

## Introduction to TSO

As announced, VM has been targeted for removal as of June 30, 2005. The replacement service is OS/390 (also commonly known as MVS). All CMS users will need to take steps to make the transition over to OS/390. This document acts as a guide through that transition.

### Requesting a TSO Userid

In order to work on OS/390, each individual will need a TSO userid. TSO is similar to CMS in that it is an interactive environment where datasets are edited, jobs submitted, and output is viewed and printed. On VM, everyone has a CMS userid, while on OS/390 everyone must have a TSO userid.

To request a TSO userid, an SSP form must be submitted. On the form, specify the desire for a TSO userid and specify the userid that you are currently using in your USER= parameter on your JOB statement or on the `//*LOGONID` statement from the jobs you currently submit from CMS. SSP forms can be obtained from the Customer Service Center by calling 453-5155.

### TSO Logon

Once you have been contacted informing you that your TSO userid has been created, you can then logon using the password provided. The software most often used for Windows-based PC's is called TN3270 from McGill University. If you do not have this software, contact Customer Service at 453-5155.

Double-click the TN3270 icon on your Windows desktop or select it from the Windows Start menu. In the IP Host/Gateway field, specify SIUCMVSA.SIU.EDU as the address. Select terminal type 3270. Click the Connect button to start a session. An OS/390 screen should display.

From the command prompt, enter the command **TSO *userid*** in order to logon to TSO. If you have never used your TSO userid before, you will be prompted for a new password which you will have to enter twice for verification. During the logon process, you may encounter three asterisks (\*\*\*). This is simply an indication that the screen has been paused so you can review the information displayed. You can clear the screen by pressing Enter. Also, as part of the logon process, you will receive a message 'NO BROADCAST MESSAGES'. This message is normal and can be ignored.

After the logon process is complete, you will be presented with the OS/390 Main Menu. From this menu, you can select options by typing a letter or number representing the option, and then pressing Enter. You will notice at the top it says 'AMVS'—this refers to our 'A' system or production system that you are currently logged onto.

### Introduction to Datasets

The first thing you will want to do is create a dataset for storing your CMS files. On CMS, files are known by 'filename' and 'filetype' (e.g., PAYROLL JOB), while on OS/390 they are known by 'qualifier.qualifier.qualifier.etc.' (e.g., JOE.JOB.CNTL). In the example, 'JOE' is a fictional TSO userid, and the dataset is Joe's 'job control' dataset where he stores all of his jobs for submission to OS/390.

A common type of dataset on OS/390 is known as a Partitioned Organization dataset (also known as a partitioned dataset or PDS). It holds *members* which might be thought of as different files on an A-disk on CMS. The individual members contain jobs or other data. For example, if my JOE.JOB.CNTL dataset on OS/390 stores all of my jobs and I have a job called PAYROLL, then the full name is JOE.JOB.CNTL(PAYROLL). Another member in my job control dataset that has a budget-related job might be called JOE.JOB.CNTL(BUDGET).

You are not limited to the name JOB.CNTL. For example, you could also have a dataset called JOE.JOBS.REPORTS which contain all of Joe's jobs related only to reporting. These could contain all the CMS job files called JOB1 REPORTS, JOB2 REPORTS, etc. on your CMS A-disk. They all share the same filetype on CMS, therefore, the dataset name has 'REPORTS' as part of the name. Since it is a PDS, the members would be called JOB1, JOB2, etc. This is one way of organizing CMS files when transferring them to TSO datasets.

## **Introduction to ISPF**

The tool used for editing datasets on TSO is called ISPF, the Interactive System Productivity Facility. This is accessed via the I selection on the TSO Main Menu. ISPF is a very powerful facility with many tools and options.

## **Allocating a JOB.CNTL Dataset**

The first tool to work with in ISPF for a first-time TSO user is the Data Set Utility. This utility does many things, but initially we should use it to allocate a job control dataset. When you are given a TSO userid for the first time, there are no datasets allocated to your account. So, the first thing you should do is create a job control dataset which will hold the jobs that you submitted on CMS. Later in this document, you will learn how to transfer all of your jobs from CMS over to this new dataset on TSO.

From the TSO Main Menu enter I . 3 . 2, or separately enter I for ISPF Primary Option Menu, then 3 for Utility Selection Panel, and then 2 for Data Set Utility. You can use the PF3 (or F3) key to jump back a screen if needed.

When the Data Set Utility menu displays, type an A for 'Allocate new data set' on the 'Option' line at the top. Tab down to the 'Data Set Name' line, then type JOE.CNTL, and press Enter. The 'Allocate New Data Set' menu will be displayed.

At the top you will see your completely named '*userid*.JOB.CNTL' dataset that you are about to create. All fields should be blank except for the following:

Device type	type POOL in order to allocate the dataset on a POOLxx volume
Space units	type CYLINDER to allocate in cylinders
Primary quantity	type 1 to allocate one primary cylinder
Secondary quantity	type 1 to allocate one secondary cylinder which gives extra space if the primary fills up
Directory blocks	type 50 which will give you roughly 250 members
Record format	type FB which stands for Fixed Blocked
Record length	type 80 for the standard 80 character record length
Block size	type 4000 which will store approximately 50 records per block

You can modify the suggested primary/secondary quantity and directory blocks fields, if needed.

Press Enter and your new dataset will be allocated.

### **Transferring Files from CMS to TSO**

With your new job control dataset created, you can begin transferring data from CMS to TSO. For these instructions, let's assume that both your CMS ID and TSO ID is 'JOE'. The program we will use to transfer files between systems is called FTP (file transfer protocol). The file transfer will take place on your CMS userid.

The first step is to open a TN3270 session and connect to `SIUCVM.SIU.EDU`. Then logon to your CMS userid.

Print a list of files you want to transfer over to TSO. Make sure they are not packed. The files should be Fixed (not Variable) and have a record length of 80. CMS files that are not Fixed 80 can be transferred over, but a different dataset will need to be allocated on TSO with the appropriate dataset attributes.

Enter the following command at the CMS command prompt: `FTP SIUCMVSA.SIU.EDU`

Enter your TSO userid and password. You should receive a prompt similar to the following:

```
230 JOE is logged on. Working directory is "JOE".
Command:
```

To transfer CMS file `ABC JOB A` to member `ABC` in your TSO dataset `JOE.JOB.CNTL`, enter:

```
PUT ABC.JOB.A JOB.CNTL(ABC)
```

Enter another PUT command to transfer another file.

Enter QUIT to terminate your FTP session.

### **Using XFERTSO to Transfer Files**

An alternative method of transferring files from CMS to TSO is via the XFERTSO exec on CMS. To use the exec, you must first create an XFERTSO TABLE on your A-disk specifying the CMS files to transfer and the TSO datasets to receive the data. An example of the format for the XFERTSO TABLE is as follows:

```
ABC JOB A JOE.JOB.CNTL(ABC)
MYDATA FILE A JOE.MYDATA
```

In the first example, CMS file ABC JOB A will be transferred to TSO dataset JOE.JOB.CNTL into member ABC. In the second example, CMS file MYDATA FILE A is transferred to TSO dataset JOE.MYDATA.

For the transfer to work properly, all CMS files must be Fixed format and record length 80. They should not be packed.

Once the XFERTSO TABLE is created, then simply run the XFERTSO exec from the CMS ready prompt as follows:

```
XFERTSO
```

A file called XFERTSO OUTPUT is created on your A-disk which contains a job to transfer the data to TSO. You will need to specify your TSO password on the PASSWORD= parameter on the JOB statement, file it, and then submit the job. A listing will be returned to your CMS reader. You should logon to TSO to make sure the data was transferred correctly.

### **Editing a Dataset**

After completion of file transfer from your CMS userid, you can then check your JOB.CNTL dataset on TSO to make sure the files were transferred. From the TSO Main Menu, enter 1.3.4 to display the Data Set List Utility menu. Tab down to Dsname Level and type your userid.JOB.CNTL dataset and press Enter. Tab down to where the cursor is directly in front of the userid.JOB.CNTL dataset, type E (for Edit), and press Enter. A list of members should now be displayed. These are the CMS files that you transferred earlier. To select a member to be edited, tab down to one of the member names, type S (for Select), and press Enter. Or, you can simply press Enter while the cursor is next to the member name. The member you selected will now be displayed in the ISPF Editor.

The ISPF Editor is very similar to Xedit on CMS. There is a command line at the top (or bottom, depending on your TSO configuration) for commands such as:

CAN	- short for CANCEL, cancels the edit session, modifications are not saved
C	- short for CHANGE, a powerful tool for changing text in the member
F	- short for FIND, finds a string in the member, press PF5 to repeat find
KEYS	- displays the PF key settings
RES	- short for RESET, eliminates highlighted messages and text
SAVE	- saves the member you are editing, but remain in the edit session

**SORT** - sorts data in ascending or descending order  
**SUB** - short for SUBMIT, submits a job to OS/390 for processing

These commands are known as 'primary commands'. Some of these commands (e.g., FIND and SORT) have additional parameters. To receive help on primary commands, enter the HELP command, type 13 to select help on primary commands, and press Enter.

There is also a prefix area to the left with line numbers where you can also specify 'line commands' such as:

<b>A</b>	Insert data after a line - used with Copy or Move
<b>B</b>	Insert data before a line - used with Copy or Move
<b>C</b>	Copy a line (using an A or B prefix command) – also can use CC
<b>COLS</b>	Display a ruler of column numbers to help in placing data in specific columns
<b>D</b>	Delete a line
<b>I</b>	Insert a line
<b>M</b>	Move a line (using an A or B prefix command) – also can use MM
<b>R</b>	Repeat a line

To save your changes and exit out of the editor, press the PF3 key. Issue the CANCEL command to quit without saving.

## **PF Keys**

PF keys are great shortcuts for many common tasks. Here is a brief list of some of the more useful PF keys and their default settings:

<b>PF1</b>	- display Help menu
<b>PF3</b>	- exit and save member
<b>PF5</b>	- repeat the last Find command
<b>PF6</b>	- repeat the last Change command
<b>PF7</b>	- page up a screen at a time
<b>PF8</b>	- page down a screen at a time
<b>PF10</b>	- shift the edit screen to the left
<b>PF11</b>	- shift the edit screen to the right
<b>PF12</b>	- retrieve the last command entered

The primary command KEYS displays a menu that allows you to change your PF key settings. Use PF3 to exit out of KEYS.

If you wish to display your PF key settings at the bottom of every menu, enter the command PFSHOW ON. To turn off the PF key display, enter the PFSHOW OFF command.

## **Using Split Screens**

A nice feature of TSO is the use of split screens. These are additional screens that you can use for any TSO task. Begin by entering the KEYS command, setting PF2 to the START command, and setting PF9 to the SWAP NEXT command. Ignore any values that those keys were previously set to. You will have to do this from any screen that you wish to use split screens. This will allow up to 8 split screens. Press PF3 to exit out of KEYS.

Now that you have made the appropriate changes in the KEYS menu and have exited out of KEYS and back to the original menu, press PF2 to split the screen. You are presented with a new ISPF Main Menu. From this new screen, enter KEYS again, and follow the same procedures as above.

Now press PF9 to swap back and forth between screens. To add any additional screens, make sure to enter the KEYS command first to make sure PF2 and PF9 are set properly. If for some reason the menu swapping isn't working properly, make sure PF2 and PF9 are set correctly using the KEYS command. Once you have PF2 and PF9 set on all screens that you use most frequently, then you will not have to use the KEYS command as frequently. Once you get the hang of split screens, you will find it a very powerful way of using TSO.

### **Copying Data From Another Member**

While you are editing a member, you can merge another member of your JOB.CNTL dataset into the current member being edited. Type **COPY *member*** on the command line, where 'member' is the name of the member you want copied. Tab down to the prefix area (the numbers that appear along the left), type an A (for After) in the prefix area of one of the lines, and press Enter. The member will be copied after that line. In the above example where an A was used in conjunction with the COPY command, you can also use B (for Before) to copy a member and insert it before a line.

### **Using CUT and PASTE to Copy Data From Another Member**

Another method for copying data is using the CUT and PASTE commands. These commands allow you to select a small portion of data from another member, instead of copying the entire member. While you are editing a member, you can edit another member by using the EDIT membername command. For example, while editing member XYZ, you can issue the command EDIT ABC to bring up member ABC in edit. While editing the new member, put a CC command to the left of one line in the prefix area, and another CC command to the left of another line in the prefix area in order to setup a block of data to copy. Then, issue the CUT command on the command line. The lines will be copied (not actually cut) to a clipboard in the editor. Exit out of the member with PF3 to return to the previous member you were first editing. Then find the place you wish to copy the lines, put an A command to the left of one line in the prefix area, and then issue the PASTE command on the command line. The data will be copied after the line. You could also use B to copy before the line.

### **Moving Around in the Editor**

While editing a member, you can go forward and backward a page at a time by using PF7 and PF8. You can go immediately to the top by typing M (for Maximum) on the command line, and then pressing the PF7 key. To go immediately to the bottom, type M and press PF8. To go forward or backward a certain number of lines, type that number on the command line and press PF7 or PF8. There is also a SCROLL option in the upper right of the editor that allows you to specify the amount of scroll for PF7 and PF8. HALF (for half a page), PAGE (full page), and a specific number (e.g., 20) are among some of the scroll settings. More information can be found in the help menus.

## Copying and Moving Lines

While editing a member, you can copy a line after another line by tabbing to the source line to be copied, typing C (for Copy) in the prefix area, then tabbing to the target line, typing A (for After) in the prefix area, and then pressing Enter. You can also use M to Move a line or use B for Before. You can also use PF7 and PF8 to find the source and target lines. The command takes effect only when a C or M has been placed in the prefix area in front of one line, and an A or B has been placed in the prefix area in front of another line, and Enter has been pressed.

## Editing a Job for Proper OS/390 Submission

Before submitting a job to OS/390 for processing, make sure it is set up correctly. The JOB statement should look similar to the following:

```
//jobname JOB (2,bin),name,TIME=t,CLASS=c,MSGCLASS=X,REGION=4M
```

where:

jobname	is your job name up to 8 characters
bin	is your bin number (four numbers or your secure bin code)
name	is your name (first or last name, or full name in single quotes)
t	is the job time (see below)
c	is the job class (see below)

Job time and class should be coded according to the following table:

Class	Time
-------	------

A	1 minute or less (e.g., TIME=1)
B	5 minutes or less (e.g., TIME=5)
C	10 minutes or less (e.g., TIME=10)
D	20 minutes or less (e.g., TIME=20)
E	2 hours or less (e.g., TIME=120)
N	20 minutes or less, but will only run at night from 5pm – 7am (e.g., TIME=20)
W	unlimited time (e.g., TIME=1440)

The parameter MSGCLASS=X is required for sending the job listing to a holding area known as the SDSF Hold Queue. The hold queue is similar to the CMS Reader or Reader List and allows you to review the job listing that is produced after the job is completed. Also, for any occurrence of 'SYSOUT=' in your JCL, be sure to change it to 'SYSOUT=\*'. The asterisk refers back to the X message class and routes your output to the hold queue. If you are certain that you want to actually print a particular SYSOUT, then specify SYSOUT=A or SYSOUT=C, plus additional parameters as needed. If you wish the listing to be printed without first reviewing it online, then change message class to MSGCLASS=A. The listing will be printed at the Wham Computer Center and binned according to your specified bin number.

When submitting jobs from TSO, your userid and password do *not* need to be specified in USER= and PASSWORD= parameters on the JOB statement. Remove those parameters. Also, remove any //\*LOGONID and //\*PASSWORD statements that specify your userid and password.

Remove any ROUTE PRINT or ROUTE PUNCH statements. These are *not* required.

### **Submitting a Job**

While editing a member of your JOB.CNTL dataset that contains the JCL for a job to be submitted to OS/390, you may submit that job from the edit session. Type the SUB command on the ISPF Editor command line and press Enter to submit the job. To help in understanding the next section that discusses the SDSF Hold Queue, it is recommended that you submit a job so that you have a listing to display in the hold queue.

### **Using the RUN Command to Submit a Job**

An alternative method of submitting a job is by using the RUN command (actually a locally-written exec). The RUN command allows you to specify GET statements that point to other datasets or members that contain other lines of code or data that you wish to insert into your job before it is submitted. The format of the GET statements are illustrated by the following examples:

```
GET JOE.JOB.CNTL(ABC)
GET JOE.MYDATA
```

The first statement will insert lines from the member JOE.JOB.CNTL(ABC), while the second statement insert lines from the sequential dataset JOE.MYDATA. The GET statements are replaced with the actual code when the RUN command is issued from the command line while editing the job to be submitted.

### **Initial SDSF Setup**

SDSF is the facility that is used to track a job's execution and ultimately view it's output. Those new to SDSF will need to configure it one time in order to use it properly. From the ISPF Main Menu, issue the S command to run SDSF. When the SDSF PRIMARY OPTION MENU is



displayed, enter the H command to display the Hold Queue. This shows all held output for any jobs that you have submitted. At the moment, your hold queue probably does not show any job listings. The following commands should correct that. From the hold queue command line, issue these commands:

SET DISPLAY ON	displays the settings of PREFIX, DEST, etc.
OWNER <i>userid</i> *	displays all output submitted from your userid. Substitute your userid in the command (e.g., OWNER JOE*).
PREFIX **	displays all hold queue items
SORT CRDATE D	displays hold queue items with the most recent at the top

The above commands need to be issued only this one time. Be sure to substitute 'userid' in the second command above with your actual TSO userid immediately followed by an asterisk. The listing from the job you submitted earlier should now be displayed.

### **Viewing a Listing**

To view a listing in the hold queue, tab down to the NP column, type S (for Select) next to a listing, and press Enter. The listing will then be displayed. You can scroll through the listing a page at a time using the PF7 and PF8 keys. To exit the listing, press PF3. Listings remain on the hold queue for a maximum of 2 weeks.

### **Viewing Parts of a Listing**

An alternative method of viewing a listing is by using the ? (question mark) command next to the listing, instead of the S command. The ? command breaks up the listing into separate parts. Therefore, if you have a large report at the bottom of your listing, and you want to view it immediately, then use the ? command to break the listing up into parts, and select the report section with an S command. The DDNAME, StepName, and ProcStep fields that are displayed after issuing the ? command help identify the different parts of the listing that can be selected..

### **Printing a Listing**

While in the hold queue, you can choose to print out the listing at the Wham Computer Center. If you wish to do this, tab down to the NP column, type O (for Output) next to the listing to be printed, tab to the C column, change the output class from X to A, and press Enter. The listing will be printed at Wham and binned according to your bin number.

### **Deleting a Listing**

To delete a listing, tab down to the NP column, type P (for Purge) next to the listing to be deleted, and press Enter. You can put P commands on several listings and then press Enter to purge them all at once.

### **Allocating a Listings Dataset**

If you need to save a listing to a dataset, this is possible with TSO. But first, you need to create a dataset to store listings. Press the PF9 (swap) key to jump back to an ISPF Main Menu screen.

From the TSO Main Menu enter `1 . 3 . 2` to display the Data Set Utility menu. Type an A on the command line to allocate a new data set. Tab down to the 'Data Set Name' line. Key in LISTINGS in order to create a *userid*.LISTINGS dataset. The userid will be appended to the front of the dataset name automatically. Press Enter to go on to the 'Allocate New Data Set' menu.

All fields should be blank except for the following:

Device type	type POOL in order to allocate the dataset on a POOLxx volume
Space units	type CYLINDER to allocate in cylinders
Primary quantity	type 2 to allocate two primary cylinders
Secondary quantity	type 1 to allocate one secondary cylinder which gives extra space if the primary fills up
Directory blocks	type 20 which will give you roughly 100 members
Record format	type FBA which stands for Fixed Blocked ANSI
Record length	type 133 for the record length
Block size	type 13300 which will store approximately 100 records per block

You can modify the suggested primary/secondary quantity and directory blocks fields, if needed.

Press Enter and your new dataset will be allocated.

### **Saving a Listing to a Dataset**

Now that you have created a listings dataset, you can save a listing that is in the hold queue. Only do this if you feel that you will need the listing for future reference. Be sure not to cause your listings dataset to fill up due to a large amount of saved listings. One reason for saving a listing to a dataset is for later downloading via FTP to your personal computer.

To save a listing, go to the hold queue, tab down to the listing, type the command XDC in the NP column, and press Enter. The SDSF Open Print Data Set menu is displayed. Tab to the 'Data set name' field and type the name of your listing dataset you created above. It should be in single quotes, e.g., 'JOE.LISTINGS'. Tab to the 'Member to use' field and type a member name to store the listing. Tab to the 'Disposition' field and make sure it says either SHR or OLD. Press Enter, and your listing will be saved. When you use the XDC command in the future, the listings dataset and disposition fields will already be filled in. Simply specify a new member name and press Enter.

The XDC command can also be used to save just a part of a listing. After splitting up a listing into parts using the ? command, tab down to a specific part of the listing, type the XDC command in the NP column, and press Enter.

### **Renaming a Dataset**

To rename a dataset, from the ISPF Main Menu, type `1.3.4` on the command line and press Enter to display the Data Set List Utility menu. Tab to 'Dname Level', type in the name of the dataset (with no quotes), and press Enter. You can also enter a partial name, such as JOE to list all datasets starting with JOE, or JOE.LI\* to list all datasets starting with JOE.LI (e.g., JOE.LISTINGS, JOE.LISTS, etc.). When the datasets are displayed, tab down to the dataset to be renamed, type an R (for Rename), and press Enter. The Rename Data Set menu is displayed. Type in the new name for the dataset. Make sure it is in single quotes. Press Enter.

## Deleting a Dataset

To delete a dataset, from the ISPF Main Menu, type `1.3.4` on the command line and press Enter to display the Data Set List Utility menu. Tab to 'Dname Level', type in the name of the dataset (with no quotes), and press Enter. You can also enter a partial name, as explained previously. When the datasets are displayed, tab down to the dataset to be deleted, type a D (for Delete), and press Enter. The Confirm Delete menu is displayed. Press Enter to delete the dataset or press PF3 to cancel.

## A Note About Quotes

You will notice that in some ISPF menus, single quotation marks are required, whereas in other menus they are optional. In general, when you specify the name of a dataset in ISPF, it should be fully written out and enclosed in single quotes (e.g., 'JOE.LISTINGS'). However, in some screens, you only need to supply everything but the first qualifier with no quotation marks (e.g., LISTINGS). If you do this, ISPF will expand the dataset name by appending your userid to the beginning of the dataset name (e.g., LISTINGS becomes 'JOE.LISTINGS'). The only menu where quotations are not used is on the `1.3.4` screen in the 'Dname Level' field. If you enter quotes in that field, you will receive an error. In this field, full dataset names or partial names and wildcards are used to look up dataset names on the system.

## Edit Initial Macro Setup

An edit initial macro allows you to configure your edit session. This is similar to the PROFILE XEDIT that is on your CMS A-disk. Here's how to set up the edit initial macro:

Create a dataset called ***userid.REXX.EXECS*** as a Fixed Blocked (FB) Logical Record Length 80 (LRECL 80) partitioned dataset (PDS) similar to how the *userid.JOB.CNTL* dataset is allocated.

Create a member called *userid.REXX.EXECS(EDITMAC)* with the following contents:

```
/* REXX *****/
address ispexec
'ISREDIT MACRO'
'ISREDIT RECOVERY ON'
exit
```

RECOVERY ON will eliminate the UNDO message that displays when you edit a member. It will also allow you to use the UNDO command to undo changes that are made while editing. The initial pop menu (EDIT Entry Panel) that displays prior to displaying the editor is also eliminated for most datasets..

Next, while in the editor, enter the following command: EDITSET

Change the following fields:

```
User session initial macro . . . . . EDITMAC
CUT default . . 2
PASTE default . . 2
```

Press PF3 to save the changes.

You will have to logoff and logon so the userid.REXX.EXECS dataset is added to your dataset allocations and the edit initial macro EDITMAC will take effect in your next edit session.

Also, while in the editor, you can issue this command: PROFILE

This will display current settings for your edit session. These settings can be changed in userid.REXX.EXECS(EDITMAC).

### **Edit Session Configuration**

Here's some tips for configuring the editor so you have more lines on screen to edit.

While in the editor, issue the following command: EDITSET

Put a slash (/) in the following field:

```
/ Remove action bars in ISPF edit and view panels
```

Press PF3 to save changes.

This will eliminate the "File Edit etc..." action bar line that appears on the top of the edit screen. Now you have an additional line in the file that you can edit.

Enter the command: PFSHOW OFF

This will eliminate the PF key settings from displaying, thus providing additional lines for editing. PFSHOW ON makes them reappear.

Enter the command: SETTINGS

Turn all of these options 'off' by eliminating the slash (/) in front of the options:

- Command line at bottom
- Panel display CUA mode
- Long message in pop-up
- Tab to action bar choices
- Tab to point-and-shoot fields
- Restore TEST/TRACE options
- Session Manager mode
- Jump from leader dots
- Edit PRINTDS Command
- Always show split line
- Enable EURO sign

Press PF3 to exit the Settings panel. The command line will now appear at the top, and the split line will not appear if you split your screen with PF2 or the START command.

Also, while editing, if you need to jump to the Command line, just press the Home key on your keyboard. The command line must appear at the top for this to work properly.

### **Adding a Calendar to ISPF**

To add a calendar to ISPF, first enter the I command from the Main Menu, then position your cursor on Status on the upper right of the top action bar, and press Enter. Select 3 for Calendar and press Enter. Now every time you enter the I command, the calendar appears.

### **Setting up Log Data Set Defaults**

From the Main Menu, enter the SETTINGS command. Position your cursor on Log/List at the upper left of the top action bar, and press Enter. Select 1 for 'Log Data set defaults' and press Enter. The Log Data Set Defaults menu displays. For the Process Option field, specify 2 for 'Delete data set (without printing)', and press PF3. Press PF3 again to exit the Settings panel. Now, each time you logoff TSO, the session log is deleted automatically. This is the option most people prefer, as the session log simply logs what you have done on TSO is not required to keep or print. Ordinarily, you are prompted for the disposition of the Log dataset as you logoff. Now that you have gone through this setup, this step will be eliminated and logging off TSO will be a little more streamlined.

### **Logging Off TSO**

To logoff TSO, exit out of all menus and sessions until only the ISPF Main Menu is displayed. Type an X (for Exit) and press Enter. If you happen to be presented with the 'Specify Disposition of Log Data Set' menu, just type a 2 (for Delete data set without printing) and press Enter. (Pressing PF3 from the Main Menu instead of typing X will make the 'Specify Disposition of Log Data Set' menu appear.) You will be presented with the READY prompt. To go back to ISPF, issue the ISPSTART command. To logoff, issue the LOGOFF command. The OS/390 screen should then be displayed.

### **Additional Information**

At any time during your TSO session, you can press PF1 to display the help menu.

The internet is also a terrific resource for documentation on all aspects of OS/390, TSO, and ISPF.

Here are some recommended IBM manuals:

ISPF User's Guide Vol I: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/ISPUSG00/CCONTENTS?DT=20000714164005](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/ISPUSG00/CCONTENTS?DT=20000714164005)

ISPF User's Guide Vol II: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/ISPUS200/CCONTENTS?DT=20000714183705](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/ISPUS200/CCONTENTS?DT=20000714183705)

ISPF Edit and Edit Macros: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/ISPEDT04/CCONTENTS?DT=20000712131031](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/ISPEDT04/CCONTENTS?DT=20000712131031)

TSO/E Primer: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/IKJ3P110/CCONTENTS?DT=20000114111833](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/IKJ3P110/CCONTENTS?DT=20000114111833)

TSO/E User's Guide: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/IKJ3C220/CCONTENTS?DT=20000626172615](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/IKJ3C220/CCONTENTS?DT=20000626172615)

JCL Reference: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/IEA1B640/CCONTENTS?DT=20000718114500](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/IEA1B640/CCONTENTS?DT=20000718114500)

JCL User's Guide: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/IEA1B540/CCONTENTS?DT=20000707150924](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/IEA1B540/CCONTENTS?DT=20000707150924)

Utilities Reference: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/BOOKS/DGT1U111/CCONTENTS?DT=20001013095210](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/DGT1U111/CCONTENTS?DT=20001013095210)

Full List of OS/390 2.10 Manuals: [http://publibz.boulder.ibm.com/cgi-bin/bookmgr\\_OS390/Shelves/EZ239127](http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/Shelves/EZ239127)

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