



NewEra Software
The Integrity Controls Environment
(ICE)



Our Job?

Getting you ready for your next upgrade:

Helping you make repairs, avoid problems and improve z/OS integrity.

This results in a safer and more secure environment for your business applications.



NewEra Software
z/OS Integrity and Compliance



Looking Ahead to Your Next Upgrade of z/OS:
Agenda;

- ✓ What we are doing now?
- ✓ What you can do now?
- ✓ How The Integrity Control Environment can help?



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z/OS Integrity and Compliance



Looking Ahead to Your Next Upgrade of z/OS:
Agenda;

✓ **What we are doing now?**

- ✓ Ongoing development and working with ESP sites
- ✓ Will deliver same day support for V2R3
- ✓ Creating our 'What's New' eBook.



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Looking Ahead to Your Next Upgrade of z/OS:

IFO 15.0 - Define Image for Release Analysis

```
IMAGE NAME:      ==> IMAG0004      (A User Assigned Name - up to eight
                                   Characters, will default to MVS System Name when it is found)
MVS IPL INPUT:
  MVS IPL ADDRESS ==> 0A80          (Four Digits)
  MVS LOAD PARM   ==> 0A83X1        (Up to Eight Characters)
  SYSCAT SUFFIX   ==>              (IEA347A Specify Master Catalog Parameters)
  IEASYS00 SUFFIX ==>              (IEA101A Specify System Parameters)
  ADD'L COMMNDxx ==>              (See Image FOCUS Documentation)
FILTERING INPUT:
  HARDWARE NAME   ==>              (Processor Name)
  LPAR NAME       ==>              (LPAR Name)
  VM USERID       ==> ZOS22D       (MVS VM UserID)
OPTIONAL PARMLIB: (Concatenated before LOADxx Parmlibs)
  DATASET NAME    ==>
INSPECTION OPTIONS: ---System--- ----Subsystems----- -Supplemental- --Custom--
INSPECTOR NAMES   OPSYS DSRPT JESx VTAM TCPS CICS LOAD MBRS CSDS CST1 CST2
SELECTION         ==>      Y    Y    N    N    N    N    N    N    N    N
RELEASE LEVEL     ==>    203    Y    203  203  203  203  203  202  202  202
RELEASE OPTIONS:  107=V1R7 108=V1R8 109=V1R9 110=V1R10 111=V1R11 112=V1R12
                  113=V2R13 201=V2R1 202=V2R2 203=V2R3
(A BLANK will Default to Sysplex Release Level)
COMMAND ===>
```

E-Book Downloads at www.newera-info.com:



What's New in V2R3



**Our members are leading the
Mainframe Revolution**



The z Exchange is sponsored by NewEra Software, Inc.

controller, are eligible to share alias devices when the system is operating in SuperPAV mode.

If the HYPERPAV keyword is not specified, the current HYPERPAV setting is not altered.

Note:

1. Using SETIOS HYPERPAV to change the mode of operation of all DASD control units on the system can take considerable time, depending on how many control units are configured on the system. This operation, if required, should be done during periods of lower system utilization, and should be done without concurrent IODF or microcode changes affecting the control unit.
2. If all devices in a logical control unit (LCU) are offline at IPL, SETIOS HYPERPAV mode changes will only take effect after a device on that LCU is varied online.
3. If a dynamic ACTIVATE and a SETIOS affect the devices on the same control unit, the aliases might not be converted to the correct mode. To detect this condition, use the D M=DEV command and examine the output. To correct the problem, issue VARY bbbb ONLINE,UNCOND where bbbb is a base device on the affected control unit. For more information about the error condition and how to correct it, see "Placing an I/O device or a range of I/O devices online or offline" on page 947.
4. SETIOS HYPERPAV is not supported when running MVS as a VM guest.

3.1.3 DISPLAY FXE command - /* New in V2R3 */

New DISPLAY FXE command, "Displaying function enablement state information"

Displaying function enablement state information

Use the DISPLAY FXE command to display the current enablement state of individual functions in the IBM Function Registry for z/OS.

Syntax

The syntax of the DISPLAY FXE command is:

```
DISPLAY FXE
  ,[{VENDOR|VN}=vendorname][{VENDORSLOT|VS}=vendorslot]
  ,[{PRODUCT|PN}=productname][{PRODUCTSLOT|PS}=productslot]
  [, {PRODUCTID|PID}=productID]
  [, {INSTANCEID|IID}=instanceID]
  ,[{FUNCTION|FN}=functionname][{FUNCTIONSLOT|FS}=functionslot]
  [, {FUNCTIONUPDTYPE|FUNCUPDTYPE|FUT}={AUTHONLY|ANYAUTH}]
  ,STATE
```

Parameters

[VENDOR|VN]=vendorname

A string identifying the owning vendor area by name, with optional wildcard use:

- You can use an asterisk (*) to match a sequence of zero, one, or more characters.
- You can use a question mark (?) to match a single arbitrary character.

Any comparisons to actual registry values for matching purposes will be case-insensitive.

[VENDORSLOT|VS]=vendorslot

A number identifying the owning vendor area by the vendor area slot number in the anchor table. Slot numbers start at 1.

3.1.2 SETIOS command - /* New keyword in V2R3 */

The XPAV keyword was added to the SETIOS HYPERPAV command.

```
SETIOS [MIH[,class=mm:ss[,class=mm:ss]...]]
      [,MOUNTMSG={YES|NO}]
      [,DEV={[/]devnum[,[/]devnum]...[,[/]lowdevnum-[/]highdevnum]...}]
      [,TIME=mm:ss]
      [,IOTIMING=mm:ss]
      [,DCCF={MESSAGE|WAIT_STATE}]
      [,MSGONLY={YES|NO}]
      [,IOTHSWAP={YES|NO}[,IOTTERM={YES|NO}]]
      [DCM={ON|OFF|REFRESH}]
      [MIDAM={YES|NO}]
      [FICON,STATS={YES|NO},FABRICPRTY={YES|NO}]
      [CAPTUCB,PROTECT={YES|NO}]
      [STORAGE,IOSBLKS={24|31}]
      [HYPERPAV={NO|BASEONLY|YES|XPAV}]
      [EXM[,PRIMARY={host_name[:port],PRIPORT=port} ]
        {ipv4_address[:port],PRIPORT=port}
        {ipv6_address[:port],PRIPORT=port}
        {NONE}
      [,SECONDARY={host_name[:port],SECPORT=port} ]
        {ipv4_address[:port],SECPORT=port}
        {ipv6_address[:port],SECPORT=port}
        {NONE}
      [,MAXCONN=dd1]
      [,MAXPCONN=dd2]
      [RECOVERY[,LIMITED_RECTIME=ss]
      [,DEV={DASD|IOTIMING}]
      [,PATH_SCOPE={CU[,PATH_INTERVAL=nn] }
        [,PATH_THRESHOLD=nnn]
        (DEVICE)
      [ZHPF={YES|NO}]
      [HYPERWRITE={YES|NO}]
```

New in V2R3.

HYPERPAV={NO or BASEONLY or YES or XPAV} ** Added to V2R3 **

Specifies the use of HyperPAV mode. Use of this keyword changes the mode of operation of HyperPAV-capable DASD control units to the requested mode.

HYPERPAV=NO

Specifies that HyperPAV mode is not to be used.

HYPERPAV=BASEONLY

Specifies that I/O is to be run only on non-PAV-alias devices in HyperPAV mode.

HYPERPAV=YES

Specifies that HyperPAV mode is to be used.

HYPERPAV=XPAV

Specifies that HyperPAV mode is to be used, and wherever possible, allow aliases to be used for peer control units in the defining alias management group (AMG). This HyperPAV mode is also known as SuperPAV mode. Control units on a storage controller with the exact same paths, in order, and those that share the alias management group number, as defined by the storage

12.6 DEVSUPxx - /* Changed in V2R3 */

Syntax format of DEVSUPxx

```

ALVERSION={3|4|FORCE3|FORCE4},
COMPACT={YES|NO},
COPYSO={YES|SMALL|LARGE|INPUT|NO},
DORSIZELIM={xxxx|xxxxM|1000M},
{ENABLE|DISABLE} feature,
ENFORCE_OC_MEDIA={ALLMEDIATY|MEDIASPLUS},
EOSV2={YES|NO},
ERROR=xxxx,
EXPIRATION_MESSAGE={NEVER|ALWAYS},

GREATER_253={YES|NO},
ICKDSF_NOOEXIST={YES|NO},
ICKDSF_VERIFYOFFLINE={YES|NO},
JES3_ALLOC_ASSIST={YES|NO},
MEDIAn=xxxx,
MTL_NO_OC_WORM_OK,
NON_VSAM_XTIOT={YES|NO},
OCF_AREND_DESCRIP={YES|NO},
PPRCSYMCONF = {YES|NO},
PRIVATE=xxxx,
TAPEAUTHDSN = {YES|NO},
TAPEAUTHF1 = {YES|NO},
TAPEAUTHRC4 = {ALLOW|FAIL},
TAPEAUTHRCB = {FAIL|WARN},
TAPEBLKSZLIM={nnnn|nnnnn|nnnnM|nG},
TAPE_MULTI_VOLUME_ANOMALY={ALLOW|FAIL},
VOLNSNS={YES|NO}

```

New in V2R3.

New in V2R3.

{ENABLE|DISABLE}(feature)

Enables or disables a particular feature, where feature can be any one of the following choices:

AOM496I**** Added to V2R3 ****

Enables or disables the issuing of the AOM496I status message on the console for transparent cloud tiering operations.

ENABLE(AOM496I)Enables the issuing of the AOM496I status message on the console for transparent cloud tiering operations. The following message is issued when ENABLE(AOM496I) is present in a DEVSUPxx member:
'IEA253I DEVSUP AOM496I IS ENABLED'**DISABLE(PPRCMT)**Disables the issuing of the AOM496I status message on the console for transparent cloud tiering operations. This is the default. The following message is issued when DISABLE(AOM496I) is present in a DEVSUPxx member:
'IEA253I DEVSUP AOM496I IS DISABLED'**Default: DISABLE(AOM496I)****REFVTOC**

Enables or disables the automatic REFVTOC function of the Device Manager:

DISABLE(REFVTOC)

When the REFVTOC feature is disabled and the system detects a volume expansion, the system issues message IEA019I, but the VTOC is not rebuilt. An ICKDSF Batch job must be submitted to rebuild the VTOC before the newly added space on the volume can be used.

ENABLE(REFVTOC) **** Changed in V2R3 ****

When the REFVTOC feature is enabled and the system detects a volume expansion, the system issues message IEA019I. If the volume is online, the Device Manager causes the volume VTOC to be rebuilt. This allows the newly added space on the volume to be used by the system.

Default: ENABLE(REFVTOC)

ICKDSF_NODSEXIST= **** Changed in V2R3 ****

NO Disables the ICKDSF NODSEXIST parameter as the default for the ICKDSF INIT command. If the NODSEXIST parameter is disabled and the device contains data sets, the ICKDSF INIT command is not terminated because data sets exist.

If ICKDSF NODSEXIST=NO is specified, an IEA253I message is logged at IPL or after a 'SET DEVSUP=xx' command is issued.

YES Enables the ICKDSF NODSEXIST parameter to be the default for the ICKDSF INIT command. If the NODSEXIST parameter is the default and the device contains data sets other than the VTOC index data set or VVDS, the command terminates and message ICK32179I is in the job output. See Device Support Facilities (ICKDSF) User's Guide and Reference for more details.

If ICKDSF_NODSEXIST=YES is specified, an IEA253I message is logged at IPL or after a 'SET DEVSUP=xx' command is issued.

Default: NO

Note: If an online INIT is attempted on a volume that has been initialized as a Data Facility Storage Management Subsystem (DFSMS) managed volume and data sets other than the VTOC index data set or VVDS exist, the command terminates and message ICK32177I is in the job output. See Device Support Facilities (ICKDSF) User's Guide and Reference for more details.

ICKDSF_VERIFYOFFLINE= **** Changed in V2R3 ****

NO Disable the ICKDSF VERIFYOFFLINE parameter as default. If you want to make sure that the device is offline to all host systems, you must specify the VERIFYOFFLINE parameter.

If ICKDSF_VERIFYOFFLINE=NO is specified, an IEA253I message is logged at IPL or after a 'SET DEVSUP=xx' command is issued.

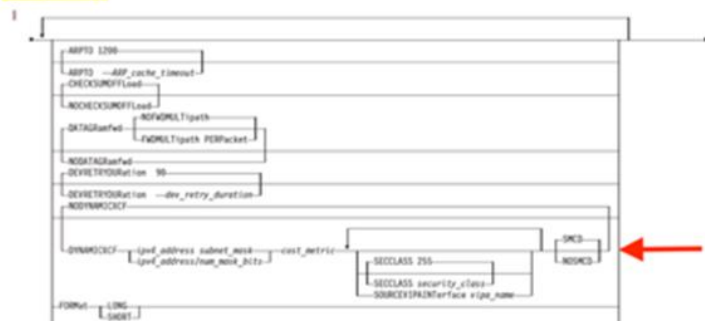
YES Enable the ICKDSF VERIFYOFFLINE parameter to be defaulted if all the following are true:

1. UNIT parameter is specified
2. Storage control microcode support exists
3. z/OS software support exists
4. Device is not a minidisk

If ICKDSF_VERIFYOFFLINE=YES is specified, an IEAV253I DEVSUP ENABLED ICKDSF VERIFYOFFLINE PARAMETER DEFAULT message is also logged. If the keyword is not specified, no message is logged.

4.1.3 IPCONFIG statement - /* V2R3 CHANGED */

OLD (V2R2):



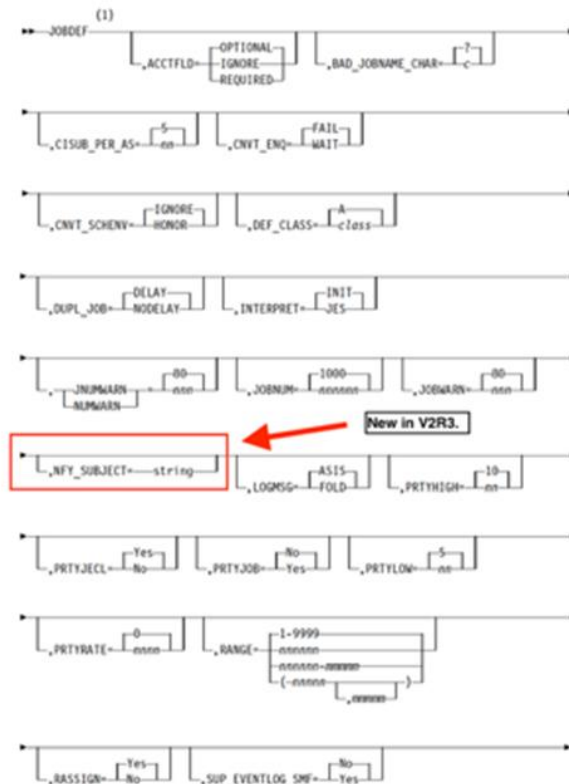
NEW (V2R3):



9.1.2 JOBDEF - /* V2R3 Keyword Added */

Modified JOBDEF to add NFY_SUBJECT=string.

Format description for JOBDEF

**NFY_SUBJECT=string****** Added to V2R3 ****

Specifies the optional character string that is used by JES2 as a subject line in email messages that are sent as a result of processing the NOTIFY JCL statement. Subject line can be up to 128 characters. Enclose string in single quotation marks if text includes blanks or special characters. Adding quotation marks also prevents capitalization of alphabetic characters.

Default: If this parameter is not specified, JES2 provides the default subject line of: z/OS job event notification.

Scope: Single Member.



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Looking Ahead to Your Next Upgrade of z/OS: Agenda;

- ✓ What we are doing now?
- ✓ **What you can do now?**
 - ✓ Review your configuration definitions and optimize your datasets and libraries.
 - ✓ Create a checklist of things to research



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Looking Ahead to Your Next Upgrade of z/OS:
Agenda;

- ✓ What we are doing now?
- ✓ What you can do now?
- ✓ zExchange



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zExchange Activity:

Marna Walle – IBM

Migrating to z/OS V2R3 – Part 1

Thursday, October 19 at 12 pm EDT

<http://www.newera-info.com/MW1.html>

Ross Cooper – IBM

IBM Multi-Factor Authentication

Tuesday, October 24 at 2 pm EDT (11 am PDT)

<http://www.newera-info.com/RC1.html>

Steve Warren

z/OS V2R3 Client Web Enablement Toolkit Update

Wednesday, October 25 at 2 pm EDT (11 am PDT)

<http://www.newera-info.com/SW1.html>



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Looking Ahead to Your Next Upgrade of z/OS: Agenda;

- ✓ What we are doing now?
- ✓ What you can do now?
- ✓ SHARE website
- ✓ Links from IBM-MAIN / SHARE

https://www.ibm.com/support/knowledgecenter/SSLTBW_2.3.0/com.ibm.zos.v2r3.e0zm10/e0z3msoc_V2R3_GA.htm

<https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=ZSD00998USEN&>

<http://watsonwalker.com/ibms-z14-zos-2-3-announcements/>

https://share.confex.com/data/handout/share/129/Session_21586_handout_10845_0.pdf



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- ✓ What we are doing now?
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- ✓ How The Integrity Control Environment can help?