
Cheryl Watson's SMF Reference Summary

2015/09/26 (Includes z/OS 2.2)

The MVS operating system by any name (MVS, OS/390, z/OS) provides the most comprehensive metrics about its actions of any platform we are aware of. Most of this information is written to a tool called the System Management Facility or SMF. The resulting SMF records can then be used for accounting and chargeback, capacity planning, tuning and performance management, data center reporting, troubleshooting, and activity logs. In addition to IBM products, dozens of vendor products provide data via SMF.

This Reference Summary is the only one we know of that combines all of the records available from both IBM and other vendors into a single publication. It contains information about 75 record types and 600 subtypes. But some vendors have not yet replied to our queries; if you know of records not included here, please send us an email. We expect to update this periodically, so please check back for future updates at www.watsonwalker.com/references.html. We've never met an SMF record we didn't like!

Cheryl Watson's SMF Reference Summary is not copyrighted, but leave the footer if you distribute it. You are welcome to link to it, but please use www.watsonwalker.com/references.html (or the QR code below) instead of a link directly to the PDF in order to always get the latest version.



Frank Kyne, Editor / Cheryl Watson, Publisher



Watson & Walker, Inc.
Publishers of ***Cheryl Watson's TUNING Letter***
100 Central Ave, Suite 1013
Sarasota, FL 34236
941-924-6565
Fax: 941-924-4892
www.watsonwalker.com
technical@watsonwalker.com

SMF Reference Summary Contents

In our last Reference Summary, we indicated changes with change bars. We're using a different technique from this point on. All changes will be listed at the back of this document. Here's some information that will help you get the most out of this Reference.

1. Most of the information about IBM record types comes from the System Management Facilities (SMF) manual:
[SA38-0667-04](#) - z/OS 2.2 MVS System Management Facilities (SMF), about Sep2015
[SA38-0667-03](#) - z/OS 2.1 MVS System Management Facilities (SMF), Feb2015
[SA22-7630-26](#) - z/OS 1.13 MVS System Management Facilities (SMF), Sep2012
[SA22-7630-22](#) - z/OS 1.12 MVS System Management Facilities (SMF), Undated
2. Columns 1-2: The two columns on the left for Type(Dec) and Type(Hex) provide the SMF record type. Record types 0 to 127 are reserved for IBM's use, although a few vendors create similar records to IBM's (such as the Type 6 for printing). Most non-IBM vendors provide a default record type. Some allow the customer to change the number; those are marked in the chart with an asterisk (*) to the right of the decimal record type. Some vendors don't provide any default, but require the customer to specify one. Those are listed at the end of the chart with a record type of 128-255.
3. Column 3: Some SMF record types support subtypes, and others don't. Subtypes are listed in the third column. These subtypes may or may not be located in the standard subtype field. In some cases, the subtype is located elsewhere, and another field identifies the position of the subtype (often by just the vendor id). This is especially true of the SMF type 6 record.
4. Column 4: Short description.
5. Column 5: Exit. The SYS and SUBSYS keywords of the SMFPRMxx Parmlib member (see page 21) defines which SMF user exits, if any, will be called during the life of an address space. The default is that all exits are called. Just before an SMF record is written to the VSAM data set or logstream, one of three user exits is optionally called: IEFU83, IEFU84, or IEFU85. Users can choose to delete or modify the record before it's written. The selection as to which of the three exits is called is determined by how the record was originally passed to SMF. If the SMFWTM macro was used to pass the record or the SMFEWTM macro with BRANCH=NO was used, then exit IEFU83 is called. If the SMFEWTM macro was used with BRANCH=YES and MODE=XMEM, then exit IEFU85 is called. If the SMFEWTM macro was used with BRANCH=YES and not in cross memory mode, then exit IEFU84 is called. As you will see in our tables, many of the SMF writers have not documented how the record is passed. Over time, we hope to fill in those gaps. If you are a software vendor or IBM developer who can help us expand this reference to include your products, please send an email to us at technical@watsonwalker.com.
6. Column 6: Vendor name.
7. Column 7: Additional reference or manual number. When viewed as a PDF, these are all hot links that will open when clicked. When a URL is included, we use the most current manual available at the time of publication. For this publication the March 2014 IBM manual refresh for z/OS 2.1 is used.

For a more thorough explanation of SMF or Parmlib member SMFPRMxx, please see *Cheryl Watson's Tuning Letter* (by subscription only at www.watsonwalker.com) or attend one of our classes at www.watsonwalker.com/education.html. Our *Tuning Letter* has provided system programming recommendations since 1991, and each subscriber has access to all 24 years of newsletters. Do you want to know which are the most important SMF records, and how to use them? Or do you want to know WHY, for instance, we recommend you specify DDCONS(NO) in SMFPRMxx? Just check out our *Tuning Letter DVD*!

You might also be interested in Cheryl and Frank's SMF series of articles in the free Enterprise Systems Media Tech Journal. We starting with the August/September issue. Check it out here - enterprisesystemsmedia.com/magazines/enterprise-tech-journal - sr=g&m=o&cp=or&ct=-tmc&st=(opu qspwjefe)&ts=1348406612.

Index of SMF Record Types and Subtypes

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
0	00		IPL	IEFU84	IBM	
2	02	none	SMF Dump Header		IBM	
		1	Signature Group			
		2	Signature Interval			
3	03		SMF Dump Trailer		IBM	
4	04		Step Termination (use type 30 instead)	IEFU84	IBM	
5	05		Job Termination (use type 30 instead)	IEFU84	IBM	
6	06		Printer Output	--	IBM	
		0	External Writer			
		2	JES2 Output Writer	IEFU83		
		5	JES3 Output Writer	IEFU83		
		7	PSF (Print Services Facility) Output	IEFU83		
		9	IP PrintWay Output	IEFU83		SA38-0693-00 - z/OS 2.1 Infoprint Server Operation and Administration
6 *	06		CA View		CA	www.ca.com/us/opscenter/ca-view.aspx
6	06		CA Dispatch		CA	www.ca.com/us/products/detail/ca-dispatch.aspx
6 *	06		CA Deliver		CA	www.ca.com/us/products/detail/ca-deliver.aspx
6	06		CA BUNDL		CA	www.ca.com/us/products/detail/ca-bundl.aspx
6 *	06		Columbus Z		Macro 4	www.macro4.com/en/product/columbus-z/
6	06	2	JES Queue for Printers		MacKinney	www.mackinney.com/products/mainframe-printing/jes-queue-printers.html
6	06		VPS		Levi, Ray & Shoup	http://www.lrs.com
6	06		Xerox XPAF		Xerox	http://www.xerox.com/digital-printing/workflow/printing-software/xpaf/enus.html
7	07		SMF Data Lost	IEFU84	IBM	
8	08		I/O Configuration	IEFU84	IBM	
9	09		Vary Device Online	IEFU83	IBM	
10	0A		Allocation Recovery	IEFU83	IBM	
11	0B		Vary Device Offline	IEFU83	IBM	
14	0E		Input Data Set Activity		IBM	
15	0F		Output Data Set Activity		IBM	
16	10		DFSORT Statistics	--	IBM	SC23-6881-00 - z/OS 2.1 DFSORT Installation and Customization
		1	Short Record, Successful Execution			
		2	Full Record, Successful Execution			
		3	Short Record, Unsuccessful Execution			
17	11		Scratch Data Set Status		IBM	
18	12		Rename (Non-VSAM) Data Set Status		IBM	
19	13		Direct Access Volume		IBM	
20	14		Job Initiation (use type 30 instead)	IEFU84	IBM	
21	15		Tape Error Statistics by Volume		IBM	
22	16		Configuration	--	IBM	
		1	IPL	IEFU84		
		2	Vary Online	IEFU84		
		3	Vary Offline	IEFU84		

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		7	Vary Channel Path Online/Offline	IEFU84		
		8	3990 State Change	IEFU84		
		9	Activate	IEFU84		
		99	Continuation Record	IEFU84		
23	17		SMF Statistics	IEFU84	IBM	
24	18		JES2 Spool Offload	--	IBM	
		1	Job Transmitted	IEFU83		
		2	Job Received	IEFU83		
		3	SYSOUT Transmitted	IEFU83		
		4	SYSOUT Received	IEFU83		
25	19		JES3 Device Allocation	IEFU83		
26	1A		Job Purge	--	IBM	
		2	Job Purge: JES2	IEFU83		
		5	Job Purge: JES3	IEFU83		
26	1A		CA BUNDL		CA	www.ca.com/us/products/detail/ca-bundl.aspx
28	1C		NPM (NetView) Statistics - Too many subtypes to include - 136.		IBM	SH19-6965-06 - NetView Performance Monitor V2R7
30	1E		Common Address Space Work	--	IBM	
		1	Job or Task Initiation	IEFU84		
		2	Interval Termination	IEFU84		
		3	Last Interval Termination	IEFU84		
		4	Step Termination	IEFU84		
		5	Job or Task Termination	IEFU84		
		6	System Address Space Interval Termination	IEFU84		
31	1F		TIOC Initialization (obsolete)		IBM	
32	20		TSO/E User Work Accounting	--	IBM	
		1	Interval Termination	IEFU84		
		2	Session Termination	IEFU84		
		3	Detailed Interval Termination	IEFU84		
		4	Detailed Session Termination	IEFU84		
33	21		APPC/MVS TP Accounting	--	IBM	
		1	Transaction Record	IEFU84		
		2	Conversation Record	IEFU85		
34	22		TSO Step Termination (use type 30 instead)	IEFU84	IBM	
35	23		TSO Logoff (use type 30 instead)	IEFU84	IBM	
36	24		ICF Catalog Export		IBM	
37	25	4	NetView Hardware Monitor	--	IBM	SC27-2870-01 - Tivoli NetView for z/OS 6.2.0 - Application Programmer's Guide
38	26		NetView Health Check and User Authorization Monitor	--	IBM	SC27-2870-01 - Tivoli NetView for z/OS 6.2.0 - Application Programmer's Guide
		1	Command Authorization Table Data			
		2	Task Resource-Utilization-Data Data			
		3	Span Authorization Table			

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
39	27		NetView (NLDM) Response Time	--	IBM	SC27-2870-01 - Tivoli NetView for z/OS 6.2.0 - Application Programmer's Guide
		1	RTM Collection			
		2	Session End			
		3	Session Start			
		4	Accounting and Availability			
		5	Combined Session Start-End			
		6	Bind Failure			
		7	Init Failure			
		8	Storage and Event Counter			
39 *	27		CA NetMaster Network Management for SNA/Network Tracking System		CA	www.ca.com/us/opscenter/ca-netmaster-network-management-for-sna.aspx Subtypes are the same as NLDM.
40	28		Dynamic DD (use type 30 instead)	IEFU83	IBM	
41	29		DIV Objects and VLF Statistics	--	IBM	
		1	DIV Object Accessed (Opened)	IEFU84		
		2	DIV Object Unaccessed (Closed)	IEFU84		
		3	VLF Statistics	IEFU83		
42	2A		DFSMS Statistics and Configuration	--	IBM	
		1	Storage Class Summary & Buffer Management	IEFU84		
		2	Cache Control Unit (3990-3) Statistics	IEFU84		
		3	SMS Configuration Change	IEFU84		
		4	System Data Mover Statistics	IEFU84		
		5	Storage Class VTOC/VVDS I/O Stats	IEFU84		
		6	Data Set I/O Statistics	IEFU84		
		7	NFS File Timeout Statistics	IEFU84		SC23-68883-00 - z/OS 2.1 Network File System Guide and Reference
		8	NFS User Logout Statistics	IEFU84		SC23-68883-00 - z/OS 2.1 Network File System Guide and Reference
		9	Out of Space ABEND (Sx37)	IEFU84		
		10	Allocation Volume Selection Failure	IEFU84		
		11	XRC Interval Statistics	IEFU84		
		14	ADSM Accounting	IEFU84		
		15	VSAM RLS Storage Class Statistics	IEFU84		
		16	VSAM RLS Data Set Statistics	IEFU84		
		17	VSAM RLS CF Lock Statistics	IEFU84		
		18	VSAM RLS CF Usage Statistics	IEFU84		
		19	VSAM RLS Buffer LRU Statistics	IEFU84		
		20	All PDSE Members Deleted	IEFU84		
		21	PDS/PDSE Member Deleted	IEFU84		
		22	DFSMSrmm for Audit Records	IEFU84		
		23	DFSMSrmm for Security Records	IEFU84		
		24	PDS/PDSE Member Added or Changed	IEFU84		
		25	PDS/PDSE Member Renamed	IEFU84		
		26	NFS	IEFU84		SC23-68883-00 - z/OS 2.1 Network File System Guide and Reference

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		27	VTOC DSCB Audit Record	IEFU84		
43	2B		JES Started	--	IBM	
		2	JES2 Started	IEFU83		
		5	JES3 Started	IEFU83		
45	2D		JES Stopped	--	IBM	
		2	JES2 Stopped	IEFU83		
		5	JES3 Stopped	IEFU83		
47	2F		JES Signon / Line Started	--	IBM	
		2	JES2 Line Started	IEFU83		
		5	JES3 Line Started	IEFU83		
48	30		JES Signoff / Line Stopped	--	IBM	
		2	JES2 Line Stopped	IEFU83		
		5	JES3 Line Stopped	IEFU83		
49	31		JES Integrity	--	IBM	
		2	JES2 Integrity	IEFU83		
		5	JES3 Integrity	IEFU83		
50	32		VTAM Tuning Statistics		IBM	SC27-3672-00 - z/OS 2.1 Communications Server: SNA Network Implementation Guide
52	34		JES2 Line Started (SNA)	IEFU83	IBM	
53	35		JES2 Line Stopped (SNA)	IEFU83	IBM	
54	36		JES2 Integrity (SNA)	IEFU83	IBM	
55	37		JES2 Network Started	IEFU83	IBM	
56	38		JES2 Network Integrity	IEFU83	IBM	
57	39		JES Network Transmission	--	IBM	
		2	JES2 SYSOUT Transmission	IEFU83		
		5	JES3 Networking Transmission	IEFU83		
58	3A		JES2 Network Signoff	IEFU83	IBM	
59	3B		BDT File-to-File Transmission	IEFU84	IBM	
60	3C		VSAM Volume Data Set Updated		IBM	
61	3D		ICF Catalog Define Activity		IBM	
62	3E		VSAM Component or Cluster Opened	IEFU83	IBM	
63	3F		VSAM Catalog Entry Defined (obsolete)		IBM	
64	40		VSAM Component or Cluster Status	IEFU83	IBM	
65	41		ICF Catalog Delete Activity		IBM	
66	42		ICF Catalog Alter Activity		IBM	
67	43		VSAM Catalog Entry Deleted (obsolete)		IBM	
68	44		VSAM Catalog Entry Renamed (obsolete)		IBM	
69	45		VSAM Data Space Modified (obsolete)		IBM	
70	46		RMF/CMF Processor Activity	--	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
		1	CPU, PR/SM and ICF Activity	IEFU83		
		2	Cryptographic Hardware Activity	IEFU83		
71	47	1	RMF/CMF Paging Activity	IEFU83	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
72	48		RMF/CMF Workload Activity, Storage Data, and Serialization Delay	--	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
		3	Workload Activity	IEFU83		
		4	Storage Data	IEFU83		

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		5	Serialization Delay	IEFU83		
73	49	1	RMF/CMF Channel Path Activity	IEFU83	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
74	4A		RMF/CMF Resource Activity	--	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
		1	Device Activity	IEFU83		
		2	XCF Activity	IEFU83		
		3	OMVS Kernel Activity	IEFU83		
		4	Coupling Facility Activity	IEFU83		
		5	Cache Subsystem Device Activity	IEFU83		
		6	HFS Statistics	IEFU83		
		7	FICON Director Statistics	IEFU83		
		8	Enterprise Disk System Statistics	IEFU83		
		9	PCI Express Based Function Activity	IEFU83		
		10	Storage Class Memory (SCM) Statistics	IEFU83		
75	4B	1	RMF/CMF Page Data Set Activity	IEFU83	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
76	4C	1	RMF/CMF Trace Activity	IEFU83	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
77	4D	1	RMF/CMF Enqueue Activity	IEFU83	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
78	4E		RMF/CMF Virtual Storage & I/O Activity	--	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
		2	Virtual Storage Activity	IEFU83		
		3	I/O Queuing & HyperPAV Activity	IEFU83		
79	4F		RMF Monitor II Activity	--	IBM/BMC	SC34-2665-00 - z/OS 2.1 RMF Report Analysis
		1	Address Space State Data	IEFU83		
		2	Address Space Resource Data	IEFU83		
		3	Central Storage/Processor/SRM Data	IEFU83		
		4	Paging Activity	IEFU83		
		5	Address Space SRM Data	IEFU83		
		6	Reserve Data	IEFU83		
		7	Enqueue Contention Data	IEFU83		
		9	Device Activity	IEFU83		
		11	Page Data Set Activity	IEFU83		
		12	Channel Path Activity	IEFU83		
		14	I/O Queuing Activity	IEFU83		
		15	IRLM Long Lock Detection	IEFU83		
80	50		RACF and PKI Processing		IBM	SA23-2288-00 - z/OS 2.1 Security Server RACF Macros & Interfaces
80	50		ETF/R - Emergency Firecall Access for RACF		EKC, Inc.	www.ekcinc.com/Products/Firecall/Firecall.htm
80	50		ETF/R - Emergency Firecall Access for CA-ACF2		EKC, Inc.	www.ekcinc.com/Products/Firecall/Firecall.htm
80 *	50		CA Top Secret (non-USS-based events)		CA	www.ca.com/us/securecenter/ca-top-secret.aspx
81	51		RACF Initialization		IBM	SA23-2288-00 - z/OS 2.1 Security Server RACF Macros & Interfaces
82	52	0001	Programmed Cryptographic Facility (PCF)	IEFU83	IBM	
82	52	0002	Cryptographic Unit Support Program (CUSP)		IBM	

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
82	52		Cryptography Services	--	IBM	SA22-7520-16 - z/OS Cryptographic Services ICSF System Programmer's Guide
		1	ICSF Started			
		3	Change in Number of Processors	IEFU85		
		4	ICSF Error Condition	IEFU85		
		5	Security Mode Change	IEFU85		
		6	Key Part Entered via Key Entry Unit (KEU)	IEFU85		
		7	Key Part Entered via Key Entry Unit (KEU)	IEFU85		
		8	In-Storage CKDS Refreshed	IEFU85		
		9	Dynamic CKDS Update			
		10	PKA Master Clear Key Part Entered			
		11	DES Master Clear Key Part Entered			
		12	CSFSPKSC Request/Reply			
		13	PKDS Dynamic Update			
		14	PCI Master Key Clear Key Part Entered			
		15	PCI Retain Key Created or Deleted			
		16	CSIPCI Request/Reply			
		17	PCI Usage Statistics			
		18	Cryptographic Processor Online/Offline			
		19	PCI X Operation			
		20	PCIXCC/CEX2C Processing Times			
		21	ICSF Join/Leave Sysplex			
		22	Trusted Block Create			
		23	TKDS Updated			
		24	Duplicate Tokens			
		25	Key Store Policy Invoked			
		26	Public Key Data Set Refreshed			
		27	PKA Key Mgmt Extensions			
		28	High Performance Encrypted Key			
		28	TKE Workstation Audit			
83	53		RACF Audit Record for Data Sets	--	IBM	SA23-2288-00 - z/OS 2.1 Security Server RACF Macros & Interfaces
		1	Change of Security Label			
		2 +	User Defined			
84	54		JES3 Monitoring Facility (JMF)	--	IBM	GA32-1002-00 - z/OS 2.1 JES3 Diagnosis
		1	FCT Analysis	IEFU83		
		2	FCT Summary and Highlight	IEFU83		
		3	Spool Data Management	IEFU83		
		4	Resqueue Cellpool, JCT, and Control Block Utilization	IEFU83		
		5	Job Analysis	IEFU83		
		6	Hot Spot Analysis	IEFU83		
		7	Internal Reader DSP Analysis	IEFU83		
		8	SSI Response Time Analysis	IEFU83		
		9	SSI Destination Queue Analysis	IEFU83		

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		10	Workload Manager Analysis	IEFU83		
85	55		OAM Transaction Performance	--	IBM	SC23-6866-00 - z/OS 2.1 DFSMS OAM Planning, Installation, and Storage Administration Guide for Object Support
		1-93	See Manual			
86	56		CIM Server Audit	--	IBM	SC34-2671-00 - z/OS 2.1 Common Information Model User's Guide
		1	Authentication			
		2	Configuration			
		3	Provider Status			
		4	CIM Operations			
87	57		GRS Monitoring		IBM	SA23-1389-01 - z/OS 2.2 MVS Planning: Global Resource Serialization Also see APAR OA42221
		1	Global Generic Queue Scan (QSCAN)	IEFU84		
		2	ENQ/DEQ/ISGENQ/RESERVE	IEFU84		
88	58		System Logger Data	--	IBM	
		1	Log Stream Activity			
		11	Coupling Facility Structure Altered			
89	59		Licensed Product Usage Data	--	IBM	
		1	Usage Data Interval	IEFU84		
		2	State Data Interval	IEFU84		
89	59		CA Repository for z/OS		CA	www.ca.com/us/products/detail/ca-repository-for-zos.aspx
89	59		SYSB-II		H&W Computer Services	www.hwcs.com
90	5A		System Status Change	--	IBM	
		1	SET TIME			
		2	SET DATE			
		3	SETDMN			
		5	SET SMF	IEFU84		
		6	SWITCH SMF	IEFU84		
		7	HALT EOD	IEFU83		
		8	IPL PROMPT	IEFU84		
		9	IPL SMF	IEFU84		
		10	IPL SRM			
		11	SET OPT			
		13	SETSMF	IEFU84		
		14	SET MPF			
		15	SET SMF (restart SMF)	IEFU84		
		16	SET DAE			
		17	SET PFK			
		18	SET GRSRNL			
		19	SET APPC			
		20	SET ASCH			
		21	SET SCH			
		22	SET CNGRP			
		23	IPL WLM			
		24	VARY WLM			

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		25	MODIFY WLM			
		26	IPL LOGREC			
		27	SETXCF START (restart management)			
		28	SETXCF STOP (restart management)			
		29	SET PROG (LNKLST activation)			
		30	RESET			
		31	SET PROG (LPALST activation)			
		32	WLM Policy Change			
		33	SET AUTOR			
		34	Processor Capacity Change			
		35	SETLOAD xx,IASYM			
		36	SET CON			
		37	Dynamic APF			
91	5B		BatchPipes/MVS Statistics	--	IBM	SA22-7458-00 - <i>IBM BatchPipes OS/390 V2R1 Users Guide and Reference</i>
		1	Subsystem Started			
		2	Subsystem Interval Statistics			
		3	Subsystem Stopped			
		11	Pipe Opened			
		12	Pipe Interval Statistics			
		13	Pipe Closed			
		14	Pipe Created			
		15	Pipe Deleted			
92	5C		z/OS UNIX File System Activity	--	IBM	GA32-0884-00 - <i>z/OS 2.1 UNIX System Services Planning</i>
		1	File System Mounted	IEFU85		
		2	File System Suspended/Quiesced	IEFU85		
		4	File System Resumed/Unquiesced	IEFU85		
		5	File System Unmounted	IEFU85		
		6	File System Remounted	IEFU85		
		7	File System Moved	IEFU85		
		10	File Opened	IEFU85		
		11	File Closed	IEFU85		
		12	Memory Map Started (MMAP)	IEFU85		
		13	Memory Map Ended (MUNMAP)	IEFU85		
		14	File or directory deleted or renamed	IEFU85		
		15	File security changed	IEFU85		
		16	Socket or character special file closed	IEFU85		
		17	Times File is Accessed	IEFU85		
94	5E		Tape Library Dataserver Statistics		IBM	
		1	Composite Statistics			
		2	Volume Pool Statistics			
96	60		Cross Memory Service Provider Charge Back	--	IBM	
		1	Detail Statistics			
		2	Summary Statistics			
97	61	1	Foreign Enclave Resource Data		IBM	

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
99	63		System Resource Manager Decisions	--	IBM	SC34-2663-01 - z/OS 2.1 MVS Programming: Workload Management Services
		1	System Level Data			
		2	Service Class Activity			
		3	Service Class Period Plot Data			
		4	Device Cluster			
		5	Monitored Address Spaces			
		6	Service Class Period Summary			
		7	ESS/PAV Statistics			
		8	LPAR/CPU Management Statistics			
		9	Dynamic Channel Path Summary			
		10	Dynamic Processor Speed Change			
		11	Group Capacity Limits			
		12	HiperDispatch Interval			
		13	HiperDispatch Internal			
		14	HiperDispatch Topology			
100	64		DB2 Statistics		IBM	SC19-2968-10 - IBM DB2 Administration Guide
101	65		DB2 Accounting		IBM	SC19-2968-10 - IBM DB2 Administration Guide
102	66		DB2 Performance		IBM	SC19-2968-10 - IBM DB2 Administration Guide
103	67		HTTP Server Statistics	--	IBM	SC34-4826-10 - z/OS 2.1 HTTP Server Planning, Installing, and Using
		1	Configuration Statistics			
		2	Performance Statistics			
		13	Operational Statistics			www-01.ibm.com/support/knowledgecenter/-/SSD28V_8.5.5/com.ibm.websphere.ihs.doc/ihs/tihs_smfconfig.html
		14	HTTP Apache Requests			publib.boulder.ibm.com/htpserv/manual70/mod/mod_smf.html
104	68		RMF Distributed Platform Performance Data		IBM	SC34-2667-00 - z/OS 2.1 RMF Programmer's Guide
		1-12	AIX on System P			
		20-31	Linux on System x			
		40-53	Linux on System z			
		60-64	Windows on System x			
105	6A		GDPS/Global Mirror	--	IBM	
		1	Global Mirror Session Data	IEFU84		
		2	DiskSubsystem Data	IEFU84		
106	6B		BCPii Activity	--	IBM	SA23-1377-03 - z/OS 2.2 MVS Programming: Callable Services for High-Level Languages
		1	HWISET API Calls	IEFU85		
		2	HWICMD API Calls	IEFU85		
108	6C		Domino Server Statistics	--	IBM	
		1	Server Load	IEFU83		
		2	User Activity	IEFU83		
		3	Monitoring and Tuning	IEFU83		

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		6	Data Base Activity	IEFU83		
109	6D		TCP/IP syslogd Messages		IBM	SC27-3659-01 - z/OS 2.1 Communications Server: IP Programmer's Guide and Reference
110	6E		CICS/TS Statistics	--	IBM	SC34-7269-00 - CICS Transaction Server for z/OS V5.2: Customization Guide
		0	Journaling Data			
		1	Monitoring Data			
		2	Statistics Data			
		3	TS Data Sharing			
		4	CF Data Table (CFDT)			
		5	DFHNC Named Counter			
110	6E		MainView for CICS		BMC Software	Optional
		1	CICS Performance			MVCICS will optionally append additional data to the SMF records if requested by the user via the CICS MCT (Monitoring Control Table)
		2	CICS Statistics			MVCICS provides the capabilities to write various records at MVCICS controlled intervals defined in the SOPT
		0B02	MVCICS Generated Statistics			These are MVCICS defined records that can be written to the SMF file at user defined intervals
110	6E	1	ASG-TMON for CICS TS for z/OS		ASG	www.asg.com/Smart-Catalog/ASG-TMON-for-CICS-TS-for-z-OS.aspx
111	6F	0	CICS Transaction Gateway (CTG)		IBM	SC34-2832-02 - CICS Transaction Gateway V9.0 z/OS Administration
113	71		z/OS Hardware Monitor		IBM	
		1	Event Counter Deltas			
		2	Event Counters (stabilized)			
114	72	0	Tivoli System Automation		IBM	SC34-2644-00 - IBM Tivoli System Automation for z/OS V3R4 Customizing and Programming
115	73		MQSeries Statistics		IBM	WebSphere MQ V8.0 Administration
		1	System Information			
		2	Message, Buffer, Paging Activity			
		3	Storage Usage			
		215	Bufferpool Information			
		231	Channel Initiator Stats			
116	74		MQSeries Accounting		IBM	WebSphere MQ V8.0 Administration
		0	Message Manager			
		1	Thread/Queue Level			
		2	More Queue Level Data			
		10	Channel			
117	75		Data Persistence		IBM	See mapping macro GTZZSMF
118	76		TCP/IP Statistics (stabilized)		IBM	SC27-3651-01 - z/OS 2.1 Communications Server: IP Configuration Reference User should migrate to Type 119 records.
		1	TCP API Initialization			
		2	TCP API Termination			
		3	FTP Client			
		4	TN3270 Client			
		5	TCP/IP Statistics			

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		20	TN3270 Server Initialization			
		21	TN3270 Server Termination			
		70	FTP Server Append Subcommand			
		71	FTP Server Delete Subcommand			
		72	FTP Server Logon Failures			
		73	FTP Server Rename			
		74	FTP Server Retrieve			
		75	FTP Server Store			
119	77		TCP/IP Statistics		IBM	SC27-3651-01 - z/OS 2.1 Communications Server: IP Configuration Reference
		1	TCP Connection Started			
		2	TCP Connection Ended			
		3	FTP Client Transfer Completion			
		4	TCP/IP Profile Event			
		5	TCP/IP Statistics			
		6	Interface Statistics			
		7	Server Port Statistics			
		8	TCP/IP Stack Start/Stop			
		10	UDP Socket Close			
		20	TN3270 Server SNA Session Initiation			
		21	TN3270 Server SNA Session Termination			
		22	TSO Telnet Client Connection Initiation			
		23	TSO Telnet Client Connection Ends			
		32	DVIPA Status Change			
		33	DVIPA Removed			
		34	DVIPA Target Added			
		35	DVIPA Target Removed			
		36	DVIPA Target Server Started			
		37	DVIPA Target Server Ended			
		41	SMC-R Link Groups			
		42	SMC-R Link Started			
		43	SMC-R Link Ended			
		44	10GbE RoCE Statistics			
		48	CSSMTP Configuration			
		49	CSSMTP Connection			
		50	CSSMTP Mail			
		51	CSSMPT Spool File			
		52	CSSMPT Statistics			
		70	FTP Server Transfer Completion			
		71	FTP Daemon Configuration			
		72	FTP Server Login Failure			
		73	IPSec IKE Tunnel Activation			
		74	IPSec IKE Tunnel Deactivation			
		75	IPSec Dynamic Tunneling Activation			
		76	IPSec Dynamic Tunnel Deactivation			
		77	IPSec Dynamic Tunnel Added			

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		78	IPSec Dyn. Tunnel Removed			
		79	IPSec Manual Tunnel Activation			
		80	IPSec Manual Tunnel Deactivation			
		94	OpenSSH Client Connection Started			http://publibz.boulder.ibm.com/epubs/pdf/fot1zo00.pdf
		95	OpenSSH Server Connection Started			
		96	OpenSSH Server Transfer Completion	IEFU83/ IEFU84		www-03.ibm.com/systems/resources/fot4os02.pdf
		97	OpenSSH Client Transfer Completion	IEFU83/ IEFU84		www-03.ibm.com/systems/resources/fot4os02.pdf
		98	OpenSSH Login Failure	IEFU83/ IEFU84		www-03.ibm.com/systems/resources/fot4os02.pdf
119	77	3	MacKinney JES Report Broker		MacKinney	http://www.mackinney.com/products/mainframe-printing/jes-report-broker.html
119	77		Co:Z SFTP		Dovetailed Technologies	https://www.dovetail.com/products/sftp.html
120	78		WebSphere Performance Statistics		IBM	www-01.ibm.com/support/knowledgecenter/?lang=en-1/SS7K4U_8.5.5/com.ibm.websphere.nd.multiplatform.doc/ae/rt rb_SMFrt120overview.html?cp=SS7K4U_8.5.5%2F2-18-5-31 - WAS for z/OS 8.5.5 Knowledge Center
		1	Server Activity	IEFU83		
		3	Server Interval	IEFU83		
		5	J2EE Container Activity	IEFU83		
		6	J2EE Container Interval	IEFU83		
		7	WebContainer Activity	IEFU83		
		8	WebContainer Interval	IEFU83		
		9	Request Activity	IEFU83		
		10	Outbound Request	IEFU83		
		11	Liberty Request Activity	IEFU83		
		20	Compute Grid (Obsolete)	IEFU83		Moved to 120.9.
121	79		Java Runtime Performance Statistics			
122	7A		Tivoli Automated Tape Allocation Manager		IBM Tivoli	www-01.ibm.com/support/knowledgecenter/-1/SSATAY/welcome See Appendix I of Users Guide
		0	ATAM Initialization			
		1	Successful Allocation			
		2	WAT-NOHOLD Initiated			
		3	Failed Allocation			
		4	ATAM Termination			
		5	Forced WAIT-NOHOLD			
		6	Unexpected Vary-Online Failures			
		7	Unsupported Dynamic Allocation			
		8	Vary Online Requests			
128 *	80		CA PDSMAN		CA	www.ca.com/us/products/detail/ca-pdsman-pds-library-management.aspx
		1	OPS/MVS Termination Summary			
		2	OSF Server Termination			
		3	AOF Rule-Disablement			
		4	Global Variable Subtask Termination			

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		5	RDF Statistics			
		6	IMSBMP Statistics			
		7	OSF Transaction			
		8	EPI Stats Record			
128	80		CA OPS/MVS Event Management and Automation		CA	www.ca.com/us/opscenter/ca-ops-mvs-event-management-and-automation.aspx
129 *	81		InSync		Macro 4	www.macro4.com/en/product/insync/
144	90		CA Dispatch		CA	www.ca.com/us/products/detail/ca-dispatch.aspx
145	91		CA Dispatch		CA	www.ca.com/us/products/detail/ca-dispatch.aspx
146	92		CA Dispatch		CA	www.ca.com/us/products/detail/ca-dispatch.aspx
150 *	96		CA Scheduler/Smart Console		CA	
150 *	96		CA 7/Smart Console Option		CA	
150 *	96		CA Opera		CA	www.ca.com/us/products/detail/ca-opera.aspx
157 *	9D		BMC Control-M for z/OS		BMC Software	www.bmc.com/it-solutions/control-m.html
170 *	AA		File-AID/MVS		Compuware	www.compuware.com/en_us/mainframe-solutions/products/file-aid-data-management.html
170 *	AA		File-AID/Data Solutions		Compuware	www.compuware.com/en_us/mainframe-solutions/products/file-aid-data-management.html
180	B4		WebSphere MQ Crypto Audit			
188 *	BC		athene		Metron	www.metron-athene.com
		1	DASD Space by Volume			
		2	DASD Space by SMS Storage Group			
		3	DASD Space by Dataset HLQ			
189 *	BD		CA MIM		CA	
		0001	Control File Performance			
		0002	Virtual Control File Performance			
		0003	File I/O Count Data			
		0005	Cell Pool/Storage Util.			
		00FF	MIM Lost Events			
		0101	GDIF ENQ/RESERVE			
		0103	ECMF Job Requeue			
		0201	GTAF Statistics			
		0301	GCMF Command Audit			
		0401	EDIF Statistics			
		0402	EDIF			
191 *	BF		Hitachi Mainframe Analytic Recorder (MAR)		Hitachi	
		1	Lost Record			
		2	LDEV			
		3	MPB			
		4	Parity Group			
		5	Port			
		6	MPRANK20			
192 *	C0		CA XCOM Data Transport		CA	www.ca.com/us/opscenter/ca-xcom-data-transport.aspx
198 *	C6		CA MICS Space Collector		CA	www.ca.com/us/support/ca-support-online/support-by-product/ca-mics-resource-management.aspx

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
199 *	C7		CA MICS Space Collector		CA	www.ca.com/us/support/ca-support-online/support-by-product/ca-mics-resource-management.aspx
200 *	C8		CA SPOOL		CA	www.ca.com/us/opscenter/ca-spool.aspx
200 *	C8		CA LPD		CA	www.ca.com/us/opscenter/ca-xcom-data-transport.aspx
200 *	C8		SF-Sherlock		Enterprise-IT-Security.com	www.enterprise-it-security.com
200 *	C8		MacKinney JES Report Broker		MacKinney	www.mackinney.com/products/mainframe-printing/jes-report-broker.html
201 *	C9		MacKinney JES Report Broker	--	MacKinney	www.mackinney.com/products/mainframe-printing/jes-report-broker.html
		1	Document Viewed			
		2	Document Downloaded			
		3	Document Purged			
		4	Document Restored to JES			
		5	Document Restored From Backup			
202 *	CA	1	IND\$FIILE Auditing	IEFU83	Correlog	https://correlog.com/solutions-and-services/sas-correlog-mainframe.html
208 *	D0		Syncsort MFX Statistics	IEFU83	Syncsort	http://www.syncsort.com/en/Solutions/Mainframe-Solutions/High-Performance-Sort-for-System-z
210 *	D2		Voltage SecureData for z/OS		Voltage Security, Inc.	www.voltage.com/products/securedata-enterprise/encryption-for-mainframes/
222 *	DE		zOSEM (Operating System Environment Manager)		Trident Services	www.triserv.com
225 *	E1		CA Teleview		CA	www.ca.com/us/products/detail/ca-teleview-session-management.aspx
225 *	E1		zCost AutoSoftCapping		zCost Management	www.zcostmanagement.com
		1	ASC CPC Activity (Perf, Billing)			
		2	ASC LPAR Activity (Perf, Billing, WLM)			
		3	ASC SYSPLEX/CPC Activity			
		4	ASC Parameter (Parmlib)			
230 *	E6		CA ACF2		CA	www.ca.com/us/securecenter/ca-acf2.aspx
		A	Environment			
		D	Dataset / Program			
		E	Information Storage Update			
		G	Environment			
		J	Restricted Logonid Job			
		L	Logonid Modification			
		O	UNIX System Services			
		P	Invalid Password/Authority			
		R	Rule-ID Modification			
		S	SAF Trace			
		T	TSO Command Statistics			
		U	MLS Dirauth Event			
		V	Resource Event			
		W	CA Statistics			
		Z	DDB Transmission Report			

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
		1	Archive Session Start			
		2	Archive Session Settings			
		3	File Process Tracking			
		99	Archive Session End			
253 *	FD		File-AID for DB2		Compuware	www.compuware.com/en_us/mainframe-solutions/products/file-aid-data-management.html
255 *	FF		CA SYSVIEW	--	CA	
		01	Audit			
		02	Hourly Pilot Metric			
		03	Threshold Exceptions			
		04	State Exceptions			
		24	CICS Exceptions			
		25	CICS Trans Summary			
		27	CICS Trans Detail			
		28	CICS System Interval			
		34	IMS Trans Detail			
		35	IMS Region Accounting			
		38	Application Request Monitoring			
255 *	FF		I/O Booster		4bears Technologies	http://www.4bears.com.br/product-and-services/iobooster
128-255	80-FF		(E)JES	IEFU84	Phoenix Software	www.phoenixsoftware.com/ejes.htm
128-255	80-FF		CA Roscoe		CA	www.ca.com/us/products/detail/ca-roscoe-interactive-environment.aspx
128-255	80-FF		CA TPX		CA	www.ca.com/us/products/detail/ca-tpx-session-management.aspx?intcmp=searchresultclick&resultnum=1
128-255	80-FF		CA Dispatch		CA	www.ca.com/us/products/detail/ca-dispatch.aspx
128-255	80-FF		CA SOLVE: Operations Automation/Audit		CA	
128-255	80-FF		Control-D Printing		BMC Software	www.bmc.com/it-solutions/product-listing/control-d-zos.html
128-255	80-FF		Control-D Decollation Process		BMC Software	www.bmc.com/it-solutions/product-listing/control-d-zos.html
128-255	80-FF		Control-D On-line Viewing		BMC Software	www.bmc.com/it-solutions/product-listing/control-d-zos.html
128-255	80-FF		Control-D WA Viewing		BMC Software	www.bmc.com/it-solutions/product-listing/control-d-zos.html
128-255	80-FF		Control-D IOA Archive Server Usage		BMC Software	www.bmc.com/it-solutions/product-listing/control-d-zos.html
128-255	80-FF		Systemware Content Server Statistics		Systemware	www.systemware.com
128-255	80-FF		DumpMaster	--	Macro 4	www.macro4.com/en/product/dumpmaster/
		101	Viewer Usage			
		102	Source Listings Access			
		103	Dump Capture			
		104	Dump Suppressed			
		105	Dump Printed Via IPRINT			
128-255	80-FF		Macro 4 Products	--	Macro 4	www.macro4.com/en/product/
		1	Hourly Use Counts			These include DumpMaster, TraceMaster, InSync, CodeTrack, AUTOMON, VSAMTune, Columbus Z, Reflect, Tubes, WORDS Online
		2	Daily Use Counts			
		3	Product Start			
		4	Product End			

Type (Dec)	Type (Hex)	Sub type	Description	Exit	Company	Additional References
128-255	80-FF		IBM Tivoli Output Manager for z/OS V3.1		IBM	www-01.ibm.com/support/knowledgecenter/api/content/SSKJLZ_3.1.0/com.ibm.bjt.doc.v3.1/bjtiv368.htm - dqx1bjtursmf
128-255	80-FF		File-AID for IMS		Compuware	www.compuware.com/en_us/mainframe-solutions/products/file-aid-data-management.html
128-255	80-FF		VTAM/Switch	--	MacKinney	www.mackinney.com/products/session-management/vtam-switch.html
		01	User Sign-on Event			
		02	User Sign-off Event			
		03	Session Start Event			
		04	Session Stop Event			
128-255	80-FF		Space Recovery System		DTS Software	www.dtssoftware.com/login.php?return_url=/scc/dnlsc61_doc.htm (for registered users)
128-255	80-FF		User-Defined SMF Records		DTS Software	www.dtssoftware.com/scc/rlsru61.pdf (for registered users); identified by 'SRH' at offset X'6C'
128-255	80-FF		MainView Batch Optimizer		BMC Software	
		1	Data Optimizer			Data Optimizer Reference Appendix E
		2	Job Optimizer			Job Optimizer Reference Appendix D
128-255	80-FF		MainView Batch Optimizer		BMC Software	
		1	Job Optimizer Pipes Termination			Job Optimizer Reference Appendix D
		2	Job Optimizer Pipe Participant Close			Job Optimizer Reference Appendix D
128-255	80-FF		MainView SRM Allocation		BMC Software	SRM Allocation User Guide; SRM User Guide
128-255	80-FF		StopX37/II		BMC Software	SRM StopX37/II User Guide; SRM User Guide
128-255	80-FF		ULTRAOPT		BMC Software	
		0	Optimization Stats			
		1	Response Time Stats			
		2	Data Stream Error			
		3	CICS Stats			
		4	IMS Stats			
128-255	80-FF		License Management Component		Compuware	

SMF Control Parameters SYS1.PARMLIB(SMFPRMxx)

Parameter	Description
ACTIVE NOACTIVE	Record data to SMF file
AUTHSETSMF NOAUTHSETSMF	SETSMF allowed despite PROMPT value
BUFSIZMAX(nnnnM / 1G)	Memory limit for in-storage buffers
BUFUSEWARN(nn / 25)	Buffer warning message percent
DDCONS(YES / NO)	Consolidate EXCP sections in type 30 records
DEFAULTLSNAME(logstreamname, NOBUFFS(HALT / MSG), BUFUSEWARN(nn), DSPSIZMAX(nnnn M / nG / 2G), NOCOMPRESS COMPRESS(PERMFIX(nnnnM) / NOPERMFIX), NORECSIGN RECSIGN(HASH(SHA1 / SHA256 / SHA384 / SHA512),SIGNATURE(RSA / ECDSA), TOKENNAME(name)))	Default name and characteristics of a default SMF logstream
DSNAME(SYS1.MAX,SYS1.MANY / name1, name2, ...)	Define names of VSAM SMF data sets
DSPSIZMAX(nnnnM / nG / 2G)	Size of logstream buffers
DUMPABND(RETRY/NORETRY)	Action on SMF ABEND
EMPTYEXCPSEC(NOSUPPRESS / SUPPRESS)	Suppression of empty EXCP sections on Type 30 records
FLOOD(ON / OFF)	SMF record flood support is active
FLOODPOL(TYPE(aa,bb / aa,bb:zz,...), RECTHRESH(nnnn), INTVLTIME(nnnn), MAXHIGHINTS(nnnn), ACTION(MSG / DROP))	Determines thresholds for stopping records if flooding occurs
INTVAL(mm / 30)	Global interval length
JWT(hhmm)	Job/TSO maximum wait before S522
LASTDS(MSG / HALT)	Action when all data sets are full
LISTDSN NOLISTDSN	List data set names
LSNAME(logstreamname, TYPE(00:255 / aa,bb / aa,bb:zz,...), NOBUFFS(HALT / MSG), BUFUSEWARN(nn), DSPSIZMAX(nnnn M / nG / 2G), NOCOMPRESS COMPRESS(PERMFIX(nnnnM) / NOPERMFIX), NORECSIGN RECSIGN(HASH(SHA1 / SHA256 / SHA384 / SHA512),SIGNATURE(RSA / ECDSA), TOKENNAME(name)))	Name and characteristics of a specific SMF logstream; there may be multiples
MAXDORM(mmss / 3000) NOMAXDORM	Wait time before SMF buffer flushed
MAXEVENTINTRECS(nn / 0)	Max number of type 30 and 89 records per interval if event driven
MEMLIMIT(2G / nnnnM / nnnnG / nnnnT / nnnnP) NOMEMLIMIT	Default task memory limit
MULCFUNC NOMULCFUNC	IFAUSAGE service option requirements
NOBUFFS(MSG / HALT)	Action when SMF buffers are full
PERMFIX(nnnnM) NOPERMFIX	Amount of storage to fix for buffers
PROMPT(ALL / IPLR / LIST) NOPROMPT	Specify operator prompting options
REC(ALL / PERM)	Deleted data set monitoring options
RECORDING(DATASET / LOGSTREAM)	Write to VSAM data set or logstream
NORECSIGN RECSIGN(HASH(SHA1 / SHA256 / SHA384 / SHA512),SIGNATURE(RSA / ECDSA),TOKENNAME(name))	

Parameter	Description
SID(xxxx)	Defines SMF System ID (SID) unconditionally
SID(xxxx,ser#,ser#) -or- SID(xxxx,COMBIN(ser#,ser#))	Defines SID based on processor ID
SID(xxxx,SYSNAME(sssssss))	Defines SID based on system name
SMF30COUNT NOSMF30COUNT	Count number of instructions executed
SMFDLEXIT(USER1(exitname,existname,...) / NOUSER1, USER2(IRRADU00,exitname,...) / NOUSER2, USER3(IRRADU86,exitname,...) / NOUSER3)	Exits called by IFASMF DL (dump logstreams)
SMFDPEXIT(USER1(exitname,existname,...) / NOUSER1, USER2(IRRADU00,exitname,...) / NOUSER2, USER3(IRRADU86,exitname,...) / NOUSER3)	Exits called by IFASMF DP (dump VSAM data sets)
STATUS(hhmmss / 010000 / SMF,SYNC / NOSYNC) NOSTATUS	SMF buffer statistics interval option
SUBPARM(subsys(options))	Pass options to a subsystem
SUBSYS(JES2 / JES3 / STC / ASCH / TSO,TYPE [can override SYS], INTERVAL [can override SYS], EXITS [can override SYS], DETAIL [can override SYS])	Same as SYS but for subsystems
SWT(hhmm) [default is JWT]	STC maximum wait before S522
SYNCVAL(mm / 00)	Global synchronization value
SYS(TYPE(aa,bb.. / 00:255) / NOTYPE, NOINTERVAL / INTERVAL(hhmmss / SMF,SYNC / NOSYNC), EXITS (exitname,exitname,... / all), / NOEXITS, NODETAIL / DETAIL)	SMF record to keep Interval length Exits to invoke Detail option for TSO and STC tasks
TWT (hhmm) [default is JWT]	TSO maximum wait before S522

SMF Exits

Exit Name	Description
IEFACTRT	Accounting Routine
IEFUAV	User Account Validation (APPC/MVS and z/OS UNIX)
IEFUJI	Job Initiation
IEFUJP	Job Purge
IEFUJV	Job Validation
IEFUSI	Step Initiation
IEFUSO	SYSOUT Limit Exceeded
IEFUTL	Time Limit Exceeded (CPU or wait)
IEFU29	SMF Dump of VSAM data sets
IEFU29L	SMF Dump of Logstreams
IEFU83	SMF Record Written
IEFU84	SMF Record Written (Branch Entry, no cross memory)
IEFU85	SMF Record Written (Branch Entry, cross memory)

SMF Reference Summary Change Log

September 12, 2015

Added z/OS 2.2 changes:

- Added 2, subtype 1 - Signature Group
- Added 2, subtype 2 - Signature Interval
- Corrected 41.3 to specify the IEFU83 exit
- Added 42, subtype 27 - VTOC audit log
- Added 74, subtype 10 - Storage Class Memory (SCM) Statistics
- Added 87, subtype 2 - ENQ/DEQ/ISGENQ/RESERVE
- Added 90, subtype 37 - Dynamic APF
- Added 92, subtype 16 - Socket or character special file closed
- Added 105 - GDPS/Global Mirror
- Added 106 - BCPII activity
- Added 117 - Data Persistence
- Added 119, subtype 94 - OpenSSH Client Connection Started
- Added 119, subtype 95 - OpenSSH Server Connection Started
- Added 121 - Java runtime performance statistics
- Added RECSIGN and NOCOMPRESS to SMFPRMxx parameters

Added 6 for VPS from LRS, and from Xerox's XPAF. Thanks to **Tim Hare** of Hare Systems Support.
Added 87, subtype 1 - Global Generic Queue Scan (QSCAN) due to doc that was previously missing
Added 90, subtype 35 - SETLOAD xx, IEASYM, was missing
Added 90, subtype 36 - SET CON, was missing
Added 191 - Hitachi Mainframe Analytic Recorder. Thanks to **Ron Hawkins** of Hitachi Data Systems.
Added 202 - IND\$FILE Auditing from CorreLog. Thanks to **Charles Mills** of CorreLog.
Added 225, subtype 4 - zCOST AutoSoftCapping. Thanks to **Jacky Hofbauer** from zCost Management.
Added 15 subtypes to type 230 (CA - ACF2). Thanks to **Raymond Pascoe** from Highmark Health Solutions.

February 25, 2015

Added subtypes to 230 (CA - ACF2 External Security System)
Corrected a typo of NOBUFS to NOBUFFS in the DEFAULTLSNAME and LSNAME parameters (the manual was incorrect)

October 15, 2014

Changed page 2, item 3, regarding sub-types. Thanks to **Bruce Bordonaro** from BNY Mellon for pointing this out.
Added 80 - CA Top Secret
Added 119 - Dovetailed Technologies Co:Z SFTP
Updated 208 - Syncsort MFX for z/OS
Changed 230 to 231 - CA Top Secret
Added 255 - 4bears Technologies I/O Booster
Added 128-255 - Compuware License Management Component
Corrected 'Mackinney' to 'MacKinney' throughout

SMF Reference Summary Change Log

August 21, 2014

- Added type 6 and 26 - CA BUNDL
- Updated type 110 - BMC MainView for CICS
- Marked type 120.20 as obsolete - IBM WebSphere Compute Grid
- Added type 200 - CA LPD
- Corrected errors in 240 and 241 - IBM DFSMSHsm
- Added 128-255 - DTS Space Recovery System
- Added 128-255 - DTS User-Defined SMF Records
- Added 128-255 - BMC MainView Batch Optimizer
- Added 128-255 - BMC MainView Batch Optimizer
- Added 128-255 - BMC MainView SRM Allocation
- Added 128-255 - BMC StopX37/II
- Added 128-255 - BMC ULTRAOPT

August 3, 2014

First release; printed and distributed this as hardcopy at SHARE in Pittsburgh.

Notes

Notes

Notes

Notes