

Application Developers Controlled Distribution (ADCD)
Release Guide
z/OS V2R4 May Edition of 2021

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Introduction:

This document provides you information regarding the contents of the ADCD z/OS V2R4 May Edition for 2021. It also provides some additional notes and tips to effectively manage the ADCD system. The instructions for starting WAS, z/OSMF, Health Checker are also included in this document.

Release Notes:

Listed below are modifications / enhancements incorporated into this ADCD z/OS V2R4 May Edition for 2021.

With this release of ADCD the z/OSMF Server and Angel are auto started. This is a requirement to support the new function of JES2 Email Support delivered in z/OS 2.3 . Additionally the TSO logon procedures have been changed to end at the READY prompt. So it will be necessary to type ISPF to access the ISPF panels.

The following z/OSMF functions were implemented:

- Software Management
- Cloud Provisioning see(z/OSMF section for instructions)
- Performance
- Consoles
- Jobs and Resources (ie. SDSF Plugin)
- Rest Services
- z/OS Classic Interfaces
- z/OSMF JES2 Email Support

The option to use Secure SSL/TLS for TN3270 has been provided in this ADCD release. Please reference the webpage Section: **Announcements, Changes and Updates.**

The following products have been added:

- IBM z Monitoring Suite for z/OS V1.2.0
- IBM Open Enterprise SDK for GO 1.1.6
- IBM Application Discovery Connect for Mainframe v6.0.0
- IBM z/OS Transparent Data Migration Facility v5.9.0
- IBM Urbancode Deploy for z/OS v7.1.1
- IBM Open Enterprise SDK for Python 3.9.0
- IBM Engineering Workflow Management v7.0.1
- IBM z Development and Test Environment Enterprise v13.0.0
- IBM XML Toolkit for z/OS v1.11.0
- IBM Data Virtualization Manager 1.1.0
- IBM MQ for z/OS CD V9.2.2

The following products have been updated with the latest available version/release/modification level.

- CICS Transaction Server for z/OS V5.6.0

All of z/OS base, z/OS products and middleware volume size has been increased to mod-9 (10,017 cylinders) to provide more free space for expansion

Page Data Sets:

This ADCD system provides you with three volumes dedicated for page data sets, D4PAGA through D4PAGC. The contents of the volumes are listed below.

D4PAGA – SYS1.S0W1.PLPA.PAGE , SYS.S0W1.COMMON.PAGE , SYS1.S0W1.LOCALA.PAGE

D4PAGB – SYS1.S0W1.LOCALB.PAGE

D4PAGC – SYS1.S0W1.LOCALC.PAGE

The pre-configured loadparms that are meant for bringing up DB2 and WAS, use all of the above listed page data sets. The rest of the loadparms use only the ones on first two volumes listed above. Depending upon your requirement you can add or remove these page data sets using the example parameters below in IEASYSxx member after copying it to USER.PARMLIB.

```
PAGE=(SYS1.S0W1.PLPA.PAGE,  
      SYS1.S0W1.COMMON.PAGE,  
      SYS1.S0W1.LOCALA.PAGE,  
      SYS1.S0W1.LOCALB.PAGE,L),
```

Starting IMS and running an IVP transaction:

The instructions for starting and stopping IMS can be found at the below link:

['http://dtsc.dfw.ibm.com/MVSDS/HTTPD2.DFSF10.PUBLIC.SHTML\(INDEX\)'](http://dtsc.dfw.ibm.com/MVSDS/HTTPD2.DFSF10.PUBLIC.SHTML(INDEX))

Above page has pointers to the levels of IMS V15 and V14. On each level click on the "Issues, Hints and Tips" to see the instructions for starting and stopping. The IVP jobs are available on ADCD system, in the data set DFSF10.INSTALIB for IMS v15, DFSE10.INSTALIB for IMS v14 and one needs to run each series in a specific manner to create the particular IVP environment and data to be able to follow each IVP.

WLM configuration provided on ADCD z/OS:

The WLM configuration of application environments for DB2 Stored Procedures for DBBG are self-documented in the WLM application environment display.

For DBCG(DB2 V12) the comment describes the usage of each environment.

DBCGENV	Default
DBCGENVC	DSNWLM_DSNACICS
DBCGENVD	DSNWLM_DEBUGGER
DBCGENVG	DSNWLM_GENERAL
DBCGENVI	Stored Procedure for IDAA
DBCGENVJ	DSNWLM_JAVA
DBCGENVM	DSNWLM_MQSERIES
DBCGENVO	DSNWLM_JAVA_BIGMEM
DBCGENVP	DSNWLM_PGM_CONTROL
DBCGENVR	DSNWLM_REXX
DBCGENVU	DSNWLM_UTILS
DBCGENVW	DSNWLM_WEBSERVICES
DBCGENVX	DSNWLM_XML
DBCGENV1	DSNWLM_NUMTCB1
DBCGRFSH	Stored Procedure REFRESH

For DBBG(DB2 V11) the comment describes the usage of each environment.

DBBGENV	Default
DBBGENVC	DSNWLM_DSNACICS
DBBGENVD	DSNWLM_DEBUGGER
DBBGENVG	DSNWLM_GENERAL
DBBGENVJ	DSNWLM_JAVA
DBBGENVM	DSNWLM_MQSERIES
DBBGENVO	DSNWLM_JAVA_BIGMEM
DBBGENVP	DSNWLM_PGM_CONTROL
DBBGENVR	DSNWLM_REXX
DBBGENVU	DSNWLM_UTILS
DBBGENVW	DSNWLM_WEBSERVICES
DBBGENVX	DSNWLM_XML
DBBGENV1	DSNWLM_NUMTCB1
DBBGRFSH	Stored Procedure REFRESH

ACS routines provided on ADCD:

DB2 V12 requires that its Catalog and Directory be SMS managed. The ACS routines available on ADCD z/OS system were created to handle HLQ DSNCC10, which is the HLQ of the DB2 V12 Catalog and Directory. The logic is to use two qualifiers, first is DSNCC10 and the second is DSNDBC or DSNDBD. The DSNDBC and DSNDBD indicates the cluster and data portion of the VSAM data set of a DB2 Tablespace. Other datasets for DB2 V12 have a HLQ of DSNCC10 and these are not SMS managed. A DB2 STOGROUP called SYSSMS has been created for the Catalog and Directory Tablespaces with a VCAT of DSNCC10 and VOL of (*). The (*) is for SMS managed STOGROUP. The DB2 STOGROUP, SYSDEFLT uses VCAT of DSNB10 and lists actual volumes and is not SMS managed. The installation is configured to use SYSSMS when creating the Catalog and Directory Tablespaces. If users create and specify a STOGROUP of their own or default to SYSDEFLT STOGROUP, their Tablespaces will fall into non-SMS managed volumes as specified in the STOGROUP.

DB2 V11 requires that its Catalog and Directory be SMS managed. The ACS routines available on ADCD z/OS system were created to handle HLQ DSNCB10, which is the HLQ of the DB2 V11 Catalog and Directory. The logic is to use two qualifiers, first is DSNCB10 and the second is DSNDBC or DSNDBD. The DSNDBC and DSNDBD indicates the cluster and data portion of the VSAM data set of a DB2 Tablespace. Other datasets for DB2 V11 have a HLQ of DSNB10 and these are not SMS managed. A DB2 STOGROUP called SYSSMS has been created for the Catalog and Directory Tablespaces with a VCAT of DSNCB10 and VOL of (*). The (*) is for SMS managed STOGROUP. The DB2 STOGROUP, SYSDEFLT uses VCAT of DSNB10 and lists actual volumes and is not SMS managed. The installation is configured to use SYSSMS when creating the Catalog and Directory Tablespaces. If users create and specify a STOGROUP of their own or default to SYSDEFLT STOGROUP, their Tablespaces will fall into non-SMS managed volumes as specified in the STOGROUP.

The data class DCEXTEAV is defined to allow larger than four Gigabyte dataset allocation. With this data class and the accompanying storage group and class, a dataset can be allocated on the provided SMS managed volume D4USR1. The ACS routines are defined so no filtering is needed. To allocate and SMS managed dataset, specify the data class (DCEXTEAV) in the allocation JCL and the dataset will be defined on the provided volume. Below are the names of the Data class, Storage Group and Storage class for reference purposes:

DCEXTEAV	Data Class
SGEXTEAV	Storage Group
SCEXTEAV	Storage class
D4USR1	Volume defined to SGEXTEAV (Storage Group)

zCX Container SMS environment

This is the link to the zCX Container Guide

[https://www.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosv2r4izso100/\\$file/izso100_v2r4.pdf](https://www.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosv2r4izso100/$file/izso100_v2r4.pdf)

The data class CXDC is defined to allow larger than four Gigabyte dataset allocation. With this data class and the accompanying storage group and class, a dataset can be allocated on the provided SMS managed volume D4ZCX1. The ACS routines are used during provisioning of zCX Container.

Data class, Storage Group and Storage class for zCX Containers reference purposes:

CXDC	Data Class for zCX
CXROOTSG	Storage Group
CXROOTSC	Storage class
D4ZCX1	Volume size is 18,000 cylinders and defined in CXROOTSG (Storage Group)

Recreating the coupling data sets:

Below listed are the coupling data sets provided on ADCD.

```
SYS1.ADCDPL.CDS01
SYS1.ADCDPL.CDS02
SYS1.ADCDPL.CFRM.CDS01
SYS1.ADCDPL.CFRM.CDS02
SYS1.ADCDPL.LOGR.CDS01
SYS1.ADCDPL.LOGR.CDS02
SYS1.ADCDPL.OMVS.CDS01
SYS1.ADCDPL.OMVS.CDS02
SYS1.ADCDPL.WLM.CDS01
SYS1.ADCDPL.WLM.CDS02
```

In case any of these data sets are corrupted or become unusable, delete them and use the JCL available in the member ALOCCOPL in 'ADCD.LIB.JCL' data set, to allocate them again.

Note: Be sure to make the appropriate volume change that reflects the level of ADCD you are using.

Note: This procedure is provided to you, assuming that you have a thorough knowledge of setting up a SYSPLEX environment. These steps are a bit involved and could cause disruption of normal functioning of your ADCD system.

Allocating DB2 archive logs into an esoteric device:

Additional storage volume D4DBAR has been defined and is pointed to by a new esoteric DBARCH, for DB2 archive logs. Instructions for adding more volumes to this esoteric is provided in this document below. Ensure to map this volume D4DBAR to device# 0AA3 in your devmap, so that it is in sync with the IODF definition.

In this edition of ADCD z/OS, the loadparms that are meant to bring up DB2, have been configured to use the esoteric device DBARCH for holding the DB2 archive logs. This means that the archive logs will go only into this volume (or volumes if you add more to the esoteric). You will still need to manage the space on the volume and delete archive logs that are no longer needed. The fourth qualifier in the data set name is a date of the format Dyyymm where “yy” is the year and “nnn” is the Julian day of the year. When you start DB2, examine the console log to see that it does not read any archive logs. If no archive logs are used at the start, then you have a clean start of DB2 and you can delete all the prior archive logs. If you are running DB2 and run out of space in the esoteric DBARCH volume(s), look at the SDSF console log for DB2 and determine the start date. Then you can delete archive logs prior to the start date of the last clean start of DB2. You should monitor the space available on your DBARCH esoteric volume(s). Better space management can be achieved by turning off logging on some of your Tablespace, that can be recovered by just dropping, re-creating and re-loading. You can also reduce logging by using the LOG NO parm in your load utility job. You would need to reset the COPY pending flag with the NOCOPYPEND parm in the load utility or the REPAIR utility. Please note that these are to be used only for Tablespace that you can recover on your own without any of DB2's recovery. A thoughtful management of DB2 archive logs is important in any DB2 environment - test, development or production.

Also note that, even though you delete the DSNx10.DBxG.ARCLOG1.Date.Time.**A0000000#** data sets you need to keep enough of the DSNx10.DBxG.ARCLOG1.Date.Time.**B0000000#** data sets to cover two successful restarts of DB2. These are the backups for your BSDS data sets. If anything happens to your BSDS; you will need these backups to restore your BSDS.

The DBARCH esoteric is coded into DB2 ZPARM, via the link-edit JCL member DSNTIJUZ in DSNx10.NEW.SDSNSAMP. You can find the below parms coded under DSN6ARVP section of DSNTIJUZ. This information is provided here, just in case you want to create and update with a different esoteric other than the one provided.

```
TSTAMP=YES,                                X
UNIT=DBARCH,                               X
UNIT2=
```

Follow the below instructions, if you need to add more volumes to the esoteric DBARCH.

The IODF file needs to be updated in order to make changes to an esoteric. The default active IODF in ADCD system is SYS1.IODF99. When we try to modify this, a temporary work IODF is created, which can be named as per our preference. In this case, let us name it SYS1.IODF03.WORK. Once the changes are done, this work file can be used to create a production IODF file, let us name it SYS1.IODF03. The system can be re-IPLed after changing loadparm to use IODF03 and check if the changes we have done are working properly. We can either continue to use IODF03 or copy it to IODF99. For copying to IODF99, we need to take a backup of IODF99 and then delete IODF99. After deleting IODF99, copy IODF03 to IODF99 and update the loadparm member to use IODF99.

1. Go to option M.4 from ISPF primary option menu, to enter into the HCD tool (Hardware Configuration Tools).

```
Command ==>
Hardware Configuration

Select one of the following.

_ 0. Edit profile options and policies
  1. Define, modify, or view configuration data
  2. Activate or process configuration data
  3. Print or compare configuration data
  4. Create or view graphical configuration report
  5. Migrate configuration data
  6. Maintain I/O definition files
  7. Query supported hardware and installed UIMs
  8. Getting started with this dialog
  9. What's new in this release

For options 1 to 5, specify the name of the IODF to be used.

I/O definition file . . . 'SYS1.IODF99' +
```

2. Ensure that the default IODF file is selected as shown in above screenshot. Select option 1 (Define, Modify, or View Configuration Data)

```
C Define, Modify, or View Configuration Data
S Select type of objects to define, modify, or view data.
1 _ 1. Operating system configurations
   consoles
   system-defined generics
   EDTs
   esoterics
   user-modified generics
   2. Switches
   ports
   switch configurations
   port matrix
   3. Processors
   channel subsystems
   partitions
   channel paths
F
I 4. Control units
  5. I/O devices
  6. Discovered new and changed control units and I/O devices
```

3. Select option 1 (Operating System Configurations). Type '/' to select Config. ID OS390 in the next screen and press enter.

```

-----
                          Operating System Configuration List                      Row 1 of 1
Command ==> _____ Scroll ==> PAGE

Select one or more operating system configurations, then press Enter. To
add, use F11.

/ Config. ID  Type      Gen  Description                                D/R site OS ID
/ OS390      MVS        ADCD  ZOS IODF
***** Bottom of data *****

```

4. A pop-up window is thrown as shown below, select option 5 (Work with EDTs) in this pop-up.

```

-----
                          Actions on selected operating systems
Command ==> _____
Select one or
add, use F11.

/ Config. ID
/ OS390
*****

1. Add like . . . . . (a)
2. Repeat (copy) OS configurations . . (r)
3. Change . . . . . (c)
4. Delete . . . . . (d)
5. Work with EDTs . . . . . (s)
6. Work with consoles . . . . . (n)
7. Work with attached devices . . . . (u)
8. View generics by name . . . . . (g)
9. View generics by preference value . (p)

```

5. Now it throws a list of EDTs, select EDT# 00, by typing '/' and press enter

```
- Goto Backup Query Help
-----
C Command ==> _____ Scroll ==> PAGE Row 1 of 1
S
a Select one or more EDTs, then press Enter. To add, use F11.
/ Configuration ID . : OS390 ADCD ZOS IODF
/
* / EDT Last Update By Description *
/ 00 2012-05-17 IBMUSER Add new esoterics
***** Bottom of data *****
```

6. Throws another pop-up with actions to be performed on EDTs, select option 4 (Work with esoteric)

```
- Goto Backup Query Help
-----
C Command =
S
a Select on
/ Configura
/
* / EDT Las
/ 00 201
*****

----- Actions on selected EDTs -----
4_ 1. Repeat (copy) EDTs . . . . . (r)
2. Change . . . . . (c)
3. Delete . . . . . (d)
4. Work with esoterics . . . . . (s)
5. Work with generics by name . . . . (g)
6. Work with generics by pref. value . (p)
```

7. This lists the esoteric already available, select the esoteric DBARCH by typing '/' and press enter for further options.

```

-      Goto Filter Backup Query Help
-----
C      Command ==> _____ Scroll ==> PAGE      Row 1 of 7
S
a      Select one or more esoterics, then press Enter. To add, use F11.

/      Configuration ID . : 0S390      ADCD ZOS IODF
/      EDT identifier . . : 00      Add new esoterics
*

/ Esoteric VIO Token State
- DASD Yes 1
/ DBARCH Yes 3
- SORT Yes 5
- SYSDA Yes 7
- TEMP Yes 9
- VIO Yes 11
- WORK Yes 13
***** Bottom of data *****

```

8. Select option 4 (Assign devices)

```

-      Goto Filter Backup Query Help
-----
C      Command = _____
S
a      Select on
/      Configura
/      EDT ident
*

/ Esoteri
- DASD
/ DBARCH
- SYSDA
- VIO Yes _____
***** Bottom of data *****

-----
Actions on selected esoterics
-----
Select by number or action code and press Enter.
4_ 1. Repeat (copy) esoterics . . . . . (r)
   2. Change . . . . . (c)
   3. Delete . . . . . (d)
   4. Assign devices . . . . . (s)
   5. View assigned devices . . . . . (v)

```

- Throws a pop-up window with list of devices available, select the appropriate device or device range that you want to add to this esoteric. In the screenshot below, we are trying to add one additional device at address 0AA7. Change the status of 'Assigned' column from 'No' to 'Yes' across the device range that you want to add and also specify the starting device address, and number of devices to add a range.

```

Goto Filter Backup Query Help
-----
C                                     Row 11 of 17
Command ==> _____ Scroll ==> PAGE
S
a
Specify Yes to assign or No to unassign.
/
Configuration ID . . : OS390          ADCD ZOS IODF
/ EDT.Esoteric . . . : 00.DBARCH      VIO eligible . . : No
x
Devices      Device Type  Generic      Assigned  Starting  Number of
                Name
0900,13      3270-X      3277-2      No        _____
090E,18      3270-X      3277-2      No        _____
0A80,38      3390        3390        No        _____
0AA6,1       3390        3390        Yes       _____
0AA7,73      3390        3390        Yes       0AA7      1
-----
0E20,4       CTC         CTC         No        _____
0E40,4       CTC         CTC         No        _____
***** Bottom of data *****
To leave the panel press EXIT or CANCEL.

```

- On pressing enter after above selections, a pop-up window is thrown to capture the details for creating a work IODF file that will capture the changes.

```

Goto Filter Backup Query Help
-----
C                                     Add Esoteric
S
a
Create Work I/O Definition File
-----
C
S
The current IODF is a production IODF and therefore cannot be
/ updated. To create a new work IODF based on the current
/ production IODF, specify the following values.
x
IODF name . . . . . 'SYS1.IODF03.WORK'
-----
Volume serial number . SDSYS1 +
-----
***
Space allocation . . . 1024 (Number of 4K blocks)
Activity logging . . . Yes (Yes or No)
Multi-user access . . No (Yes or No)

```

11. On pressing enter, now it shows the updated list of devices assigned. As device# 0AA6 was already assigned, now with 0AA7 added, it shows 2 devices in that range.

```

-      Goto Filter Backup Query Help
-----
C                                     Row 11 of 17
Command ==> _____ Scroll ==> PAGE

Specify Yes to assign or No to unassign.

Configuration ID . . : 0S390          ADCD ZOS IODF
EDT.Esoteric . . . : 00.DBARCH      VIO eligible . : No

Devices      Device Type  Generic  Assigned  Starting  Number of
                Name           Number   Devices
0900,13      3270-X    3277-2   No         _____
090E,18      3270-X    3277-2   No         _____
0A80,38      3390      3390     No         _____
0AA6,2       3390      3390     Yes        _____
0AA8,72      3390      3390     No         _____
0E20,4       CTC       CTC       No         _____
0E40,4       CTC       CTC       No         _____
***** Bottom of data *****

```

12. Now, go back to primary option menu of HCD and select option 2 (Activate or process configuration data) against the work IODF file that we just created.

```

Command ==> _____

Hardware Configuration

Select one of the following.

2 0. Edit profile options and policies
  1. Define, modify, or view configuration data
  2. Activate or process configuration data
  3. Print or compare configuration data
  4. Create or view graphical configuration report
  5. Migrate configuration data
  6. Maintain I/O definition files
  7. Query supported hardware and installed UIMs
  8. Getting started with this dialog
  9. What's new in this release

For options 1 to 5, specify the name of the IODF to be used.

I/O definition file . . . 'SYS1.IODF03.WORK'      +

```

13. Select option 1 (Build production I/O definition file) as shown below

```

C
Select one of the following tasks.
S 1 1. Build production I/O definition file
   2. Build IOCDS
2 3. Build IOCP input data set
   4. Create JES3 initialization stream data
   5. View active configuration
   6. Activate or verify configuration
   dynamically
   7. Activate configuration sysplex-wide
   8. *Activate switch configuration
   9. *Save switch configuration
   10. Build I/O configuration data
   11. Build and manage S/390 microprocessor
   IOCDSs and IPL attributes
F 12. Build validated work I/O definition file ed.
I * = requires TSA I/O Operations +

```

14. The changes made are verified and if any errors / warnings are displayed at this stage. A warning message as shown below, can be ignored.

```

Save Query Help
-----
Row 1 of 2
Command ==> Scroll ==> PAGE
Messages are sorted by severity. Select one or more, then press Enter.
/ Sev Msg. ID Message Text
/ W CBDA333I EDT 00 of OS configuration OS390 does not use tokens for
# its esoterics.
***** Bottom of data *****

```

15. Press F3 to go back and create the production IODF file, call it 'SYS1.IODF03', specify the volume and hit enter.
Note: The volume specified here should be the same volume as where IODF99 is residing.

```

C
S
S 1 Specify the following values, and choose how to continue.
2
   Work IODF name . . . : 'SYS1.IODF03.WORK'
   Production IODF name . 'SYS1.IODF03'
   Volume serial number . SDSYS1 +
Continue using as current IODF:
2  1. The work IODF in use at present
   2. The new production IODF specified above
F
I * = requires TSA I/O Operations +

```

16. Throws a pop-up window for descriptor fields as shown below, hit enter again

```

C
S
S 1 Specify the following values, and choose how to continue.
2
   Work IODF name . . . : 'SYS1.IODF03.WORK'
   Production IODF name . 'SYS1.IODF03'
   Vo
Co
2
   Specify or revise the following values.
   Production IODF name . . : 'SYS1.IODF03'
   Descriptor field 1 . . . SYS1
   Descriptor field 2 . . . IODF03
F
I * = re

```

17. You should get a message for successful creation as shown below

```

C
Select one of the following tasks.
S 1 1. Build production I/O definition file
  2. Build IOCDs
  2 3. Build IOCP input data set
  4. Create JES3 initialization stream data
  5. View active configuration
  6. Activate or verify configuration
    dynamically
  7. Activate configuration sysplex-wide
  8. *Activate switch configuration
  9. *Save switch configuration
  10. Build I/O configuration data
  11. Build and manage S/390 microprocessor
    IOCDs and IPL attributes
F 12. Build validated work I/O definition file ed.
I * = requires TSA I/O Operations +
Production IODF SYS1.IODF03 created.
  
```

18. Come out of HCD and create a new loadparm member (using LOADCS as a template) as shown below, to use IODF03, by changing the IODF parm value from 99 to 03.

```

EDIT      SYS1.IPLPARM(LOAD01) - 01.00      Columns 00001 00072
Command ==>                               Scroll ==> CSR
***** ***** Top of Data *****
000001 IODF      03 SYS1
000002 SYSCAT   Z1SYS1113CCATALOG.Z21Z.MASTER
000003 SYSPARM  CS
000004 IEASYM   00
000005 PARMLIB  USER.PARMLIB                Z1SYS1
000006 PARMLIB  ADCD.Z21Z.PARMLIB           Z1RES1
000007 PARMLIB  SYS1.PARMLIB                Z1RES1
000008 NUCLEUS  1
000009 SYSPLEX  ADCDPL
***** ***** Bottom of Data *****
  
```

19. IPL the system with loadparm '01' to ensure that IODF03 works without any issues. If you want to continue using IODF03, modify other loadparms that you need, to use IODF03. Otherwise if you want to copy the changes to IODF99, take a backup of IODF99 using option 6 (Maintain I/O definition files) and then option 2 (Copy I/O definition file). After taking a backup, delete IODF99 file and repeat the same options 6 and 2 to copy IODF03 into IODF99.

Steps for dumping SMF data into GDG data sets

The system is configured to clear SMF data using the procedure SMFCLEAR. This procedure is triggered by the exit routine IEFU29, the source code of which is available in ADCD.LIB.JCL. In case, you wish to save the SMF data into GDG data sets, this exit routine needs to be modified to invoke procedure SMFDUMPS. Edit the routine IEFU29 to change occurrences of string SMFCLEAR to SMFDUMPS and assemble / link-edit the load module using the JCL member IEFU29@, also available in ADCD.LIB.JCL. The system needs to be re-IPLed for this to take effect. A GDG base SYS1.SMF.DATA has already been defined using the JCL in ADCD.LIB.JCL(SMFGDG). The procedures SMFCLEAR and SMFDUMPS are available in ADCD.Z24B.PROCLIB.

Using the esoteric devices

Esoteric devices called WORK, TEMP and SORT have been defined and mapped to devices in the range 0600 – 060 F. Create emulated 3390 volumes in your zPDT system and map them to these device address via the devmap file, in order to use these esoterics. Also note that the appropriate VATLSTxx member (volume attribute list) should be updated with necessary statement, as shown highlighted in below sample. In this example, we want to use volumes WORK01 through WORK12, which is marked as WORK*. This member defines the mount and use attributes of direct access volumes.

```
VATDEF IPLUSE (PRIVATE) , SYSUSE (PRIVATE)
D4SYS1,0,0,3390      ,Y
WORK* ,0,0,3390      ,Y
```

Steps for starting IBM Health Checker for z/OS

With this edition, IBM Health Checker has been pre-configured to start automatically.

This utility can be started manually with the below start command.

```
/START HZSPROC
```

<http://www-03.ibm.com/systems/z/os/zos/hchecker/index.html>

For stopping issue the below command manually or include it in your shutdown script SHUTxx in parmlib.

```
/STOP HZSPROC
```

Steps for starting IBM zOWE Distribution v1.0.0

The zOWE started task are not auto started on ADCD. Due to the need for z/OSMF product to be fully initialized before starting the zOWE started tasks. Verify that you can logon to z/OSMF first, then start in the sequence below:

```
S ZWESISTC
```

The Cross Memory Server will initialize quickly.

```
S ZWESVSTC
```

The Application Server will start and after several minutes several processes will start up and run for some length of time. Currently there is no message that comes out letting you know when zOWE is completely initialized. This could take several minutes before you can logon to the Desktop.

The URL below is the Desktop

<https://192.168.248.147:8544/ZLUX/plugins/org.zowe.zlux.bootstrap/web/index.html>

Steps for starting IBM z/OS Management Facility (z/OSMF)

All loadparm's have been configured to autostart the z/OSMF product. The only related z/OSMF task still being started in the startup scripts is the CIM(Common Information Model) server.

```
S CFZCIM
```

This might take 20 plus minutes to come up, depending upon your zPDT system. Look for the below messages for successful start of the z/OSMF.

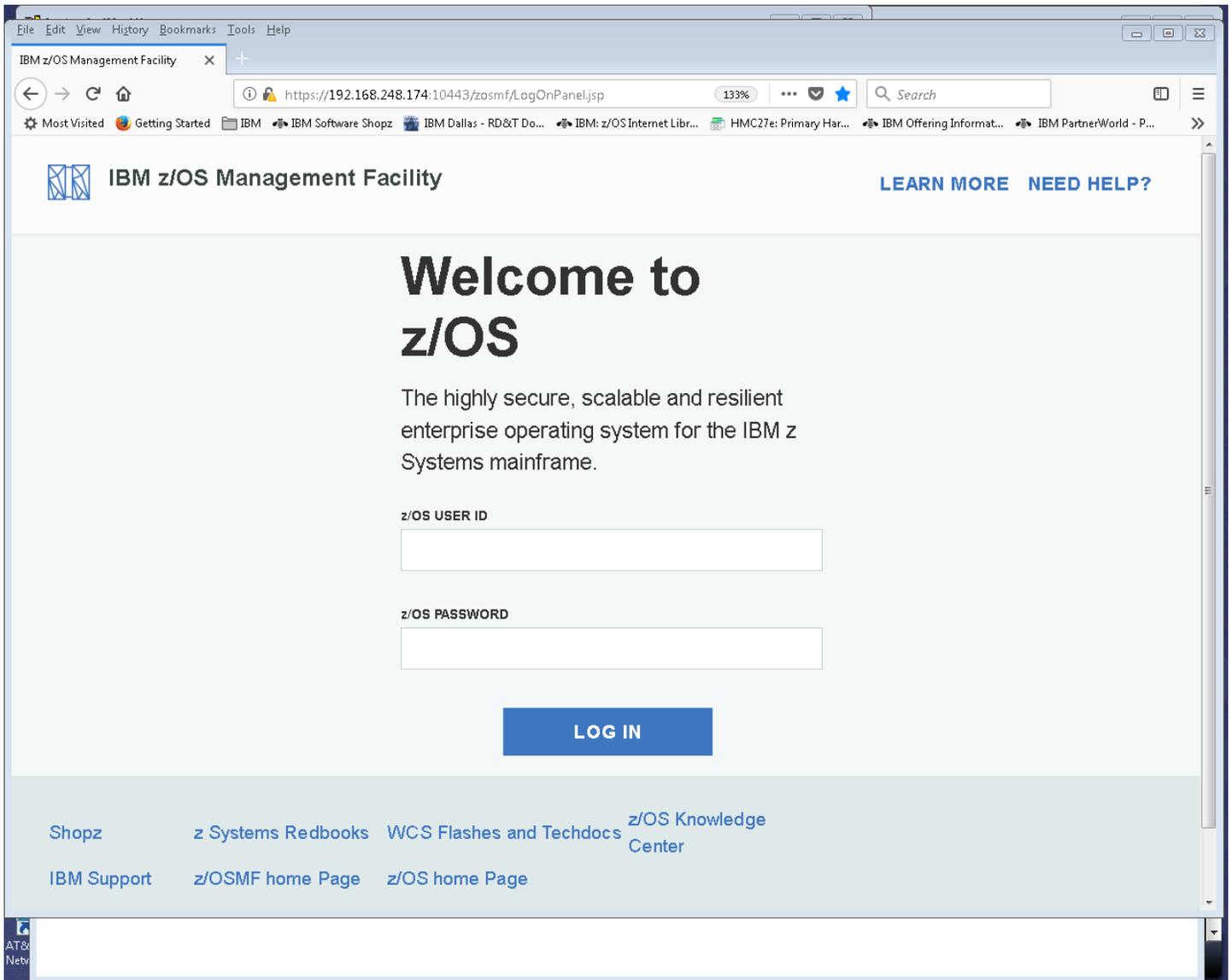
```
S IZUANG1  
CWWKB0056I INITIALIZATION COMPLETE FOR ANGEL  
S IZUSVR1 IZUG400I: The z/OSMF Web application services are initialized.  
+ CWWKF0011I: The server zosmfServer is ready to run a smarter planet.
```

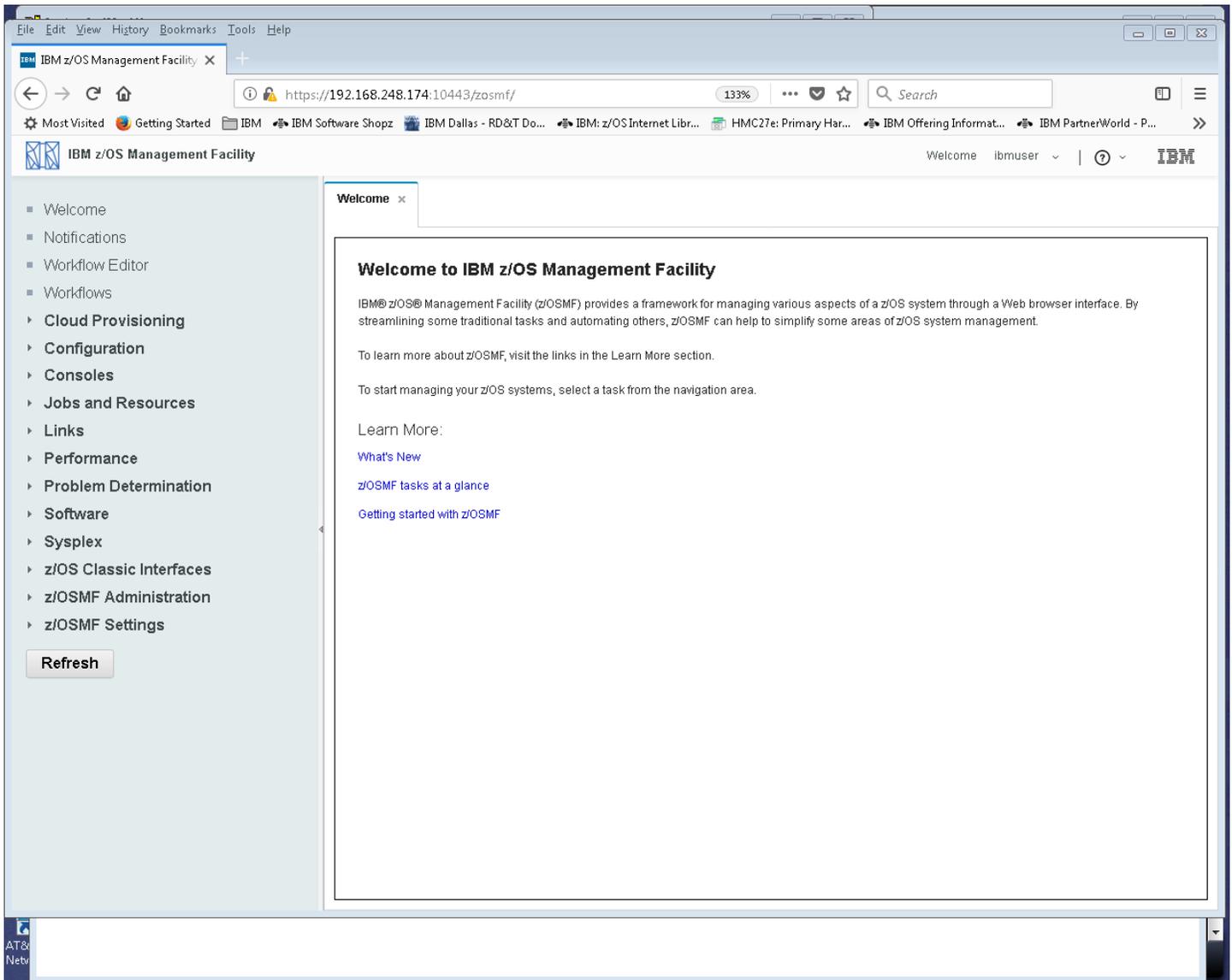
The z/OSMF console can be accessed by using the below url.

<https://s0w1.dal-ebis.ihost.com:10443/zosmf>

The initial login screen is as shown in below screenshot.

The welcome screen of z/OSMF console is shown in below screenshot.





The commands for stopping z/OSMF are listed below.

```
P IZUSVR1
P CFZCIM
P IZUANG1
```

Instructions to get Provisioning to work under z/PDT

NOTE: If doing Cloud Provisioning you should use
The AL load parm.

1. The user will need to edit their etc/hosts file on their workstation.
2. Place the ADCD IP address and the host name in /etc/hosts
ex. 192.168.248.76 S0W1.DAL-EBIS.IHOST.COM
3. Save the file
4. Logon to z/OSMF <https://S0W1.DAL-EBIS.IHOST.COM:10443/zosmf>
5. Using the left column menu Click the option Configuration
6. Then click Network Configuration Assistant
7. Select the radio button for Manage z/OS Cloud configuration
and click PROCEED
8. When the next screen appears (Work with a Cloud Domain)
click PROCEED again.
9. After the next screen appears go to the Cloud Provisioning tab on the left
and click it. Several options appear.
10. Click Marketplace and you will see the available products to subscribe to
11. Choose which ever one you want and click Subscribe
12. The next screen (Subscribe to CICS Transaction Server for z/OS will appear
13. Under option Tenant select the down arrow in the box and select Default
14. Under Subscription Details enter a description for the Provision
15. Then click OK box at the bottom.
16. The Provision will start and you will see the Marketplace again.
17. The Product you picked will have a red circle with a 1 in it.
18. Click the red circle and the next screen will appear with status of
the provision.

Steps for starting WebSphere Application Server (WAS V9.0)

It is recommended to have more than 4 GB real memory on your system and code at least 3000m (3 GB) in the devmap. IPL the system with loadparm WA and follow the below steps to bring up WAS V9.0:

- 1) Issue the below command from SDSF, to start the Deployment Manager. In SDSF, type / and hit enter to get the System Command Extension window.

```
START XADCR, JOBNAME=XADMGR, ENV=XACELL.XADMNODE.XADMGR
```

```
-- Edit Options Help --
SD
CO
N O
NCO ==> START XADCR, JOBNAME=XADMGR, ENV=XACELL.XADMNODE.XADMGR
MRO ==>
LR                                     STORELIMIT 26
LR Comment _____ ER
DR                                     1
DR Group _____ Show * _____ (F4 for list)
DR                                     More: +
DR =>
ER F5=FullScr F6=Details F7=Up F8=Down F10=Save F11=Clear F12=Cancel
N O
*** **
```

- 2) This May take several minutes, look for the below message in the System log:

```
BBOO0019I INITIALIZATION COMPLETE FOR WEBSHERE FOR Z/OS CONTROL 478 PROCESS XADMGR.
```

- 3) After receiving above message issue the next command to start the Node Agent

```
START XAACR1, JOBNAME=XAAGNT1, ENV=XACELL.XANODE1.XAAGNT1
```

- 4) This May take several minutes, look for the below message in the System log

```
BBOO0019I INITIALIZATION COMPLETE FOR WEBSHERE FOR Z/OS CONTROL 346 PROCESS XAAGNT1.
```

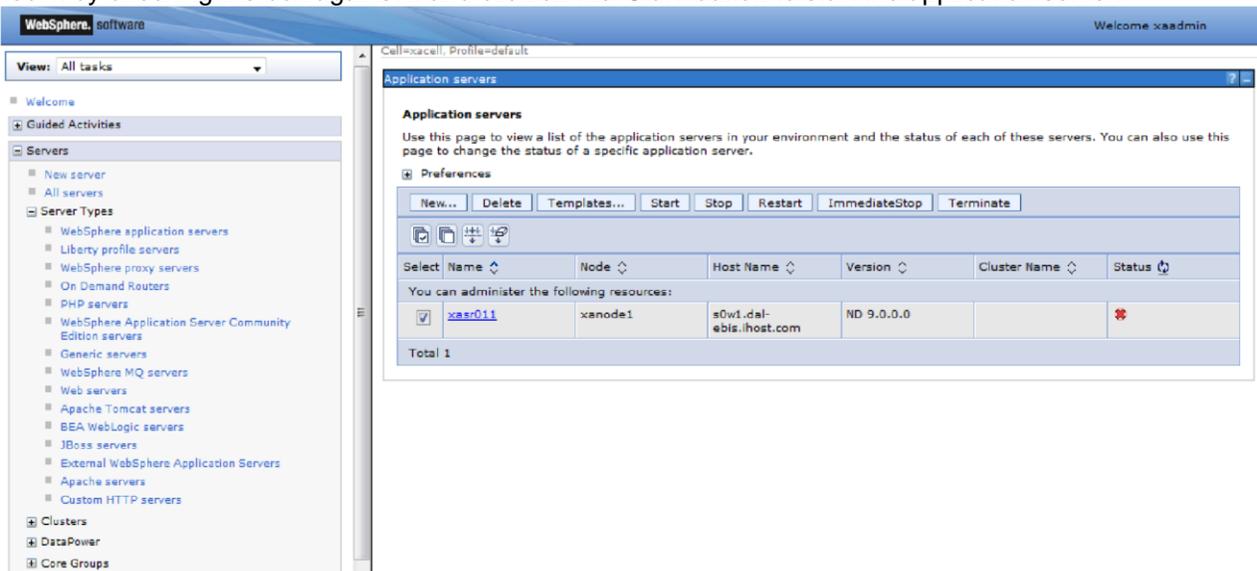
- 5) Now try to connect to the Admin console from your browser, using the below link.

<http://s0w1.dal-ebis.ihost.com:9305/ibm/console>

6) Should get a logon screen like shown below, login with userid 'xaadmin'



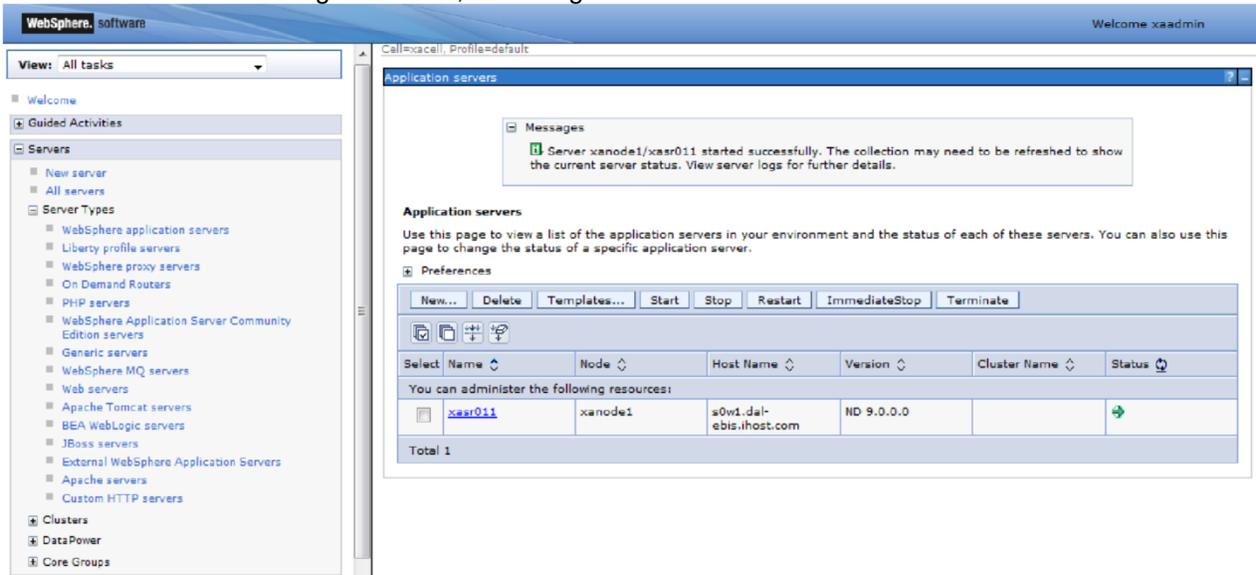
7) The Application Server can be started from the Admin console as shown below. Go to Servers → Server Types → WebSphere application servers. The server XASR011 should be listed on the right side panel. Select it by checking the box against it and click on the 'Start' button to start the application server.



8) This May take several minutes, look for the below message in the System log

```
BBOO0019I INITIALIZATION COMPLETE FOR WEBSPPHERE FOR Z/OS CONTROL 541 PROCESS XASR011.
```

The status of the server turns into green arrow, indicating that it is started now.



- 9) The application server can be stopped from the browser itself, by selecting the server and clicking on the 'Stop' button. Click OK on the confirmation message to stop the server. Alternatively, a stop command can also be issued from the SDSF:

```
/P XASR011
```

- 10) Look for the below message to confirm that the application server is shut down normally.

```
BBOO0002I WEBSPPHERE FOR Z/OS CONTROL PROCESS XASR011 ENDED NORMALLY.
```

- 11) Issue the below command, to stop the Deployment Manager and Node Agent

```
/P XADEMN
```

- 12) This will take several minutes, look for the below message for normal completion.

```
BBOO0008I WEBSPPHERE FOR Z/OS DAEMON S0W1 ENDED NORMALLY.
```

LOADPARMs option

Table Listing of available pre-configured distributed LOADPARMS.

LOADPARM	Description
CS	CLPA and Cold start of JES2. Base z/OS system functions i.e. no CICS, DB2, IMS, WAS, etc.
00	CLPA and Warm start of JES2. Base z/OS system functions i.e. no CICS, DB2, IMS, WAS, etc.
WS	CLPA and Warm start of JES2. Base z/OS system functions i.e. no CICS, DB2, IMS, WAS, etc.
CI	CLPA and Warm start of JES2. Loads CICS 5.6 and 5.5 libraries. Starts up CICS 5.6, z/OSMF and RDz.

DB	CLPA and Warm start of JES2. Loads DB2 V12 and V11 libraries. Starts up DB2 V12, z/OSMF and RDz.
IM	CLPA and Warm start of JES2. Loads IMS 15 and 14 libraries. Starts up IMS 15, z/OSMF and RDz.
IZ	CLPA and Warm start of JES2. Starts up z/OSMF and RDz.
WA	CLPA and Warm start of JES2. Loads WAS v9 . Starts up z/OSMF, RDz. WAS needs to be manually started.
AL	NOTE: If doing Cloud Provisioning you should use The AL load parm. CLPA and Warm start of JES2. Loads all middleware libraries. Starts up CICS 5.6, DB2 V12, IMS 15, z/OSMF, RDz and UCD. WAS needs to be manually started.
DC	CLPA and Cold start of JES2. Loads CICS, DB2 libraries. Starts up CICS 5.6, DB2 V12, UCD 7.1.1 , RTC 7.0.1, RDz and UCD.
ZE	C CLPA and Warm start of JES2. Loads all middleware libraries. Starts up CICS 5.6, DB2 V12, IMS 15, z/OSMF, RDz and UCD. WAS needs to be manually started.