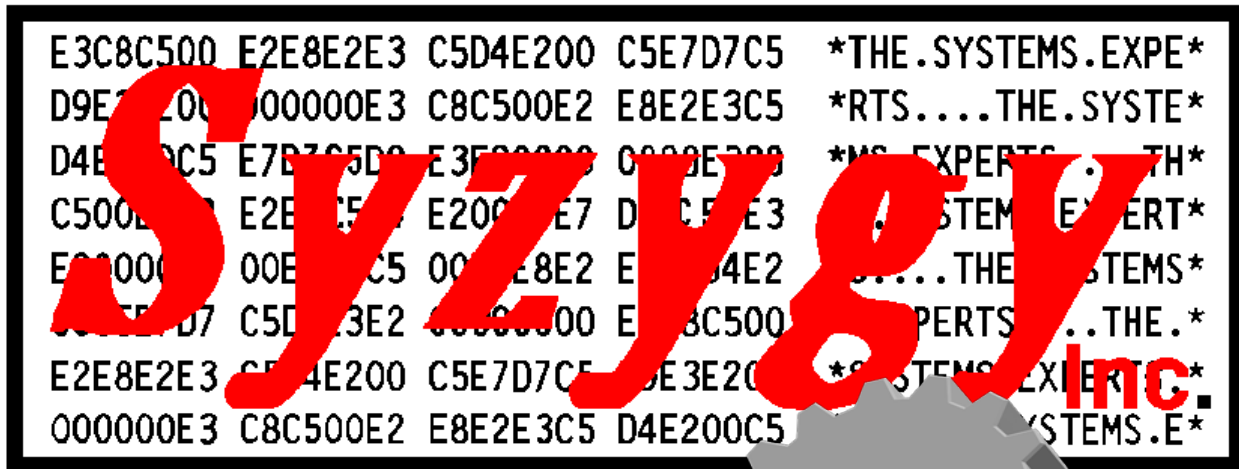


[Version 7.0]  
November 23, 2013

## SyzSPOOL/z



## [Installation and User's Guide]

Automated Spool Output Management and Access Utility

## Revision History

Version	Date	Revision Description
7.0	11/23/2013	<ul style="list-style-type: none"> <li>• This version is a complete rewrite of the previous version of SyzSpool/z. SyzSpool/z has been modularized to increase efficiency and provide better support.</li> <li>• New DELEte table which provides the site with the ability to immediately delete output which matches specific criteria rather than offload it to a dataset for any length of time. This feature was created to allow the site to delete entire output from a job or just selected "pieces" of a JOB, i.e. individual DD's which may not be necessary. One use for this is to remove the //SYSABEND output from JOB. The entire JOB output need not be deleted.</li> <li>• ISPF Delete command to remove output immediately which may not be wanted in the management areas. The use MUST have RACF authority to that output in order to delete the file. Once deleted it is immediate removed from DASD and from the Journal LOG.</li> <li>• SyzSpool/z can now remove any of the processing tables "on the fly". All tables are supported in this way, TASK, RETENTION, DELETE, etc.</li> <li>• The SyzSYNC processing module has been re-written to provide the capability of recovering from a damaged or destroyed Journal Log. Most fields are rebuilt from the output datasets and very little, if any, information is lost in the Journal Log should a disaster render the file unavailable or unuseable.</li> </ul>

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# 1. Introduction

SyzSPOOL/z is a Spool (Jes2 or Jes3) Output utility that works with the Syzygy Automation suite of products. This facility automatically manages the sites JES Spool to move output from the Spool to individual datasets which are managed by either Management Class (SMS) or Retention Period (non-SMS). The output is available to be displayed from the included ISPF/PDF interface, from which the output can be displayed (by an authorized user), or emailed to any authorized user in any of several formats including Adobe PDF, Word, HTML, XML, and several other formats. The output is also available from any authorized web browser (Microsoft Internet Explorer, Firefox, Chrome, etc.) and the RACF authorized user can display the output and save in in any format they wish on their workstation or device. The Syzygy Automation Suite is made up of 4 main products and two new additions as of 2012;

SyzAUTO/z, the command and task scheduling facility, which allows the site to schedule any system or subsystem command, submit batch JOBS and control timed operations on a 24x7 basis.

SyzCMD/z, the Command Scripting facility, which allows the site to start automated scripts to perform automated and complex functions with complete nested IF/THEN/ELSE logic, allowing the site to control all simple and complex operations in an orderly and efficient manner.

SyzSPOOL/z, the JES SPOOL maintenance facility, which offloads spool data from JES2 or JES3 to separately addressable data sets, and allows users to access the offloaded output interactively from TSO/ISPF or via the Web from any standard web browser. Full security is maintained for access to the offloaded spool data, which is able to be controlled via any storage manager (HSM, ABR), or via SyzSPOOL's own internal dataset allocation control methods. The Data may be viewed, sent via FTP or via Email in any of several output formats including PDF, WORD, HTML, XML and several others.

SyzMPF/z, the Console Message Processing Facility, allows the site to respond to any Console-type message with predefined scripts allowing complete interactive control of any console situation or message. SyzMPF/z allows answering any request or responding to any console based event, (job end, start, abend, message from any job or task, etc.). In short, any console event or message can be handled by the facilities of SyzMPF/z.

SyzNotify/z, the end of task notification facility. SyzNotify/z captures the maximum condition code, plus all (or any) of the Step condition codes, plus other task related information (execution time, CPU time used, I/O's etc.) and sends them to any Email address or destination. User's no longer have to logon to the system to see if a task completed and what it's condition codes were, they can be notified via email, which can be encrypted and delivered directly from the mainframe.

SyzTEXT/z, the "short" email messaging utility. The SyzTXT/z program interfaces with the sites SMTP server under z/OS, and can (if the site allows) send text directly to any user in the sites local network, or to any user with an email address, (if the site allows the transmission). The utility can send the text to a cellphone if the cellphone carrier supports the option. Currently AT&T, Verizon, and Sprint all support this feature. Other carriers also support it, but you will need to verify that your carrier supports the features of email/text message if they are not one of those previously mentioned.

## Purpose

The products that make up the Syzygy Automation Suite, are designed to offload the burden of supporting the normal day to day operation of the computer center. The facilities allow the site to spend their time and money on things that really matter, instead of maintaining the same old processes which can be automated by the components of the Automation Suite. The site will conserve manpower, and resources.

## Related Documents

SyzAUTO/z	Installation and Operations Guide	
SyzCMD/z	Installation and Operations Guide	
SyzSPOOL/z	Installation and Operations Guide	(this guide)
SyzMPF/z	Installation and Operations Guide	
SyzNotify/z	Installation and Operations Guide	
SyzTEXT/z	Installation and Operations Guide	

## Conventions

Where present, z/OS, OS/390 and MVS may be used interchangeably. It is not meant that these products are exactly the same, but they are sufficiently alike that for the purposes of this manual, they can be thought of as the same family with similar or identical support constraints with respect to the products covered in this manual.

## Problem Reporting Instructions

Problems should be reported to:

[ClientSupport@SyzygyInc.com](mailto:ClientSupport@SyzygyInc.com)

Problems with Beta versions of this product should be reported to:

[Beta@SyzygyInc.com](mailto:Beta@SyzygyInc.com)



## 2. Overview

The SyzSPOOL/z utility is designed to provide the computer center with the capability of selectively managing the data from the JES2 or JES3 spool volumes under a large number of user-specified rules. SyzSPOOL/z provides an ISPF interface and (as of Version 4.3) a WEB interface to view the output and statistics relative to the output, as well as providing a mechanism to Re-Print or send that output via Email. Using SyzSPOOL/z, it is possible to completely manage the JES2 or JES3 spool output so that the site no longer has to “PRINT EVERYTHING” just because they don’t want to run out of spool space. SyzSPOOL/z can be used to migrate spool data (output) from the JES2 or JES3 spool volumes to individual sequential datasets that are placed under complete control of system Managed Storage constructs and thus can be managed via IBM’s HSM product or Innovation DP’s FDR/ABR product so that the output can be retrievable for a much longer period of time without taking up valuable DASD resources.

The data center’s spool output never leaves the control of the sites Security product (i.e. RACF, ACF/2, Top Secret), so there is complete security control for the output at all times.

The SyzSPOOL/z managed datasets can be converted to PDF format, can be sent to users via Email or via FTP, or can be migrated back to the JES2 or JES3 spool for additional processing or local/remote printing.

Full statistics (including Maximum Condition Code and Abend Codes) are maintained on the datasets processed via SyzSPOOL/z, and are accessible via a provided interface. Additionally normal SMF records are created by JES on behalf of SyzSPOOL/z and the site can designate that SyzSPOOL/z create additional SMF records with additional information on each JES output that is processed.

A feature of SyzSPOOL/z that is not available for normal output processing by JES2 or JES3 is the output processing notify facility. Users that “own” JES spool output that is identified to have a NOTIFY parameter will receive a TSO notify of the disposition of the output, and additionally the user can be set up to receive an Email as well or instead of that NOTIFY message.

Spool output can be processed by specific attributes like AGE, DESTINATION, JOBNAME, the USER that submitted the JOB, or any of several other attributes (described later). Using SyzSPOOL/z, the data center can set the spool management to a “set it and forget it mode” so that not only can the spool volumes not fill up easily, but the site can reduce the volume of output that is actually printed to physical printers, and since the output is managed in hierarchical storage, it can be retained in it’s original format for any user specified amount of time.

## Functional Description

SyzSPOOL/z is meant to be run as a separate Started Task. It is possible to run as a step of a “normal” JOB but the main intention of SyzSPOOL/z is to run as a separate task. SyzSPOOL/z is composed of several 24bit, 31bit and 64bit subroutines (CSECTS) generated into a single load module, which must be executed from an authorized load library.

## 3. Installation instructions

### Procedures

#### STEP 1:

The software you have ordered is attached to this E-Mail communication as a .ZIP file. You should save or copy this file to a suitable directory on your PC.

#### STEP 2:

Use PKZIP or some other ZIP/UNZIP program to unzip the file to the same directory. You will thereby obtain a EBCDIC format file with the following name structure:

software.XMI where "software" is the name of the name of the Licensed Software Product that you have ordered.

#### STEP 3:

PRE-ALLOCATE THE RECEIVING XMIT FILE(S) ON YOUR MAINFRAME

You will need to perform this step for each of the files that you received for this product

Pre-allocate a file on MVS (e.g. 'userid.software.xmit') with the following DCB.

Space: 1 Cylinder

Organization : PS

Record format : FB

Record length : 80

Block size : 3120

#### STEP 4:

UPLOAD THE software.XMI FILE FROM YOUR PC TO YOUR MAINFRAME.

Using FTP or the file transfer component of your TCP/IP telnet emulator, specifying BINARY transfer, upload the "software.XMI" file to your mainframe. You should pre-allocate the destination dataset as outlined in STEP 3 because some mainframe site configurations do not automatically allocate the proper format container for the uploaded XMIT file.

BE SURE TO USE BINARY FILE TRANSFER, DO NOT USE ASCII TRANSLATION.

#### STEP 5:

RECEIVE THE XMIT FILE TO CREATE THE CNTL PDS

On your MAINFRAME do a RECEIVE command on the uploaded XMIT file from step 4 as follows:  
(\*note If operating under ISPF use panel option 6, or exit ISPF to TSO READY state. )

```
RECEIVE INDATASET('userid.software.xmit')
```

\*\*\*where 'userid.software.xmit' is the pre-allocated file in STEP 3.

After doing the above command you will be prompted with something similar to the following:

```
INMR901I Dataset DATA.SET.NAME from userid on ??????????
```

INMR906A Enter restore parameters or 'DELETE' or 'END' +

at this prompt you should enter:

DA('userid.software.linklib')

... where "userid.software.loadlib" will be a new load module PDS that you have selected which will contain all of the modules required for the correct operation of the licensed software that you have ordered. Do not pre-allocate this dataset.

PLEASE BE SURE TO CHOOSE A NAME THAT DOES NOT ALREADY EXIST AND WHICH WILL BE RACF ACCESSIBLE BY YOU. We suggest that you use your TSO userid as the HLQ (High Level Qualifier) to assure RACF permission.

\*Note: Some mainframe sites will default to a PUBLIC volume if DF/SMS is not set up properly. If your site falls into this category, you might want to use the following format of the response to keep your dataset from being allocated to your WORK volumes and being scratched before you are ready:

DA('userid.software.linklib') VOL(volser) UNIT(unitname)

\*\*\* where "volser" is a DASD volume at your site (e.g. TSO001) and "unitname" is the esoteric unitname which governs that volser (e.g. SYSALLDA or 3390).

**STEP6:**

\*\*\*REPLACE THE 30-DAY VERSION OF YOUR LICENSED SOFTWARE

You must copy the load module(s) shipped and received by you in the previous steps to the library that currently contains your 30-day trial version of the licensed software. You do not have to use the same library, but you will need to delete the old 30-day trial version of the software if you do not use the same library or else the software will cease to function when the 30-day trial period ends. In some cases the load module(s) shipped will need to be placed into an "APF AUTHORIZED" library. If APF authorization is required it will be noted in the identification section(s) above. Normally it is always safe to copy the load module(s) to the same library as your 30-day trial versions so that no system or user JCL members will need to be updated.

**STEP7:**

Sample JCL and Possible RACF Changes.

Normally you should add a proc to your system proclib so that you can easily use the facility. We suggest that you create a proc called SYZSPOOL or SPOOLOFF. This is so that you can authorize the SYZSPOOL or SPOOLOFF procs to and allow them to run without any operator intervention.

S SYZSPOOL

The sample JCL is as follows:

Sample SyzSPOOL/z JCL

```
//SYZSPOOL PROC M=00
//*
//*   SYZYG Y SPOOL OFFLOAD PROGRAM
//*
//SYZSPOOL EXEC PGM=SYZSPOOL,TIME=1440
//SYSPRINT DD SYSOUT=*
//SYZPARMS DD DISP=SHR,DSN=SYS1.COMMANDS(SYZSPL&M)
```

\*Note. The SYS1.COMMANDS dataset is a PDS that is allocated as FBx80x23440 and will be used to contain the run-time parameters for SyzSPOOL/z.

Required RACF changes (that may be necessary for some sites):

Depending on your sites configuration, you may or may not have to perform RACF changes to create these procedures. If so, then the following will be necessary:

```
ADDUSER SYZSPOOL DFLTGRP(STCGROUP) NOPASSWORD NOOIDCARD
```

```
CONNECT SYZSPOOL GROUP(STCGROUP) AUTH(USE)
```

```
CONNECT SYZSPOOL GROUP(SYS1) AUTH(USE)
```

```
RDEFINE STARTED SYZSPOOL.* STDATA(USER(SYZSPOOL) +
  PRIVLEDGED(YES) TRUSTED(YES) GROUP(STCGROUP))
```

```
SETROPTS RACLIST(STARTED) REFRESH
```

Now, lets look at the user's side of things. We want to make it so that the users can access their own JOBS by default, if there is a requirement that they be able to access other people's output, then you may need to make other changes to RACF to support it.

First define the group PRT (assuming you selected PRT as your HLQ for the output.

AG (PRT)

Second, keep everyone from getting there by default.

```
PE 'PRT.*.**' UACC(NONE) RALTER GLOBAL DATASET
```

Now you have a decision to make:

1) You can make a global access entry which will allow read access to the spool output ONLY if the user is the one that created the output. This is normally a secure way to handle things with a minimum of work on your part since it requires only 1 RACF command. The drawback is that if you have users that need access to output that was not actually submitted by them, (i.e. they are part of some group that can all see each other's output), then this method won't work for you. To implement this method, you simple enter the following command from an authorized RACF administrator ID. It makes a GLOBAL ACCESS TABLE entry that simply allows the user to access the output IF they are the one that submitted it.

```
RALTER GLOBAL DATASET ADDMEM('PRT.*.&RACUID.**'/READ)
```

2) You can use the RACF dataset naming conversion table (a sample is supplied as member ICHNCONV of the install library), which will translate the spool output dataset requests to a format the matches your existing RACF dataset rules. ACF/2 also has this same capability, but a sample is not



provided, you can get the sample directly from Computer Associates. The conversion table provides conversion ONLY for those datasets that match the HLQ that is coded. The sample assumes a HLQ of "PRT", but you can alter the sample if you are using some other HLQ (like "SPL"). The overhead of the conversion table is not even measurable (we have tried), and works as follows:

If the incoming DSN is in the format of:

PRT.jobname.creatorID.Ddate.jobnumber.TtimeX

The table will convert the DSN (internally for RACF purposes ONLY) to:

creatorID.PRT.jobname.Ddate.jobnumber.TtimeX

Cool, isn't it? This will allow your existing RACF dataset profiles and user/group rules to be used instead of writing new ones.

Sample Code:

	Column		
1	10	20	
	ICHCONV	DEFINE,NAME=SYZSPOOL	
	ICHCONV	SELECT,COND=(QCT,EQ,6,AND)	* 6 part DSN
	ICHCONV	SELECT,COND=((GQ,1),EQ,'PRT',AND)	* HLQ=PRT
	ICHCONV	ACTION,SET=((UQ,0),(GQ,3))	* HLQ now=Creator
	ICHCONV	ACTION,SET=((UQ,3),'')	* remove 3rd Qual
	ICHCONV	ACTION,SET=(QUAL,(GQ,3))	* RACF qual=Creator
	ICHCONV	END,NEXT='SUCCESS'	* done
	ICHCONV	FINAL	* Exit

The code above is assembled and linked into a user (or system) LPA library, and can be loaded dynamically or at the next IPL. This exit has been extensively tested and affects only the way RACF

views the datasets, they are not altered on DASD nor are they affected in any physical way. This allows the dataset to be managed by DF/SMS easily and allows RACF management to be handled in a much more streamlined manner.

3) Lastly, you could create a whole series of dataset rules beginning with "PRT" to manage the RACF access to the spool data. This is a lot of work and isn't really recommended.

Note: Syzygy is planning to add support for use of the JESSPOOL resource checking for output access. That will allow use of the existing SDSF output rules for access to the spool data. While this is a good plan, it's only workable if you have rules set up for SDSF in the first place.

## STEP8:

Required SMS changes (that may be necessary for some sites):

Depending on your sites configuration, you may or may not have to perform SMS changes to allow SyzSPOOL/z to function correctly. If so, then the following may be necessary:

ISMF changes to STORCLASS:

Create a filtlist in your STORCLAS ACS routine similar to the following:

```
/* Identify the SyzSPOOL/z task name (4 possibilities in the next line)*/
```

```
FILTLIST SPOOL_OFF    INCLUDE('SPOOLOFF','SPLOFF','SYZSPOOL','SYZSPL')
```

```
/* Identify the names of the SyzSPOOL/z output datasets */
```

```
/* SyzSPOOL/z uses a 6 part name HLQ.JOBNAME.CREATOR.Date.JobNum.TimeX */
```

```

/* SPL.** covers all data sets starting with SPL. */
/* PRT.** covers all data sets starting with PRT. */
/* otherwise you have to include the 3 possible formats of the output datasets */
/* 1 for Jobs, 1 for STC's and 1 for TSU */

```

```

FILTLIST SPOOL_DATA_SET INCLUDE(SPL.**,
                                *.*.D*.J*.T*,
                                *.*.D*.S*.T*,
                                *.*.D*.T*.T*,
                                PRT.**)

```

```

/* Assume the following are valid Storage Classes */

```

```

FILTLIST VALID_STORAGE_CLASS INCLUDE('BASE','CRITICAL','FAST',
                                     'FASTREAD','SPOOL',
                                     'FASTWRIT','GSPACE','MEDIUM',
                                     'NONVIO','STANDARD','DBCRT')

```

You can then code the following in your STORCLAS when statements, the following two when statements will first allow SyzSPOOL/z to use any Storage class it wants (as long as it's valid), otherwise the second WHEN statement will be used which forces a STORCLAS of SPOOL (which you will need to make sure you have configured):

```

WHEN (&DSN = &SPOOL_DATA_SET &&          /* If SysSpool Dataset */
      &STORCLAS = &VALID_STORAGE_CLASS) /* and SyzSpool wants to use */
DO                                          /* another VALID storclas */
  SET &STORCLAS = &STORCLAS             /* allow it */
EXIT
END
WHEN (&DSN = &SPOOL_DATA_SET)           /* Else If SyzSpool Dataset */

```

```
DO                                /* Force */
  SET &STORCLAS = 'SPOOL'         /* STORCLAS of SPOOL */
EXIT
END
```

Now you can create the Storage Class entry by using the following steps. These steps assume you are calling your entry SPOOL, but you could use any name, just be sure it matches the previous steps:

ISMF changes to MGMTCLASS:

First we need to make sure that the FILTLIST in your MGMTCLAS ACS routine matches the one you created in your STORCLAS ACS routine, so it should be an exact copy of the one you created in the previous step:

```
/* Identify the names of the SyzSPOOL/z output datasets */
/* SyzSpool uses a 6 part name HLQ,JOBNAME.Date.JobNum.Time.X */
/* SPL.** covers all data sets starting with SPL. */
/* PRT.** covers all data sets starting with PRT. */
/* otherwise you have to include the 3 possible formats of the output datasets */
/* 1 for Jobs, 1 for STC's and 1 for TSU */
```

```
FILTLIST SPOOL_DATA_SET  INCLUDE(SPL.**,  
                                *.D*.J*.T*,  
                                *.D*.S*.T*,  
                                *.D*.T*.T*,  
                                PRT.**)
```

Then we will want to identify all of the possible Management Class entries that SyzSPOOL/z might be allowed to use. If you always will use just a single management class because you want all of your spool output to have the same expiration, backup and migrate characteristics, then you won't need this entry. We recommend that you have several possible Management class entries for SysSpool to use. You probably don't want or need to keep system tasks as long as the user output, so having multiple choices makes a lot of sense (at least it does to us).

The following entries are similar except that the EXPIRE after Days last used is different for each entry, we have the standard one (SPOOL) which is 18 months, then we have other entries of varying dates between 10 and 365, you can use as many or as few as you feel you might need:

```
FILTLIST VALID_SPL_CLASS  INCLUDE('SPOOL','SPOOL10','SPOOL30',  
                                'SPOOL60','SPOOL90','SPOOL120',  
                                'SPOOL365')
```

Example of the creation of the MGMTCLAS entry:

## ISPF changes necessary to use the ISPF Interface:

- 1) Make the SyzSPOOL/z ISPF interface datasets available to the users.

Several datasets are shipped with SyzSPOOL/z which need to be made available to the users in order to use the ISPF interface to the product. All of the datasets and their contents have been outlined in appendix "A". The datasets contain the SyzSPOOL/z related ISPF panels, Skeletons, Rexx Execs, Messages, and (if you desire to use the EMAIL interface), there is a task procedure which needs to be made available for use. You may take one of three methods to make this happen:

A) Use the supplied SyzSPOOL/z REXX exec to dynamically acquire the libraries only when the user requests them. This is by far the most preferred of the implementation methods and our questionnaires show that more than 95% of the clients implement via this method.

B) Include the datasets in your "standard" ISPF concatenation within the users logon procedures. I.e. ISPPLIB, ISPMLIB, ISPSLIB, ISPEXEC

C) Copy the members to installation specific datasets that are already in the user's logon procedure concatenation. While you can even copy them to the base IBM supplied libraries, it is not recommended that you do that because it makes things difficult to update later on, and basically it's just an all around bad idea to play with the libraries that IBM ships.

**\*\*Note:** You should be sure that the dataset naming convention you use for these datasets is such that the users may have "read" authority to these datasets. Otherwise RACF or ACF2 errors will result and the users will not be able to use the interface correctly.

- 2) Make installation specific updates to the members

There are several members that need to be updated to contain information to conform to your site's specific information. The changes are very simple to make, but it's a fairly safe bet that failure to make

the changes will result in unpredictable results. While it's possible that you may decide to use the shipped naming conventions that we use here at the development site, it's more than likely that you will have changed them to have dataset names that are more in line with your own site's standards. (You do have standards don't you?)

A) ISPMLIB (ISPF Message Library) dataset -  
No Changes Required

B) PROCLIB dataset -

You will need to copy the SyzMail member to your installation's PROC00 concatenation, see the member for detail changes, but the only absolutely necessary change is that you identify the correct dataset names of the XMITIP product's REXX exec library.

You will need to check the dataset name specified in the SyzSPOOL/z proclib member to see that the //JOURNAL DD points to your installation defined VSAM Journal dataset. It's the same one you must supply to the SYZSPL00 (panel library member), and @SYZSPL (sysproc or sysexec library member).

C) ISPSLIB (ISPF Skeleton library) dataset -  
No Changes Required

D) ISPPLIB (ISPF Panel library) dataset-

You will need to check the dataset name specified in the SYZSPL00 member to make the VSAM JOURNAL dataset point to the one you allocated. It's the same one you must supply to the @SYZSPL (sysproc or sysexec library member), and SyzSPOOL/z (PROCLib member)..

You will need to add support to your user's primary option panels (IBM supplies it as ISR@PRIM). Two samples are provided SYZPRIM and ISR@PRIM (which is the IBM default with the SyzSPOOL/z

product support added. The sample is from z/OS V1.9 and you should take care that it matches your supplied member before you replace the IBM supplied one.

E) SYSPROC or SYSEXEC dataset -

You will need to check the dataset name used in the @SYZSPL member of the supplied CLIST library. This dataset should contain the name of your SyzSPOOL/z JOURNAL dataset. It's the same one you must supply to the SYZSPL00 (panel library member), and SYZSPOOL (PROCLIB member).

You will need to add the @SYZSPL REXX exec to the SYSPROC or SYSEXEC concatenation of your user's logon procedure. This REXX exec uses dynamic allocation to add the SyzSPOOL/z required datasets. You will need to update the LIBDEFs within this member to your installation SyzSPOOL/z ISPF datasets. If you have copied the SyzSPOOL/z Panels, Messages, Skeletons, and REXX Execs libraries that already exist in your user's logon procedures, then you can instead use the supplied @SYZSPLN member which does not dynamically allocate the SyzSPOOL/z datasets.



## Datasets which should/Must be allocated for SyzSPOOL/z.

### A VSAM catalog

For use by SyzSPOOL/z to keep the offloaded output dataset names in.

This can either be a new catalog or an existing catalog. JOBS are provided to create the catalog and to create the necessary Alias entry that points to that catalog. If you decide to use an existing catalog in place of the new one, you will still need to define the ALIAS for SyzSPOOL/z's use.

### The Install dataset

This dataset will be created from the installation file transfer dataset process. It will by default be called &HLQ.SYZSPOOL.VxRxMx.INSTALL, but you can rename it to suit your site requirements.

#### Install Dataset contents:

\$CATALOG JOB to create a new catalog to hold the offloaded dataset entries  
\$JOURNAL JOB to create the SyzSPOOL/z VSAM JOURNAL dataset  
| Step added to copy the old dataset to the new one if upgrading  
| from version 4.4 to higher release (4.5 and up).  
\$SYNC JOB to synchronize the VSAM JOURNAL and the system catalog  
(This JOB should be run on a daily or semi-daily basis)

### The PROCLIB dataset

This dataset will contain the sample PROCLIB members which should be copied to your system PROCLIB concatenation.

## The ISPF Interface datasets

These datasets will be created from the installation file transfer dataset process. There will be several datasets with the format of &HLQ.SYZSPOOL.VxRxMx.\*\*

ISPPLIB	-	Panel Library
ISPMLIB	-	Message Library
ISPSLIB	-	Skeleton Library
CLIST	-	SYSPROC or SYSEXEC Library (either is fine)

## VSAM Journal File

This dataset is created by the \$JOURNAL member of the INSTALL library and is used by SyzSPOOL/z to keep track of all datasets that have been offloaded. It is kept in sync with the sites catalog records via a special program called SyzSync. SyzSync normally should be run daily so that datasets that have been deleted by the user or via normal system dataset expiration can be removed from the SyzSPOOL/z JOURNAL dataset. Otherwise, the JOURNAL entries would never be removed. This is very similar to other programs such as HSM which must keep the catalog entries and the JOURNAL entries in sync. The SyzSync program is very fast, and normally will process over 100,000 datasets per minute (wall clock) and uses very little CPU time. The size of the JOURNAL file is up to the site to decide. The JOURNAL records are 255 bytes long and there are typically (in version 3 of SyxSpool) 1 record for each offloaded dataset. A 250 Cylinder VSAM JOURNAL will hold roughly 1 million entries. Depending on the number of offloaded jobs that you plan to keep around, you will need to size your JOURNAL dataset accordingly. Use of the JOURNAL dataset is not mandatory, but if you decide not to use it, you will not be able to use the SyzSPOOL/z ISPF interface.

## Support tasks which should/Must be scheduled for SyzSPOOL/z.

### SYZSYNC

This job is required to keep the SyzSPOOL/z output datasets, the VSAM Journal and the catalog entries in sync. There will be a lot of activity related to the SyzSPOOL/z spool output datasets. The normal management process will move, archive and delete them, and a periodic process is necessary to keep things in sync. This task will read the catalog, the VSAM journal and compare the datasets to see where things are and make any necessary changes to keep things synchronized.

This task is VERY low impact to system resources. Total wall clock time to manage 512,000+ datasets is under 45 seconds on our mainframe system.

This task “ideally” should be scheduled to run daily at some O-DARK-THIRTY time, and running it as a started task is preferred, but not absolutely necessary. A sample started task is supplied in the installation dataset with the name of SYZSYNC.

### SYZREORG

This job is not normally required, but is provided “just in case” it ever becomes necessary to re-org the VSAM journal file.

Some sites have found that the journal can become fragmented over a long period of time, but the normal access/update pattern of SyzSPOOL/z operation is such that reorganization may never be required. A sample job is supplied in the installation dataset with the name of SYZREORG.

## SyzSPOOL/z WEB Interface Installation

If you do not already have the IBM z/OS HTTP Server running at your site, you will need to configure it in order to utilize the WEB interface. Normally the HTTP server is installed as part of the base z/OS installation, but there are some configuration steps that are necessary in order to allow SyzSPOOL/z to use this facility. By default, the IBM z/OS HTTP Server is started as either HTTPD1 or WEBSERV. You should find the startup JCL in your system proclib, or, if it is already running, you can use SDSF or some similar product to find where the configuration files and various directories that the HTTP Server uses are located.

A typical HTTP Server startup proc looks like:

```
//HTTPD1 PROC P1='-B',
// P2='-r /web/httpd1/httpd.conf',
// P3='ENVAR("_CEE_ENVFILE=/web/httpd1/httpd.envvars")/ -vv'
/* P3='STAC(200K),STOR(,,8K),LIBS(1K,1K),BE(400K,50K,KEEP)/ -vv'
//WEBSRV1 EXEC PGM=IMWHTTPD,REGION=0K,TIME=NOLIMIT,
// PARM=('&P3 &P2 &P1')
//SYSIN DD DUMMY
//OUTDSC OUTPUT DEST=HOLD
//SYSPRINT DD SYSOUT=*,OUTPUT=(*.OUTDSC)
//SYSERR DD SYSOUT=*,OUTPUT=(*.OUTDSC)
//STDOUT DD SYSOUT=*,OUTPUT=(*.OUTDSC)
//STDERR DD SYSOUT=*,OUTPUT=(*.OUTDSC)
//SYSOUT DD SYSOUT=*,OUTPUT=(*.OUTDSC)
//CEEDUMP DD SYSOUT=*,OUTPUT=(*.OUTDSC)
```

The important line is highlighted above. This is the location of the configuration file for the HTTP Server.

Within that configuration file (which you can browse and edit) are a series of "directives" which are really nothing more than configuration parms for the HTTP Server. We will be making some small changes, but before we do that, we need to look into the file to find out where the HTTP Server keeps some of the things that we are concerned with. Most important of these is the "InstallPath" directive and it looks like this (remember that the HTTP Server treats lines that start with a pound sign (#) as a comment):

```
# InstallPath directive:
#
# Set this to point to the server install path
#
# Default: /usr/lpp/internet
# Syntax: InstallPath <path>
```

```
InstallPath /usr/lpp/internet
```

This tells us that the initial place where the HTTP server keeps it's files for use when it runs (Web pages, Logs, Icons, binaries, etc.) is located. In our case it's /usr/lpp/internet.

But that's not all, we need to know where the "Home" directory is located. We know that it's somewhere within the above InstallPath, but we have to look at another directive entry (usually located right after "InstallPath" called "ServerRoot" to tell us more:

```
# ServerRoot directive:
#
# Default: server_root
# Syntax: ServerRoot <path>
```

```
ServerRoot server_root
```

Now we know that all of the locations that we are interested in will be located by placing these two directives together, as follows:

```
/usr/lpp/internet/server_root
```

Remember that USS is VERY particular about capitalization, so that "a" does not equal "A".

For our example, the SyzSPOOL/z files will be located in directories that we will create in sub-directories of /usr/lpp/internet/server\_root called:

```
/usr/lpp/internet/server_root/syzspl
```

and

```
/usr/lpp/internet/server_root/syzspl-bin
```

Directions for what and how to do this are provided later.

- Copy the WEBPAX file from the installation PDS to a HFS or ZFS dataset on your system. We suggest you copy it to the /tmp/ directory. An easy way to accomplish this is by using the OCOPY utility under TSO or BATCH, or you can use the ISPF/PDF USS shell.

Under the ISPF/PDF USS shell, you can type /tmp/syzspool.pax on the first line, this will bring up the file creation dialog, select option 2 on the left side (for FILE) and option 3 on the right side (copy from MVS dataset). Then you will be prompted for the name of this dataset and you type it as:

```
"syzspl.v4r3m0.install(WEBPAX)" making your local changes to the DSN.
```

This will create the PAX file (SYZSPOOL.PAX) which you can then "un-pax" via the OMVS interface (or batch). If using OMVS, you would go to the /tmp/ directory and type:

```
pax -rvf syzspool.pax . (the period belongs here after the space).
```

Then you can copy the files to the directories they belong in. (of course you should create those directories first as well which is covered in the next step).

- Create the following directories, and give them the permissions as follows:

...../server\_root/syzspl (permissions 755)

...../server\_root/syzspl-bin (permissions 755)

The above directories on a vanilla system would be at:

/usr/lpp/internet/server\_root/syzspl

and

/usr/lpp/internet/server\_roor/syzspl-bin

- Copy the 4 files that were "un-paxed" to the directories as follows:

syzspl-html.html and index.html go to ...server\_root/syzspl/

syzspl2.rexx goes to ...server\_root/syzspl-bin/

syzygy.gif goes to .../server\_root/icons/

- EDIT the /server\_root/syzspl-bin/syzspl2.rexx member and change the

"ADDRESS TSO "EX 'YOUR.REXX.LIBRARY(SYZSPL) ...

to replace the "YOUR.REXX.LIBRARY" with the clist or Rexx exec library that you copied the SYZSPL clist to in the earlier "allocate VSAM Journal file" step.

- EDIT the HTTP server startup configuration file.

The startup file can be found by looking at your HTTP server (usually called HTTPD1 or WEBSERV) on your running system and you should see the following line:

P2='-r /web/httpd1/httpd.conf', or something very similar.

This tells you that the startup configuration is located at /web/httpd1/httpd.conf . You will need to edit that file and make the following changes:

In the protection section, (you can look for the word "protection").

Starting in column 1, you need to add the following lines:

# This is a comment line -copy until next comment

```
Protection SyzSpling {
    ServerId    Use_Mainframe_ID
    AuthType    Basic
    PasswdFile  %%SAF%%
    UserID      %%CLIENT%%
    Mask        All
}
```

```
Protect /syzspl/* SyzSpling
```

```
Protect /syzspl-bin/* SyzSpling
```

```
Exec /syzspl-bin/* /usr/lpp/internet/server_root/syzspl-bin/*
```

```
Pass /syzspl/* /usr/lpp/internet/server_root/syzspl/*
```

# This is a comment line -stop copying when you reach here.

Next you will need to uncomment the following line later in the config file: (just remove the pound sign #)

```
# Service /SYZLST* /usr/lpp/internet/bin/mvsds.so:mvsdsGet*
```

Next you will need to uncomment the following line later in the config file: (again, just remove the pound sign #)

```
# Pass /REXX/* /usr/lpp/internet/server_root/rexx/*
```



Now you will need to restart the HTTP Server, you can do this by typing the following on the MVS

Console:

(change HTTPD1 to your web server name)

```
F HTTPD1,APPL=-restart
```

- You should now be able to access the SyzSPOOL/z Web interface from any browser by typing in the URL of your web server and the SyzSPOOL/z application name, i.e.:

```
http://www.thissite.com/syzspl/
```

## Log Format:

### Types of Logs:

SyzSPOOL/z maintains multiple LOG files during execution, one of these is called the execution log, which maintains a run-time log of the activities that SyzSPOOL/z is performing as they are accomplished and is taken to either the JES2 spool or can be taken to a sequential dataset. Another type of LOG file is the JOURNAL, which logs detail information about the JOB and Sysout datasets of the jobs in a more detail mode, each job will result in at least one Execution log entry and at least one JOURNAL file entry which is covered later in this document.

### Execution LOG format:

Location	Description	Length	
0-20	Current Date/time	20	(YYYY/MM/DD HH:MM:SS)
21	Blank	1	
22-27	Command	7	(Extract, Failure, etc)

28	Blank	1	
29-37	JOBNAME	8	
38	Blank	1	
39-46	JOBID	8	
47	Blank	1	
48-55	Records	8	(lines, pages or Records(JES3 only))
56	Blank	1	
57-61	MAXCC	5	(Max Retcode, System abend code, user abend)
62	Blank	1	
63-70	# Sysouts	8	Total in this output dataset (normally the whole job)
71	Blank	1	
74-117	Dataset name	44	
118-end	Various Error codes, etc.		



## 4. Control Commands:

Control commands are the mechanism that is used to control the startup and execution of SyzSPOOL/z. These commands (as of version 6.0) are located in the system parmlib concatenation of z/OS with the prefix SYZSPnn where "nn" is any two characters, the default is "00" and therefore the default member that SyzSPOOL/z will look for if no other ID is provided is SYZSP00. The execution parm of the SyzSPOOL/z startup JCL can contain an alternate suffix, i.e. "S SYZSPOOL,PARM=23" will start SyzSPOOL/z and look into the system parmlib concatenation for the member SYZSP23. Syzygy also allows the use of the //SYZPARM DD JCL to be used to point to either a member of a PDS or a sequential file to read the startup control commands. As of version 6.0 of SyzSPOOL/z, Syzygy recommends that all sites use the system parmlib concatenation for the SyzSPOOL/z startup control commands.

All parameters in the startup member are free form and can begin in any column, they should be separated by a comma (",") unless otherwise noted, but failure to use a comma at the end of a line will not cause SyzSPOOL/z to stop reading the parms. SyzSPOOL/z will simply issue a warning and continue on with the next card until the end of the input member or dataset is reached.

Almost all parameters can be reset to being "ignored" as a selection criteria by specifying the Parameter value as a null. "AGE=" will set the AGE parameter as unset, meaning that AGE is not a factor in locating what output to manage.

SyzSPOOL/z will always confirm the settings and display them in the LOG and on the console. SyzSPOOL/z will not knowingly allow an invalid parameter to be used. Every effort is made to verify the format and content of the parameters at startup and any time during operation of SyzSPOOL/z if the parameters are changed via Operator request.

At any time the running execution parameters can be altered via simple operator modify commands, i.e.:

```
F SYZSPOOL,LL=,LX=5000000,CLASS=,AGE=3D
```

The above will change the "current" operation parameters for SyzSPOOL/z to be:

Lower line limit = 0

Upper line limit to 5,000,000

Classes = all classes

AGE of output = 3 Days (72 hours)

The SyzSPOOL/z task can be stopped at any time via a operator modify command or stop command, i.e.:

```
P SYZSPOOL
```

or

```
F SYZSPOOL,STOP
```



**AGE of output: A | Age =**

xxx H | Hours | D |Days

**Description:**

Provide the installation defined one to three digit age of the output before it is eligible to be processed by SyzSPOOL/z. The AGE can be specified in Hours (H) or Days (D). The JES output is constantly aging, and SyzSPOOL/z will receive the output when it reaches the specified AGE automatically (actually is a function of SAPI processing, but it seems like magic).

**Parameters:**

xxx H or D

Up to a 3 number entry to designate the AGE in Hours or Days the the JES output on the Spool must reach before it is eligible to be off-loaded by SyzSPOOL/z. Hours is the default if both H and D are left unspecified.

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. AGE=,

The default is '0', which means that as soon as a JOB, TSU or STC ends, its output is eligible for processing.

**Example:**

.....

\* Set so that we only pick jobs older than 3 days (72 hours)

HLQ=PRT,AGE=3D,HELD=NO

.....



**Class of output : C | Class | Q =**

Up to 36 classes (A-Z, 0-9)

Description:

Provide the JES output class(es) that the output must be one of to be managed by SyzSPOOL/z.

Parameters:

Any JES class (A-Z or 0-9)

Up to 36 characters to specify the JES output class(es) to be processed

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. C=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

```
.....  
* Classes A-H, L, X, And 9.  
CLASS=ABCDEFGHL9  
.....
```

## Data Class Override: Dataclas= | DClass=

### Class

#### Description:

Provide the SMS Data Class name (up to 8 characters) of the Specific Data class that you want to use for all output from this session. You can change this entry at any time throughout the life of the session via a modify command. The default is to use the default data class that you have set up in your SMS routines for the dataset names that SyzSPOOL/z builds.

#### Parameters:

### Class

any (up to) 8 characters that match the required Data Class name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:

i.e. DC=,

The default is blank, meaning that the DATACLAS for the specified dataset will not be overridden by this task.

#### Example:

```
.....  
* Point the output from SysSpool to the SPOOL data Class  
HLQ=PRT,AGE=,HELD=ALL,DC=SPOOL  
.....
```

**DELEte Entry Table (autodelete unwanted output): DEL =**

Class/Type/Destination/Userid/DDname/Taskname (“/”, “\” or “|” character is required)  
 Generic(s) may be used for Destination, DDname or TASKname

**Description:**

Provides the specification of rules to govern what output datasets should be automatically deleted from the spool without moving them to a managed dataset. This allows the site to delete entire JOBS, Classes Types of JOBS (STC, TSU or JOB) or Destinations, or just specific DDnames within any subset of supported identifiable output datasets.

Parameters (individual entries must be separated by one of the supported separators and all fields are required, even if unused or generic):

Class (single Byte class or “\*” for ALL classes)  
 Type (single Byte, S=STC, T=TSU, J=Batch JOB, or “\*” for all Types of output)  
 DESTination (up to 8 bytes (or generic))  
 UserID (up to 8 bytes (or generic)), UserID is the Task Owner (normally submitter)  
 DDname (up to 8 bytes (or generic))  
 Taskname (or generic)

The Dest, User, DD and TASKname fields may be any (up to) 8 characters that match the element(s) you wish to delete. The Generic may NOT start with a generic character unless that character is the ONLY character. All fields may not be generic at the same time i.e DEL=\*\*/\*\*/\*\*/\*\* is NOT ALLOWED. Generics are specified with either single character generic “%” or the “rest of name” generic character “\*”. There is a limit of 1500 “DEL=” parameter entries at a time.

**Examples:**

.....

- \* Delete all TSO output that start with ABCD9 no matter where they are or what types they are
- \* (any class, Type=Tso Any Destination, any Userid, any DDname Taskname must start “ABCD9”

**DEL=\*/T/\*\*/\*\*/ABCD9\***

- \* Delete all SYSTSPRT DD’s from all production payroll Batch jobs
- \* (any class, TYPE=Jobs, and Destination, any UserID, DD=SYSTSPRT, Taskname must start “PAY”

**DEL=\*/ J/\*\*/\*\*/SYSTSPRT/PAY\***

- \* Delete all CLASS=Z output
- \* (Class=Z, Type=any, Dest=any, User=any, DD=any, Taskname=any)

**DEL=Z\\*\\*\\*\\***

- \* Delete all TSO output in Class K
- \* (Class=K, Type=Tsu, Dest=any, User=any, DD=any, Taskname=any)

**DEL=K/T\\*\\*\\***

- \* Delete all jobs that start with ACT and end with P that are in class X if submitted by the auto scheduler
- \* (class=X, Type=Job, dest=any, User=SYZAUTO, DD=any, Taskname=ACT%%P)

**DEL=X|J|\*|SYZAUTO|\*|ACT%%P**

.....

Destination name of output: D | DEST =

xxxxxxxxxxxxxxxxxxxx \* and ? Wildcards are supported

Description:

Provide the (up to 18 character) JES output destinations) that the output must be one of to be managed by SyzSPOOL/z.

Parameters:

Any JES supported destination or NODE.USERID, or NODE.REMOTE

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. DEST=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....  
\* All of the Payroll destinations.  
DEST=PAY\*

\* Just output queued to the SPOOLOFF destination.  
**DEST=SPOOLOFF**

.....

## Detail management log mode: DETAIL =

Yes|No (default is NO) or anything else also = NO

### Description:

The DETAIL parameter directs SyzSPOOL/z to print a second, more detailed, informational message after each management log line in the SyzSPOOL/z sysout log. This second line is written only after successful completion of the offload of the data from the JES spool and contains detailed information pertaining to the status of the generated output dataset that contains the offloaded data, including ManagementClass, StorageClass, DataClass, Volume serial, and Retain days of the offloaded data. Under some circumstances, the site may have SMS settings which override or disregard the desired SyzSPOOL/z settings in the parameters, and it would be desirable to see how that dataset was “actually” allocated. The DETAIL parameter allows that information to be shown.

### Parameters:

Yes or No

Any other characters beyond the “Y” of yes or “N” of no are unnecessary. Any other setting except for the designation of Yes or No will result in a NO setting.

### Example:

```
.....  
* request DETAIL log mode  
HLQ=PRT,DETAIL=YES,HELD=NO  
.....
```

FORM name of output: F | FORM =

xxxxxxxx \* and ? Wildcards are supported

Description:

Provide the (up to 8 character) JES output FORMS specification that the output must be one of to be managed by SyzSPOOL/z.

Parameters:

Any JES supported FORM

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. FORM=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....  
\* All of the STD1 through STD9 forms.  
FORM=STD\*

\* Reset form to nothing so that all forms are okay to manage.  
**FORM=,**

.....

## Form Control Buffer of output: FCB =

XXXX

### Description:

Provide the Forms Control Buffer name that SyzSPOOL/z should use as a selection parameter for selecting output to be processed. Select all FCB's is the default.

### Parameters:

XXXX

any 4 characters that match the required FCB name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. FCB=,

The default is blank, meaning that it is not used as a criteria for selection.

### Example:

.....  
\* Use fcb3 FCB  
**FCB=FCB3**

.....



---

## High Level Qualifier of Output : H | HLQ =

xxx

### Description:

THIS IS A REQUIRED PARAMETER!!!

Provide the installation defined one to four character HLQ (High Level Qualifier) of the output datasets to be created by SyzSPOOL/z that will contain the JES spool output. This HLQ should be defined as supported in the installations Storage Class, ACS routines so that the output can be directed to a SMS pool. It is **STRONGLY** suggested that this HLQ be used only for this facility, some sites, depending on retention, can have several million jobs retained at a time, so keeping them separate is a good idea.

### Parameters:

xxx

Default: "PRT"

Up to 3 characters to create the HLQ of the output datasets. This HLQ must follow normal IBM restrictions for High Level Qualifiers.

There is no default for this parameter, and an entry is required.

### Example:

.....

\* All datasets should start with PRT

**HLQ=PRT**,AGE=3D,HELD=NO

.....

## Queue processing options: HELD =

Y| Yes | N | No | A | All

### Description:

Provide whether SyzSPOOL/z should process ONLY normal “print queue” output (No), Both Normal and TSO Held output (Yes) or all output queues including XWTR HELD and Normal (ALL). NO is the default.

### Parameters:

Y| Yes | N | No | A | All

Only the above characters or words are supported.

- N or NO - allows SyzSPOOL/z to ONLY process normal output queue.
- Y or YES - allows SyzSPOOL/z to process both Output and HELD queues
- A or ALL - allows SyzSPOOL/z to process all queues including X-WTR queue.

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. HELD=,

The default is ”NO”, meaning that only the normal output queue is used for selection.

### Example:

.....  
\* All datasets should start with PRT  
HLQ=PRT,AGE=3D,**HELD=NO**  
.....

**JOB name of output: J | JNM | JOBNAME =**

xxxxxxx \* and ? Wildcards are supported

Description:

Provide the (up to 8 character) JOB name that the output must be one of to be managed by SyzSPOOL/z.

Parameters:

Any JES supported JOBNAME

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. JOBNAME=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....  
\* All Payroll JOBS.  
**J=PAY\***  
.....

---

## Batch JOB Management Class Override: JM | JMGCL =

### Class

#### Description:

Provides the Management Class name (up to 8 characters) of the Specific Management class that you want to use for all Batch JOB output from this session. You can change this entry at any time throughout the life of the session via a modify command. The default is to use the default management class (if provided) by the MGMTCLAS= parameter or that you have set up in your storage class routines for the dataset names that SyzSPOOL/z builds.

#### Parameters:

Class

any (up to) 8 characters that match the required Management Class name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. JMGCL=,

The default is blank, meaning that the MGMTCLAS for Batch JOB output will not be overridden by this task.

#### Example:

.....  
\* Point the output from for Batch JOBS to the 90 day retention SPOOL90 Management Class  
HLQ=PRT, Age=, HELD=ALL, **JMGCL=SPOOL90**

.....

**Journal Processing: JOURNAL =**

Yes or No (default is NO)

## Description:

Provide the ability to log information about each output dataset, including the maximum condition or abend code and many other informational fields, that is offloaded by SyzSPOOL/z to a VSAM format journal file. This file must be pre-allocated, (see the instructions in the install portion of this manual). The default is to create this file, and it is “strongly” suggested that you take advantage of this capability. If you decide to use the Journal, you will need to take note of the batch synchronize processing that needs to take place to keep the catalogs and the VSAM journal in sync. This process is quite fast, but is necessary to keep things in proper order.

Journal file Record length = Variable 255 Bytes - 32K

Journal File Key Length = 29

Journal File Contents JOB record (type “10”):

Location	Description	Format	Length	
Key start at location 0:				
0-1	Record Type	Char	2	(00-custid, 10-Job jrn1, 20-DD jrn1)
2-9	Jobname	Char	8	
10-15	Date	Char	6	
16-19	Time	Char	4	
20-26	JOB ID	Char	7	
27	Sequence Byte	Char	1	
Key end				
28-31	TOD first DD created	X	4	
32-35	Date Job Submitted	X	4	
36-39	Time Job Submitted	X	4	(Since midnight)
40-47	Owner of this JOB	Char	8	(RACF/ACF2 Userid)
48	JES DD's exist	X	1	(Bit settings)
49-52	Total number of DD	X	4	
53-55	Maximum CC, JOB	X	3	
56-58	Last Abend Code	X	3	(System first, then User)
59-62	Line Count	X	4	(this file, not just DD)
63-66	Page Count	X	4	(this file, not just DD)
	Record Count	X	4	(JES3 only)

67-71	SAPI Flag bytes	X		5	
72-73	Max LRECL	X		2	
74-93	Job Programmer	Char		20	
94-101	Notify Node	Char		8	
102-109	Notify UserID	Char		8	
110-117	Submit Node	Char		8	
118-125	Execution Node		Char		8
126-133	Output Node	Char		8	
134-137	JES MAS Member	Char		4	
138	Output location	Char		1	(0=dasd, 1=ml/1, 2=ml/2)
139	Delete Status	Char		1	(blank, 0,1,or 2)
140-141	Days to retain output	X		2	
142-145	Date offloaded	X		4	
146	Unused		Char		1
147-151	Date Offloaded Julian	Char		5	
152-159	Management Class	Char		8	
160	Entry added by SYNC		Char		1 (0=no, 1=Yes)
161-165	Last Sync Date		Char		5
166	Status Key		Char		1 (blank, or D)
167-171	Displayable MaxRC	Char		5	
172-175	Displayable #DD's	Char		4	
176	Displayable JMSG	Char		1	(Y or N)
177	Displayable JJCL	Char		1	(Y or N)
178	Displayable JSYS	Char		1	(Y or N)
179-186	Displayable #Lines	Char		8	
187-194	Displayable #Pages	Char		8	
195	Origin Output Class	Char		1	
196-254	(reserved)		Char		59

## Parameters:

Yes or No

Yes - will cause SyzSPOOL/z to maintain the VSAM journal file

No - will bypass Journal processing

Note: It is STRONGLY suggested that you decide on YES or NO at startup time and not change it during processing as you will end up with some data journaled and some not journaled.

The default is blank, meaning that the VSAM journal will not be maintained or processed.

## Example:

.....

\*Keep a VSAM JOURNAL of the datasets as they are created.

HLQ=PRT,AGE=,HELD=ALL,**JOURNAL=YES**

.....

Maximum JOB|STC|TSU number of output: JH =

nnnnnnn

Description:

Provide the (up to 7 digit) JES JOB|STC|TSU number for MAXIMUM (or only) number of the output ID to be selected by SyzSPOOL/z. If specified with the JL option (LOW RANGE), only those JOB|STC|TSU outputs that have a ID number between the two specified numbers (inclusive) will be selected for processing by SyzSPOOL/z. Any output with a JOB|STC|TSU number ID less than that specified will be bypassed.

Parameters:

Any 1 to 7 digit number (max 9999999 )

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. JH=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....

\* Select all jobs between J0001100 and J0001199

JL=1100, JH=1199

\* Reset lower limit to nothing so that all JOB|STC|TSU higher than J0001100 are managed.

**JH=,**

.....



Minimum JOB|STC|TSU number of output: JL =

nnnnnnn

Description:

Provide the (up to 7 digit) JES JOB|STC|TSU number for MINIMUM (or only) number of the output ID to be selected by SyzSPOOL/z. If specified with the JH option (HIGH RANGE), only those JOB|STC|TSU outputs that have a ID number between the two specified numbers (inclusive) will be selected for processing by SyzSPOOL/z. Any output with a JOB|STC|TSU number ID less than that specified will be bypassed.

Parameters:

Any 1 to 7 digit number (max 9999999 )

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. JL=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....

\* Select all jobs between J0001100 and J0001199

JL=1100, JH=1199

\* Reset lower limit to nothing so that all JOB|STC|TSU up to J0001199 are managed.

**JL=,**

.....

---

Minimum number of lines in output: LL | LINEL =

nnnnnnnn

Description:

Provide the (up to 8 digit) JES output MINIMUM number of lines specification that the output must have to be managed by SyzSPOOL/z. Any output with a number of lines less than that specified will be bypassed.

Parameters:

Any 1 to 8 digit number (max 99,999,999 lines)

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. LL=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....  
\* Don't manage JOBS less than 10 or more than 500,000 lines.  
LL=10,LX=500000

\* Reset lower limit to nothing so that all JOBS up to the previous 500,000 lines are managed.  
**LL=,**

.....

Maximum number of lines in output: LX | LINEX =

nnnnnnnn

Description:

Provide the (up to 8 digit) JES output MAXIMUM number of lines specification that the output can have to be managed by SyzSPOOL/z. Any output with a number of lines greater than that specified will be bypassed.

Parameters:

Any 1 to 8 digit number (max 99,999,999 lines)

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. LX=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....  
\* Don't manage JOBS less than 10 or more than 500,000 lines.  
LL=10,LX=500000

\* Reset upper limit to nothing so that all JOBS are managed.  
LL=,LX=

.....

**Maximum Retention period allowed for managed output: MAXRET=**

9999 (days to retain, up to 4 digits, max of 9999)

**Description:**

Provide the limit of the maximum number of days that the output managed by SyzSPOOL/z can be retain for before it is allowed to be scratched. This setting is meaningless to SMS, but is used by those sites that do not use SMS as the management vehicle for the managed output from SyzSPOOL/z. The other retention related parameters (RETAIN, RE, RJ, RS, and RT) are limited by this parameter and cannot exceed the number of days specified by this parameter.

**Parameters:**

Any 4 digits up to 9999 (days)

The default is blank, meaning that it is not used as a criteria for selection.

**Example:**

.....

\* Limit all retention to no more than 2 years.

**MAXRET=730**

\* Reset form to nothing so that there is no maximum retention days.

**MAXRET=,**

.....

---

## Management Class Override: MGCL | MGMTCLAS =

Class

### Description:

Provide the Management Class name (up to 8 characters) of the Specific Management class that you want to use for all output from this session. You can change this entry at any time throughout the life of the session via a modify command. The default is to use the default management class that you have set up in your storage class routines for the dataset names that SyzSPOOL/z builds.

### Parameters:

Class

any (up to) 8 characters that match the required Management Class name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. MGCL=,

The default is blank, meaning that the MGMTCLAS for the specified HLQ will not be overridden by this task.

### Example:

.....  
\* Point the output from SysSpool to the 60 day retention SPOOL60 Management Class  
HLQ=PRT, Age=, HELD=ALL, **MGCL=SPOOL60**  
.....

---

## Notify Processing: N | NOTIFY =

Yes or No (default is NO)

### Description:

Provide the ability to send a message to the person named in the JOBCARD NOTIFY= parameter or in the JES2 /\*NOTIFY JECL card. If this parameter is set to “YES”, and IF the JOBCARD or /\* card NOTIFY is set to a valid userid, then that userid will receive a message telling them that the output has been processed by SyzSPOOL/z when it is removed from the JES2spool volume and placed into the SyzSPOOL/z output dataset. If the userid is invalid, or not specified on the JOBCARD, then no processing is performed.

### Parameters:

Yes or No

Yes - will cause SyzSPOOL/z to send a message to the user

No - will bypass notify processing

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. NOTIFY=,

The default is blank, meaning that users will NOT be notified when their job is processed.

### Example:

.....  
\*Send the notification that SyzSPOOL/z has processed the user's JOB  
HLQ=PRT, Age=, HELD=ALL, **NOTIFY=YES**  
.....

Select by Origin node name of output: **OR= | ORIGIN =**

xxxxxxxx \* and ? Wildcards are supported

Description:

Provide the (up to 8 character) JES node that the output MUST have originated from in order to be managed by SyzSPOOL/z.

Parameters:

Any JES NODE name

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. ORIGIN=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....  
\* All of the output submitted on/from the production PRnn systems.  
ORIGIN=PR\*

\* Reset form to nothing so that all origins are okay to manage.  
**OR=,**

.....

Minimum number of pages in output: PL | PAGEL =

nnnnnnnn

Description:

Provide the (up to 8 digit) JES output MINIMUM number of PAGES specification that the output must have to be managed by SyzSPOOL/z. Any output with a number of PAGES less than that specified will be bypassed.

Parameters:

Any 1 to 8 digit number (max 99,999,999 PAGES)

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. PL=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....

\* Don't manage JOBS less than 10 or more than 500 Pages.

PL=10,PX=500

\* Reset lower limit to nothing so that all JOBS up to the previous 500 pages are managed.

**PL=,**

.....



**Maximum number of pages in output: PX | PAGEX =**

nnnnnnnn

**Description:**

Provide the (up to 8 digit) JES output MAXIMUM number of PAGES specification that the output can have to be managed by SyzSPOOL/z. Any output with a number of PAGES greater than that specified will be bypassed.

**Parameters:**

Any 1 to 8 digit number (max 99,999,999 lines)

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. PX=,

The default is blank, meaning that it is not used as a criteria for selection.

**Example:**

.....

\* Don't manage JOBS less than 10 or more than 500 pages.

PL=10,PX=500

\* Reset upper limit to nothing so that all JOBS are managed.

PL=,**PX=**

.....

## Process mode selection of output: PRmode =

xxxxxxx \* and ? Wildcards are supported

### Description:

Provide the (up to 8 character) JES output Process Mode (PRMODE) specification that the output must be one of to be managed by SyzSPOOL/z.

### Parameters:

Any JES supported PRMODE

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. PR=,

The default is blank, meaning that it is not used as a criteria for selection.

### Example:

.....  
\* All of the 3820xxxx PRMODE output.  
PR=3820\*

\* Reset form to nothing so that all PRMODES are okay to manage.

**PR=,**

.....

**Retention task entry (days) default for managed output: RE=**

9999 (days to retain, up to 4 digits, max of 9999)  
 Taskname/9999(days) (slash "/" character is required)  
 Generic Taskname/9999 (slash "/" character is required)

**Description:**

Provides the specification of a RETENTION days name for specific or generic tasks. You can add or change entries at any time throughout the life of the session via a modify command. This setting is meaningless to SMS, but is used by those sites that do not use SMS as the management vehicle for the managed output from SyzSPOOL/z. The number specified cannot exceed the MAXRET parameter and will override the RETAIN= default setting.

**Parameters:**

Taskname (or generic) / retaindays (numeric max of 9999)

The default is blank, meaning that it is not used as a criteria for selection.

**Example:**

.....  
 \* All CICS2 tasks get retention to no more than 2 years.  
**RE=CICS2\*/730**  
 .....

Retention period (days) default for managed output: RET= | RETAIN=

9999 (days to retain, up to 4 digits, max of 9999)

Description:

Provide the default number of days that the output managed by SyzSPOOL/z can be retain for before it is allowed to be scratched. This setting is meaningless to SMS, but is used by those sites that do not use SMS as the management vehicle for the managed output from SyzSPOOL/z. The number specified cannot exceed the MAXRET parameter. This is the “default” RETAIN days and can be overridden by other retention related parameters (RE, RJ, RS, and RT).

Parameters:

Any 4 digits up to 9999 (days)

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....

\* DEFAULT all retention to no more than 2 years.

RET=730

\* Reset form to nothing so that there is no default retention days.

**RETAIN=,**

.....

**Retention of BATCH JOB output (days): RJ=**

9999 (days to retain, up to 4 digits, max of 9999)

**Description:**

Provide the default number of days that BATCH JOB output will be retained (if not overridden by a specific RE= parameter setting) by SyzSPOOL/z before it is allowed to be scratched. This setting is meaningless to SMS, but is used by those sites that do not use SMS as the management vehicle for the managed output from SyzSPOOL/z. The number specified cannot exceed the MAXRET parameter. This is the “default” BATCH JOB output retention ONLY and does not affect other output types (STC or TSU).

**Parameters:**

Any 4 digits up to 9999 (days)

The default is blank, meaning that it is not used as a criteria for selection.

**Example:**

.....

\* ALL BATCH JOBS retained for no more than 2 years.

RJ=730

\* Reset form to nothing so that there is no default BATCH retention days.

**RJ=,**

.....

**Retention of Started Task output (days): RJ=**

9999 (days to retain, up to 4 digits, max of 9999)

**Description:**

Provide the default number of days that Started Task output will be retained (if not overridden by a specific RE= parameter setting) by SyzSPOOL/z before it is allowed to be scratched. This setting is meaningless to SMS, but is used by those sites that do not use SMS as the management vehicle for the managed output from SyzSPOOL/z. The number specified cannot exceed the MAXRET parameter. This is the “default” STC output retention ONLY and does not affect other output types (JOB or TSU).

**Parameters:**

Any 4 digits up to 9999 (days)

The default is blank, meaning that it is not used as a criteria for selection.

**Example:**

.....

\* ALL STC's retained for no more than 2 years.

RS=730

\* Reset form to nothing so that there is no default STC retention days.

**RS=,**

.....

**Retention of TSO User output (days): RT=**

9999 (days to retain, up to 4 digits, max of 9999)

**Description:**

Provide the default number of days that TSO USER output will be retained (if not overridden by a specific RE= parameter setting) by SyzSPOOL/z before it is allowed to be scratched. This setting is meaningless to SMS, but is used by those sites that do not use SMS as the management vehicle for the managed output from SyzSPOOL/z. The number specified cannot exceed the MAXRET parameter. This is the “default” TSU output retention ONLY and does not affect other output types (JOB or STC).

**Parameters:**

Any 4 digits up to 9999 (days)

The default is blank, meaning that it is not used as a criteria for selection.

**Example:**

.....

\* ALL TSO User output retained for no more than 15 days.

RT=15

\* Reset form to nothing so that there is no default TSU retention days.

**RT=,**

.....

**Select Output Type(s): SELECTxxx=**

SELECTALL, SELECTStc, SELECTTso,SELECTJob,SELECTAppc  
 (default is ALL)  
 SELECTNOTso,SELECTNOSTc,SELECTNOJob,SELECTNOAppc or  
 SELECTNOALL (deselects all types of input)

## Description:

Provide the ability to control which types of output that SyzSPOOL/z should process. The default is to process all output regardless of whether it came from a Started Task, TSO User, Batch JOB or APPC task. If you don't include this parameter, it is the same as specifying SELECTALL. Alternatively, you could unselect any of the above types via the SELECTNOxxx command.

SELECTALL	-	Selects ALL output types
SELECTNOALL	-	Un-selects ALL output types
SELECTStc	-	Selects Started Task output
SELECTNOSTc	-	Un-selects Started Task output
SELECTTso	-	Selects TSO User output
SELECTNOTso	-	Un-selects TSO User output
SELECTJob	-	Selects Batch JOB output
SELECTNOJob	-	Un-selects Batch JOB output
SELECTAppc -		Selects APPC Task output
SELECTNOAppc	-	Un-selects APPC Task output

## Parameters:

NONE

## Example:

.....  
 \*Select only Started task and Batch output  
 HLQ=PRT,Age=,HELD=ALL,**SELECTSTC,SELECTJOB**  
 .....



**Separator mode: SEP =**

No (default is NO) or anything else

**Description:**

Provide the ability to control the amount of detail in the SyzSPOOL/z output dataset separator. By default, SyzSPOOL/z will create the following record in the output dataset between each JES2 output dataset within a JOB.

```
**ZSP101I JOBNAME(SYZSPL70),JOBID(JOB00636),DDNAME(JESMSG LG),RECORDS(
16)**
```

The above entry identifies the JOBNAME, JOBID, DDNAME of the JOB, LINECOUNT and PAGECOUNT.

If you request Detailed mode separators, then the separator will be as follows:

```
**ZSP101I SYZSPL70J000636STEPNAMEPROCSTEPDDNAME....
**ZSP102I .....
```

Which adds the following fields to the separator. There are no spaces between these fields, and they are in the unprocessed format as received from the JES2 subsystem. They are meant to be programmatically processed, not generally read, but you can process them manually if necessary.

**ZSP101I record:**

Column	Field Description	Format	Length
1-9	“**ZSP101I”	Char	9
10	blank		1
11-18	JOBNAME	Char	8
19-25	JOBID	Char	7
26-33	STEPNAME	Char	8
34-41	PROCSTEP	Char	8
42-49	DDNAME	Char	8
50	CLASS	Char	1
51-54	Lines in this DD	X	4
55-58	Pages in this DD	X	4
59-61	Maximum CC (JOB)	X	3
62-64	Last Abend Code	X	3 (System code first, then User code)
65-72	OwnerID	Char	8
73	SAPI flag 1	B	1

74	SAPI Flag 2	B	1
75	SAPI Flag 3	B	1
76	SAPI Flag 4	B	1
77	SAPI Flag 5	B	1
78-79	MLRECL of this DD	X	2
80	Lines per page	X	1

ZSP102I record:

Column	Field Description	Format	Length	
1-9	“**ZSP102I”	Char	9	
10	blank		1	
11-18	Destination this DD	Char	8	
19-26	FORM Name	Char	8	
27-34	Notify ID	Char	8	
35-38	FCB name this DD	Char	4	(“*****” if default)
39-42	UCS name this DD	Char	4	(“*****” if default)
43-50	Writer Name this DD	Char	8	
51-54	TOD this DD created	X	4	(STCK format)
55-58	DATE this JOB Start	X	4	
59-62	Time this JOB started	X	4	(time since midnight)
63-80	Jobcard Programmer	Char	17	

Parameters:

No or Anything

- No (or blank) - will use the default single line separator
- Anything else - Will use the Detail (2 line) mode separator

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. SEP=,

The default is blank, meaning that the default SINGLE LINE separator will be used.

Example:

.....  
 \*Set the detailed (3 line) separator mode  
 HLQ=PRT,AGE=,HELD=ALL,**SEP=DETAIL**  
 .....

**DF/SMS controlled Processing: SMS =**

Yes or No (default is YES)

## Description:

Provide the ability to run SyzSPOOL/z without SMS control. It is recommended that you run SyzSPOOL/z under SMS control to take advantage of the built-in retention capabilities of the DF/SMS component of z/OS. IF you decide to set this to "NO", (meaning that you do NOT want SMS control of the output datasets), then you will need to be sure that you have set the UNIT= and/or VOLSER= parameters to match where you want SyzSPOOL/z to place the output. If you specify both UNIT= and VOLSER= then you will could be limiting yourself to a single VOLUME for output.

## Parameters:

Yes or No

Yes - will cause SyzSPOOL/z to use SMS controls and Constructs

No - will use internal settings provided by the user for allocation control

The default is blank, meaning that SMS constructs will be used

## Example:

.....

\*Force SyzSPOOL/z to use only the SYZ002 volume

HLQ=PRT, Age=, HELD=ALL, **SMS=NO**, UNIT=SYSDA, VOLSER=SYZ002

\*Force SyzSPOOL/z to use the TSO\* volumes (Unit=TSO)

HLQ=PRT, Age=, HELD=ALL, **SMS=NO**, UNIT=TSO

\*Force SyzSPOOL/z to use only the any mounted PUBLIC vols

HLQ=PRT, Age=, HELD=ALL, **SMS=NO**, UNIT=SYSDA

.....

**Spool Volume of output: SPL =**

Volser

**Description:**

Provide the Volume serial (up to 6 characters) of the Specific Spool Volume VOLSER that SyzSPOOL/z should use as a selection parameter for selecting output to be processed. Select all Spool volumes's is the default.

**Parameters:**

Volser

any (up to) 6 characters that match the required JES spool volumes serial

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. SPL=,

The default is blank, meaning that it is not used as a criteria for selection.

**Example:**

.....  
\* Get all jobs off the SPL005 volume  
HLQ=PRT,AGE=,HELD=ALL,**SPL=SPL005**  
.....

---

## STC Management Class Override: SM | SMGCL =

Class

### Description:

Provides the Management Class name (up to 8 characters) of the Specific Management class that you want to use for all STC (Started Task) output from this session. You can change this entry at any time throughout the life of the session via a modify command. The default is to use the default management class (if provided) by the MGMTCLAS= parameter or that you have set up in your storage class routines for the dataset names that SyzSPOOL/z builds.

### Parameters:

Class

any (up to) 8 characters that match the required Management Class name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:

i.e. SMGCL=,

The default is blank, meaning that the MGMTCLAS for Started Task output will not be overridden by this task.

### Example:

.....

\* Point the output from for STC's to the 90 day retention SPOOL90 MGCL

HLQ=PRT, Age=, HELD=ALL, **SMGCL=SPOOL90**

.....

## Storage Class Override: STCL | STORCLAS =

Class

### Description:

Provide the Storage Class name (up to 8 characters) of the Specific Storage class that you want to use for all output from this session. You can change this entry at any time throughout the life of the session via a modify command. The default is to use the default storage class that you have set up in your storage class routines for the dataset names that SyzSPOOL/z builds.

### Parameters:

Class

any (up to) 8 characters that match the required Storage Class name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:

i.e. STCL=,

The default is blank, meaning that the STORCLAS for the specified HLQ will not be overridden by this task.

### Example:

```
.....  
* Point the output from SysSpool to the SPOOL Storage Class  
HLQ=PRT, Age=, HELD=ALL, STCL=SPOOL  
.....
```

---

## TSO User Management Class Override: TM | TMGCL =

### Class

#### Description:

Provides the Management Class name (up to 8 characters) of the Specific Management class that you want to use for all TSO output from this session. You can change this entry at any time throughout the life of the session via a modify command. The default is to use the default management class (if provided) by the MGMTCLAS= parameter or that you have set up in your storage class routines for the dataset names that SyzSPOOL/z builds.

#### Parameters:

### Class

any (up to) 8 characters that match the required Management Class name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. TMGCL=,

The default is blank, meaning that the MGMTCLAS for TSO User Task output will not be overridden by this task.

#### Example:

.....  
\* Point the output from for TSO Users to the 10 day retention SPOOL10 Management Class  
HLQ=PRT, Age=, HELD=ALL, **TMGCL=SPOOL10**  
.....

## Task Entry Management Class Override: TE =

Taskname/Class (slash "/" character is required)  
 Generic Taskname/Class (slash "/" character is required)

### Description:

Provides the specification of a Management Class name for specific or generic tasks. You can add or change entries at any time throughout the life of the session via a modify command. The default is to use the default management class (if provided) by the TSU/JOB/STC, then (if not found to use the MGMTCLAS= parameter or that you have set up in your storage class routines for the dataset names that SyzSPOOL/z builds.

### Parameters:

Taskname (or generic) / managementclass

any (up to) 8 characters that match the task you wish to set the class of, this can be a JOB, TSO user or Started Task name (or generic). The TASK may NOT start with a generic character. Generics' are specified with either single character generic "%" or the "rest of name" generic character "\*". The system will automatically sort the entries, and the most specific entry will be used first, followed by the generic match.

### Example:

- .....
- \* Output from JOB "SPOOLTST" will use DELETEME management class
  - \* Output from all PRODJOB% tasks will use SPOOL365 management class
  - \* Output from all ZX%JOBn tasks will use SPOOL60 management class
  - \* Output from all TESTxxxx tasks will use SPOOL10 management class
  - \* Output from all CICSxxxx tasks will use SPOOL30 management class

**TE=SPOOLTST/DELETEME,TE=PRODJOB%/SPOOL365,  
 TE=ZX%JOB\*/SPOOL60,  
 TE=TEST\*/SPOOL10,  
 TE=CICS\*/SPOOL30**

.....



UserID of output Owner : U | UID | USER | USERID =

Axxxxxxx | \* and ? Wildcards are supported

Description:

Provide the UserID of the job submitter or owner of the output. Only JES output in the Spool that matches the specified USERID will be managed by SyzSPOOL/z.

Parameters:

Axxxxxxx

Up to a 8 characters to specify the RACF (or ACF2 or TopSecret) ID of the owner of this output. The normal Security system, restrictions apply to this field. This parameter supports the selection by WildCard characters \* and ?, where “\*” refers to multiple characters and “?” refers to a single character.

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:

i.e. UID=,

The default is blank, meaning that it is not used as criteria for selection.

Example:

.....

\* Specify all Human Resources users.

HLQ=PRT,AGE=3D,HELD=NO,**USER=HR\***

or

\* Specify all ID's that start with A21 and end with a 1

**USER=A21\*1**

or

\*Specify all users that match any first character followed by 23456

**USER=?23456**

.....

**Force Specific Allocation UNIT: UNIT =**

Any Valid UNITNAME (default is SYSDA)

## Description:

Provide the ability to run SyzSPOOL/z without SMS control. It is recommended that you run SyzSPOOL/z under SMS control to take advantage of the built-in retention capabilities of the DF/SMS component of z/OS. IF you decide to set SMS to "NO", (meaning that you do NOT want SMS control of the output datasets), then you will need to be sure that you have set the UNIT= and/or VOLSER= parameters to match where you want SyzSPOOL/z to place the output. If you specify both UNIT= and VOLSER= then you will could be limiting yourself to a single VOLUME for output.

## Parameters:

Any VALID UNITNAME (default is SYSDA)

Note: If SMS is let to default or set to "YES" then this parameter is ignored.

## Example:

.....

\*Force SyzSPOOL/z to use only the SYZ002 volume

HLQ=PRT, Age=, HELD=ALL, SMS=NO, **UNIT=SYSDA**, VOLSER=SYZ002

\*Force SyzSPOOL/z to use the TSO\* volumes (Unit=TSO)

HLQ=PRT, Age=, HELD=ALL, SMS=NO, **UNIT=TSO**

\*Force SyzSPOOL/z to use only the any mounted PUBLIC vols

HLQ=PRT, Age=, HELD=ALL, SMS=NO, **UNIT=SYSDA**

.....

## Universal Character Set of output: UCS =

xxxx

### Description:

Provide the Universal Character Set name that SyzSPOOL/z should use as a selection parameter for selecting output to be processed. Select all UCS's is the default.

### Parameters:

xxxx

any 4 characters that match the required UCS name

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. UCS=,

The default is blank, meaning that it is not used as a criteria for selection.

### Example:

.....  
\* Use AMR1 UCS  
**UCS=AMR1**

.....

**VOLUME allocation Processing: VOLSER =**

Any Valid VOLUME SERIAL (no default)

**Description:**

Provide the ability to run SyzSPOOL/z without SMS control. It is recommended that you run SyzSPOOL/z under SMS control to take advantage of the built-in retention capabilities of the DF/SMS component of z/OS. IF you decide to set SMS to "NO", (meaning that you do NOT want SMS control of the output datasets), then you will need to be sure that you have set the UNIT= and/or VOLSER= parameters to match where you want SyzSPOOL/z to place the output. If you specify both UNIT= and VOLSER= then you will could be limiting yourself to a single VOLUME for output.

**Parameters:**

Any VALID VOLUME SERIAL (There is no default)

Note: If SMS is let to default or set to "YES" then this parameter is ignored.

**Example:**

.....  
\*Force SyzSPOOL/z to use only the SYZ002 volume  
HLQ=PRT,AGE=,HELD=ALL,SMS=NO,UNIT=SYSDA,**VOLSER=SYZ002**  
.....

External Writer name of output: W | WTR | WRITER =

xxxxxxxx \* and ? Wildcards are supported

Description:

Provide the (up to 8 character) external writer name that the output must be one of to be managed by SyzSPOOL/z.

Parameters:

Any JES supported Writer name

Wildcards are supported

Note: Value can be un-SET (rendered not a selection criteria) by specifying a null value:  
i.e. WTR=,

The default is blank, meaning that it is not used as a criteria for selection.

Example:

.....  
\* All Q writer jobs.  
WTR=QWTR

\*Any of the Xnnnnn writers  
**WTR=X\***

.....

## Notes / Messages

# Cross references to other products

SyzSPOOL/z can operate in conjunction with all Syzygy and IBM and all other “known” vendors.