

# Units of Work



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# What Will We Learn?



The primary ways in which work is identified in z/OS:

Started Tasks

TSO Users

Jobs

# Computer Operations



## Operators

Monitor work

Enter commands

## System Consoles

Communication with z/OS

# System Console Messages

```
SDSF SYSLOG      4157.101 MVSD MVSD 01/27/2015 1W          74,704 COLUMNS 38- 117
COMMAND INPUT ==> █                                       SCROLL ==> CSR
INSTREAM 00000290 LOGON
TSU05577 00000285 $HASP100 GADAM2 ON TSOINRDR
TSU05577 00000094 $HASP373 GADAM2 STARTED
SMF       00000090 OPS1000I *** OPS/MVS - dumping SMF dataset SYS1.MAN1 on syst
          00000290 OPS1181H IEESYSAS OPSS (*Local*) MVS N/A MSG.IEE362A S SMFDU
          DSN=SYS1.MAN1
OXMVSD01 00000290 S SMFDUMP,DSN=SYS1.MAN1
          00000090 *IEE362A SMF ENTER DUMP FOR SYS1.MAN1 ON SCSYS1
          00000090 IEE360I SMF NOW RECORDING ON SYS1.MAN2 ON SCSYS1 TIME=19.52.
STC05578 00000285 $HASP100 SMFDUMP ON STCINRDR
STC05578 00000290 IEF695I START SMFDUMP WITH JOBNAME SMFDUMP IS ASSIGNED TO
          , GROUP SYS1
STC05578 00000090 $HASP373 SMFDUMP STARTED
STC05578 00000281 $HASP395 SMFDUMP ENDED
          00000285 IEA989I SLIP TRAP ID=X33E MATCHED. JOBNAME=*UNAVAIL, ASID=0
OPSS     00000090 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
          00000290 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
          00000090 OPS3490I System ID MVSC not found in CCI complex and not AC
01 IGD069D PLEASE ENTER NAME OF COMMDS TO BE USED
***** BOTTOM OF DATA *****
```

# Entering A Command

```
SDSF SYSLOG      4157.101 MVSD MVSD 01/27/2015 1W          74,704 COLUMNS 38- 117
COMMAND INPUT ==> /D A,L                               SCROLL ==> CSR
INSTREAM 00000290 LOGON
TSU05577 00000285 $HASP100 GADAM2 ON TSOINRDR
TSU05577 00000094 $HASP373 GADAM2 STARTED
SMF       00000090 OPS1000I *** OPS/MVS - dumping SMF dataset SYS1.MAN1 on syst
          00000290 OPS1181H IEESYSAS OPSS (*Local*) MVS N/A MSG.IEE362A S SMFDU
          DSN=SYS1.MAN1
OXMVSD01 00000290 S SMFDUMP,DSN=SYS1.MAN1
          00000090 *IEE362A SMF ENTER DUMP FOR SYS1.MAN1 ON SCSYS1
          00000090 IEE360I SMF NOW RECORDING ON SYS1.MAN2 ON SCSYS1 TIME=19.52.
STC05578 00000285 $HASP100 SMFDUMP ON STCINRDR
STC05578 00000290 IEF695I START SMFDUMP WITH JOBNAME SMFDUMP IS ASSIGNED TO
          , GROUP SYS1
STC05578 00000090 $HASP373 SMFDUMP STARTED
STC05578 00000281 $HASP395 SMFDUMP ENDED
          00000285 IEA989I SLIP TRAP ID=X33E MATCHED. JOBNAME=*UNAVAIL, ASID=0
OPSS     00000090 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
          00000290 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
          00000090 OPS3490I System ID MVSC not found in CCI complex and not AC
01 IGD069D PLEASE ENTER NAME OF COMMDS TO BE USED
***** BOTTOM OF DATA *****
```

# Command Output

```
SDSF SYSLOG 4157.101 MVSD MVSD 01/27/2015 1W COMMAND ISSUED
COMMAND INPUT ==> █ SCROLL ==> CSR
RESPONSE=MVSD
IEE114I 19.55.02 2015.027 ACTIVITY 623
  JOBS      M/S      TS USERS      SYSAS      INITS      ACTIVE/MAX VTAM      OAS
00004      00020      00001      00037      00014      00001/00040      00018
  LLA      LLA      LLA      NSW S VLF      VLF      VLF      NSW S
  DLF      DLF      DLF      NSW S RACF      RACF      RACF      NSW S
  JES2     JES2     IEFPROC  NSW S RRS      RRS      RRS      NSW S
  RMF      RMF      IEFPROC  NSW S SDSF      SDSF      SDSF      NSW S
  VTAM     VTAM     VTAM     NSW S ENF      ENF      CAENF     NSW SO
  TCPIP    TCPIP    TCPIP    NSW SO TSO      TSO      STEP1     OWT S
  TN3270   TN3270   TN3270   NSW SO CCITCP   CCITCP   CCITCP    NSW SO
  CCITCPGW CCITCPGW CCITCPGW NSW SO INETD4   STEP1    OMVSKERN  OWT AO
  PORTMAP  PORTMAP  PMAP     OWT SO FTPD1   STEP1    FTPD      OWT AO
  HTTPD1   HTTPD1   WEBSRV1  IN  SO OPSS     OPSS     OPSS      NSW S
  OPSLOGSV OPSLOGSV OPSWEBVW OWT SO OPSSUSS1 STEP1    START2    OWT AO
  OPSSUSS1 STEP1    START2   OWT AO CICSA    CICSA    CICS      NSW SO
GADAM2 IN
      00000090 OPS3490I System ID MVSC not found in CCI complex and not AC
01 IGD069D PLEASE ENTER NAME OF COMMDS TO BE USED
***** BOTTOM OF DATA *****
```

# Work Categories

- Started Tasks (STC)
- TSO Users (TSU)
- Jobs (JOB)

# Identifying Work

```
SDSF SYSLOG 4157.101 MVSD MVSD 01/27/2015 1W 74,700 COLUMNS 38- 117
COMMAND INPUT ==> █ SCROLL ==> CSR
00000090 OPS3490I System ID MVSC not found in CCI complex and not ACT
OPSS 00000090 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
00000290 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
00000090 OPS3490I System ID MVSC not found in CCI complex and not ACT
INSTREAM 00000290 LOGON
TSU05577 00000285 $HASP100 GADAM2 ON TSOINRDR
TSU05577 00000094 $HASP373 GADAM2 STARTED
SMF 00000090 OPS1000I *** OPS/MVS - dumping SMF dataset SYS1.MAN1 on syst
00000290 OPS1181H IEESYSAS OPSS (*Local*) MVS N/A MSG.IEE362A S SMFDU
DSN=SYS1.MAN1
OXMVSD01 00000290 S SMFDUMP,DSN=SYS1.MAN1
00000090 *IEE362A SMF ENTER DUMP FOR SYS1.MAN1 ON SCSYS1
00000090 IEE360I SMF NOW RECORDING ON SYS1.MAN2 ON SCSYS1 TIME=19.52.
STC05578 00000285 $HASP100 SMFDUMP ON STCINRDR
STC05578 00000290 IEF695I START SMFDUMP WITH JOBNAME SMFDUMP IS ASSIGNED TO
, GROUP SYS1
STC05578 00000090 $HASP373 SMFDUMP STARTED
STC05578 00000281 $HASP395 SMFDUMP ENDED
00000285 IEA989I SLIP TRAP ID=X33E MATCHED. JOBNAME=*UNAVAIL, ASID=0
OPSS 00000090 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
```



# Console Messages

```
SDSF SYSLOG 4157.101 MVSD MVSD 01/27/2015 1W 74,720 COLUMNS 38- 117
COMMAND INPUT ==> █ SCROLL ==> CSR
00000290 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
00000090 OPS3490I System ID MVSC not found in CCI complex and not ACT
STC04185 00000090 CAS9899W Task 1 - MVSC MVSC not available...waiting
OPSS 00000090 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
00000290 OPS3504J SYSTEM ID MVSC WILL BE SENT AN CCI SESSION ACTIVATE
00000090 OPS3490I System ID MVSC not found in CCI complex and not ACT
TSU05577 00000290 IEA630I OPERATOR GADAM2 NOW ACTIVE, SYSTEM=MVSD , LU
GADAM2 00000290 D A,L
GADAM2 00000090 IEE114I 19.55.02 2015.027 ACTIVITY 623
623 00000090 JOBS M/S TS USERS SYSAS INITS ACTIVE/MAX VTA
623 00000090 00004 00020 00001 00037 00014 00001/00040
623 00000090 LLA LLA LLA NSW S VLF VLF VLF
623 00000090 DLF DLF DLF NSW S RACF RACF RACF
623 00000090 JES2 JES2 IEFPROC NSW S RRS RRS RRS
623 00000090 RMF RMF IEFPROC NSW S SDSF SDSF SDSF
623 00000090 VTAM VTAM VTAM NSW S ENF ENF CAENF
623 00000090 TCPIP TCPIP TCPIP NSW SO TSO TSO STEP1
623 00000090 TN3270 TN3270 TN3270 NSW SO CCITCP CCITCP CCITCP
623 00000090 CCITCPGW CCITCPGW CCITCPGW NSW SO INETD4 STEP1 OMVSKE
623 00000090 PORTMAP PORTMAP PMAP OWT SO FTPD1 STEP1 FTPD
```

# JCL Example

```
//SMFDUMP  PROC DSN=NULLFILE
//*  DUMP AND CLEAR SYS1.MANX SMF DATASETS.  DSN PASSED AS PARM
//*  START SMFDUMP,DSN=SYS1.MAN1
//IEFPROC  EXEC PGM=IFASMFDP,REGION=4096K
//SYSPRINT DD  SYSOUT=*
//DUMPOUT  DD  DSN=SYSTEMA.SMF.&SYSNAME(+1),
//          DISP=(NEW,CATLG,DELETE),UNIT=SYSDA,
//          SPACE=(CYL,(40,40),RLSE)
//SYSIN    DD  DUMMY
//DUMPIN   DD  DDNAME=IEFRDER
//IEFRDER  DD  DISP=SHR,DSNAME=&DSN
```

# Types of Work

- Started task (STC) – started with operator START command
- TSO User (TSU) – started when user logs on to TSO
- Batch job (JOB) – started when work is submitted by user or automation

# Batch Jobs

```
//GADAME JOB STNT301A,'G ADAM',MSGLEVEL=1,  
//          MSGCLASS=H,NOTIFY=&SYSUID,CLASS=A  
//STEP1    EXEC PGM=SORT  
//SORTIN   DD DISP=SHR,DSN=GADAM2.UNTERSED.DATA  
//SORTOUT  DD DISP=(NEW,PASS),SPACE=(CYL,(50,50),RLSE),  
// UNIT=SYSDA,DCB=(RECFM=VBS,LRECL=32760,BLKSIZE=0),  
// DSN=&&RWCDATA  
//SYSOUT   DD SYSOUT=*  
//SYSIN    DD *  
    SORT FIELDS=(11,4,CH,A,7,4,CH,A),EQUALS  
    MODS E15=(ERBPPE15,36000,,N),E35=(ERBPPE35,3000,,N)  
//STEP2    EXEC PGM=RWCSTAT  
//SYSPRINT DD SYSOUT=*  
//SYSMSGSGS DD SYSOUT=*  
//SMFIN    DD DSN=&&RWCDATA,DISP=SHR  
//CPUOUT   DD SYSOUT=*  
//STATOUT  DD SYSOUT=*  
//SUMMARY  DD SYSOUT=*
```

# Batch Work

- Runs as unattended work
- May produce output destined for a printer
- Runs in the background
  - Useful for especially long jobs
  - Useful for high volume updates