z/OS
2.5

Release Upgrade Reference Summary

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 115.

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>
> * Your name, company/university/institution name, and email address
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> * The section title of the specific information to which your comment relates
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Summary of changes

This information includes terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations for the current edition are indicated by a vertical line to the left of the change.

Note: IBM z/OS policy for the integration of service information into the z/OS product documentation library is documented on the z/OS Internet Library under IBM z/OS Product Documentation Update Policy (www-01.ibm.com/servers/resourcelink/svc00100.nsf/pages/ibm-zos-doc-update-policy? OpenDocument).

Summary of changes for z/OS Release Upgrade Reference Summary for Version 2 Release 5 (V2R5)

The following changes were made to the z/OS Release Upgrade Reference Summary in V2R5.

New

The following content is new.

- Content for z/OS V2R5 was added.

Deleted

The following content was deleted.

- Content for z/OS V2R3 was removed.

Summary of changes for z/OS Release Upgrade Reference Summary for Version 2 Release 4 (V2R4)

The following content is new, changed, or no longer included in V2R4.

New

The following content is new.

- Content for z/OS V2R4 was added.

Changed

The following content is changed.

- This entire deliverable was reorganized and overhauled to present only the information that users need in a more concise and accurate manner.
- The title of this deliverable was changed from *Summary of Message and Interface Changes* to *Release Upgrade Reference Summary* to more accurately reflect its new role in the z/OS product library.

Deleted

The following content was deleted.

- Content for z/OS V2R2 was removed.
- The sections that summarize element and feature level interface changes were removed. That information is already more accurately and comprehensively represented in the individual element and feature level deliverables in the library.

- *Appendix A. Possible actions resulting from changed control blocks* was removed.
- *Appendix B. A method for finding changes to MVS™ and TSO/E messages* was moved into the individual MVS and TSO/E message deliverables.

Part 1. z/OS V2R5 changes

This part describes the new, changed, and removed or no longer issued messages, codes, SMF records, and selected system-level data set (SYS1) interfaces for z/OS V2R5 elements and features.

Chapter 1. Message and code changes for z/OS V2R5

This section contains the message and code changes for z/OS V2R5.

BCP (MVS) and DFSMS messages and codes changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for BCP (MVS) and DFSMS.

This topic lists new, changed, and deleted messages and codes for BCP (MVS), DFSMSdfp, DFSMSdss, DFSMShsm, DFSMSrmm, and DFSMStvs. It also lists new, changed, and deleted operator messages for TSO/E. (New, changed, and deleted non-operator messages for TSO/E are in "TSO/E message changes for z/OS V2R5" on page 30.) All the messages and codes in this section are grouped together, without distinction as to element or feature.

All messages for BCP (MVS) and DFSMS are documented in:

- *z/OS MVS System Messages, Vol 1 (ABA-AOM)*
- *z/OS MVS System Messages, Vol 2 (ARC-ASA)*
- *z/OS MVS System Messages, Vol 3 (ASB-BPX)*
- *z/OS MVS System Messages, Vol 4 (CBD-DMO)*
- *z/OS MVS System Messages, Vol 5 (EDG-GLZ)*
- *z/OS MVS System Messages, Vol 6 (GOS-IEA)*
- *z/OS MVS System Messages, Vol 7 (IEB-IEE)*
- *z/OS MVS System Messages, Vol 8 (IEF-IGD)*
- *z/OS MVS System Messages, Vol 9 (IGF-IWM)*
- *z/OS MVS System Messages, Vol 10 (IXC-IZP)*

Dump output messages are documented in *z/OS MVS Dump Output Messages*.

DFSMS Volume Mount Analyzer messages (GFT) and abend codes are documented in *z/OS DFSMS Using the Volume Mount Analyzer*.

For explanations of and additional details about MVS system codes, see *z/OS MVS System Codes*.

New messages

ADR660W
ADR785E (APAR OA58156)
AHL155I
AHL912I
AMA790I (APAR OA63815)
AMD126I (APAR OA63507)
AMD127I (APAR OA63507)
AMD128I (APAR OA63507)
AMD129I (APAR OA63507)
ANTF0520E (APAR OA62836)
ANTF0521E (APAR OA62836)
ANTF0522E (APAR OA62836)
ANTP0280I (APAR OA59659)
ANTP0281E (APAR OA59936)
ANTP0282E (APAR OA59936)
ANTX8904I (APAR OA61669)
ANTX8935I (APAR OA61669)

ARC0582E(APAR OA53353)
ARC0583I (APAR OA53353)
ARC0573I (APAR OA61080)
ARC0574I (APAR OA61080)
ARC0576I (APAR OA61080)
ARC0577I (APAR OA61080)
ARC0578I (APAR OA61080)
ARC0579I (APAR OA61080)
ARC0658I
ARC0659I
ARC0660I
ARC0661I
ARC0662I
ARC0663I
ARC1279I (APAR OA59765)
ARC1453I (APAR OA61080)
ARC1454I (APAR OA63130)
ARC1455I (APAR OA63130)
ARC1456I (APAR OA63130)
ARC1457I (APAR OA63130)
ARC1589I
ARC1662I
ARC1663I

BCF007I (APAR OA61722)
BPXF179E
BPXF180E
BPXF287I
BPXI090I

CBR0078I
CBR0448I
CBR0449I
CBR1046I
CBR1297I
CBR1315D
CBR1316I
CBR1317I
CBR1318I
CBR2005I (OA60339)
CBR6525I (OA63025)
CBR7532I
CBR7534I
CBR7536I
CBR9204I (OA61787)
CBR9205I (OA61787)
CBR9206I (OA61787)
CBR9390I (OA61787)
CBR9925I (OA62374)
CBR9926I (OA62374)
CBR9927I (OA62374)
CBR9928I (OA62374)
CBR9929I (OA62374)

CBR9930I (OA62374)
CSV050I (OA63507)
DMO002I (OA63069)
DMO065E (OA63069)

EDG0246I
EDG0248I
EDG1112I
EDG2123I
EDG2321W
EDG6322I
EDG6525E
EDG6526E
EDG6527D
GDKU0010E (APAR OA62318)
GDKU0011E (APAR OA62318)
GDKU0013I (APAR OA62318)
GDKU0014E (APAR OA62318)
GDKU0015E (APAR OA62318)
GDKU0016E (APAR OA62318)
GDKU0100I (APAR OA62318)
GDKU0101E (APAR OA62318)
GDKU0102E (APAR OA62318)
GDKU0103I (APAR OA62318)
GDKU0104I (APAR OA62318)
GDKU0105I (APAR OA62318)
GLZB031I (APAR OA63854)
GLZC016I (APAR OA62310)
GLZV006I

IAR059I
IAR078I (APAR OA63507)
IAR079W (APAR OA63507)
IDC0016I (APAR OA62224)
IDC01382I
IDC0556I
IDC2903I
IDC3352I (APAR OA59285)
IDC4234I (APAR OA59847)
IDC4235I (APAR OA59847)
IDC4238I (APAR OA59847)
IEA608I (APAR OA63468)
IEA609I (APAR OA63468)
IEA688I (APAR OA60660)
IEA689I (APAR OA60660)
IEA700I (APAR OA61395)
IEA701I (APAR OA61395)
IEA980I (APAR OA63507)
IEA981I (APAR OA63507)
HWI023I (APAR OA60962)

IEC161I (return code 236, APAR OA59251, OA63195)
IEC161I (return code 042) (APAR OA48995)

IEC161I (return code 067)
IEC382I
IEC997I (APAR OA61850)
IEE196I
IEE258I (APAR OA60560)
IEE261I (APAR OA61395)
IEE589I (APAR OA61131)
IEE863I

IEF044I (APAR OA64426)
IEFJ201A
IEW2950I (APAR OA63507)
IEW6001 - IEW6035 (APAR OA63507)
IGD030I
IGD414I
IGD415I
IGD17270I
IGD17337I (form 2 of 2)
IGD17338I (form 2 of 2)
IGD17339I (form 2 of 2)
IGD17396I (form 1 of 3)
IGD17396I (form 2 of 3)
IGD17396I (form 3 of 3)

IGW005I (form 2) (APAR OA63016)
IGW467I (APAR OA63195)
IGW586A (APAR OA60142)
IGW10111I (APAR OA59251)
ILR041I (APAR OA63507)
ILR042I (APAR OA63507)
ILR043I (APAR OA63507)
IOSHC163I (APAR OA59792)
IOSHC164E (APAR OA59792)
IOSHC165I (APAR OA59792)
IOSHC167I (APAR OA59792)
IOSHS0022I (APAR OA61131)
IOSHS0023I (APAR OA61131)
IWM090E (APAR OA61881)

Changed messages

ADR071I (APAR OA63768)
ADR310W
ADR322E
ADR380E
ADR383W
ADR439E
ADR530I
ADR707E (APAR OA57526)
ADR707I
ADR785E (APAR OA62241)
ADR878E
ADR918I

ADY001I (APAR OA62568)
ADY002I (APAR OA62568)
ADY012I (APAR OA62568)
AMA574I
ANTP0215E (APAR OA61072)
ANTRQST return codes and reason codes (APAR OA59936, APAR OA62810, APAR OA62836, APAR OA63501)
ANTX8903I (OA61669)
System Data Mover (SDM) return code 4544 (applies to V2R4 also)

ARC0026E
ARC0103I (APAR OA59919)
ARC0120I
ARC0123I
ARC0138I (APAR OA60587)
ARC0144I
ARC0216I
ARC0262I
ARC0570I
ARC0635I
ARC0643I
ARC0650I
ARC0682I (APAR OA60587)
ARC0685I (APAR OA60587)
ARC0734I (APAR OA59765)
ARC0744E (APAR OA59549)
ARC0752I
ARC0797I
ARC0840I (APAR OA59919)
ARC0965I (APAR OA59919)
ARC1158I (APAR OA60586)
ARC1334I (APAR OA59866)
ARC1334I (APAR OA60586)
ARC1334I (APAR OA63130)
ARC1453I (APAR OA60586)
ARC1605I (APAR OA60586, APAR OA63701)
ARC1584I
ARC1605I (APAR OA63130)
ARC6027I (APAR OA60800)
ARC6168E (APAR OA60800)

AZDL0001E
AZIF0146E (APAR OA64280)
BCF002I (APAR OA61722)
BCF004I (APAR OA61722)
BPXF002I
BPXF173E

CBR0006D
CBR0333I
CBR0334I
CBR0428I
CBR0429I

CBR6530I (OA63025)
CBR6502I
CBR6503I
CBR6522I
CBR7531E
CBR7532I
CBR7535I
CBR9123I
CBR9390I (APAR OA63954)
CBR9844I
CBR9881I
CNZ4212I
CUN4026I (APAR OA63203)
DMO002I (OA63069)
DMO0012I(APAR OA57173)

HWI007I
HWI008I
HZR0200I (APAR OA62274)
IEA611I (APAR OA62646)
IEA911I (APAR OA62646)
IAR040I
IAR048I
IAR051I
IDC1148I (APAR OA59847)
IDC3009I (APAR OA62097)
IDC31378I
IEA014W
IEA075I (APAR OA61447)
IEA253I(APAR OA57173)
IEA386I (APAR OA60036)
IEA394A (APAR OA61634)
IEA611I (APAR OA61542, OA62646)
IEA687I (APAR OA60660)
IEA848I
IEA911E (APAR OA61542, OA62646)

IEC141I (APAR OA61850)
IEC143I
IEC161I (APAR OA64291)
IEC212I (APAR OA61850)
IEC215I
IEC507D
IEC707I (APAR OA64291)
IEE088D
IEE020E
IEE097I (APAR OA58107)
IEE148I
IEE174I (form 6) (APAR OA61131)
IEE174I (form 8)
IEE174I (form 13)
IEE174I (form 14)
IEE174I (form 24)

IEE174I (form 25)
IEE174I (form 26)
IEE174I (form 27)
IEE174I (form 29)
IEE174I (form 30)
IEE174I (form 33) (APAR OA63507)
IEE178I
IEE193I (APAR OA63507)
IEE194I (APAR OA63507)
IEE195I (APAR OA63507)
IEE254I (APAR OA63507)
IEE254I (APAR OA62744, which also applies to z/OS 2.4)
IEE328I
IEE406I (APAR OA62124)
IEE510I
IEE524I
IEE576I
IEE583I (APAR OA60381)
IEE711I (APAR OA51098)
IEE831D (APAR OA62124)
IEE852I (APAR OA51098)
IEE857I
IEE994E

IEFA003I
IFA710I
IFA740E
IGD002I (APAR OA59209, OA61838, OA63196)
IGD002I (APAR OA63721)
IGD031I (APAR OA59209, OA61838, OA63196, OA63721)
IGD06041I (APAR OA50221)
IGD06132I
IGD17157I (APAR OA61265)
IGD17169I (APAR OA61265)
IGD17269I (APAR OA64834)
IGD17279I
IGD17337I (form 1 of 2)
IGD17338I (form 1 of 2)
IGD17339I (form 1 of 2)
IGD330I (APAR OA61761)
IGD402I (APAR OA63676)
IGD403I (APAR OA63676)

IXC104I (APAR OA63059, which also applies to z/OS 2.4)
IXC336I (APAR OA63059, which also applies to z/OS 2.4)
IXC337I (APAR OA63059, which also applies to z/OS 2.4)
IXC357I (APAR OA63059, which also applies to z/OS 2.4)
IXC360I
IXC403D (APAR OA63059, which also applies to z/OS 2.4)
IXC413I (APAR OA63059, which also applies to z/OS 2.4)
IXC416I (APAR OA63059, which also applies to z/OS 2.4)
IXC443I
IXC473I

IXC585E (APAR OA60275)
IXCH0512I (APAR OA63059, which also applies to z/OS 2.4)
IXCH0528I (APAR OA63059, which also applies to z/OS 2.4)
IXG278I
IXG281I
IXG607I (APAR OA63551)
IXL011I (APAR OA63059, which also applies to z/OS 2.4)
IXL016I (APAR OA61848)
IXL150I

No longer issued messages

ARC1583I

DMO0012E DEVICE MANAGER UNABLE TO LOCATE *volser* ONLINE (APAR OA63069)
DMO0012E DEVICE MANAGER UNABLE TO RESET READ-ONLY DUE TO OTHER READ ONLY CONDITIONS (APAR OA63069)
DMO0012I DEVICE MANAGER UNABLE TO LOCATE *volser* ONLINE (APAR OA63069)
DMO0012I DEVICE MANAGER UNABLE TO RESET READ-ONLY DUE TO OTHER READ ONLY CONDITIONS (APAR OA63069)
DMO0012I DEVICE MANAGER CHANGED *devn* FROM A READ-ONLY DEVICE TO A READ-WRITE DEVICE (APAR OA63069)

IDC0672I
IDC0674I
IDC0676I
IDC0874I
IDC0877I
IDC0888I
IDC1178I
IDC01011I
IDC01037I
IDC01049I
IDC01402I
IDC01407I
IDC01408I
IDC1631I
IDC1632I
IDC1638I
IDC1661I
IDC1662I
IDC1663I
IDC1664I
IDC1860I
IDC1864I
IDC1865I
IDC1866I
IDC1870I
IDC1871I
IDC1875I
IDC1878I
IDC1880I
IDC1881I

IDC1885I
IDC2053I
IDC2160I
IDC2666I
IDC2668I
IDC2671I
IDC2673I
IDC2675I
IDC2872I
IDC2873I
IDC2876I
IDC2879I
IDC2882I
IDC2884I
IDC2886I
IDC3325I
IDC3619I
IDC3624I
IDC3862I
IDC11003I
IDC11015I
IDC11022I
IDC11023I
IDC11029I
IDC11031I
IDC11033I
IDC11036I
IDC11040I
IDC11041I
IDC11042I
IDC11043I
IDC11044I
IDC21009I
IDC21020I
IDC21024I
IDC21025I
IDC21026I
IDC21027I
IDC21030I
IDC21032I
IDC21034I
IDC21045I
IDC21046I
IDC21047I
IDC21411I
IDC31000I
IDC31001I
IDC31004I
IDC31006I
IDC31007I
IDC31008I

IDC31010I
IDC31012I
IDC31013I
IDC31014I
IDC31016I
IDC31017I
IDC31018I
IDC31019I
IDC31035I
IDC31038I

IEE174I (form 7)
IEE174I (form 9)
IEE174I (form 24)
IEE257I (APAR OA60560)

IEW3000I
IEW3020E
IEW3025E
IEW3031T
IEW3032S
IEW3033S
IEW3034W
IEW3035E
IEW3036T
IEW3037T
IEW3038S
IEW3039S
IEW3050T
IEW3051T
IEW3052T
IEW3053T
IEW3090T

New dump output messages

BLS01010I
BLS18556I
BLS18557I
BLS18558I
BLS18559I
IAR81605I

Changed dump output messages

None

No longer issued dump output messages

None

New MVS system codes

System completion codes

For system completion code EC6, reason code 079D is added. (APAR OA63988, which applies to V2R4 and V2R5)

333 explanation is updated with a new reason code, 026x.

0B7 explanation is updated and new reason codes are added.

System completion code 2C4 is added. (APAR OA62150)

For system completion code 72A, reason codes 24, 28, and 2C are added.

System completion code 7D1 is added. (APAR OA62150)

For system completion code 1E0, reason code 24 is added.

Wait state codes

For wait state code 07B, reason code x22 was added.

For wait state code 07C, reason code 0A is added. (APAR OA62744, which also applies to z/OS 2.4)

For wait state code 087, reason code 1A is added.

Wait state code EC9 was added. (APAR OA63507)

Changed MVS system codes

System completion codes

System completion code A1C is updated.

System completion code C0D is updated.

System completion code DC2 is updated. (APAR OA64115)

Wait state codes

Wait state code 03C is updated. (APAR OA63507)

Wait state code 07B is updated.

Wait state code A2D is updated. (APAR OA63507)

Wait state code A7A is updated. (APAR OA63257)

No longer issued MVS system codes

None

Communications Server message changes for z/OS V2R5

This section contains new, changed, and no longer issued messages and codes for Communications Server.

New

EZD1314I
EZD1315E
EZD1393I
EZD1853I
EZD1978I
EZD2047I
EZD2052I
EZD2053I
EZD2054I
EZD2055I
EZD2056I
EZD2057I
EZD2058I
EZD2059I
EZD2060I

EZD2061I
EZD2062I
EZD2063I
EZD2064I
EZZ0841I
EZZ0842I
EZZ0843I
EZZ0844I
EZZ0845I
EZZ0846I
EZZ0847I
EZZ0848I
EZZ0849I
EZZ0850I
EZZ8546I
EZZ8547I
EZZ8551I
EZZ8552I
EZZ8553I
EZZ8554I
EZZ8555I
EZZ8556I
EZZ8557I
EZZ8558I
EZZ8559I
EZZ8560I
EZZ8561I
EZZ8562I
EZZ8563I
EZZ8564I
EZZ8565I
EZZ8583I
EZZ8584I
EZZ8585I
EZZ8586I
IST2466I
IST2467I
ISTM051I
ISTM052E
ISTM053I
ISTM054E

Changed

EZB6473I
EZD0902I
EZD1139I
EZD1176I
EZD1282I
EZD1283I
EZD1284I
EZD1286I

EZD1314I
EZD1360I
EZD1362A
EZD1578I
EZYFS04I
EZYFS05I
EZYFS06I
EZZ0395I
EZZ4336I
EZZ8438I
EZZ8544I
EZZ8771I
IST315I
IST448I
IST786I
IST863I
IST865I
IST967I
IST2361I
IST2396I
IST2398I
IST2406I
IST2444I

No longer issued

EZD1303I
EZD1305I
EZD1306I
EZD1307I
EZD1309I
EZD1311I
EZD1926I
EZD1927I
EZD1971I
EZZ0782I
EZZ0783I
EZZ0784I
EZZ0785I
EZZ0809I
EZZ0823I
EZZ0824I
EZZ8475I
EZZ8476I
EZZ8477I
IST1293I
IST1331I
IST1332I
IST1396I
IST1397I
IST1398I
IST1399I

IST1443I
IST1444I
IST1656I
IST1657I
ISTH035I
ISTH036E
ISTM037I
ISTM038M
ISTM041I
ISTM042E
ISTM043I
ISTM044E
ISTM045I
ISTM046E
ISTM047I
ISTM048E
ISTM049I
ISTM050E

Cryptographic Services ICSF message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for Cryptographic Services Integrated Cryptographic Service Facility (ICSF).

The messages for Cryptographic Services Integrated Cryptographic Service Facility (ICSF) are documented in *z/OS Cryptographic Services ICSF Messages*.

New

CSFM723I
CSFM726I

Changed

CSFM668I

No longer issued

CSFG1124
CSFM122I
CSFM674I
CSFM676I
CSFM677I
CSFM678E
CSFM679I
CSFM680I
CSFM681I
CSFM682I
CSFM683E
CSFM685I

Cryptographic Services PKI Services message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for Cryptographic Services PKI Services.

All messages for PKI Services are documented in *z/OS Cryptographic Services PKI Services Guide and Reference*.

New

IKYC099I

Changed

None

No longer issued

IKYP008E
IKYS001I
IKYS002I
IKYS006I

Data Set File System message changes for z/OS V2R5

The messages for z/OS Data Set File System are documented in *z/OS Data Set File System Messages and Codes*.

DFSORT message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for DFSORT.

All messages for DFSORT are documented in *z/OS DFSORT Messages, Codes and Diagnosis Guide*.

New

None

Changed

ICE267I

No longer issued

None

Hardware Configuration Definition (HCD) message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for Hardware Configuration Definition (HCD).

The messages for HCD are documented in *z/OS and z/VM HCD Messages*.

New

New messages have been added:

CBDG771I - Request to netid.nau failed with rc = rc, reason = reason.

CBDG772I - The version of the hardware activation service on remote processor at netid.nau is not supported by this version of HCD.

CBDG773I - Internal firmware interface error on netid.nau, RC=rc Reason=reason.

CBDG774I - Request to netid.nau failed with rc = return code, reason = reason code.

CBDG775I - Error encountered during the processing of a dynamic change request for entry_type entry_id. Error information = (resp_code,resp_qual,code_qual).

CBDG776I - Error encountered during the processing of a backout request for entry_type entry_id. Error information = (resp_code,resp_qual,code_qual).

CBDG777I - Request to remote support element netid.nau failed with HCD internal reason code reason.

CBDG778I - Trying to start I/O configuration changes on processor netid.nau failed with error information = (resp_code,resp_qual,code_qual).

CBDG779I - FORCE option not specified.

CBDG780I - Recovery to IODF iodfname was successful.

CBDG781I - Recover direction failed during the processing of a dynamic change request for entry_type entry_id. Error information = (resp_code,resp_qual,code_qual).

CBDG782I - Delete Partition partname from CSS css failed because the partition is active.

Changed

CBDG422I

Deleted

None

IBM Tivoli Directory Server (TDS) message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for IBM Tivoli® Directory Server (TDS).

The messages for IBM Tivoli Directory Server are documented in *z/OS IBM Tivoli Directory Server Messages and Codes for z/OS*.

New

None

Changed

None

No longer issued

None

Device Support Facilities (ICKDSF) message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for Device Support Facilities (ICKDSF).

The messages for ICKDSF are documented in *Device Support Facilities (ICKDSF) User's Guide and Reference*.

New

```
ICK03096I
ICK11468I
ICK20807I
ICK32177I
ICK34151I
ICK34152I
ICK34153I
```

Changed

```
ICK03095I
ICK31529I
ICK32177I
ICK34102I
ICK34104I
ICK34108I
ICK34109I
ICK34111I
ICK34141I
```

No longer issued

None

Infoprint Server message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for Infoprint Server and IBM Print Transform from AFP for Infoprint Server for z/OS.

The messages and codes for Infoprint Server are documented in *z/OS Infoprint Server Messages and Diagnosis*.

The messages and codes for IBM Print Transform from AFP for Infoprint Server for z/OS are documented in *IBM Print Transforms from AFP for Infoprint Server for z/OS*.

New messages

```
AOP2508E
AOP2509E
```

Changed messages

```
AOP180E
```

No longer issued messages

```
ANFH002I
ANFH003I
ANFH004I
AOP051I
AOPH1501E
AOPH1502I
AOPH1503I
AOPH1504E
```

AOPH1511E
AOPH1512I
AOPH1513I
AOPH1514I
AOPH1515I
AOPH1803I
AOPH1805I
AOPH1902E
AOPH1903R
AOPH1905I
AOPH1906E
AOPH1907R

New system completion codes

None

Changed system completion codes

None

No longer issued system completion codes

None

Integrated Security Services Network Authentication Service message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for Integrated Security Services Network Authentication Service.

All messages for Network Authentication Services are documented in *z/OS Integrated Security Services Network Authentication Service Administration*.

New

EUVF04172E
EUVF04173I
EUVF04174E
EUVF04175I
EUVF04177I
EUVF04178E
EUVF04179W
EUVF04180I
EUVF04181E
EUVF04182W
EUVF04183I
EUVF04184E
EUVF06172E
EUVF06173E
EUVF06174E
EUVF06175I

Changed

EUVF04148I (APAR OA61733)

No longer issued

None

ISPF message changes for z/OS V2R5

This section contains new, changed, and no longer issued messages and codes for ISPF.

All messages for ISPF are documented in *z/OS ISPF Messages and Codes*.

New

FLM08503
FLM08504
ISRB513A
ISRB513B
ISRB513C
ISRB515
ISRE469A
ISRE469B
ISRE469C
ISRE688
ISRE689
ISRE937
ISRF052
ISRF053
ISRF054
ISRF055
ISRLS152
ISRLS153

Changed

ISPC763
ISPD301
ISPI013
ISPP147
ISPP258
ISPS107
ISPYF015
ISRB513
ISRDS012
ISRE030
ISRE173
ISRE177
ISRE337
ISRE469
ISRE494
ISRE553
ISRE554

ISRF046
ISRF047
ISRF048
ISRF049
ISRF050
ISRF051
ISRG011
ISRLS212
ISRLS213
ISRLS214
ISRLS477
ISRP102
ISRU002
ISRU019
ISRU030
ISRU044
ISRU070
ISRU070A
ISRU070B
ISRU079
ISRU113
ISRU113A
ISRU114
ISRU439
FLM80500

No longer issued

ISPC765
ISPC766
ISPD302
ISPD303
ISPF160
ISPF161
ISPF162
ISPF163
ISPF164
ISPG203
ISPG204
ISPI011
ISPI012
ISPI014
ISPI015
ISPO036
ISPO900
ISPO905
ISPO906
ISPO907
ISPO908
ISPO909
ISPO910
ISPO911

ISPO917
ISPO918
ISPO920
ISPO921
ISPO922
ISPO923
ISPO924
ISPO925
ISPO927
ISPO928
ISPO929
ISPO933
ISPO934
ISPO935
ISPO937
ISPO938
ISPO939
ISPP268
ISPP515
ISPP517
ISPP517A
ISPP517B
ISPP517C
ISPP517D
ISPP602
ISPP603
ISPP604
ISPP605
ISPWS000 - ISPWS022
ISPX001 - ISPX103
ISRE088
ISRE089
ISRE090A
ISRE555
ISRE949
ISRP100
ISRP101
ISRP103 - ISRP110
ISRP112 - ISRP121
ISRP123
ISRP125
ISRP518
ISRRS006
ISRU570
ISRU590
ISRU591
ISRU592
FLM390A
FLM72006
FLM72007
FLM84315

JES2 message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for JES2.

The messages for JES2 are documented in *z/OS JES2 Messages*.

New

$HASP1538 (APAR OA58332)
$HASP1539 (APAR OA61231)
$HASP1540 (APAR OA61231)
$HASP1541 (APAR OA61231)
$HASP1542 (APAR OA61231)
$HASP1543 (APAR OA61231)
$HASP1544 (APAR OA61231)
$HASP1545 (APAR OA61231)
$HASP1548 (APARs OA62796, OA62804)
$HASP1549 (APARs OA62796, OA62804)
$HASP1550 (APARs OA62796, OA62804)
$HASP1551 (APARs OA62796, OA62804)
$HASP1552 (APAR OA63581)

Changed

$HASP435
$HASP492
$HASP493
$HASP851 (APAR OA63671)
$HASP1527 (APAR OA61231)
$HASP1528 (APAR OA61231)
$HASP1530 (APAR OA61231)

No longer issued

None

JES3 message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for JES3.

The messages for JES3 are documented in *z/OS JES3 Messages*.

New

IAT3845
IAT3846
IAT7148

Changed

None.

No longer issued

None.

Language Environment message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for Language Environment®.

The following messages are new, changed, or no longer issued for Language Environment in z/OS V2R5 and its updates.

New messages

The following messages are new.

    CEE3935I
    CEE5239S (APAR PH41950 for V2.5 only)
    IBM0343S (APAR PH42584, which also applies to V2.4)
    IBM0344S (APAR PH42584, which also applies to V2.4)
    IBM0422S (APAR PH42584, which also applies to V2.4)
    IBM0490S (APAR PH42584, which also applies to V2.4)
    IBM0491S (APAR PH42584, which also applies to V2.4)
    IBM0492S (APAR PH42584, which also applies to V2.4)
    IBM0493S (APAR PH42584, which also applies to V2.4)
    IBM0494S (APAR PH42584, which also applies to V2.4)
    IBM0495S (APAR PH42584, which also applies to V2.4)
    IBM0496S (APAR PH42584, which also applies to V2.4)
    IBM0497S (APAR PH42584, which also applies to V2.4)
    IBM0498S (APAR PH42584, which also applies to V2.4)
    IBM0499S (APAR PH42584, which also applies to V2.4)
    IGZ0377S (APARs PH40684 and PH40348, which also apply to V2.4)
    IGZ0378S (APARs PH40684 and PH40348, which also apply to V2.4)
    IGZ0379S (APARs PH40684 and PH40348, which also apply to V2.4)
    IGZ0380S (APARs PH40684 and PH40348, which also apply to V2.4)
    IGZ0381S (APARs PH40684 and PH40348, which also apply to V2.4)
    IGZ0382S (APAR PH43141, which also applies to V2.4)

Changed messages

The following messages are changed.

    CEE3754S (APAR PH45216, which also applies to V2R4 and V2R5)
    IGZ0152S
    IBM0236
    IBM0598

Deleted messages

Language Environment no longer issues the following messages.

    None.

New abend codes

The following abend codes are new.

    X'400' (1024)
    X'404' (1028)

Changed abend codes

The following abend codes are changed.

U4087 (X'FF7')
U4093 (X'FFD')

New errno values

The following errno values are new.

C4030020
C4030021
C112001F

Network File System (NFS) message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for Network File System (NFS).

All messages for NFS are documented in *z/OS Network File System Guide and Reference*.

New

GFSA325E
GFSA1045I
GFSA1046E

Changed

GFSA320E
GFSA327I
GFSA348I
GFSA730I
GFSA736E
GFSA737W
GFSA743W
GFSA945I
GFSA947I
GFSC700I

No longer issued

GFSA990I
GFSA991E

OpenSSH message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for OpenSSH.

The messages for z/OS OpenSSH are documented in *z/OS OpenSSH User's Guide*.

New

FOTS4321 (APAR OA62371)

Changed

FOTS2815 (APAR OA62122)

No longer issued

None

Resource Measurement Facility (RMF) message changes for z/OS V2R5

The messages for RMF are documented in *z/OS Resource Measurement Facility Messages and Codes*. For new, changed, and deleted RMF messages for z/OS V2R5, see Summary of changes for z/OS Version 2 Release 5 (V2R5) in *z/OS Resource Measurement Facility Messages and Codes*.

Security Server RACF message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for RACF®.

All messages for RACF are documented in *z/OS Security Server RACF Messages and Codes*.

New

ICH601I
ICH602I
ICH603I
ICH604I
ICH605I
ICH606I
ICH607I
ICH608I (APAR OA62267)
ICH08029I (APAR OA61951)
ICH14086I (APAR OA61951)
IRR62005I
IRR62006I
IRR62077I
IRR62078I
IRR62079I
IRR62080I
IRR62081I
IRR62082I
IRR62083I
IRR62084I
IRR62085I
IRR62086I
IRR62087I
IRR62088I
IRR62089I
IRR62090I (APAR OA62267)
IRR65045I
IRR65046I
IRRC090I (APAR OA61933)
IRRC091I (APAR OA61933)
IRRC092I (APAR OA61933)
IRRC093I (APAR OA61933)
IRRC094I (APAR OA61933)
IRRC095I (APAR OA61933)

```
IRRH300E
IRRH332I
IRRH333E
IRRH334E
IRRH335E
IRRH336E
IRRH337E
IRRH338I
IRRH339E
IRRH340I
IRRH341E
IRRH342E
IRRH343I
IRRH344E
IRRH345I
IRRH346E
IRRH347E
IRR05417
```

Changed

```
ICH601I
ICH602I
ICH603I
ICH604I
ICH605I
ICH606I
ICH607I
ICH7001I (APAR OA62201)
ICH08007I (APAR OA61951)
ICH08029I (APAR OA61951)
IRR1007I (APAR OA61951)
IRR62071I
IRRB072I (APAR OA61933)
IRRD109I
```

No longer issued

```
ICH601I (APAR OA62267)
ICH607I (APAR OA62267)
IRR62065I (APAR OA61995)
IRR62066I (APAR OA61995)
```

SMP/E V3R7 message changes for z/OS V2R5

This topic lists new, changed, and no longer issued non-operator messages for SMP/E.

All messages for SMP/E are documented in *z/OS SMP/E Messages, Codes, and Diagnosis*.

New

```
GIM69265S
GIM69266S
GIM69267S
```

GIM69268S
GIM69269S
GIM69270I
GIM69271S

Changed

None

No longer issued

None

System Display and Search Facility (SDSF) message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for System Display and Search Facility (SDSF).

All messages for SDSF are documented in *z/OS SDSF Operation and Customization*.

New

UNABLE TO MAP
HSF0038W
HSF0060E
HSF0079I
ISF006I
ISF060I
ISF349I
ISF354I
ISF361I
ISF799I
ISFH1018R
ISFH1019R
ISFH1020R
ISFH1021R
ISFH1022E
ISFH1023E
ISFH1024E
ISFH1025I
ISFH1026R

Changed

AFD CURSOR row,column
INPUT FILE ALLOC FAILED
HSF0062I
HSF0065E
ISF019I
ISF020E
ISF024I
ISF025E
ISF035I

ISF037I
ISF051I
ISF059I
ISF300E
ISF301E
ISF302E
ISF303E
ISF304I
ISF305E
ISF306E
ISF307E
ISF309E
ISF311I
ISF312I
ISF313I
ISF315I
ISF351I
ISF401I
ISF406I
ISF407I
ISF412I
ISF413E
ISF414E
ISF415I
ISF423I
ISF452E
ISF713E
ISF731E
ISF735E
ISF737E
ISF797I

No longer issued

ISF026I
ISF030E
ISF046I

TSO/E message changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages for TSO/E.

The messages for TSO/E are documented in *z/OS TSO/E Messages*.

New

None

Changed

None

No longer issued

> None

XL C/C++ message changes for z/OS V2R5

This lists contains new, changed, and no longer issued messages for XL C/C++.

The messages for XL C/C++ are documented in *z/OS XL C/C++ Messages*.

New

> None

Changed

> None

No longer issued

> None

Xvfb message changes for z/OS V2R5

This topic lists new, changed, and no longer issued non-operator messages for Xvfb.

All messages for Xvfb are documented in *z/OS Xvfb User's Guide*.

New

> None

Changed

> None

No longer issued

> None

z/OS Data Gatherer message changes for z/OS V2R5

The messages for z/OS Data Gatherer are documented in *z/OS Resource Measurement Facility Messages and Codes*. For new, changed, and deleted z/OS Data Gatherer messages for z/OS V2R5, see Summary of changes for z/OS Version 2 Release 5 (V2R5) in *z/OS Resource Measurement Facility Messages and Codes*.

z/OS File System (zFS) message and code changes for z/OS V2R5

This topic lists new, changed, and no longer issued messages and codes for z/OS File System (zFS).

The following messages and reason codes are new, changed, or no longer issued for z/OS File System (zFS) in z/OS V2R5.

New messages for zFS

The following messages are new for zFS.

> None.

New messages for Health Checker

The following messages are new for Health Checker.

> None.

Changed messages for zFS

The following messages are changed for zFS.

> IOEZ00522E
> IOEZ00337E (APAR OA59379, which also applies to V2R4 and V2R3)
> IOEZ00338A (APAR OA59379, which also applies to V2R4 and V2R3)
> IOEZ00617I (APAR OA59379, which also applies to V2R4 and V2R3)
> IOEZ00777A (APAR OA59379, which also applies to V2R4 and V2R3)
> IOEZ00784E (APAR OA59379, which also applies to V2R4 and V2R3)
> IOEZ00947A (APAR OA59379, which also applies to V2R4 and V2R3)
> IOEZ00948A (APAR OA59379, which also applies to V2R4 and V2R3)
> IOEZ00639I

Changed messages for Health Checker

The following messages are changed for Health Checker.

> None.

New reason codes for zFS

The following reason codes are new for zFS.

> 6619 (APAR OA63845, which applies to V2R4 and V2R5)
> 6123 (APAR OA63845, which applies to V2R4 and V2R5)
> 6124 (APAR OA63845, which applies to V2R4 and V2R5)
> 6CA6 (APAR OA60828)

Changed reason codes for zFS

The following reason codes are changed for zFS.

> None.

z/OS UNIX message changes for z/OS V2R5

This topic lists new, changed, and deleted messages, reason codes, and return codes for z/OS UNIX.

New messages

> None.

Changed messages

> FSUM1202 (APAR PH47666)
> FSUM1203 (APAR PH47666)
> FSUM1204 (APAR PH47666)
> FSUM1206 (APAR PH47666)
> FSUM1211 (APAR PH47666)
> FSUM1222 (APAR PH47666)
> FSUM1226 (APAR PH47666)

FSUM1228 (APAR PH47666)
FSUM1229 (APAR PH47666)
FSUM1239 (APAR PH47666)

Deleted messages

None.

New reason codes

JrUFSMergedSecurity (APAR OA64326)
JRUFSNoMountParm (APAR OA61759, 2.5 only
JRUFSMaxUpperDir (APAR OA61759, 2.5 only)
JRUFSMissingDir (APAR OA61759, 2.5 only)
JRUFSFidNotThere (APAR OA61759, 2.5 only)
JRUFSNameNotFound (APAR OA61759, 2.5 only)
JRUFSWhiteoutNode (APAR OA61759, 2.5 only)
JRUFSFileExists (APAR OA61759, 2.5 only)
JRUFSMaxWorkDir (APAR OA61759, 2.5 only)
JRUFSUpperWorkDi (APAR OA61759, 2.5 only)
JRUFSWorkDirNotEmpty (APAR OA61759, 2.5 only)
JRPFSTerminating (APAR OA61759, 2.5 only)
JRUFSSysplexNotSupported (APAR OA61759, 2.5 only)
JRUFSTooManyMergedDirs (APAR OA61759, 2.5 only)
JRUFSDirNotUsable (APAR OA61759, 2.5 only)
JRUFSRemountUnsupported (APAR OA61759, 2.5 only)
JRUFSVgetCopyup (APAR OA61759, 2.5 only)
JRUFSDirsNotDifferent (APAR OA61759, 2.5 only)
JRUFSNFSNotSupported (APAR OA61759, 2.5 only)
JrUFSDirNotEmpty (APAR OA63685, 2.5 only)
JrUFSUsingFS (APAR OA63685, 2.5 only)
JrCPLPListError (APAR OA63685, 2.5 only)
JRUFSExpNotSupported (APAR OA61759, 2.5 only)
JRNestedUFSNotSupported (APAR OA61759, 2.5 only)
JRUFSStickyNotOwner (APAR OA61759, 2.5 only)
JRSMFExitSuppressedRec
JRSMFMalformedExtHdr
JRSMFExitModMalformedExtHdr

Changed reason codes

JrSwapDirInUse

Deleted reason codes

None.

New return codes

None.

Changed return codes

None.

Deleted return codes

None.

Chapter 2. New and changed System Management Facilities (SMF) records for z/OS V2R5

This topic lists the System Management Facilities (SMF) records for z/OS elements and features that are new or changed for z/OS V2R5.

Table 1 on page 35 provides a list of SMF records that are new or changed for z/OS V2R5. Detailed information about these SMF records can be found in one of the following documents, as indicated by the "Where documented" column in Table 1 on page 35.

Communications Server

- Type 119 SMF records in *z/OS Communications Server: IP Programmer's Guide and Reference*
- Type 1154 SMF records in *z/OS Communications Server: IP Programmer's Guide and Reference*
- Tuning input/output (I/O) operations for RoCE connections in *z/OS Communications Server: SNA Network Implementation Guide*

MVS
z/OS MVS System Management Facilities (SMF)

OAM
OAM System Management Facility records in *z/OS DFSMS OAM Planning, Installation, and Storage Administration Guide for Object Support*

RACF
SMF records in *z/OS Security Server RACF Macros and Interfaces*

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5

SMF record	z/OS element or feature	Description	Where documented
Type 0	MVS	- New fields are added at offsets 82 - 87 to indicate the number of crypto and NNPI counters supported by the system (APAR OA61511). - The description of the SMF0RST field is updated and the SMF0RS4K field is added in support of greater than 4 TB real storage.	MVS

SMF record	z/OS element or feature	Description	Where documented
Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)			

Type 30	MVS	• New support for tracking crypto and NNPI counters (APAR OA61511):
		
		  – New fields are added in the Header/self-defining section at offsets 192 - 219 to locate the Crypto counters and NNPI counters sections and to indicate that a record is part of a continuation.
		
		  – New bits are defined in the Subsystem section in the SMF30PFlags field to indicate that Crypto counters and NNPI counters are active.
		
		  – The Crypto counters section is added.
		
		  – The NNPI counters section is added.
		
		• Bit 5 of SMF30_RaxFlags is now defined. (APAR OA61368)
		
		• The descriptions of the SMF30MSC and SMF30LOC fields are updated in support of the removal of WLM service coefficients.
			MVS

Type 42 , subtype 5	DFSMS	• For APAR OA61171:
		
		  – The S42SCCNT and S42SCCRP fields are added in "Storage class response time section."
		
		  – The S42SNCTR and S42SNCOK fields are added in "Synchronous I/O section 1."
		
		• The S42SCRRU and S42SCRSU fields formerly at offsets 148 and 152, respectively, are replaced by reserved space (following existing reserved space starting at offset 146) in "Storage class response time section."
			MVS

Type 42, subtype 6	DFSMS	• For APAR OA61171, the S42DSCNT and S42DSCRP fields are added in "Data set I/O statistics section."	MVS
Type 70	z/OS Data Gatherer / RMF	• Bit 6 in the SMF70FLA field is now defined in the RMF Product section. (APAR OA63190) • The description of the SMF70SRL field is updated in the RMF Product section. (APAR OA62064) • Bits 4 and 5 in the SMF70FLA field are now defined in the RMF Product section.	MVS

SMF record	z/OS element or feature	Description	Where documented
Type 70, subtype 1	z/OS Data Gatherer	• The description of bit 3 in the SMF70STF field is updated in the CPU control section. (APAR OA63190) • New fields are added in the PR/SM Logical Processor Data section. (APAR OA62064)	MVS
Type 70, subtype 2	z/OS Data Gatherer / RMF	• The list of supported crypto processor types in the various record sections is updated to include the CEX8 crypto card on machines that support it. (APAR OA59874)	MVS
Type 71	z/OS Data Gatherer / RMF	• Bit 6 in the SMF71FLA field is now defined in the RMF Product section. (APAR OA63190) • Bits 4 and 5 in the SMF71FLA field are now defined in the RMF Product section.	MVS
Type 72	z/OS Data Gatherer / RMF	• Bit 6 in the SMF72FLA field is now defined in the RMF Product section. (APAR OA63190) • Bits 4 and 5 in the SMF72FLA field are now defined in the RMF Product section. • Descriptions of the R723CIOC and R723CMSO fields are updated.	MVS
Type 72, subtype 3	z/OS Data Gatherer / RMF	• The R723MFL2 field is added in the Workload Manager Control section. (APAR OA62081) • The description of the R723CRTX field is updated in the Service/report class period data section. (APAR OA62081) • Fields are added in the Service/Report Class Period Data section in support of transaction data for enclaves. (APAR OA62502)	MVS
Type 73	z/OS Data Gatherer / RMF	• The descriptions of the SMF73NT1 and SMF73NT2 fields are updated in the Channel path data section. • Bit 6 in the SMF73FLA field is now defined in the RMF Product section. (APAR OA63190) • Bits 4 and 5 in the SMF73FLA field are now defined in the RMF Product section.	MVS

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)

SMF record	z/OS element or feature	Description	Where documented
Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)			
Type 74	z/OS Data Gatherer / RMF	• Bit 6 in the SMF74FLA field is now defined in the RMF Product section. (APAR OA63190) • The descriptions of the SMF74DSO, SMF74SPR, and SMF74SPW fields are updated in the Device data section. (APAR OA62081) • The description of the SMF74SRL field is updated in the RMF Product section. (APAR OA61041) • Bits 4 and 5 in the SMF74FLA field are now defined in the RMF Product section.	MVS
Type 74, subtype 4	z/OS Data Gatherer / RMF	• The R744RFLG field is added in the Remote Facility Data section. (APAR OA62081) • Bit 0 is no longer used in the R744FFLC field in the Local coupling facility data section. (APAR OA62081) • New fields are added in the Processor Utilization Data section. (APAR OA61041) • New fields are added to the Request Data Section in support of coupling facility monopolization avoidance. • Bit 5 is now defined in the R744FFLG status flags field, and dependencies on the bit 5 setting are added in the Local Coupling Facility Data Section and the Request Data Section.	MVS
Type 74, subtype 5	z/OS Data Gatherer / RMF	• The following fields are now reserved in the Cache device data section: R745DSG2 bits 4 and 5, R745INCR, R745BYTR, R745BYTW, R745RTIR, and R745RTIW. (APAR OA62081) • Bits 4–6 are now reserved in the R745SCS field in the Cache control unit status data section. (APAR OA62081)	MVS
Type 74, subtype 8	z/OS Data Gatherer / RMF	• A new version value is added in the description of the R748CVSN field in the Control Data section. (APAR OA62081)	MVS

SMF record	z/OS element or feature	Description	Where documented
Type 75	z/OS Data Gatherer / RMF	• The SMF75LVU field is added in the Page Data Set Data section. (APAR OA62081) • The descriptions of SMF75FL2 bit 1 and SMF75TYP are updated in the Page data set data section. (APAR OA62081) • Bit 6 in the SMF75FLA field is now defined in the RMF Product section. (APAR OA63190) • Bits 4 and 5 in the SMF75FLA field are now defined in the RMF Product section.	MVS
Type 76	z/OS Data Gatherer / RMF	• The descriptions of the SMF76MIN, SMF76MAX, SMF76AVG, SMF76STD, and SMF76ENV fields are updated in the Trace data section. (APAR OA62081) • Bit 6 in the SMF76FLA field is now defined in the RMF Product section. (APAR OA63190) • Bits 4 and 5 in the SMF76FLA field are now defined in the RMF Product section.	MVS
Type 77	z/OS Data Gatherer / RMF	• The description of SMF77DFG bit 5 is updated in the Enqueue data section. (APAR OA62081) • Bit 6 in the SMF77FLA field is now defined in the RMF Product section. (APAR OA63190) • Bits 4 and 5 in the SMF77FLA field are now defined in the RMF Product section.	MVS
Type 78	z/OS Data Gatherer / RMF	• The notes about subtype 3 are updated. (APAR OA63190) • Bit 6 in the SMF78FLA field is now defined in the RMF Product section. (APAR OA63190) • Bits 4 and 5 in the SMF78FLA field are now defined in the RMF Product section.	MVS
Type 78, subtype 2	z/OS Data Gatherer / RMF	• Bit 4 in the R782FLGS field is now defined in the Virtual storage private area data section. (APAR OA62081)	
Type 79	z/OS Data Gatherer / RMF	• Bit 1 in the R79BFL2 field is now reserved in the PGSP control section. (APAR OA62081) • Bits 4 and 5 in the SMF79FLA field are now defined in the RMF Product section.	MVS

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)

SMF record	z/OS element or feature	Description	Where documented
Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)			
Type 79, subtype 1	z/OS Data Gatherer	Bits 5 and 6 in the R791FLG3 field are now defined in the Address Space State Data section. **Reason for change:** Support for System Recovery Boost stage 3 (APAR OA60660)	MVS
Type 79, subtype 2	z/OS Data Gatherer	Bits 5 and 6 in the R792FLG3 field are now defined in the Address Space Resource section. **Reason for change:** Support for System Recovery Boost stage 3 (APAR OA60660)	MVS
Type 90	MVS	• Bit 2 is now defined in the SMF92MFG field of the subtype 1 record. • The subtype 41 record is added.	MVS
Type 90, subtype 40	MVS	• Fields updated and new fields added in support of System Recovery Boost stage 3 (APAR OA60660). • The description of the SMF90T40_ETOD field has been updated, and the length of the SMF90T40_NumTransientzIIPCores field has been corrected.	MVS
Type 90, subtype 42	MVS	New subtype 42 record for Validated Boot for z/OS. (APAR OA63507)	MVS
Type 99, subtype 2	MVS	Bit 6 in the SMF99_AS_ESP_FLAGS field is updated in the Address space expanded storage access policy section. (APAR OA60841)	MVS
Type 98, subtype 3	MVS	Type 98 subtype 3 records contain performance information for the z/OS I/O Supervisor component for asynchronous (FICON), DASD only, I/O. (APAR OA62963)	MVS
Type 98, subtype 4	MVS	Type 98 subtype 4 records contain performance information for the z/OS I/O Supervisor component for synchronous (zHyperLink) I/O. (APAR OA62963)	MVS
Type 100	Db2	Information is added about generating correlator records.	MVS

SMF record	z/OS element or feature	Description	Where documented
Type 119, TCP connection termination (subtype 2)	Communications Server	These new fields record SMC characteristics of the TCP connection: • SMF119AP_TTSMCVersion • SMF119AP_TTSMCDEid • SMF119AP_TTSMCv2Eid • SMF119AP_TTSMCRv2Reason • SMF119AP_TTSMCDv2Reason **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server
Type 119, TCP connection termination (subtype 2)	Communications Server	SMF119AP_TTTermCode – Reason code for connection termination can have a new value of x'77' indicating connection was reset by zERT enforcement policy action **Reason for change:** zERT policy-based enforcement	Communications Server
Type 119, TCP/IP profile event record (subtype 4)	Communications Server	Global Configuration section: New field NMTP_GBCFzAGGtim_INTVAL indicates the setting of the INTVAL sub-parameter on the GLOBALCONFIG statement. New field NMTP_GBCFzAGGtim_SYNCVAL indicates the setting of the SYNCVAL sub-parameter on the GLOBALCONFIG statement. • NMTP_GBCFzAGGtim_SYNCVAL_HH is the hours part of SYNCVAL (format of 24-hour military time). • NMTP_GBCFzAGGtim_SYNCVAL_MM is the minutes portion of SYNCVAL. **Reason for change:** z/OS Encryption Readiness Technology (zERT) aggregation recording interval	Communications Server

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)

SMF record	z/OS element or feature	Description	Where documented

Type 119, TCP/IP profile record (subtype 4)	Communications Server	These new fields record the settings of the new SMC parameters on the GlobalConfig statement:
		
		• NMTP_GBCFSYSTEMEID
		• NMTP_GBCFSYSTEMEIDSTR
		• NMTP_GBCFSMCEID
		• NMTP_GBCFSMCEIDCount
		• NMTP_GBCFUEIDList
		
		Two new triplets have been added to provide the new SMC permit filter and the SMC deny filter sections.
		
		The following new parameters were added to the Interface section:
		
		• NMTP_INTFSmcrV2Pfid
		• NMTP_INTFSmcrV2MTU
		• NMTP_INTFSmcrV2IpAddr4
		
		These are the fields in new sections:
		
		• SMC Filter Permit Entries section:
		  – NMTP_FLTPEye
		  – NMTP_FLTPIPaddrV4
		  – NMTP_FLTPIPaddrV6
		  – NMTP_FLTPPrefix
		  – NMTP_FLTPFLG
		• SMC Filter Exclude Entries section:
		  – NMTP_FLTPEye
		  – NMTP_FLTEIPaddrV4
		  – NMTP_FLTEIPaddrV6
		  – NMTP_FLTEPrefix
		  – NMTP_FLTEFLG
		• SMF119S22Off
		• SMF119S22Len
		• SMF119S22Num
		• SMF119S23Off
		• SMF119S23Len
		• SMF119S23Num
		
		Reason for change: Shared Memory Communications multiple IP subnet support (SMCv2)
			Communications Server

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)			
SMF record	**z/OS element or feature**	**Description**	**Where documented**
Type 119, TCP/IP statistics record (subtype 5)	Communications Server	New fields SMF119AP_TSSTZAGGCurrent and SMF119AP_TSSTZAGGMax, in the TCP statistics section, provide current and maximum storage usage statistics for ZERT AGGREGATION. **Reason for change:** z/OS Encryption Readiness Technology (zERT) aggregation recording interval	Communications Server
Type 119, z/OS Encryption Readiness Technology (zERT) connection details (subtype 11)	Communications Server	A new triplet has been added to provide the new zERT policy-based enforcement section. These are the fields in the new section: • SMF119SC_ZERTIPsecPol • SMF119SC_ZERTTLSPol • SMF119SC_ZERTSSHPol • SMF119SC_ZERTNoRecognizedPol • SMF119S7Off • SMF119S7Len • SMF119S7Num • zERT policy-based enforcement section New values have been defined for the following fields: • SMF119SC_SAEvent_Type • SMF119SC_SAFlags **Reason for change:** zERT policy-based enforcement	Communications Server
Type 119, SMC-D link statistics (subtype 38)	Communications Server	These new fields record SMC characteristics of the SMC-D link: • SMF119DM_LSSMCVersion • SMF119DM_LSEid • SMF119DM_LSRmtHostName • SMF119DM_LSRmtOSType **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server

SMF record	z/OS element or feature	Description	Where documented
Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)			
Type 119,SMC-D link state start record (subtype 39)	Communications Server	These new fields record SMC characteristics of the SMC-D link: • SMF119DM_LISMCVersion • SMF119DM_LIEid • SMF119DM_LIRmtHostName • SMF119DM_LIRmtOSType **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server
Type 119, SMC-D link state end record (subtype 40)	Communications Server	These new fields record SMC characteristics of the SMC-D link: • SMF119DM_LTSMCVersion • SMF119DM_LTEid • SMF119DM_LTRmtHostName • SMF119DM_LTRmtOSType **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server
Type 119, SMC-R link group statistics record (subtype 41)	Communications Server	These new fields record SMC characteristics of the SMC-R link: • SMF119SM_GSSmcrV2Flags • SMF119SM_GSSmcrVersion • SMF119SM_GSSmceid • SMF119SM_GSRmtOSType • SMF119SM_GSRmtHostName • SMF119SM_LSLclIPAddr4_SMCRv2 • SMF119SM_LSRmtIPAddr4_SMCRv2 • SMF119SM_LSSmcLnkFlags • SMF119SM_LSSmcLnkTypeDirect • SMF119SM_LSSmcLnkRoleServer • SMF119SM_LSSmcLnkNextHopMAC • SMF119SM_LSSmcLnkNextHopIpAddr **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server

	z/OS element or feature	Description	Where documented
Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)			
SMF record			
Type 119, SMC-R link state start record (subtype 42)	Communications Server	These new fields record SMC characteristics of the SMC-R link: • SMF119SM_LISmcrV2Flags • SMF119SM_LISmcrVersion • SMF119SM_LISmceid • SMF119SM_LIRmtOSType • SMF119SM_LIRmteHostName • SMF119SM_LISmcLnkFlags • SMF119SM_LISmcLnkTypeDirect • SMF119SM_LISmcLnkRoleServer • SMF119SM_LISmcLnkNextHopMAC • SMF119SM_LISmcLnkNextHopIpAddr **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server
Type 119, SMC-R link state end record (subtype 43)	Communications Server	These new fields record SMC characteristics of the SMC-R link: • SMF119SM_LTSmcrV2Flags • SMF119SM_LTSmcrVersion • SMF119SM_LTSmceid • SMF119SM_LTRmtOSType • SMF119SM_LTRmtHostName • SMF119SM_LTSmcLnkFlags • SMF119SM_LTSmcLnkTypeDirect • SMF119SM_LTSmcLnkRoleServer • SMF119SM_LTSmcLnkNextHopMAC • SMF119SM_LTSmcLnkNextHopIpAddr **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server
Type 119, RDMA network interface card (RNIC) interface statistics record (subtype 44)	Communications Server	These new fields record RDMA network interface card (RNIC) interface statistics: • SMF119SM_RSSMCv2Flags • SMF119SM_RSSmcrV2MultiIpAddr • SMF119SM_RSSmcCapability • SMF119SM_RSSmcrV2_MTU • SMF119SM_RSSmcrV2IpAddr **Reason for change:** Shared Memory Communications multiple IP subnet support (SMCv2)	Communications Server

		Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)	
SMF record	**z/OS element or feature**	**Description**	**Where documented**
• **Type 119, FTP server transfer completion record (subtype 70)** • **Type 119, FTP server transfer initialization record (subtype 100)** • **FTP server session record (subtype 104)**	Communications Server	The value "T: TLS" removed from the SMF119FT_FSMechanism field in the FTP server security section **Reason for change:** Removal of native TLS/SSL support from TN3270E Telnet Server, FTP Server, and DCAS	Communications Server

Type 119, FTP daemon configuration record (subtype 71)	Communications Server	• In the FTP daemon general configuration section:
		  – Value "True" removed for the field SMF119FT_FDCFsslv3
		  – Value "FTP" removed for the field SMF119FT_FDCFTLSMec
		  – Value "CCCNONOTIFY" removed for the field SMF119FT_FRDFTLSRfcLevel
		  – Field SMF119FT_FDCFTLSTimeout will always be 0. TLS Timeout parameter is no longer available for the FTP server.
		• Field removed.
		  SMF119FT_FDCD_KEYRING in the FTP configuration data keys
		
		Reason for change: Removal of native TLS/SSL support from TN3270E Telnet Server, FTP Server, and DCAS
			Communications Server

Type 119, FTP server logon failure record (subtype 72)	Communications Server	The value "T: TLS" removed from the SMF119FT_Ff Mechanism field in the FTP server logon failure security section **Reason for change:** Removal of native TLS/SSL support from TN3270E Telnet Server, FTP Server, and DCAS	Communications Server

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)

SMF record	z/OS element or feature	Description	Where documented
• **Type 119, subtype 73** • **Type 119, subtype 74**	Communications Server	The following new fields are added to the IPSec common IKE tunnel specific section: • SMF119IS_IKETunLclNotAfterType • SMF119IS_IKETunLclCertExp • SMF119IS_IKETunLclSerialNumber • SMF119IS_IKETunLclSerialNumLen • SMF119IS_IKETunRmtNotAfterType • SMF119IS_IKETunRmtCertExp • SMF119IS_IKETunRmtSerialNumber • SMF119IS_IKETunRmtSerialNumLen Four new triplets are added to provide: • Local issuer distinguished name • Remote issuer distinguished name • Local subject distinguished name • Remote subject distinguished name **Reason for change:** IPsec certificate reporting enhancements	Communications Server
Type 122	MVS	Information about subtype 4 for IBM Wazi Deploy has been added.	MVS
Type 124, subtype 1	MVS	New fields added to provide additional z/OS support for IBM Fibre Channel Endpoint Security (APAR OA59792).	MVS
Type 124, subtype 2	MVS	New fields added to provide additional z/OS support for IBM Fibre Channel Endpoint Security (APAR OA59792).	MVS
Type 124, subtype 4	MVS	New fields added to provide additional z/OS support for IBM Fibre Channel Endpoint Security (APAR OA59792).	MVS
Type 1153	JES2	JES2 SMF Record Type 1153 added to correct SMF 84. **Reason for change:** The header for SMF Type 84 records does not conform to the standard SMF header, and standard programs that process SMF records cannot use type/subtype filtering to access SMF 84 subtype 21 records.	MVS
Type 1154	MVS	New record type and subtypes for z/OS compliance evidence. **Reason for change:** z/OS compliance support (APAR OA61444)	MVS

	z/OS element or		Where
SMF record	feature	**Description**	**documented**
Type 1154 • **Subtype 1, TCP/IP stack compliance evidence record** • **Subtype 2, FTP daemon compliance evidence record** • **Subtype 3, TN3270E Telnet server compliance evidence record** • **Subtype 4, CSSMTP client compliance evidence record**	Communications Server	New SMF 1154 records **Reason for change:** Support for SMF compliance evidence (APAR PH37372)	Communications Server
Type 1154, subtype 128	MVS	New subtype 128 for processor activity compliance evidence. **Reason for change:** z/OS compliance support (APAR OA61511)	MVS

Table 1. New and changed System Management Facilities (SMF) records for z/OS V2R5 (continued)

Chapter 3. New and changed members in SYS1.MACLIB for z/OS V2R5

This topic lists the lists the new and changed members of SYS1.MACLIB for z/OS V2R5.

Table 2 on page 49 lists the new and changed members of SYS1.MACLIB for z/OS V2R5.

Table 2. New and changed members in SYS1.MACLIB for z/OS V2R5

Member	Element or feature	Description	Reason for change
EZASM482	Communications Server	New mapping for the SMF 1154, subtype 1 – 4 records	Support for SMF compliance evidence (APAR PH37372)
EZASMF77	Communications Server	Updates to SMF 119 records. See New and changed System Management Facilities (SMF) records for z/OS V2R5 for more information.	V2R5 release change
EZAENF80	Communications Server	New qualifier for ENF80 signal to notify applications of complete initialization of the TCP/IP stack and extended services.	Notification of availability of TCP/IP extended services
IAZS1153	MVS System Management Facilities (SMF)	New mapping macro for JES2 SMF Record Type 1153.	V2R5 release change
IFASMFCN	MVS System Management Facilities (SMF)	Updated with new constants for Crypto counter and NNPI counter values.	APAR OA61511
IHAECVT	MVS	Updated for System Recovery Boost stage 3.	APAR OA60660
IHAENF84	MVS	Updated for System Recovery Boost stage 3.	APAR OA60660
IRARASD	MVS Workload Management	Updated for System Recovery Boost stage 3.	APAR OA60660
IRASRMST	MVS Workload Management	Structure SRMSTAT is updated for PLISTVER = 3.	APAR OA61811
IWMSVAEA	MVS Workload Management	Updated for System Recovery Boost stage 3.	APAR OA60660
IWMSVDCR	MVS Workload Management	Updated for System Recovery Boost stage 3.	APAR OA60660
IWMSVDEF	MVS Workload Management	Updated for System Recovery Boost stage 3.	APAR OA60660
IWMSVNPA	MVS Workload Management	Updated for System Recovery Boost stage 3.	APAR OA60660
IWMSVPOL	MVS Workload Management	Updated for System Recovery Boost stage 3.	APAR OA60660

Member	Element or feature	Description	Reason for change
Table 2. New and changed members in SYS1.MACLIB for z/OS V2R5 (continued)			
IWMWRCAA	MVS Workload Management	Structure RCAERST is extended to support new TRXNUM parameter for IWM4EDEL service.	APAR OA61811
IWMWRQAA	MVS Workload Management	Updated for System Recovery Boost stage 3.	APAR OA60660
IXLYAMDA	MVS Parallel Sysplex	Updated for new fields in IXLYAMDA sub mapping IXLYAMDCFMINFO.	APAR OA60275

Chapter 4. New and changed PARMLIB members for z/OS V2R5

This topic lists the new and changed PARMLIB members for z/OS V2R5.

See *z/OS MVS Initialization and Tuning Reference* for more information about these members.

Table 3 on page 51 lists the new and changed members of PARMLIB for z/OS V2R5. In some cases, IBM might provide these updates in SYS1.IBM.PARMLIB and a customer might install them into SYS1.PARMLIB.

Table 3. New and changed PARMLIB members for z/OS V2R5

Member	Element or feature	Description
BPXPRMxx	z/OS UNIX	• The default for the LIMMSG statement was changed from NONE to SYSTEM. • You can specify the union file system (UFS) in the FILESYSTYPE statement. (APAR OA61759) • You can specify the SMFUPDATE statement. (APAR OA62405, which also applies to 2.4)
DIAGxx	MVS	• The AUTOIPL notes are updated for Validated Boot for z/OS. (APAR OA63507) • The ALLOWEARLYRUCSA statement is added. (APAR OA61368) • The VSM CHECKREGIONLOSS statement is updated to specify the range of valid values and the default values.
IEADMCxx	MVS	• Additional guidance is provided about the IBM-supplied default.
IEAOPTxx	MVS workload management	• The IFAHONORPRIORITY and ZAAPAWMT parameters are deprecated.
IEASYSxx	MVS	• The description of the CLPA parameter is updated for Validated Boot for z/OS. (APAR OA63507) • The CRYPCTRS parameter is added. (APAR OA61395)
IECIOSxx	MVS	• The READSEC parameter is added to the ZHPFOPTS statement.
IGDSMSxx	DFSMS	• The USE_MOST_FREE_SPACE (YES|NO) parameter is added to specify whether or not to allow SMS randomization for volume selection to select the volumes with the most sufficient free space between similar eligible volumes.
IGGCATxx	DFSMS	The GDGLIMITMAX parameter is added and specifies the maximum number allowed for the LIMIT parameter on a DEFINE GDG.
LOADxx	MVS	• The CRYPCTRS and NNPICTRS parameters are added to the MACHMIG statement. (APAR OA61395)

Chapter 5. New and changed PROCLIB members for z/OS V2R5

This topic lists the new and changed members of PROCLIB for z/OS V2R5.

lists the new and changed members of PROCLIB for z/OS V2R5. In some cases, IBM might provide these updates in SYS1.IBM.PROCLIB and a customer might install them into SYS1.PROCLIB.

Table 4. New and changed PROCLIB members for z/OS V2R5

Member	Element or feature	Description
IEACTRS	MVS	Control the state of crypto counter set processing. (APAR OA61395)

Chapter 6. New and changed SYS1.SAMPLIB members for z/OS V2R5

This topic lists the new and changed members of SYS1.SAMPLIB for z/OS V2R5.

Table 5 on page 55 lists the new and changed members of SYS1.SAMPLIB for z/OS V2R5.

Table 5. New and changed SYS1.SAMPLIB members for z/OS V2R5		
Member	**Element or feature**	**Description**
GRB00ALC	z/OS Data Gatherer	New member, replaces ERB00ALC.

Part 2. z/OS V2R4 changes

This part describes the new, changed, and removed or no longer issued messages, codes, SMF records, and selected system-level data set (SYS1) interfaces for z/OS V2R4 elements and features.

Chapter 7. Message and code changes for z/OS V2R4

This section contains the message and code changes for z/OS V2R4.

BCP (MVS) and DFSMS messages and codes changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for BCP (MVS) and DFSMS.

This topic lists new, changed, and deleted messages and codes for BCP (MVS), DFSMSdfp, DFSMSdss, DFSMShsm, DFSMSrmm, and DFSMStvs. It also lists new, changed, and deleted operator messages for TSO/E. (New, changed, and deleted non-operator messages for TSO/E are in "TSO/E message changes for z/OS V2R4" on page 88.) All the messages and codes in this section are grouped together, without distinction as to element or feature.

All messages for BCP (MVS) and DFSMS are documented in:

- *z/OS MVS System Messages, Vol 1 (ABA-AOM)*
- *z/OS MVS System Messages, Vol 2 (ARC-ASA)*
- *z/OS MVS System Messages, Vol 3 (ASB-BPX)*
- *z/OS MVS System Messages, Vol 4 (CBD-DMO)*
- *z/OS MVS System Messages, Vol 5 (EDG-GLZ)*
- *z/OS MVS System Messages, Vol 6 (GOS-IEA)*
- *z/OS MVS System Messages, Vol 7 (IEB-IEE)*
- *z/OS MVS System Messages, Vol 8 (IEF-IGD)*
- *z/OS MVS System Messages, Vol 9 (IGF-IWM)*
- *z/OS MVS System Messages, Vol 10 (IXC-IZP)*

Dump output messages are documented in *z/OS MVS Dump Output Messages*.

DFSMS Volume Mount Analyzer messages (GFT) and abend codes are documented in *z/OS DFSMS Using the Volume Mount Analyzer*.

For explanations of and additional details about MVS system codes, see *z/OS MVS System Codes*.

New messages

CBR0802I (APAR OA58344)
CBR0803I (APAR OA58344)
CBR9227I (APAR OA57287)
DMO0064E (APAR OA57255)
DMO0066E (APAR OA57255)
DMO012I (APAR OA57255)
DMO012E (APAR OA57255)
DMO0012I (APAR OA57173)
CBR0085I (APAR OA55700)
CBR0360I (APAR OA55700)
CBR0361I (APAR OA55700)
CBR0362I (APAR OA55700)
CBR0363I (APAR OA55700)
CBR1290I (APAR OA55700)
CBR1295I (APAR OA55700)
CBR1705I (APAR OA55700)
CBR1795I (APAR OA55700)

CBR1810I (APAR OA55700)
CBR1811I (APAR OA55700)
CBR1812I (APAR OA55700)
CBR1813I (APAR OA55700)
CBR1994I
CBR6505I (APAR OA55700)
CBR6523I (APAR OA55700)
CBR6524I (APAR OA55700)
CBR6530I (APAR OA55700)
CBR9844I (APAR OA60070)
CBR9845I (APAR OA60070)
CPO4444I
CPO4445I
CPO4446I

EDG0244I
EDG0245I
EDG0246W
EDG6877E
EDG6878I
EDG6879E
EDG6880I
EDG2120W
EDG2122W
EDG2436W
EDG3377I
EDG4015D
EDG4016D
EDG4017I
EDG4064D
EDG4065I
EDG4066I
EDG4067I
EDG6851E
EDG6852I
EDG6853E
EDG6854I
EDG6855E
EDG6856I
EDG6857E
EDG6858I
EDG6859E
EDG6860I
EDG6861E
EDG6862I
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EDG6869E

EDG6870I
EDG6871E
EDG6872I
EDG6873E
EDG6874I
EDG6875E
EDG6876I
EDG8013D
GLZB001I
GLZB002I
GLZB003I
GLZB004I
GLZB005I
GLZB007I
GLZB008I
GLZB009I
GLZB010I
GLZB011I
GLZB012I
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GLZB014I
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GLZB021I
GLZB022I (APAR OA58996)
GLZB023I (APAR OA59573)
GLZB024I (APAR OA59573)
GLZB025I (APAR OA59573)
GLZB026I (APAR OA59573)
GLZB027I (APAR OA59573)
GLZB028I (APAR OA59573)
GLZC001I
GLZC002I
GLZC003I
GLZC004I
GLZC005I
GLZC006I
GLZC007I
GLZC008I
GLZC009I
GLZC010I
GLZC011I
GLZC012I
GLZM001I
GLZM002I
GLZM003I
GLZM004I

GLZM005I
GLZM006I
GLZM007I
GLZM008I
GLZM009I
GLZM010I
GLZM011I
GLZN001I
GLZN002I
GLZN003I
GLZN004I
GLZN005I
GLZS001I
GLZV001I
GLZV002I
GLZV003I
GLZV004I
GLZV005I (APAR OA59573)

HIS037I
HIS038I
HIS039I
HIS040I
HIS041I
HIS042I
HIS043I
IDC1148I
IDC3009I
IDC3041I
IDC3548I (APAR OA55153)
IDC3549I (APAR OA55153)
IDC3550I (APAR OA55153)
IDC3551I (APAR OA55153)
IDC3552I (APAR OA55153)
IDC4233I (APAR OA55153)
IAZH002I
IAZH003I
IAZH123E
IAZH124E
IAZH125E
IAZH126E
IAZH127E
IAZH128E
IAZH201I
IAZH301R
IAZH302R
IAZH303R
IAZH304R
IAZH405D
IEA671I
IEA672I
IEA674I

IEA675I

IEA676I

IEA677I

IEA678I

IEA680I

IEA681I

IEA682I (APAR OA59813)

IEA683I (APAR OA59813)

IEA684I (APAR OA59813)

IEA685I (APAR OA59813)

IEA686I (APAR OA59813)

IEA687I (APAR OA59813)

IEB1181I (APAR OA60639)

IEC817I (APAR OA55440)

IEE257I (APAR OA59813)

IEE588I (APAR OA56924)

IEFA113I (APAR OA57756)

IEFA114I (APAR OA59163)

IEFAH004I (APAR OA59163)

IEFAH005I (APAR OA59163)

IEFAH006E (APAR OA59163)

IEW2411I

IEW2414E

IEW2580W

IFA748E

IFA850I

IFA851I

IGD002I

IGD330I

IGD402I

IGD403I

IGD410E (APAR OA58588)

IGD411I

IGD412I

IGD413I

IGD17340I (APAR OA59041)

IOSHM0821E (APAR OA57050)

IGVH110E (APAR OA59143)

IGW288E (APAR OA59837)

IGW289I (APAR OA57718 and OA59581)

IGW290I (APAR OA57718 and OA59581)

IGW291I (APAR OA57718)

IGW790E (APAR OA57718)

IGW793E (APAR OA59837)

IGW01618E (OA60829)

IGW01619E (OA60829)

IGV900W

IKJ604I

IOS059I (APAR OA58789)

IOS633I (APAR OA43682)

IOS634I
IOS644I (APAR OA56723)
IOS645I (APAR OA56723)
IOS646I (APAR OA56723)
IOS647I (APAR OA58531)
IRA867I
IOSHM0437I
IOSHM0304I (APAR OA56535)
IOSHM0437I (OA57049)
IOSHM0438I (OA57049)
IOSHM0439I (OA57049)
IOSHM0440I (OA57049)
IOSHM0441I (OA57049)
IOSHM0442I (OA57049)
IOSHM0443I (OA57049)
IOSHM0444I (OA57049)
IOSHM0445I (OA57049)
ISN015I
IWMH101 (APAR OA59066)
IWMH102 (APAR OA59066)

IXCH0105I (APAR OA57113)
IXG081I
IXG082E
IXG388E
IXG458E
IXG734I
IXL062E (APAR OA56774)
IXL063I (APAR OA56774)
IXL064I (APAR OA56774)

None

Changed messages

ADR472E
ADR374E (OA56622)
ADR380E
ADR615E
ADR526W
ADR439E
ADR287I
ADR472E
ADR707E
AMD005I
AMD108I
ANTF0421I
ANTF0447E

ARC0001I (APAR OA58870)
ARC0100I
ARC0104I
ARC0006I (APAR OA58870)
ARC0103I (APAR OA58870)

ARC0139I (APAR OA57404)
ARC0160I (APAR OA57404)
ARC0162I (APAR OA59186)
ARC0249I (APAR OA58870)
ARC0250I (APAR OA58870)
ARC0279I
ARC0523I
ARC0526I
ARC0527I
ARC0535I
ARC0552I (APAR OA59693)
ARC0570I
ARC0734I
ARC0774I
ARC1158I
ARC1181I
ARC1205I
ARC1220I
ARC1245I
ARC1334I (APAR OA52703 & APAR OA60506)
ARC1381I (APAR OA60103)
ARC1605I

BPXP029I (APAR OA58565)
BPXF035I (APAR OA58565)
BPXO045I (APAR OA58565)
AXR0200I
AXR0208I
AXR0209I
AXR0210I
AXR0211I
AXR0212I
AXR0213I
AXR0214I
AXR0215I
AXR0216I
AXR0217I
AXR0218I
BPXF242I
BPXH072E
BPXO043I

CBR0434I (APAR OA58344)
DMO0063E (APAR OA57255)
CBR0016I (APAR OA55700)
CBR0052I (APAR OA55700)
CBR0054I
CBR0080I (APAR OA55700)
CBR0081I (APAR OA55700)
CBR0082I (APAR OA55700)
CBR0302I (APAR OA55700)
CBR0303I (APAR OA55700)
CBR0304I (APAR OA55700)

CBR0305I (APAR OA55700)
CBR0306I (APAR OA55700)
CBR0307I (APAR OA55700)
CBR0309I (APAR OA55700)
CBR0338I (APAR OA55700)
CBR0339I (APAR OA55700)
CBR0344I (APAR OA55700)
CBR0443I (APAR OA55700)
CBR1075I (APAR OA55700)
CBR1090I (APAR OA55700)
CBR1091I (APAR OA55700)
CBR1092I (APAR OA55700)
CBR1093I (APAR OA55700)
CBR1100I (APAR OA55700)
CBR1110I (APAR OA59161)
CBR1130I (APAR OA55700 and OA59161)
CBR1990I (APAR OA55700)
CBR1991I (APAR OA55700)
CBR1992I (APAR OA55700)
CBR1993I (APAR OA55700)
CBR6000I (APAR OA55700)
CBR6001I (APAR OA55700)
CBR6520I (APAR OA55700)
CBR6521I (APAR OA55700)
CBR6522I (APAR OA55700)
CBR6530I (APAR OA55700)
CBR9014I (APAR OA55700)
CBR9015I (APAR OA55700)
CBR9103I (APAR OA55700)
CBR9106I (APAR OA55700)
CBR9225I (APAR OA55700)
CBR9370I (APAR OA55700)
CBR9842I (APAR OA55700)
CBR9890I (APAR OA55700)
CNZ0005I
CNZ4207I
CNZ4303I
CNZ4304I
CNZ6000I
COF10301I
CSV034I
CSV550I
CSV552I
CSV553I
CSV563I
CSV564I
DMO0012I

HIS009I
HIS015I
HIS019I
IAR038W (APAR OA60310)

IDC3009I (APAR OA55153)
IDC3351I (reason code)
IEA023E
IEA253I (APAR OA57526 and OA57173)
IEA253I (APAR OA59707)
IEA253I (APAR OA58111)
IEA253I (APAR OA56863)
IEA386I (APAR OA59597)
IEA437I (APAR OA56401)
IEA480E (Form 2 of 2) (APAR OA59828)
IEA497I (APAR OA56953)
IEA671I (APAR OA59813)
IEA672I (APAR OA59813)
IEA674I (APAR OA59813)
IEA675I (APAR OA59813)
IEA678I (APAR OA59813)
IEA681I (APAR OA59813)
IEA705I
IEA794I

IEC023I (APAR OA53955)
IEC036I (APAR OA56622)
IEC037I
IEC141I (APAR OA53955)
IEC143I (APAR OA56622)
IEC150I (APAR OA56622)
IEC161I (return code 071)
IEC212I (APAR OA53955, OA58871)
IEC294A (APAR OA53955)
IEC376W
IEC604I (APAR OA56084)
IEC618I (APAR OA60327)
IEC919I (APAR OA57430)
IEE025I
IEE044I
IEE045I
IEE060I
IEE079I
IEE103I
IEE108I
IEE113I
IEE174I (form 6 of 35) (APARs OA58531, OA56924)
IEE174I (form 17 of 35) (APAR OA56924)
IEE174I (form 21 of 35) (APARs OA58531, OA56924)
IEE174I (form 22 of 35) (APAR OA59813)
IEE174I (form 35 of 35) (APAR OA59813)
IEE273I
IEE274I
IEE302I
IEE303I
IEE313I
IEE328I

IEE329I
IEE339I
IEE340E (APAR OA57593)
IEE345I
IEE372I
IEE373I
IEE374I
IEE387I
IEE406I
IEE409I
IEE420I
IEE423I
IEE424I
IEE459I
IEE460I
IEE461I
IEE463I
IEE464I
IEE476I
IEE529I
IEE535I
IEE587I (APAR OA56924, OA56723)
IEE605I
IEE606I
IEE623I
IEE625I
IEE709I
IEE710I
IEE712I
IEE756I
IEE779I
IEE791I
IEE792I
IEE793I
IEE799D
IEE800D
IEE836D
IEE845I
IEE846I
IEE847I
IEE854I
IEE871I

IEF043I (APAR OA60316)
IEF196I
IEF213I
IEF356I
IEFC023I
IEW2494E
IFA714I
IFA740E
IFA742I

IFA900I (APAR OA60316)
IFA788I (APAR OA53261)
IFB096I
IFC001I
IEW2606S
IGD002I
IGD029I
IGD031I
IGD046I
IGD048I
IGD096I
IGD306I
IGD03157I
IGD413I (APAR OA60327)
IGD17151I (APAR OA56763, APAR OA56622)
IGD17157I (APAR OA56763, APAR OA56622)
IGD17279I (APAR OA59925)
IGD17319I (APAR OA57356)

IGW611A (APAR OA58064)
IGW051I (APAR OA57216)
IGW400I (APAR OA56377)
IGVH100E
IGVH100I
IOS651I (APAR OA60594)
IOS085I (APAR OA43682, OA56723)
IOS090I (APAR OA43682)
IOSHC132E (APAR OA47143)
IOSHC133I (APAR OA47143)
IOSHM0201I (OA57049)
IOSHM0303I (APAR OA56535, OA57050, (OA57049))
IOSHM0420I (OA57049)

IOSHM0819I (APAR OA56535)
IQP062I (APAR OA56143)
IQP066I (APAR OA56143)
IRA501I
IRA864I
ISG353E
IWM063I
IWM064I (APAR OA59366)

IXC285I
IXC286I
IXC357I (APAR OA56774)
IXC358I
IXC360I (APAR OA56774)
IXC362I (APAR OA56774)
IXC453I
IXC544I (APAR OA61062)
IXC546I (APAR OA61062)
IXC735I
IXCH0420E (APAR OA57113)

IXCH0421I (APAR OA57113)
IXG001E
IXG002E
IXG003I
IXG004I
IXG005I
IXG006I
IXG007E
IXG008E
IXG010E
IXG012E
IXG016E
IXG017E
IXG018E
IXG032E
IXG033E
IXG034E (APAR OA54815)
IXG035E
IXG036E
IXG040E
IXG041E
IXG047I
IXG049I
IXG052I
IXG054A
IXG059I
IXG060I
IXG061I
IXG065I (APAR OA54815)
IXG233I
IXG251I
IXG284I
IXG384I
IXG405I
IXG432E
IXG433E
IXG434E
IXG442E
IXG446E
IXG447I
IXG448I
IXG601I
IXG607I
IXG652I
IXG735I
IXL055I (APAR OA56774)
IXL056I (APAR OA56774)

IXC285I
IXC286I
IXC357I (APAR OA56774)
IXC358I

IXC360I (APAR OA56774)
IXC362I (APAR OA56774)
IXC453I
IXC544I (APAR OA61062)
IXC546I (APAR OA61062)
IXC735I
IXCH0420E (APAR OA57113)
IXCH0421I (APAR OA57113)
IXG001E
IXG002E
IXG003I
IXG004I
IXG005I
IXG006I
IXG007E
IXG008E
IXG010E
IXG012E
IXG016E
IXG017E
IXG018E
IXG032E
IXG033E
IXG034E (APAR OA54815)
IXG035E
IXG036E
IXG040E
IXG041E
IXG047I
IXG049I
IXG052I
IXG054A
IXG059I
IXG060I
IXG061I
IXG065I (APAR OA54815)
IXG233I
IXG251I
IXG284I
IXG384I
IXG405I
IXG432E
IXG433E
IXG434E
IXG442E
IXG446E
IXG447I
IXG448I
IXG601I
IXG607I
IXG652I

IXG735I
IXL055I (APAR OA56774)
IXL056I (APAR OA56774)

No longer issued messages

None

New dump output messages

IFA10112I

New MVS system codes

System completion codes
For system completion code 42, reason codes 00090003-00090007 were added via APAR OA60351.
For system completion code EC6, reason codes 803B and 8040 were added.
For system completion code 422, reason code XXXX01A8 was added. (APAR OA59829)
For system completion code C0D, reason code 80040029 is added. (APAR OA59573)
For system completion code B78, reason code 7C is added.
For system completion code DC2, reason code 0084 is added. (APAR OA58289)
For system completion code B78, reason code 78 is added.
For system completion code 3C4, reason code 0000001D is added.
For system completion code 02A, new reason codes 00000074, 00000078, 0000007C, 00000080, 00000084, 00000088, 0000008C, 00000090, 00000094, 00000098, 0000009C, 000000A0, 000000A4, 000000A8, 000000AC, 000000B0, 000000B4, 000000B8, 000000BC, 000000C0, 000000C4, 000000C8, 000000D4, 000000D8, 000000DC, 000000E0, 000000E4, 000000E8, 000000EC, 000000F0, 000000F4, 000000F8, 000000FC, 00000100, 00000104, 00000108, 0000010C, 00000110, 00000114, and 00000118 have been added.
For system completion code 0F7, new reason codes 1E0, 1E4, 1F0, 1F4, 1F8, 1FC, 200, 204, and 208 have been added.
For system completion code 653, reason code OC is added.
For system completion code 655, reason code 300 is added.
For system completion code 01A, reason code 30 is added.
For system completion code 01D, new reason codes are added.
For system completion code 08B, new reason code 0057 is added. (APAR OA59306)
For system completion code 08F, a new reason code is added.
For system completion code C0D, new reason codes are added.
For system completion code DC2, reason codes 0024, 0073, 0083, and 2001 are added.
Wait state codes
For wait state code 07C, reason code 09 is added.
For wait state code 0A2, reason code 19C is added.

Changed MVS system codes

System completion codes
For system completion code 01D, reason code xx030Fxx has been updated.
System completion code 024 has been updated.
System completion code 027 has been updated.
System completion code 07D has been updated.
System completion code 0A6 has been updated.
System completion code 0AD has been updated.

System completion code 06F has been updated.

System completion code 09F has been updated.

System completion code 1C2 has been updated.

System completion code 16E has an updated explanation and reason codes (APAR OA53955).

System completion code 2C2 has been updated.

System completion code 3C2 has been updated.

For system completion code 378, reason code 14 has been updated.

System completion code 40D has been updated.

System completion code 435 has an updated explanation and reason codes (APAR OA53955).

For system completion code D22, reason code 24 is removed.

System completion code EC7 has been updated.

Wait state codes

Wait state code 07B has been updated.

Wait state code to module table updates, added A2E

No longer issued MVS system codes

Wait state codes

System completion code 0AF was deleted.

Communications Server message changes for z/OS V2R4

This section contains new, changed, and no longer issued messages and codes for Communications Server.

New

EZA4444E
EZA4445E
EZD1393I
EZD1976E
EZD1977E
EZD1979E
EZD2045I
EZD2046I
EZD2048I
EZD2049I
EZD2050I
EZD2051I
EZYFT79I
EZYFT88I
EZZ0839I
EZZ8306I
IST2447I
IST2448I
IST2449I
IST2450I
IST2451I
IST2452I
IST2453I
IST2454I
IST2455E
IST2456I

IST2457I
IST2458I
IST2459I
IST2460I
IST2461I
IST2462I
IST2463I
IST2464I
IST2465I
ISTH038E
ISTH039I
ISTH040E
ISTM034E
ISTM037I
ISTM038E
ISTM041I
ISTM042E
ISTM043I
ISTM044E
ISTM045I
ISTM046E
ISTM047I
ISTM048E
ISTM049I
ISTM050E

Changed

EZA4423I
EZD0007I
EZD0009I
EZD1282I
EZD1283I
EZD1286I
EZD1360I
EZD1362A
EZZ0839I
EZZ6035I
EZZ8306I
EZZ8453I
EZZ9293I
EZZ9298I
EZZ9304I
IST087I
IST1221I
IST1230I
IST1233I
IST1717I
IST2418I
IST2421I
ISTH017E

Cryptographic Services ICSF message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for Cryptographic Services Integrated Cryptographic Service Facility (ICSF).

The messages for Cryptographic Services Integrated Cryptographic Service Facility (ICSF) are documented in *z/OS Cryptographic Services ICSF Messages*.

New

CSFG1154 (APAR OA60318)
CSFG1164 (APAR OA60318)
CSFH0042I
CSFH0043I
CSFH0044E
CSFH0045I
CSFH0046I
CSFH0047E
CSFH0048E
CSFM005A
CSFM722I
CSFM727I (APAR OA60318)
CSFM729I (APAR OA60318)

Changed

CSFM109I
CSFM111I
CSFM123E
CSFM124I
CSFM129I
CSFM134I
CSFM135E
CSFM136I
CSFM137E
CSFM138I
CSFM139I
CSFM661I (APAR OA59593)
CSFM667I
CSFM668I
CSFM670I
CSFM689I
CSFM691E

No longer issued

CSFO0026

Cryptographic Services PKI Services message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for Cryptographic Services PKI Services.

All messages for PKI Services are documented in *z/OS Cryptographic Services PKI Services Guide and Reference*.

New

```
IKYC098I
IKYP055I
IKYP056I
```

Changed

```
IKYC055I
IKYC056I
IKYC058I
IKYP031E
```

No longer issued

None

DFSORT message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for DFSORT.

All messages for DFSORT are documented in *z/OS DFSORT Messages, Codes and Diagnosis Guide*.

New

```
ICE167A
ICE267I
ICE268I
ICE269A
ICE399I
```

Changed

```
ICE000I
ICE039A
ICE201I
```

No longer issued

None

Hardware Configuration Definition (HCD) message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for Hardware Configuration Definition (HCD).

The messages for HCD are documented in *z/OS and z/VM HCD Messages*.

New

The following messages are new.

CBDG114E
CBDG115E
CBDG119I
CBDG897I

Changed

The following messages are changed.

CBDA203I
CBDA390I
CBDC099I
CBDG375I

Deleted

The following messages have been deleted.

CBD0002I
CBD0003I
CBD0004I
CBD0005I
CBD0006I
CBD0007I
CBD0008I
CBD0009I
CBD0010I
CBD1000I
CBD1001I
CBD1002I
CBD1003I

IBM Tivoli Directory Server (TDS) message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for IBM Tivoli Directory Server (TDS).

The messages for IBM Tivoli Directory Server are documented in *z/OS IBM Tivoli Directory Server Messages and Codes for z/OS*.

New

None

Changed

None

No longer issued

None

Device Support Facilities (ICKDSF) message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for Device Support Facilities (ICKDSF).

The messages for ICKDSF are documented in *Device Support Facilities (ICKDSF) User's Guide and Reference*.

New

ICK03096I
ICK11468I
ICK20807I
ICK32177I
ICK34151I
ICK34152I
ICK34153I

Changed

ICK03095I
ICK31529I
ICK32177I
ICK34102I
ICK34104I
ICK34108I
ICK34109I
ICK34111I
ICK34141I

No longer issued

None

Infoprint Server message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for Infoprint Server and IBM Print Transform from AFP for Infoprint Server for z/OS.

The messages and codes for Infoprint Server are documented in *z/OS Infoprint Server Messages and Diagnosis*.

The messages and codes for IBM Print Transform from AFP for Infoprint Server for z/OS are documented in *IBM Print Transforms from AFP for Infoprint Server for z/OS*.

New

AOP125E

AOP2026W
AOP2061E
AOP2201E
AOP2500W
AOP2501E
AOP2502I
AOP2503I
AOP2504E
AOP2505E
AOP2506W
AOP2507E
AOP2508E
AOPH1803I
AOPH1804E
AOPH1805I
AOPH1806I
AOPH1902E
AOPH1903R
AOPH1905I
AOPH1906E
AOPH1907R
AOPH1908I
AOPH1909E

Changed

AOP047E - reference to `aopd.conf` is removed from the system programmer response.

AOP092E - text, explanation, system action, user action, and system programmer response are rewritten to include all resource and access types.

AOP101E - reference to `aopd.conf` is removed from the system programmer response.

AOP139E - references to `aopd.conf` and situations where dynamic configuration is not enabled are removed from the system programmer response.

AOP159E - text, explanation, system action, and system programmer response are rewritten for an unsupported file format.

AOP191I - explanation, system action, and system programmer response are rewritten to indicate that the `aopmsg.conf` file and most of the attributes in the `aopd.conf` file are ignored.

AOP3608E - reference to `aopd.conf` is removed from the system programmer response.

AOP3906E - references to the AOP_APPLID environment variable are removed from the explanation and system programmer response.

AOP3910E - reference to the AOP_APPLID environment variable is removed from the system programmer response.

AOPIM017 - reference to enabling dynamic configuration is removed from the system programmer response.

No longer issued

AOP148E
AOP149E
AOP150I
AOP151E
AOP152E
AOP153W
AOP2202E

AOP2203E
AOP2204W
AOPIM006

New system completion codes

Printer Inventory Manager reason code 56

Integrated Security Services Network Authentication Service message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for Integrated Security Services Network Authentication Service.

All messages for Network Authentication Services are documented in *z/OS Integrated Security Services Network Authentication Service Administration*.

New

EUVF06171E

Changed

EUVF04169E
EUVF06004I

No longer issued

None

ISPF message changes for z/OS V2R4

This section contains new, changed, and no longer issued messages and codes for ISPF.

All messages for ISPF are documented in *z/OS ISPF Messages and Codes*.

New

ISPI014
ISPI015
ISPP010
ISRU070B
ISRU070C
ISRU071D
ISRU071E
ISRU072D
ISRU072E
ISRU113A
ISRU393
ISRU394
ISRU437A
ISRU859
ISRU597

Changed

FLM396L
FLM87310
ISPC035
ISPC804
ISPP255
ISPWS018
ISRD014
ISRD019
ISRE679
ISRLS176
ISRS007
ISRS034
ISRS050
ISRS080

No longer issued

ISRLS021
ISRLS024
ISRLS026
ISRLS028

JES2 message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for JES2.

The messages for JES2 are documented in *z/OS JES2 Messages*.

New

$HASP149
$HASP665
$HASP735
$HASP736
$HASP737
$HASP1100
$HASP1178
$HASP1179
$HASP1180
$HASP1181
$HASP1182
$HASP1183
$HASP1184
$HASP1185
$HASP1186
$HASP1187
$HASP1188
$HASP1189
$HASP1190
$HASP1191
$HASP1192
$HASP1193

$HASP1194
$HASP1195
$HASP1196
$HASP1197
$HASP1198
$HASP1199
$HASP1308
$HASP1538
$HASP1600
$HASP1601
$HASP1602
$HASP1603
$HASP1604
$HASP1605
$HASP1606
$HASP1607
$HASP1608
$HASP1609
$HASP1610
$HASP1611
$HASP1612
$HASP1613
$HASP1614
$HASP1615
$HASP1616
$HASP1617
$HASP1623
$HASP1624
$HASP1625
$HASP1626
$HASP1627
$HASP1628
$HASP1629
$HASP1630
$HASP1631
$HASP1632
$HASP1633
$HASP1634
$HASP1635
$HASP1636
$HASP1637
$HASP1638
$HASP1639
$HASP1640
$HASP1641
$HASP1642
$HASP1643
$HASP1644
$HASP1645
$HASP1646
$HASP1647

$HASP1648
$HASP1649
$HASP1650
$HASP1651
$HASP1652
$HASP1653
$HASP1654
$HASP1655
$HASP1656
$HASP1657
$HASP1658
$HASP1659
$HASP1660
$HASP1661
$HASP1900
$HASP1901
$HASP1902
$HASP1903
$HASP1904
$HASP2222
$HASP2223
$HASP6140
$HASP6175
$HASP6176
$HASP6177
$HASP9182

Changed

$HASP003
$HASP111
$HASP650
$HASP720
$HASP1111
$HASP1657

No longer issued

None

JES3 message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for JES3.

The messages for JES3 are documented in *z/OS JES3 Messages*.

New

None.

Changed

IAT3844
IAT3937

IAT3938
IAT9307

No longer issued

None.

Language Environment message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for Language Environment.

The messages for Language Environment are documented in *z/OS Language Environment Runtime Messages*.

New

IGZ0342W (APAR PH26783)
IGZ0350S (APAR PH15921)
IGZ0351S (APAR PH15921)
IGZ0352S (APAR PH15921)
IGZ0353S (APAR PH15921)
IGZ0354S (APAR PH15921)
IGZ0355S (APAR PH15921)
IGZ0356I (APAR PH15921)
IGZ0372S (APAR PH31133)
IGZ0373S (APAR PH31133)
IGZ0374S (APAR PH31133)
IGZ0375S (APAR PH31133)
IGZ0376S (APAR PH31133)

Changed

CEE3754S
IGZ0064S
IBM0225S
IBM0236S
IGZ0153S
IGZ0339W

No longer issued

None.

Network File System (NFS) message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for Network File System (NFS).

All messages for NFS are documented in *z/OS Network File System Guide and Reference*.

New

GFSA325E
GFSA327I
GFSA880E
GFSA989E
GFSA992I

GFSA1035I
GFSA1037E
GFSA1038I

Changed

GFSA320E
GFSA473E
GFSA480E (1Q2020)
GFSA481E (1Q2020)
GFSA733I
GFSA784I
GFSA801I
GFSA854I
GFSA918I
GFSA930I
GFSA936I
GFSA939I
GFSA963E
GFSA1030E
GFSA1031I

No longer issued

None

OpenSSH message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for OpenSSH.

The messages for z/OS OpenSSH are documented in *z/OS OpenSSH User's Guide*.

New

FOTS1794 (APAR OA57432)

Changed

FOTS1370

No longer issued

None.

Resource Measurement Facility (RMF) message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for Resource Measurement Facility (RMF).

The messages for RMF are documented in *z/OS RMF Messages and Codes*.

New

ERB898I
ERB949I
ERB950I

ERB951I
ERB952I
ERB953I
ERB954I
GPM0634I
GPM0635I
GPMH1001I (APAR OA60403)
GPMH1002I (APAR OA60403)
GPMH1003E (APAR OA60403)
GPMH1004I (APAR OA60404)
GPMH1005E (APAR OA60404)

Changed

ERB140I
ERB292I
ERB425I
ERB617I
ERB619I
ERB629I
GPM0632I
GPM0633I

No longer issued

GPM054I (APAR OA60404)
GPM055I (APAR OA60404)
GPM255I (APAR OA60404)

Security Server RACF message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for RACF.

All messages for RACF are documented in *z/OS Security Server RACF Messages and Codes*.

New

ICH408I
IRR421I
IRR52223I
IRR52224I
IRR52225I
IRR52230I
IRR52231I
IRR52232I
IRR52233I
IRR52234I
IRR52235I
IRR52236I
IRR52251I
IRR52252I
IRR52253I
IRR52254I
IRR52255I

```
IRR52256I
IRRC083I
IRRD304I
IRRD305I
IRRDPI00
IRRM056I
IRRM057I
IRRM058I
IRRM060I
IRRM061I
IRRM062I
IRRM063I
```

Changed

```
IRR52141I
IRR52142I
IRR52218I
IRRD135I
IRRD157I
IRRD188I
```

No longer issued

```
IRR52140I
```

SMP/E V3R7 message changes for z/OS V2R4

This topic lists new, changed, and no longer issued non-operator messages for SMP/E.

All messages for SMP/E are documented in *z/OS SMP/E Messages, Codes, and Diagnosis*.

New

GIM47101S (APAR IO27564)

Changed

GIM69207S

No longer issued

None

System Display and Search Facility (SDSF) message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for System Display and Search Facility (SDSF).

All messages for SDSF are documented in *z/OS SDSF Operation and Customization*.

New

None

Changed

None

No longer issued

None

TSO/E message changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages for TSO/E.

The messages for TSO/E are documented in *z/OS TSO/E Messages*.

New

IKJ55320I
IKJ55328I
IKJ56469I

Changed

IKJ56425I

No longer issued

CHSCMI01I
CHSCOM09I
CHSCOM10I
CHSCOM11I
CHSCPS01E
CHSCPS02E
CHSCPS03E
CHSCPS04E
CHSCPS05E
CHSCPS06E
CHSCPS07I
CHSCPS08I
CHSCPS09E
CHSCPS10I
CHSCUT01I
CHSCUT02E
CHSCUT03E
CHSCUT04I
CHSCUT05I
CHSCUT06I
CHSCUT07I
CHSCUT08I
CHSCUT09E
CHSCUT11E
CHSCUT12E
CHSCUT13E
CHSCUT14E
CHSCUT15E
CHSDCA01E

CHSDCA03E
CHSDCA04E
CHSDCA05E
CHSDCA06I
CHSDCA07E
CHSDCA08I
CHSDCA09E
CHSDCOM01I
CHSDCOM02E
CHSDCOM03E
CHSDCOM04E
CHSDCOM05E
CHSDCOM06E
CHSDCOM07I
CHSDCOM08I
CHSDCOM09I
CHSDCOM10E
CHSDCOM11E
CHSDCOM12I
CHSINF01E
CHSINF02I
CHSINF03E
CHSIPM01E
CHSIPM02I
CHSIPM03E
CHSIPM04I
CHSIPM05E
CHSIPM06I
CHSIPM07I
CHSIPM08I
CHSREC01I
CHSREC02I
CHSREC03I
CHSREC04I
CHSREC06I
CHSREC07I
CHSREC08I
CHSREC09E
CHSRUT01E
CHSRUT02E
CHSRUTR01I
CHSRUTR02I
CHSRUTR03I
CHSRUTR04I
CHSRUTR05I
CHSRUTR06I
CHSRUTR07I
CHSRUTR08E
CHSRUTR09E
CHSRUTR10E
CHSRUTR11E

CHSRUTR12I
CHSRUTR13I
CHSRUTR14I
CHSRUTR15I
CHSRUTR16E
CHSRUTR17I
CHSSPR01I
CHSSRI01I
CHSSRI02I
CHSSRI03I
CHSSRI04E
CHSSRI05E
CHSSRI06E
CHSSRV01E
CHSSRV02I
CHSSRV03I
CHSTCA01E
CHSTCA02E
CHSTCA03I
CHSTCA04I
CHSTCA05E
CHSTCA06I
CHSTCA07E
CHSTCA08E
CHSTCA09I
CHSTCA10I
CHSTCA11E
CHSTCA12E
CHSTCA13I
CHSTCA14E
CHSTCA15E
CHSTCA16E
CHSTCA17E
CHSTCA18E
CHSTCA19I
CHSTCA20E
CHSTRH01I
CHSTRH02I
CHSTRH201I
CHSTRH202I
CHSTRL01I
CHSTRR01I
CHSTRS01I
CHSTSF01I
CHSTSF02I
CHSTSF03I
CHSTSF04I
CHSTSF05I
CHSTSF06I
CHSTSF07I
CHSTSF08I

```
CHSTSF09I
CHSTSF10I
CHSTSF11I
CHSTSF12I
CHSTSF13I
CHSTSF13I
CHSTSF14I
CHSTSF14I
CHSTSF15I
CHSTSF15I
CHSTSF16I
CHSTSF16I
CHSTSF17I
CHSTSF17I
CHSTSF18I
CHSTSF18I
CHSTTP01I
CHSTTP02I
```

XL C/C++ message changes for z/OS V2R4

This lists contains new, changed, and no longer issued messages for XL C/C++.

The messages for XL C/C++ are documented in *z/OS XL C/C++ Messages*.

New

CCN3404

Changed

CCN8160

No longer issued

None

Xvfb message changes for z/OS V2R4

This topic lists new, changed, and no longer issued non-operator messages for Xvfb.

All messages for Xvfb are documented in *z/OS Xvfb User's Guide*.

New

None

Changed

None

No longer issued

None

z/OS File System (zFS) message and code changes for z/OS V2R4

This topic lists new, changed, and no longer issued messages and codes for z/OS File System (zFS).

The following messages and reason codes are new, changed, or no longer issued for z/OS File System (zFS) in z/OS V2R4.

New messages for zFS

The following messages are new for zFS.

> IOEZ01031E (APAR OA59435)
> IOEZ01027E
> IOEZ01028E
> IOEZ01029E
> IOEZ01030E

New messages for Health Checker

The following messages are new for Health Checker.

> None.

Changed messages for zFS

The following messages are changed for zFS.

> IOEZ00857I (APAR OA59435)
> IOEZ00782I
> IOEZ00642I
> IOEZ00004I
> IOEZ00323I
> IOEZ00324I
> IOEZ00617I
> IOEZ00639I
> IOEZ00705I

Changed messages for Health Checker

The following messages are changed for Health Checker.

> None.

New reason codes for zFS

The following reason codes are new for zFS.

> 6C94
> 6CA0
> 6CA2
> 6CA3
> 6CA5
> 6D0A
> 6D0B
> 6D0C
> 6D0D
> 6D0E
> 6D11

6D12

Changed reason codes for zFS

The following reason codes are changed for zFS.

None.

z/OS UNIX message changes for z/OS V2R4

This topic lists new, changed, and deleted messages, reason codes, and return codes for z/OS UNIX.

z/OS UNIX messages, reason codes, and return codes are documented in *z/OS UNIX System Services Messages and Codes*.

New messages

FSUMF437 (APAR OA59201)
FSUMF438 (APAR OA59201)
FSUMF439 (APAR OA59201)
FSUMF440 (APAR OA59201)
FSUMF445 (APAR OA59201)
FSUMF446 (APAR OA59201)
FSUMF447 (APAR OA59201)
FSUMF448 (APAR OA59201)
FSUMF435 (APAR OA57659)
BPXWMG020I
BPXWMG022I
BPXWMG023I
BPXWMG024I
BPXWMG025I
BPXWMG026I
BPXWMG027I
BPXWMG028I
BPXWMG029I

Changed messages

FDBX0722
FSUM9225 (APAR OA58116)

Deleted messages

None.

New reason codes

JRMmapAddrNot64Bit (APAR OA60306)
JR3164BitMismatch (APAR OA60306)
JRMmapMaxShareFail (APAR OA60306)
JrPFSTerminating (APAR OA59829)
JrMigEOMCancel (APAR OA57021)
JrDVIPAServicesNotActive
JrMigMoveCancel
JRPtLDRMODE64Loadmod

JrMvRemntInProgress
JrTtlsResetWriteCipherFailed
JrTtlsSendSessionTicketFailed

Changed reason codes

JRNoUserStorage (APAR OA60306)
JrMigDownLevel (APAR OA59891)
JRMigSrcNotHFS

Deleted reason codes

None.

New return codes

None.

Changed return codes

None.

Deleted return codes

None.

Chapter 8. New and changed System Management Facilities (SMF) records for z/OS V2R4

This topic lists the System Management Facilities (SMF) records for z/OS elements and features that are new or changed for z/OS V2R4.

Table 6 on page 95 provides a list of SMF records that are new or changed for z/OS V2R4. Detailed information about these SMF records can be found in one of the following documents, as indicated by the "Where documented" column in Table 6 on page 95.

Communications Server

- Type 119 SMF records in *z/OS Communications Server: IP Programmer's Guide and Reference*
- Type 1154 SMF records in *z/OS Communications Server: IP Programmer's Guide and Reference*
- Tuning input/output (I/O) operations for RoCE connections in *z/OS Communications Server: SNA Network Implementation Guide*

MVS
z/OS MVS System Management Facilities (SMF)

OAM
OAM System Management Facility records in *z/OS DFSMS OAM Planning, Installation, and Storage Administration Guide for Object Support*

RACF
SMF records in *z/OS Security Server RACF Macros and Interfaces*

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4

SMF record	z/OS element or feature	Description	Where documented
Type 23	MVS	• SMF can now report a maximum of 100 logstream statistics sections in each record (APAR OA61083).	MVS
Type 30	MVS	• The description for byte 0 of the SMF30CAS_OA54589 field has been updated in the Processor Accounting section. • The descriptions of the RECTYPE and SUBTYPE parameters for the SMFRTEST macro are updated. • SMF42RDS1 and SMF42RCMDS fields are updated via APAR OA59541. • New System Recovery Boost fields added in the CPU accounting section. • New TIOT high-water mark fields added in the Storage and Paging section.	MVS
Type 42, Subtype 5	DFSMS	New fields added in the volume header section, and the following new sections added: • Volume metrics section • System I/O section • System I/O statistics section • System I/O high response time section • Volume background activity • Volume cloud activity	MVS

SMF record	z/OS element or feature	Description	Where documented

Type 42, Subtype 6	DFSMS	• For APAR OA57718, new fields are added to the record header, and the following new sections are added:
		
		  – Synchronous I/O Section 2
		
		  – Synchronous I/O Section 3
		
		• New fields added in the data set I/O statistics section.
		
		• For Media Manager support for Dual Logging, new fields, S42SNTWH, S42SNTDR, S42SNTDX, S42DS2FL and S42DS2DL are added in Synchronous I/O Section 2.
			MVS

Type 42, Subtype 27	DFSMS	Fields SMF42RDS1 and SMF42RCMDS are updated. (APAR OA59541)	MVS

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

SMF record	z/OS element or feature	Description	Where documented

Type 50, Record for RoCE connection	Communications Server	• Added new fields for RoCE port and RoCE user records:
		
		Offset 26 (36 bytes)
		    Reserved
		
		Offset 62 (1 byte)
		    Extension length (including this field)
		
		Offset 63 (1 byte)
		    Attachment type
		
		Offset 64 (2 bytes)
		    Version
		
		Offset 66 (16 bytes)
		    Reserved
		
		• Added new fields for RoCE port records:
		
		Offset 82 (4 bytes)
		    Number of RoCE users
		
		Offset 86 (4 bytes)
		    Poll EQ overflow
		
		Offset 90 (4 bytes)
		    Poll EQ count
		
		Offset 94 (4 bytes)
		    Poll EQ entries overflow
		
		Offset 98 (4 bytes)
		    Poll EQ entries count
		
		Offset 102 (4 bytes)
		    PCI real interrupts overflow
		
		Offset 106 (4 bytes)
		    PCI real interrupts count
		
		Offset 110 (4 bytes)
		    Unproductive PCI overflow
		
		Offset 114 (4 bytes)
		    Unproductive PCI count
		
		• Added new field for RoCE user records:
		
		Offset 118 (8 bytes)
		    ULP ID
		
		• Changed the offsets for the existing RoCE user record fields at offset 26 (120 bytes).
		
		Fields were shifted 100 bytes. The new offsets are 126 through 242.
			Communications Server

Type 70, subtype 1	RMF	• The description of the SMF70OS_PRTCT field is updated in the CPU Control Section. • The PR/SM Partition Data section updated for System Recovery Boost. • Boost indicators are set in the PR/SM Logical Partition data section. • New fields added in the CPU Control Section. • New field added in the Tenant Resource Group (TRG) Data Section.	MVS

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

SMF record	z/OS element or feature	Description	Where documented
Type 70, subtype 2	RMF	• FFX measurement fields are added via APAR OA59330. • Performance data is stored.	MVS
Type 71	RMF	Some field descriptions have been updated to support RUCSA in the Paging Data Section.	MVS
Type 72 subtype 3	RMF	The Workload Manager Control section is updated for System Recovery Boost.	MVS
Type 74, subtype 2	RMF	The Path Usage Statistics block is added in the Path Data Section.	MVS
Type 74, subtype 4	RMF	New fields are added in the Request Data Section via APARs OA58729 and OA58724.	MVS
Type 74, subtype 9	RMF	New field added in the PCIE Function Data Section.	MVS
Type 78, subtype 2	RMF	New RUCSA-related fields are added in the Virtual Storage Common Storage Data Section, and some field descriptions have been updated.	MVS
Type 78, subtype 3	RMF	• In the I/O queuing global section, field R783GFLX has new bits defined. • New fields are added in the IOP Initiative Queue and Utilization Data Section.	MVS
Type 79	RMF	Some field descriptions have been updated to support RUCSA in the SRCS Data Section.	MVS
Type 89	MVS	New SMF89SolutionID field in the System ID section for APAR OA60198.	MVS
Type 89, subtype 1	MVS	• New fields added in the Usage data section. • New fields added in the Tenant resource group section.	MVS
Type 89, subtype 1	MVS	The Usage Data section is updated for System Recovery Boost.	MVS
Type 89, subtype 2	MVS	The Product enable/disable section is updated for System Recovery Boost.	MVS
Type 90, subtype 40	MVS	• SMF90T40_RP_Start_Requestor_ID and SMF90T40_RP_Duration fields are added via APAR OA59813. • SMF90T40_Event, SMF90T40_Flags0, and SMF90T40_Flags1 fields are updated via APAR OA59813 • Record type 90, subtype 40, is added for System Recovery Boost.	MVS
Type 90, subtype 41	MVS	New subtype 41 added to record type 90.	MVS
Type 92, subtype 12	MVS	New offsets 8 and 24 added for APAR OA60306.	
Type 2, subtype 13	MVS	New offsets 16 and 14 added for APAR OA60306.	

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

SMF record	z/OS element or feature	Description	Where documented
Type 98	MVS	Support for IBM z/OS Workload Interaction Correlator is added, including record layouts for new subtypes.	MVS
Type 99	MVS	New field added in the Header data section.	MVS

Type 99, subtype 1	MVS	• SMF99_BOOSTINFO field is added via APAR OA59366.
		• Several field descriptions have been updated in the following sections:
		  – Header/Self-defining Section
		  – System State Information Section
		  – Resource Group Entry Section
		  – Software licensing information
			MVS

Type 99, subtype 2	MVS	• SMF99FLAGS2 field in the Period Data section has been updated via APAR OA59366.
		• Several field descriptions have been updated in the following sections:
		  – Period Data Section
		  – Address space expanded storage access policy section
			MVS

Type 99, subtype 10	MVS	Several field descriptions have been updated in the following sections: • CPU Data Section • Processor Speed Change Section	MVS
Type 99, subtype 14	MVS	Some field descriptions have been updated in the Header data section.	MVS
Type 119, TCP connection termination (subtype 2)	Communications Server	These new fields record SMC characteristics of the TCP connection: • SMF119AP_TTSMCVersion • SMF119AP_TTSMCDEid **Reason for change:** Shared Memory Communications - Direct multiple IP subnet support (SMC-Dv2)	Communications Server
Type 119, subtype 2	Communications Server	• SMF119AP_TTTTLSSP – negotiated protocol type can have a new value of x'0304' indicating TLSv1.3. • SMF119AP_TTTTLSNC4 – negotiated 4-byte cipher can have new values. • SMF119AP_TTTTLSNKS – new field TLSv1.3 negotiated key share **Reason for change:** AT-TLS support for TLS v1.3	Communications Server

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

SMF record	z/OS element or feature	Description	Where documented
Type 119, subtype 3, subtype 101, subtype 102, and subtype 103	Communications Server	• SMF119FT_FCProtoLevel – negotiated protocol type can have a new value of x'0304' indicating TLSv1.3. • SMF119FT_FCCipher4 – negotiated 4-byte cipher can have new values. • SMF119FT_FCKeyShare – new field negotiated TLSv1.3 key share. **Reason for change:** AT-TLS support for TLS v1.3	Communications Server
Type 119, TCP/IP profile record (subtype 4)	Communications Server	These new fields record the settings of the new SMC parameters on the GlobalConfig statement: • NMTP_GBCFSYSTEMEID • NMTP_GBCFSYSTEMEIDSTR • NMTP_GBCFSMCEID • NMTP_GBCFSMCEIDCount • NMTP_GBCFUEIDList **Reason for change:** Shared Memory Communications - Direct multiple IP subnet support (SMC-Dv2)	Communications Server
Type 119, TCP/IP profile record (subtype 4)	Communications Server	NMTP_GBCFSysMonOptions in the Global Configuration section - New fields, NMTP_GBCFSysMonDelayJoinI and NMTP_GBCFSysMonIpsec, indicate the settings of the SYSPLEXMONITOR DELAYJOINIPSEC and MONIPSEC subparameters. **Reason for change:** Sysplex Autonomics for IPSec	Communications Server
Type 119, TCP/IP profile event record (subtype 4)	Communications Server	Global Configuration section: New field NMTP_GBCFzAGGtim_INTVAL indicates the setting of the INTVAL sub-parameter on the GLOBALCONFIG statement. New field NMTP_GBCFzAGGtim_SYNCVAL indicates the setting of the SYNCVAL sub-parameter on the GLOBALCONFIG statement. • NMTP_GBCFzAGGtim_SYNCVAL_HH is the hours part of SYNCVAL (format of 24-hour military time). • NMTP_GBCFzAGGtim_SYNCVAL_MM is the minutes portion of SYNCVAL. **Reason for change:** z/OS Encryption Readiness Technology (zERT) aggregation recording interval	Communications Server
Type 119, TCP/IP statistics record (subtype 5)	Communications Server	New fields SMF119AP_TSSTZAGGCurrent and SMF119AP_TSSTZAGGMax, in the TCP statistics section, provide current and maximum storage usage statistics for ZERT AGGREGATION. **Reason for change:** z/OS Encryption Readiness Technology (zERT) aggregation recording interval	Communications Server

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

SMF record	z/OS element or feature	Description	Where documented
Type 119, z/OS Encryption Readiness Technology (zERT) connection details (subtype 11)	Communications Server	New fields have been defined: • SMF119SC_TLS_Server_Handshake_Sig_Method • SMF119SC_TLS_Client_Handshake_Sig_Method • SMF119SC_TLS_Neg_Key_Share New values has been defined for the following fields: • SMF119SC_SSH_Kex_Method • SMF119SC_SSH_SKey_Type • SMF119SC_TLS_Prot_Ver • SMF119SC_TLS_Neg_Cipher • SMF119SC_TLS_SCert_Signature_Method • SMF119SC_TLS_CCert_Signature_Method • SMF119SC_TLS_CryptoFlags **Reason for change:** AT-TLS support for TLSv1.3	Communications Server
Type 119, z/OS Encryption Readiness Technology (zERT) summary (subtype 12)	Communications Server	New fields have been defined: • SMF119SS_TLS_Server_Handshake_Sig_Method • SMF119SS_TLS_Client_Handshake_Sig_Method • SMF119SS_TLS_Neg_Key_Share New values has been defined for the following fields: • SMF119SS_SSH_Kex_Method • SMF119SS_SSH_SKey_Type • SMF119SS_TLS_Prot_Ver • SMF119SS_TLS_Neg_Cipher • SMF119SS_TLS_SCert_Signature_Method • SMF119SS_TLS_CCert_Signature_Method • SMF119SS_TLS_CryptoFlags **Reason for change:** AT-TLS support for TLSv1.3	Communications Server
Type 119, SMC-D link statistics (subtype 38)	Communications Server	These new fields record SMC characteristics of the SMC-D link: • SMF119DM_LSSMCVersion • SMF119DM_LSEid • SMF119DM_LSRmtHostName • SMF119DM_LSRmtOSType **Reason for change:** Shared Memory Communications - Direct multiple IP subnet support (SMC-Dv2)	Communications Server

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

SMF record	z/OS element or feature	Description	Where documented
Type 119,SMC-D link state start record (subtype 39)	Communications Server	These new fields record SMC characteristics of the SMC-D link: • SMF119DM_LISMCVersion • SMF119DM_LIEid • SMF119DM_LIRmtHostName • SMF119DM_LIRmtOSType **Reason for change:** Shared Memory Communications - Direct multiple IP subnet support (SMC-Dv2)	Communications Server
Type 119, SMC-D link state end record (subtype 40)	Communications Server	These new fields record SMC characteristics of the SMC-D link: • SMF119DM_LTSMCVersion • SMF119DM_LTEid • SMF119DM_LTRmtHostName • SMF119DM_LTRmtOSType **Reason for change:** Shared Memory Communications - Direct multiple IP subnet support (SMC-Dv2)	Communications Server
Type 119, CSSMTP configuration record (subtype 48)	Communications Server	• SMF119ML_CF_Mbcs – specifies the value of the MBCS statement. • SMF119ML_TS_MBCharset – specifies the value of the MBCharset option. **Reason for change:** Code page enhancements for CSSMTP	Communications Server
Type 119, subtype 49	Communications Server	• SMF119ML_CN_TLSSSP – negotiated protocol type can have a new value of x'0304' indicating TLSv1.3. • SMF119ML_CN_TLSSNC4 – negotiated 4-byte cipher can have new values. • SMF119ML_CN_TLSNKS field negotiated TLSv1.3 key share. **Reason for change:** AT-TLS support for TLS v1.3	Communications Server
Type 119, subtype 70, subtype 100, and subtype 104	Communications Server	• SMF119FT_FSProtoLevel – negotiated protocol type can have a new value of x'0304' indicating TLSv1.3. • SMF119FT_FSCipher4 – negotiated 4-byte cipher can have new values. • SMF119FT_FSKeyShare – new field negotiated TLSv1.3 key share. **Reason for change:** AT-TLS support for TLS v1.3	Communications Server

Table 6. New and changed System Management Facilities (SMF) records for z/OS V2R4 (continued)

SMF record	z/OS element or feature	Description	Where documented
Type 119, subtype 72	Communications Server	• SMF119FT_FFProtoLevel – negotiated protocol type can have a new value of x'0304' indicating TLSv1.3. • SMF119FT_FFCipher4 – negotiated 4-byte cipher can have new values. • SMF119FT_FFKeyShare – new field negotiated TLSv1.3 key share. **Reason for change:** AT-TLS support for TLS v1.3	Communications Server
Type 1154 • **Subtype 1, TCP/IP stack compliance evidence record** • **Subtype 2, FTP daemon compliance evidence record** • **Subtype 3, TN3270E Telnet server compliance evidence record** • **Subtype 4, CSSMTP client compliance evidence record**	Communications Server	New SMF 1154 records **Reason for change:** Support for SMF compliance evidence (APAR PH37372)	Communications Server

Chapter 9. New and changed members in SYS1.MACLIB for z/OS V2R4

This topic lists the lists the new and changed members of SYS1.MACLIB for z/OS V2R4.

Table 7 on page 105 lists the new and changed members of SYS1.MACLIB for z/OS V2R4.

Table 7. New and changed members in SYS1.MACLIB for z/OS V2R4

Member	Element or feature	Description	Reason for change
BCFXCRYP	MVS	New macro	For APAR OA58246 a new BCFXCRYP macro invokes BCFCRYPT to perform an encryption operation or a related function.
CVT	MVS	New bit definitions in the CVTFLAG9 field.	Support for IBM z/OS Workload Interaction Correlator
EZASM482	Communications Server	New mapping for the SMF 1154, subtype 1 – 4 records	Support for SMF compliance evidence (APAR PH37372)
EZASMF77	Communications Server	Updates to SMF 119 records. See Chapter 8, "New and changed System Management Facilities (SMF) records for z/OS V2R4," on page 95 for more information	AT-TLS support for TLS v1.3
IFAWICCB	MVS	IFAWICCB is a new data area.	Support for IBM z/OS Workload Interaction Correlator
MGCRE	MVS	CMDFLAG=NOHCPY parameter is updated.	Support for APAR OA55640.

Chapter 10. New and changed PARMLIB members for z/OS V2R4

This topic lists the new and changed PARMLIB members for z/OS V2R4.

See *z/OS MVS Initialization and Tuning Reference* for more information about these members.

lists the new and changed members of PARMLIB for z/OS V2R4. Note that in some cases, IBM might provide these updates in SYS1.IBM.PARMLIB and a customer might install them into SYS1.PARMLIB.

Table 8. New and changed PARMLIB members for z/OS V2R4

Member	Element or feature	Description
ALLOCxx	MVS	In support of previous APAR OA40542, added missing keyword OPTCDB_SPLIT.
ANTXIN00	DFSMS	With APAR OA55068, the RemoteFlashCopy parameter indicates whether or not Remote Pair FlashCopy support should be enabled for the specified XRC session. The values are YES or NO (the default).
BPXPRMxx	MVS	Because copy-on-write (COW) mode for fork processing is no longer supported, the applicable line in BPXPRMxx was changed from FORKCOPY(COW) to FORKCOPY(COPY).
		Previously, the KERNELSTACKS parameter had two options, ABOVE and BELOW. The KERNELSTACKS parameter is now always above the bar. If the BELOW option is specified, it is ignored.
		A usage note was added to the **bpxwmigf** shell command indicating that the File Creation Time is not preserved.
CEAPRMxx	MVS	• APAR OA57346 updated the description of the MAXSESSPERUSER parameter.
CEEPRMxx	Language Environment	The new CEENXSTG parameter indicates whether non-executable memory is ON or OFF. The default is ON.
DEVSUPxx	MVS	• APAR OA51622 added the TCTCOMPRESSION and AOM496I options.
		• APAR OA59707 added the SUPPR_SMF19_DUMPCOND option.
		• APAR OA58007 added two new options: RETRY(STAT011) and STAT011_PRESERVE_INDEX.
		• APAR OA58111 added VTOC_USE_ZHPF to specify whether you want the you want the system to read the VTOC or write to it, using zHPF when it is available. ENABLE(VTOC_USE_ZHPF) and DISABLE(VTOC_USE_ZHPF) were also added.
		• Characteristics of parmlib member table of Overview of parmlib members chapter is updated.
		• For APAR OA57255, you can use the REFUCB_FAIL parameter to specify the action to be taken if a failure occurs while the UCB is being refreshed.
		• For APAR OA59707, SUPPR_SMF19_DUMPCOND was added. It specifies the generation of SMF type 19 records for the LSPACE command on dump conditioned volumes.
DIAGxx	MVS	• For address space layout randomization, the ASLR parameter has been added.
		• [REAL31(structure1,structure2, ...)] [REAL64(structure1,structure2, ...)] has been added to the CBLOC parameter.
		• LOADTYPE added to AUTOIPL parameter.
		• NUCLABEL added to AUTOIPL parameter syntax and description for APAR OA54733.
		• For RUCSA support, the VSM ALLOWUSERKEYCSA parameter has been updated.
IEAOPTxx	MVS	• Information about the default value for the CPENABLE parameter is updated.
		• Updated the description of the HIPERDISPATCH parameter.

Table 8. New and changed PARMLIB members for z/OS V2R4 (continued)

Member	Element or feature	Description
IEASYSxx	MVS	• The SOLUT parameter is added for APAR OA60198. • BOOST parameter and ZAAPZIIP parameter are updated.
IECIOSxx	MVS	For APAR OA53143, the PCUHSWAP parameter is added.
IKJTSOxx	TSO/E	• For APAR OA57937, TIMEOUT is added to the LOGON parameter. • For APAR OA55889, the USERIDMAX parameter is added.
IQPPRMxx	MVS	Added a note that IQPPRMxx will still be valid on IBM zEnterprise z15 and above processors, but that tunable options will no longer be available and will therefore display message IQP062I REQUEST REJECTED - OPTIONS IGNORED.
IXGCNFxx	MVS	• The MANAGE parameter has a new keyword of USECDSTYPE(<u>LOGR</u>|LOGRY|LOGRZ). • The MANAGE parameter has a new keyword of HYPERWRITE(ALOWUSE) for APAR OA57408. • LOGRCDS(ALLOWACCESS) keyword default has changed for APAR OA54814. • The ZAI statement has a new TPNAME(*transport_name*) parameter (APAR OA53111).
SMFLIMxx		• The MAXSHARE parameter is added for APAR OA60316. • Corrected maximum value for the DSLIMITSIZE parameter. • For APAR OA56625, the OVERRIDEIEFUSI option is added to REGIONABOVE and REGIONBELOW. • For APAR OA56091, SUBSYS is updated to identify valid subsystem IDs. • Syntax rules are updated to clarify that a statement without any filters, but only attributes, will cause a match to any subsequent statement with filters and have their attributes overridden.
SMFPRMxx	MVS	• Corrected the syntax format of the USER4 and USER5 keywords for the SMFDLEXIT and SMFDPEXIT parameters. • Added the USER4 and USER5 options to the SMFDLEXIT and SMFDPEXIT parameters. • APAR OA57165 updated the description of the HFTSINTVL statement to support IBM z/OS Workload Interaction Correlator. • APAR OA57165 added the WIC statement to support IBM z/OS Workload Interaction Correlator. • APAR OA57371 added a new option, NOARECSIGN | ARECSIGN, to the SMFPRMxx parameter to support using an alternate signature method. • Updated to modify the COMPRESS parameter about zEDC sessions. • Added USER4 and USER5 parameter options to SMFDLEXIT and SMFDPEXIT parameters. • Added information on allowable values for TYPE and NOTYPE on SYS, SUBSYS, and LSNAME parameters.

Chapter 11. New and changed PROCLIB members for z/OS V2R4

This topic lists the lists the new and changed members of PROCLIB for z/OS V2R4.

Table 9 on page 109 lists the new and changed members of PROCLIB for z/OS V2R4. Note that in some cases, IBM might provide these updates in SYS1.IBM.PROCLIB and a customer might install them into SYS1.PROCLIB.

Table 9. New and changed PROCLIB members for z/OS V2R4

Member	Element or feature	Description
None	None	None

Chapter 12. New and changed SYS1.SAMPLIB members for z/OS V2R4

This topic lists the new and changed members of SYS1.SAMPLIB for z/OS V2R4.

Table 10 on page 111 lists the new and changed members of SYS1.SAMPLIB for z/OS V2R4.

Table 10. New and changed SYS1.SAMPLIB members for z/OS V2R4

Member	Element or feature	Description
CBRIPROC	DFSMS OAM	For customers who are using V2R3 Multiple OAM address spaces support and different versions of Db2, the sample was updated with a recommendation to use the highest available Db2 version.
IXGCNFxx	MVS	The MANAGE statement has a new default of USECDSTYPE(LOGR).The ZAI statement contains a new default TPNAME(NONE) parameter (APAR OA53111).
IXGDELLS	MVS	Delete a log stream definition scope is from the current system's active system logger couple data set (CDS) inventory. It could be sysplex scope (LOGR) or single-system scope (LOGRY or LOGRZ).
IXGLOGZF	MVS	New sample JCL is added to define (format) single-system scope LOGRY and LOGRZ CDS types.
IXGLOGZP	MVS	New sample JCL is added to define (format) single-system scope policy information in LOGRY and LOGRZ CDS types.

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