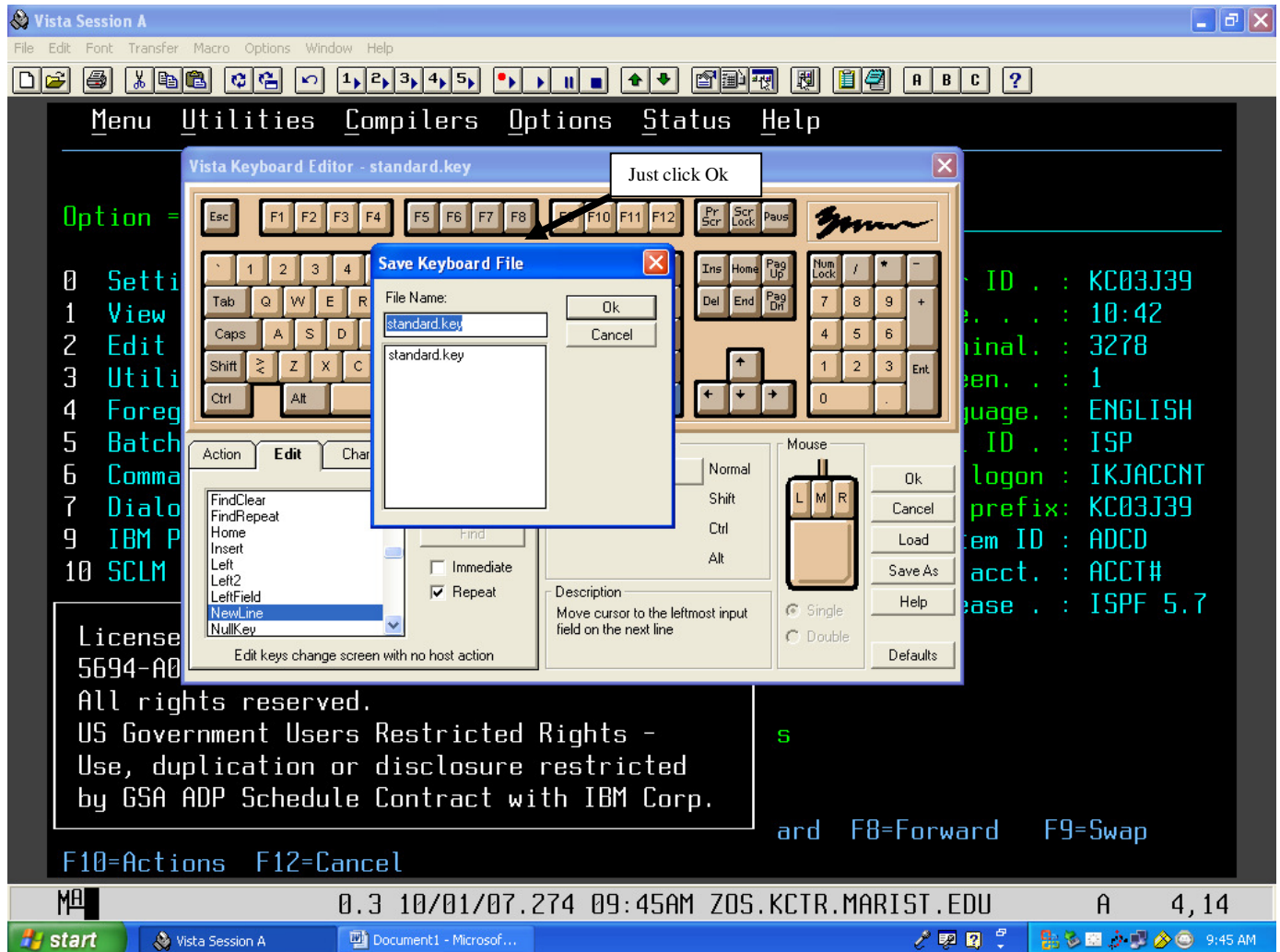
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5.) Finally, click Ok. It will then ask you if you want to save the keyboard changes, click Yes.



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6.) Finally, a box will pop up that says Save Keyboard File. Just click Ok. Then your Enter key is assigned to the Enter function, and your R-Ctrl key is assigned to the NewLine function.



****NOTE****

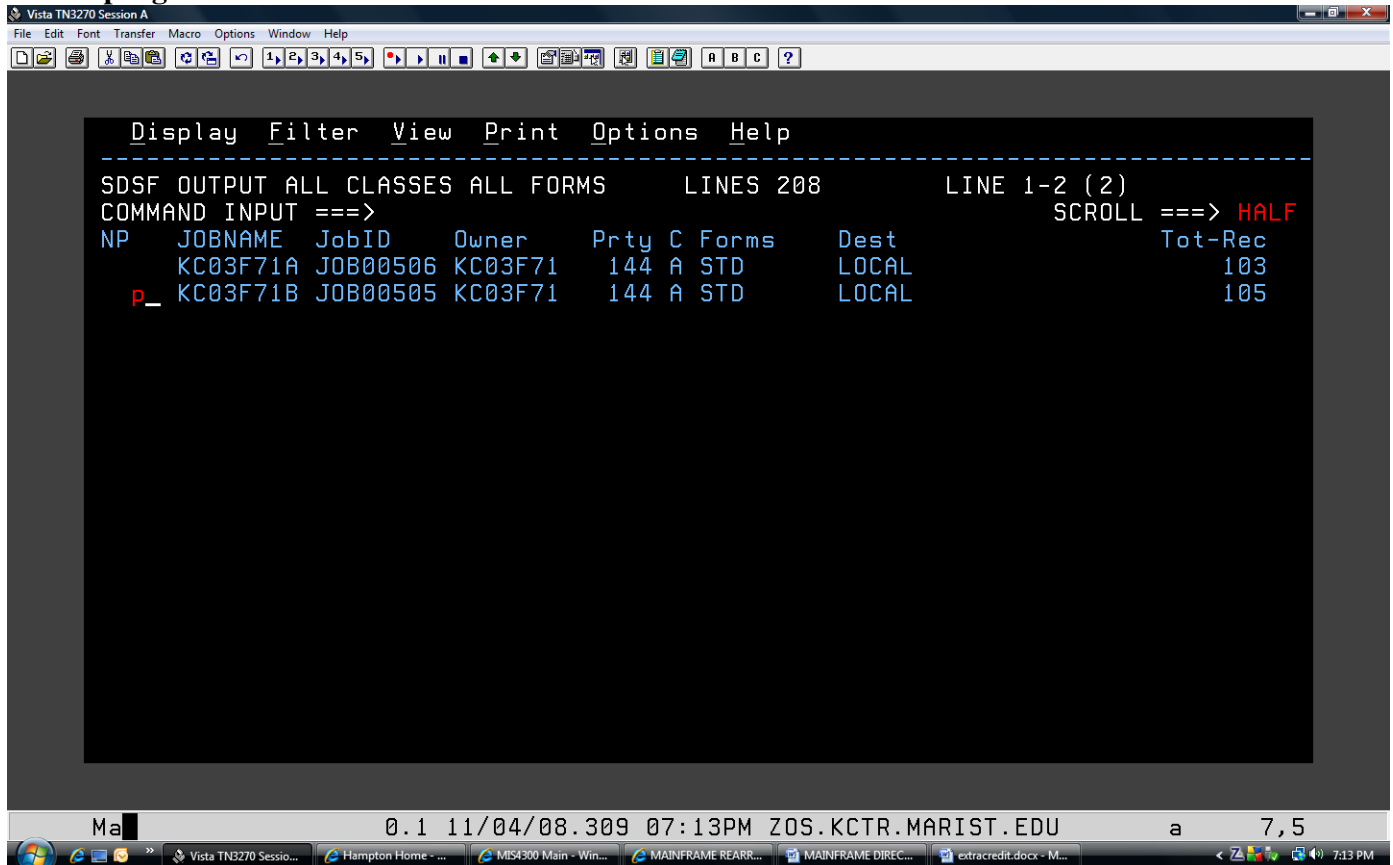
To change any other key on the keyboard, you will follow the exact same steps as mentioned above. However, make sure you track what buttons you change in case one function doesn't work as you thought it was going to or in case you decide later you would like to change the buttons back to the way they were.

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PURGE OUTPUT QUEUE OF YOUR EXECUTED PROGRAMS

If your output queue is becoming quite full or you no longer need specific output you can purge any/all of them from the output queue. To do this type P next to the job(s) that you do not want to be displayed anymore and that job will be purged from the system (no longer available).

Before purge:



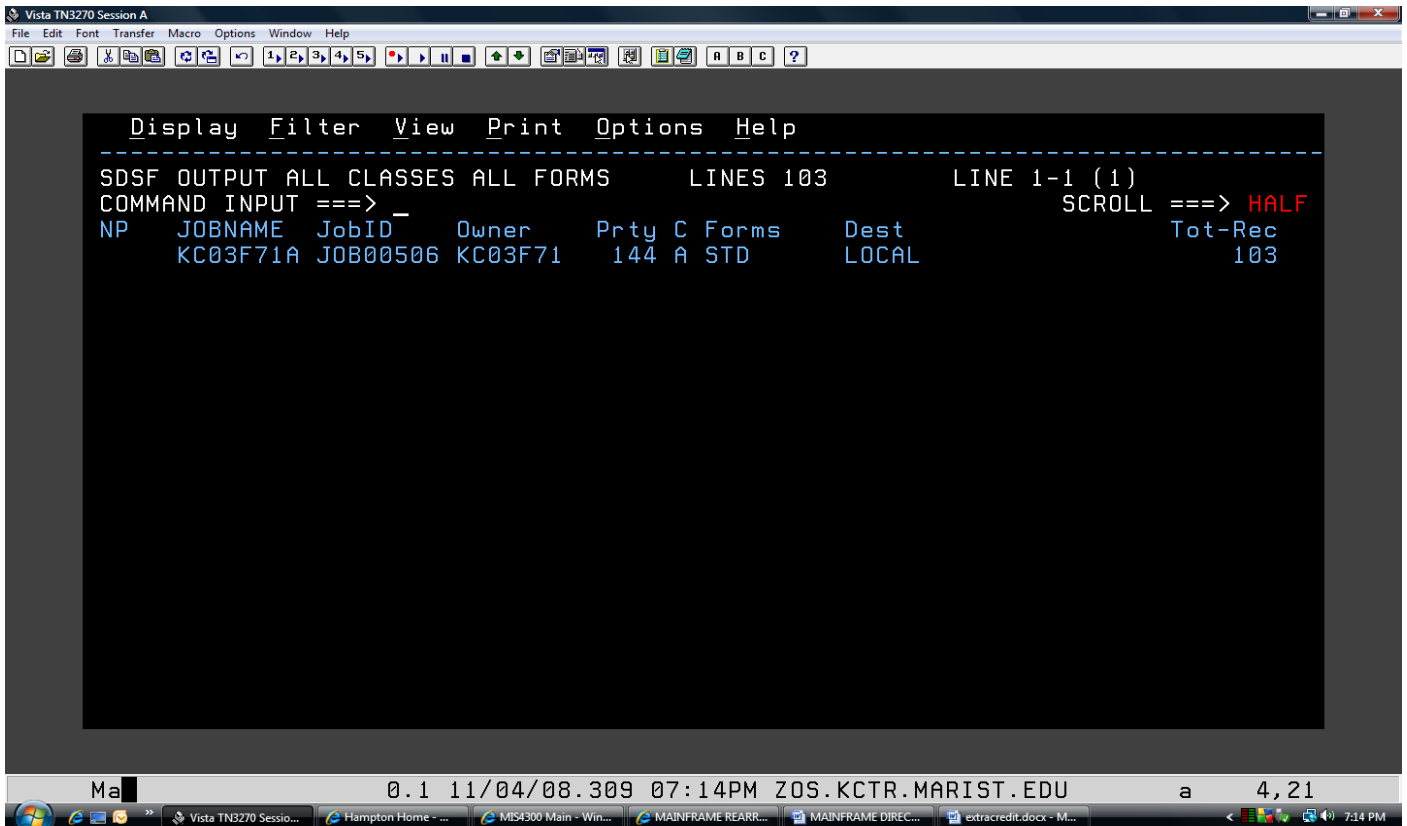
```
-----  
Display Filter View Print Options Help  
-----  
SDSF OUTPUT ALL CLASSES ALL FORMS      LINES 208      LINE 1-2 (2)  
COMMAND INPUT ==>                      SCROLL ==> HALF  
NP  JOBNAME  JobID   Owner    Prty C Forms   Dest      Tot-Rec  
   KC03F71A  JOB00506  KC03F71   144 A STD    LOCAL     103  
P_ KC03F71B  JOB00505  KC03F71   144 A STD    LOCAL     105  
-----
```

Ma 0.1 11/04/08.309 07:13PM ZOS.KCTR.MARIST.EDU a 7,5

Taskbar: Vista TN3270 Sessio..., Hampton Home - ..., MIS4300 Main - Win..., MAINFRAME REARR..., MAINFRAME DIREC..., extracredit.docx - M...

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After purge:



The screenshot shows a z/OS SDSF session window titled "Vista TN3270 Session A". The window contains a menu bar (File, Edit, Font, Transfer, Macro, Options, Window, Help) and a toolbar. The main display area shows the following text:

```
Display Filter View Print Options Help
-----
SDSF OUTPUT ALL CLASSES ALL FORMS      LINES 103      LINE 1-1 (1)
COMMAND INPUT ==>_                     SCROLL ==> HALF
NP  JOBNAME  JobID   Owner    Prty C Forms   Dest      Tot-Rec
    KC03F71A JOB00506 KC03F71   144 A STD    LOCAL      103
```

The status bar at the bottom of the window displays the following information:

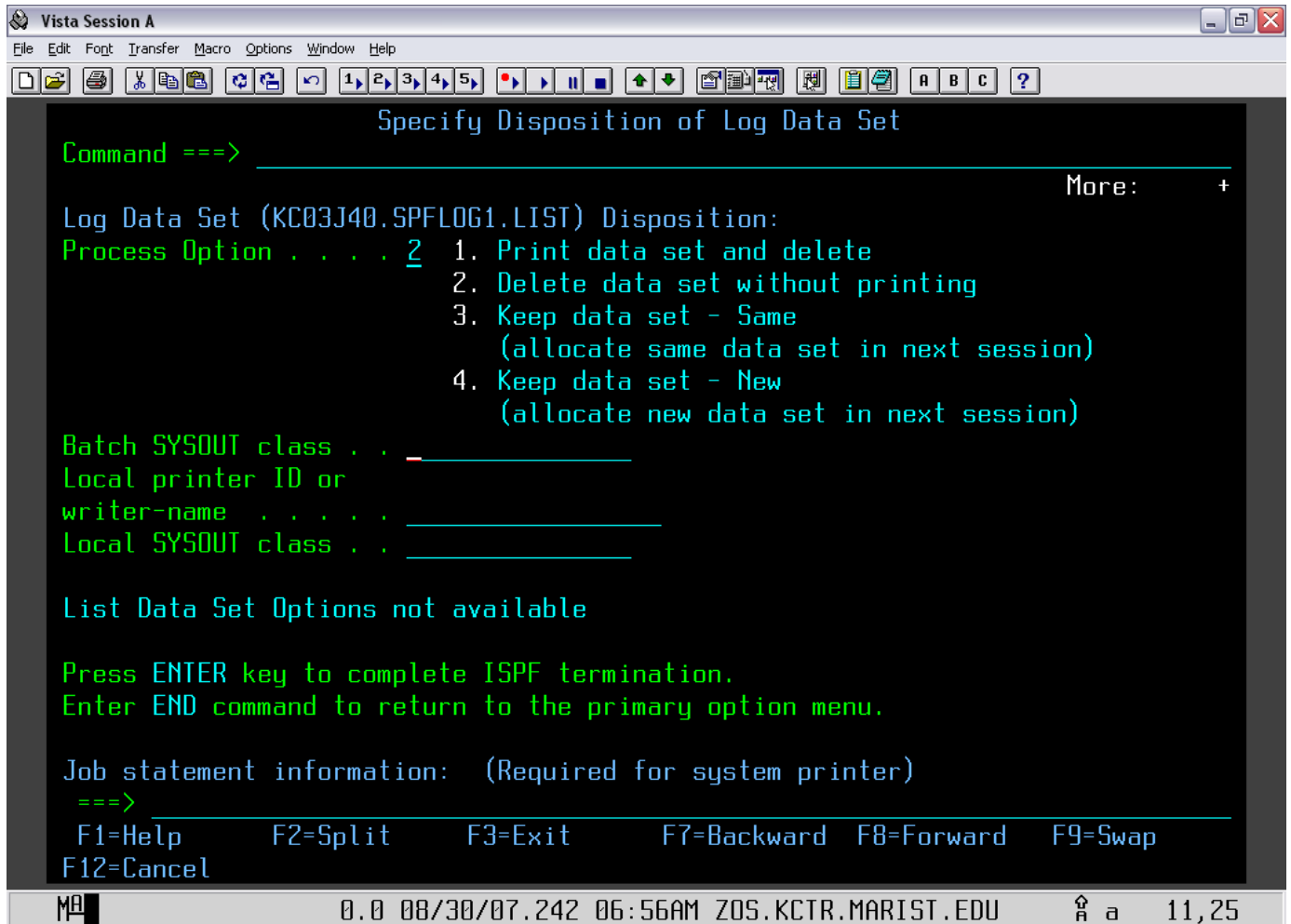
Ma 0.1 11/04/08.309 07:14PM ZOS.KCTR.MARIST.EDU a 4,21

The taskbar at the bottom of the screen shows several open applications: Vista TN3270 Sessio..., Hampton Home - ..., MIS4300 Main - Win..., MAINFRAME REARR..., MAINFRAME DIREC..., and extracredit.docx - M...

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LOGOFF TSO

To logoff TSO, from the main menu hit F3. You should now see a screen similar to:



The screenshot shows a TSO session window titled 'Vista Session A'. The main display area has a black background with green and blue text. The title 'Specify Disposition of Log Data Set' is at the top. Below it, the prompt 'Command ==>' is followed by a blank line. To the right, 'More: +' is visible. The text 'Log Data Set (KC03J40.SPFLOG1.LIST) Disposition:' is displayed. Below this, 'Process Option 2' is shown, followed by a list of four options: 1. Print data set and delete, 2. Delete data set without printing, 3. Keep data set - Same (allocate same data set in next session), and 4. Keep data set - New (allocate new data set in next session). Below the list, there are prompts for 'Batch SYSOUT class . . .', 'Local printer ID or writer-name', and 'Local SYSOUT class . . .'. The text 'List Data Set Options not available' is displayed. Below that, instructions state: 'Press ENTER key to complete ISPF termination.' and 'Enter END command to return to the primary option menu.' The 'Job statement information: (Required for system printer)' section shows '==>' followed by a blank line. At the bottom, function key definitions are listed: F1=Help, F2=Split, F3=Exit, F7=Backward, F8=Forward, F9=Swap, and F12=Cancel. The status bar at the bottom shows 'M4', '0.0 08/30/07.242 06:56AM ZOS.KCTR.MARIST.EDU', and '11,25'.

```
Specify Disposition of Log Data Set

Command ==> _____ More: +

Log Data Set (KC03J40.SPFLOG1.LIST) Disposition:
Process Option . . . . 2  1. Print data set and delete
                        2. Delete data set without printing
                        3. Keep data set - Same
                          (allocate same data set in next session)
                        4. Keep data set - New
                          (allocate new data set in next session)

Batch SYSOUT class . . . _____
Local printer ID or
writer-name . . . . . _____
Local SYSOUT class . . . _____

List Data Set Options not available

Press ENTER key to complete ISPF termination.
Enter END command to return to the primary option menu.

Job statement information: (Required for system printer)
==> _____

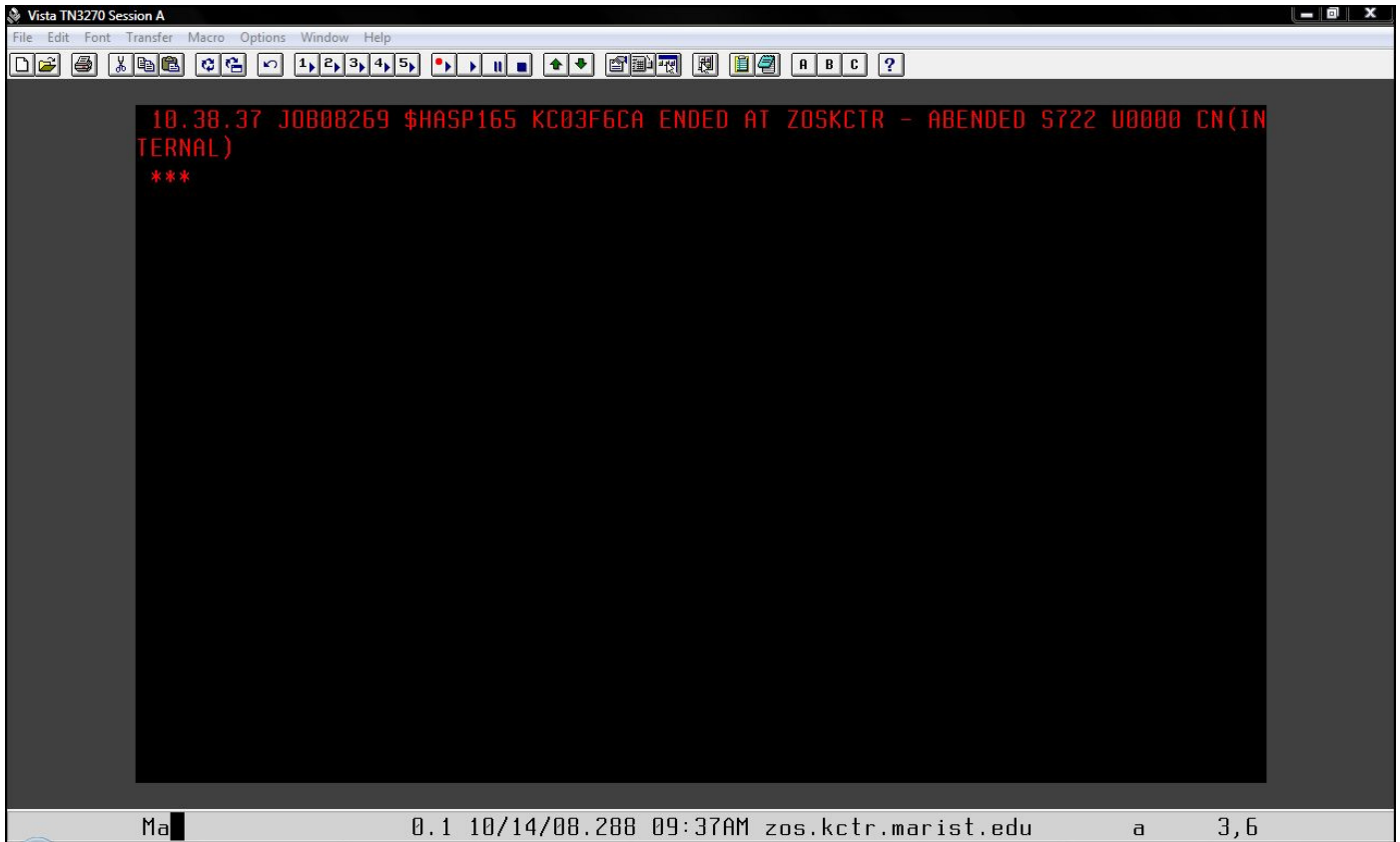
F1=Help    F2=Split    F3=Exit    F7=Backward  F8=Forward  F9=Swap
F12=Cancel
```

Type in 2 and then CTRL. You should now be at a READY screen. Type in LOGOFF and hit CTRL. Wait a few seconds and it will return to the Z/OS screen. Now exit out of the applications. You can re-logon anytime after this if you need to.

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ABEND MESSAGES – FIND OUT WHAT THEY MEAN USING TSO

1. Rather than going outside of TSO, when you receive an ABEND look at the code that it gives you.



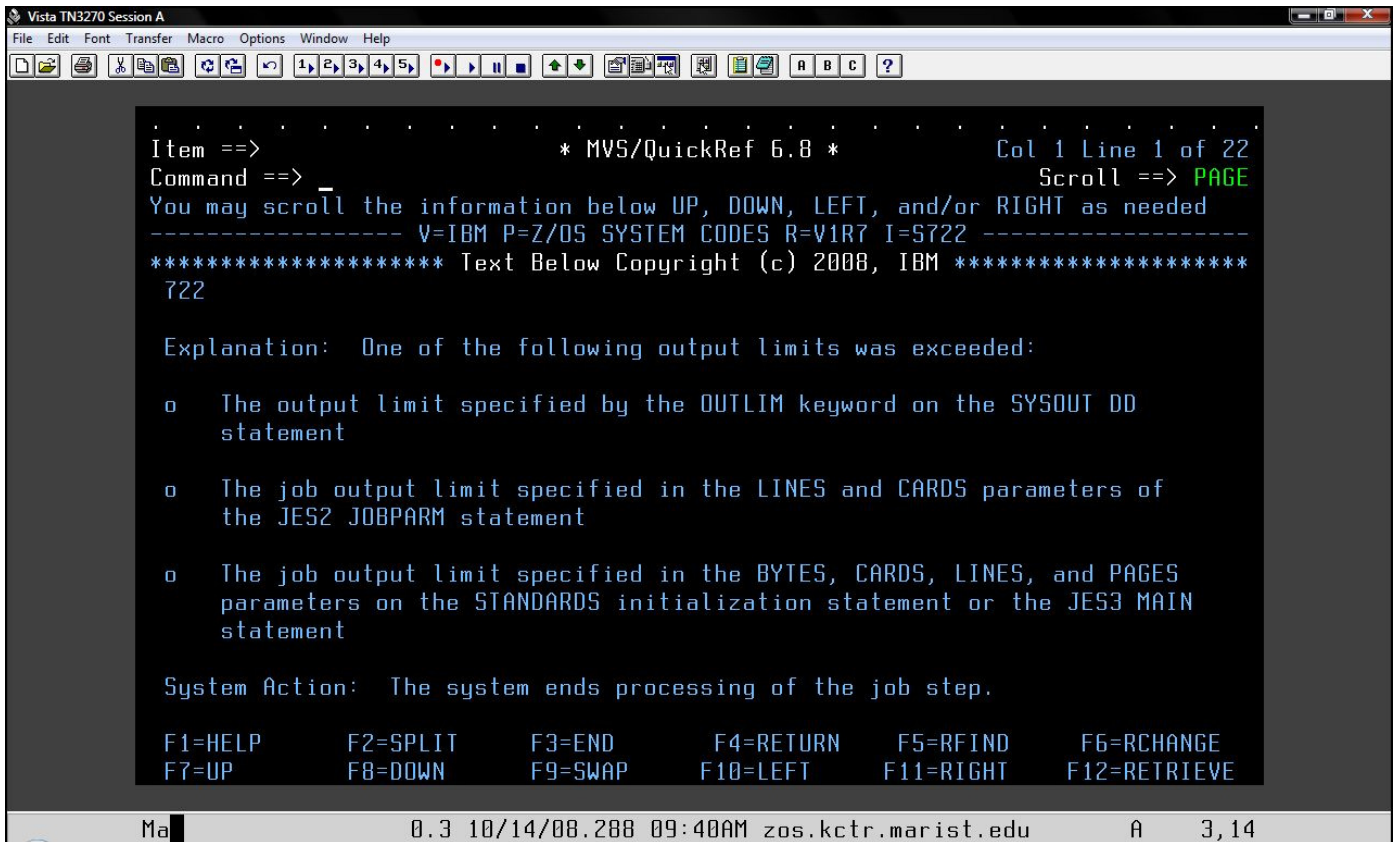
The screenshot shows a TSO session window titled "Vista TN3270 Session A". The window has a menu bar (File, Edit, Font, Transfer, Macro, Options, Window, Help) and a toolbar with various icons. The main display area is black with red text. The text reads: "10.38.37 JOB008269 \$HASP165 KC03F6CA ENDED AT ZOSKCTR - ABENDED S722 U0000 CN(INTERNAL)" followed by three asterisks "***" on the next line. The status bar at the bottom shows "Ma" on the left, "0.1 10/14/08.288 09:37AM zos.kctr.marist.edu" in the center, and "a 3,6" on the right.

```
10.38.37 JOB008269 $HASP165 KC03F6CA ENDED AT ZOSKCTR - ABENDED S722 U0000 CN(INTERNAL)
***
```

Ma 0.1 10/14/08.288 09:37AM zos.kctr.marist.edu a 3,6

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2. In this case it would be S722. Go back to your command line and enter in “QW S722” and you should get...



The screenshot shows a VISTA TN3270 Session A window. The main display area contains the following text:

```
Item ==> * MVS/QuickRef 6.8 * Col 1 Line 1 of 22
Command ==> Scroll ==> PAGE
You may scroll the information below UP, DOWN, LEFT, and/or RIGHT as needed
----- V=IBM P=Z/OS SYSTEM CODES R=V1R7 I=S722 -----
***** Text Below Copyright (c) 2008, IBM *****
722

Explanation: One of the following output limits was exceeded:

o The output limit specified by the OUTLIM keyword on the SYSOUT DD
  statement

o The job output limit specified in the LINES and CARDS parameters of
  the JES2 JOBPARM statement

o The job output limit specified in the BYTES, CARDS, LINES, and PAGES
  parameters on the STANDARDS initialization statement or the JES3 MAIN
  statement

System Action: The system ends processing of the job step.

F1=HELP      F2=SPLIT    F3=END      F4=RETURN   F5=RFIND    F6=RCHANGE
F7=UP        F8=DOWN     F9=SWAP    F10=LEFT   F11=RIGHT   F12=RETRIEVE
```

The status bar at the bottom of the window displays: Ma 0.3 10/14/08.288 09:40AM zos.kctr.marist.edu A 3,14

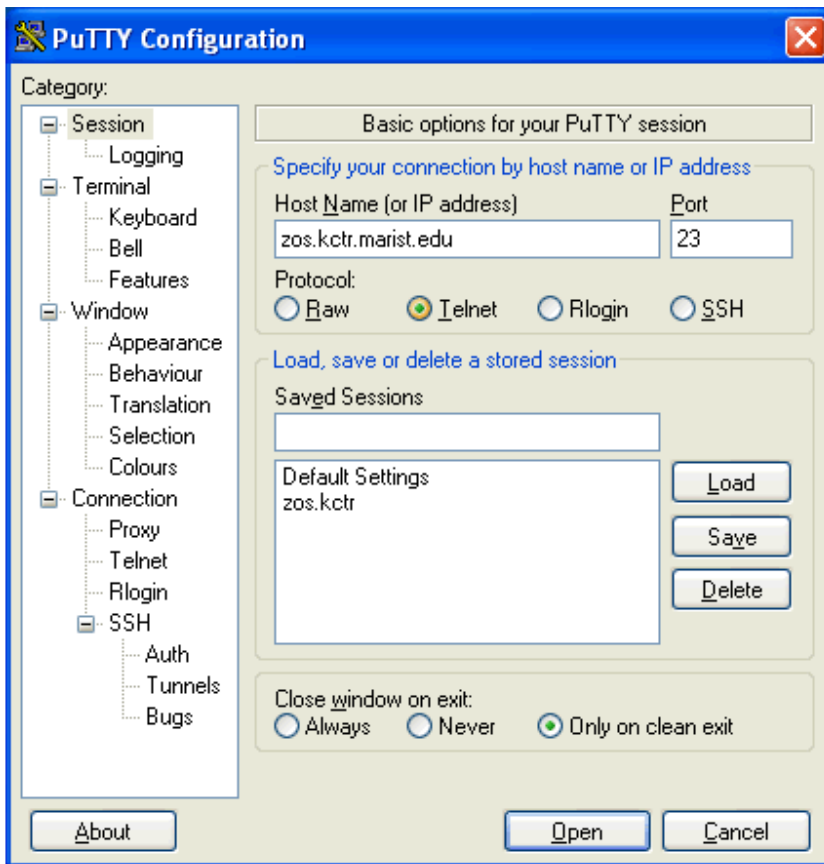
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CONNECTING TO UNIX SYSTEM SERVICES (USS)

Connecting to ZOSKCTR7's USS will require using PUTTY or TELNET.

The z/OS system can be accessed using USS PUTTY (TELNET)...
Where it asks for Host Name or IP Address enter zos.kctr.marist.edu

For PuTTY make sure you put in the HOST NAME.
When you depress the TELNET Key you will notice that the PORT will change to 23.
Depress the OPEN Key to get the session started.



Accessing ZOSKCTR7(z/OS 1.9) for RDZ (PORT 4035 for MVS)
Accessing ZOSKCTR7(z/OS 1.9) for RDZ (PORT 6715 for JES2 Output)

For TELNET go to the PC COMMAND Prompt and key in the following:
TELNET ZOS.KCTR.MARIST.EDU

Personalize the emulation software according to your hardware definition.

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Some solutions to problems people have had trying to connect to Marist Hub.

- 1.) Using Hummingbird set the "Negotiate SSL"
- 2.) To enter 3270 Commands, define the ENTER Key for VistaTN3270.
The KEY definitions 'Right CTRL Key' will have to be defined as the ENTER KEY.
- 3.) The login screen is not compatible with PComm version 5.8.(5/24/06)
- 4.) If you cannot ping the address (zos.kctr.marist.edu), you have a firewall problem.
- 5.) If you are using Filezilla, you cannot specify 1023 as the port but let it default to either 20 or 21.

For a description of the Different Enterprise Courses go to:
www.ibm.com/university/zseries/resources.html

JES2 SYSOUT Information for the ZOSKCTR7 System:
MSGCLASS Definition.....

MSGCLASS=H is used if you want the job to be in the HELD queue. This is the Held Output Queue.
MSGCLASS=A is the normal SYSOUT which will be deleted from the system every hour. This would be the OUTPUT queue(SDSF).
MSGCLASS=5 is used if you want the SYSOUT deleted.
MSGCLASS=9 is also used to delete SYSOUT.

PDS= ZOSKCTR.PROCLIB
(IGYWC)COBOL Compile
(IGYWCL)COBOL Compile and Load(Link Edit).....
(IGYWCLG)COBOL Compile, Load(LinkEdit) and Go

JCL required to run the COBOL Programs, JCL examples are included below to help Students COMPILE, COMPILE and Link or CLG.

The enhancements may help you or give you some interesting challenges.

Students can create a COBOL program(file) and then use it as input to the following

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COBOL COMPILE, LINK and GO JCL EXAMPLE:

```
//STUDENT JOB          <- - - - - YOUR JOB CARD
//COBOL1 EXEC IGYWCLG,REGION=50M,
// PARM.COBOLE='TEST,RENT,APOST,OBJECT,NODYNAM,LIB,SIZE(1048376)'
//* STEPLIB IS RELEASE DEPENDENT
//COBOL.STEPLIB DD DSN=IGY340.SIGYCOMP,
// DISP=SHR
//COBOL.SYSIN DD DISP=SHR,DSN=STUDENT.COBOLE.PROGRAM
//* {NAME OF THE PROGRAM(file) TO COMPILE}
//GO.INFILE DD DISP=SHR,DSN=STUDENT.INDATA
//* {INPUT FILE FOR GO STEP(OPTIONAL)}
//GO.OUTFILE DD DISP=SHR,DSN=STUDENT.OUTDATA
//* {OUTPUT FILE FOR THE GO STEP(OPTIONAL)}
```

COBOL COMPILE, LINK JCL EXAMPLE:

```
//STUDENT JOB          <- - - - - YOUR JOB CARD
//COBOL1 EXEC IGYWCL,REGION=250M,
// PARM.COBOLE='TEST,RENT,APOST,OBJECT,NODYNAM,LIB,SIZE(1048376)'
//COBOL.SYSIN DD DISP=SHR,DSN=STUDENT.COBOLE.PROGRAM
//* {NAME OF THE PROGRAM(file) TO COMPILE}
```

COBOL COMPILE JCL EXAMPLE:

```
//STUDENT JOB          <- - - - - YOUR JOB CARD
//COBOL1 EXEC IGYWC,REGION=250M,
// PARM.COBOLE='TEST,RENT,APOST,OBJECT,NODYNAM,LIB,SIZE(1048376)'
//* STEPLIB IS RELEASE DEPENDENT
//COBOL.STEPLIB DD DSN=IGY340.SIGYCOMP,
// DISP=SHR
//COBOL.SYSIN DD DISP=SHR,DSN=STUDENT.COBOLE.PROGRAM
//* {NAME OF THE PROGRAM(file)TO COMPILE}
```

The High Level Assembler can be used by using the following PROCS found in the following PROCLIB::

PDS= ZOSKCTR.PROCLIB

ASMAC - for compile.

ASMACL - compile and LKED

ASMACG - ASM and EXECUTE(GO)

ASMACLG - ASM, LKED, and GO

=====

Contact Information:

Technical Systems Services
Information Technology
Marist College
3399 North Road
Poughkeepsie, NY 12601
email: kctradmin@marist.edu