Using **StepOne** you'll explore the DNA of the most powerful Central Processing Complex (CPC) available to your business and governmental clients, the IBM z/Enterprise.

StepOne

2.0

Getting Started

Contact us for additional information:

NewEra Software Technical Support

800-421-5035 or 408-520-7100
Or text support requests to 669-888-5061

support@newera.com

www.newera.com

Rev: 2023-9-18

1 Foreword

1.1 Copyright, Trademark and Legal Notices

1.1.1 Copyrights

1.1.2 License Agreement

1.1.3 Trademarks and Copyrights of Others

1.2 General Information

1.2.1 Who Should Read this Document

Those given the responsibility to install, maintain, and use **StepOne** should read this document. It will explain in detail how it is installed, configured, maintained and optionally used with other ICE core functions. In addition, this Getting Started Guide will provide product use exercises.

1.2.2 Other Documents and Resources

In addition to this document, new users will benefit from the content of these three additional documents:

- The **StepOne** Read Me;
- The Image FOCUS User Guide.

All of these documents are available in PDF format as downloads on the NewEra web site or can be requested directly by contacting NewEra Technical Support by email at the following email address: support@newera.com.

1.2.3 Online Help – PFK1

In addition to the information contained in this document and others, **StepOne** user may access an Online Help Tutorial for any given panel by pressing PFK1 once the panel is fully displayed.

1.2.4 Reporting Problems

When reporting a **StepOne** problem to NewEra Technical Support, please provide the following information so that we may resolve the issue expeditiously.

- A Screen Image of the TSO or IFO Logon Panel;
- A Screen Image The **StepOne** Setup Configuration;
- Any additional information requested by Technical Support;

1.2.5 Technical Support Information

Around-the-clock-support	NewEra Software is dedicated to providing the highest level of technical support to meet our customers' growing needs. In order to meet these needs, NewEra provides technical support, 7 days a week, 24 hours a day.
Reach us by Telephone during Business Hours	Please use the following phone numbers to reach our technical support staff during normal business hours (6 AM to 4 PM Pacific Time): • In North America, dial 1-800-421-5035 • Outside North America, dial 1-408-520-7100 • Support inquiries may also be texted to 669-888-5061
Reach us by Telephone during non-Business Hours	In case of an emergency, during non-business hours, phone the above numbers to receive instructions on how to contact a Technical Support Representative or a Technical Support Manager.
Sending Email	Our technical support staff can be reached by email at support@newera.com. Email messages will be answered by the next business day. Product technical questions or product recommendations may be sent via email.
Help through the NewEra website	You can access technical support from www.newera.com. Click the Support tab at the top of the screen to reach our Technical Support Request page.
Service Levels	NewEra is committed to providing the highest level of quality to our customers by adopting the following criteria for responding to customer requests: • All critical questions received by phone during working hours will be answered within 15 minutes of receiving the request; • Technical questions sent by email, or messages sent through our Technical Support Request page, will be answered by the next business day.
We Want Your Suggestions!	NewEra understands the significance of providing our customers with the highest quality support and welcomes all suggestions as to how we may improve Technical Support.

1.2.6 About StepOne

StepOne is a software audit tool fully supported and licensed by NewEra Software, Inc. that is designed specifically for Information System Auditors facing the challenge of auditing the IBM zEnterprise.

Using **StepOne** you'll explore the DNA of the most powerful Central Processing Complex (CPC) available to your business and governmental clients. The interactive native environment used by **StepOne** allows you to dynamically and automatically create a zEnterprise Configuration Baseline.

Think of this Configuration Baseline as a platform of knowledge upon which you, your team and your client can base ALL more detailed system investigation and remediation. At your fingertips, a click away, are the specifics of all hardware configurations used for Power on Reset (POR) and operating system configurations used for Initial Program Loads (IPL).

For the first time you'll enjoy the advantages of seeing the zEnterprise Fabric from a MACRO perspective. The significance of each individual configuration component and its potential impact on the overall integrity of each Logical Partition (LPAR), the primary control boundary of the zEnterprise, becomes immediately clear.

1.3 System Requirements

1.3.1 Prerequisites

To use **StepOne**, you will need the following:

- zEnterprise Hardware;
- z/OS Operating System;
- Valid TSO UserId;
- Read access authority of the IODF Dataset and
- Authority to allocate datasets using a TSO UserId as a High Level Qualifier (HLQ)

1.3.2 The License Key

No License Key is required to activate **StepOne**. **StepOne** functions will be unlocked automatically each time the installation assigned password is used during **StepOne** logon.

1.3.3 Releases Prior to Release 16.0 of ICE

If you are planning to use **StepOne** in conjunction with the Integrity Controls Environment (ICE) you will need to upgrade to Release 16.0. When upgrading special care should be taken when you do upgrade to 16.0 to remove all pre-existing ICE Libraries. All pre-existing Inspection Reports (logs) and Package/Blueprints (packages) are fully supported in Release 16.0.

1.4 Things to look out for

1.4.1 Application Datasets

StepOne will allocate and subsequently delete its working datasets. Certain datasets used to store user specified values will persist from one execution to the next. You should evaluate the need to manually delete these prior to the termination of your engagement.

1.4.2 Application Password

The default **StepOne** logon Password is 'AMAZING'. It is recommended that you evaluate the need for changing this password (See Configuring StepOne) in order to conform its use to match the requirements of your engagement.

1.4.3 Application Resources

StepOne is a memory intensive application. It is best practice to specify the maximum allowable region size when you logon to TSO or Image FOCUS (IFO).

1.4.4 External Security Manager Issues

You will need READ access to the running system IODF Dataset and any other IODF Dataset you may specify when configuring StepOne. In addition you will need to be granted the right to allocate working datasets using your TSO Userid and/or one or more dataset qualifiers you specified when configuring **StepOne**.

1.4.5 ReadMe File

For additional assistance concerning product installation, review the "ReadMe" file associated with the product download.

1.5 Product Limitations

This release of **StepOne** has the following restrictions and/or limitations. If you are uncertain as to how this may affect the operation and/or function of **StepOne** in your z/OS environment, contact NewEra Technical Support at support@newera.com for assistance.

- First, if you have extremely large IODF datasets, there is a potential to exhaust memory during the extraction process. You can change your memory allocation by modifying your region size (you will need to LOGOFF of TSO, then LOGON with a new region size).
- Second, **StepOne** is designed to produce a number of panels, reports and worksheets. Some of the lowest level reporting is not fully implemented in this release. When these report options are selected, a message is displayed.
- Third, **StepOne** advance functions (Component Inspections, Health Checks and Configuration Change History) are dependent on the availability of the Integrity Controls Environment (ICE). When these functions are selected and ICE is not found, a message is displayed.

1.6 Recent Enhancements to StepOne

- Each Operating System Configuration Program (OSCP) is identified by a unique Configuration Identifier. This "ConfigId" is called by name from the IODF Keyword that appears in the LOADxx member used during the Initial Program Load (IPL) of an LPAR. With **StepOne**, the time consuming but required task of matching ConfigIds and LOADxx members in order to identify configuration orphans is fast, efficient, and totally automated.

1.7 Planned Enhancements

- Lowest Level Reporting – Completion of the **StepOne** Report Set.
- Email Support – Addition of Email Support when operational inside ICE.
- Baseline Retention – Retention of the IODF Extract as a configuration baseline that can be automatically compared with the current configuration to identify configuration changes between engagements.

1.8 Solving Real-World Control Problems

- "…the conventional wisdom of many Audit Plans and Tools ignore the obvious and begin deep in the details of the Operating System (OS) and External Security Manager (ESM). In doing so, these Plans and Tools often fail to establish an independently verifiable System Baseline. Without such a repository of system identity and configuration relationships, zEnterprise System Auditors can become disoriented, losing their way. Incredibly **StepOne** sets us on the right path each time. We save time; our clients save money…"

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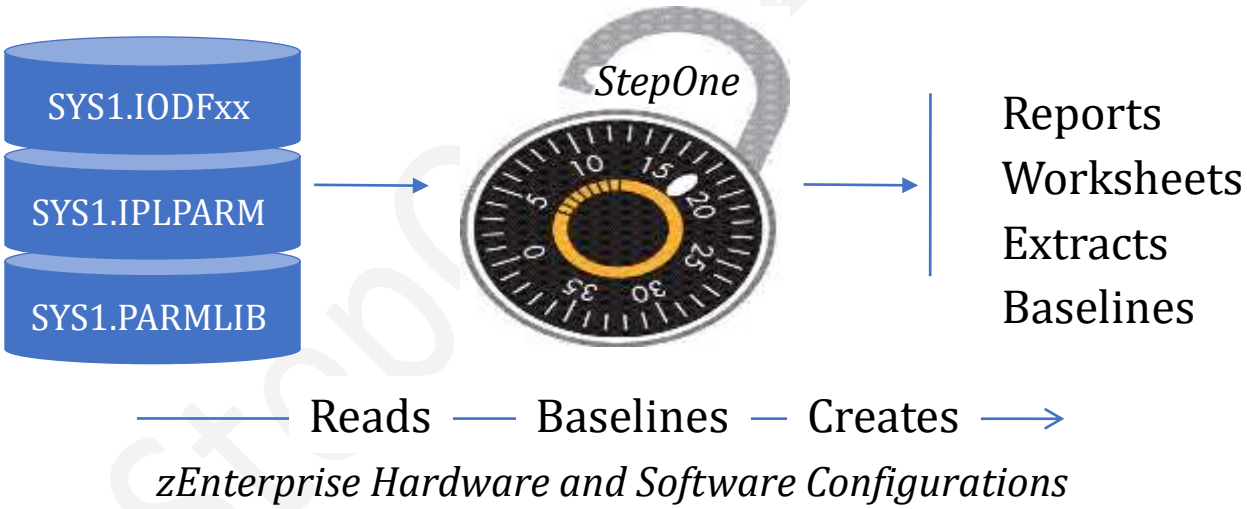
3 Overview

IBM's zEnterprise Server, AKA the Mainframe, and its companion Operating System z/OS combine to create the most powerful and secure transaction processing environment available to your clients. With a single server capable of supporting thousands of users, accessing hundreds of databases and generating billions of financial transactions per day, the z/Enterprise is an Audit target of material interest and should be included within the scope of any Information Technology Audit.

To understand the zEnterprise you need to envision the use and function of its resources - processors, channel paths, controllers and devices - and how those resources are connected, each to the other, to form the "Fabric" of interconnectivity that defines for each Logical Partition (LPAR) both its resource limits and its potential for resource sharing. To accomplish this, **StepOne** links you directly to the various Configuration Control Programs (CP) that reside at the heart of the system in the Input/Output Definition File (IODF), the Absolute zEnterprise Control Point.



As available and needed, StepOne will access other zEnterprise configuration components – IPLPARM and PARMLIB – to extend your view from the outer edge of the Fabric to the beginning of a z/OS IPL.

3.1 Download

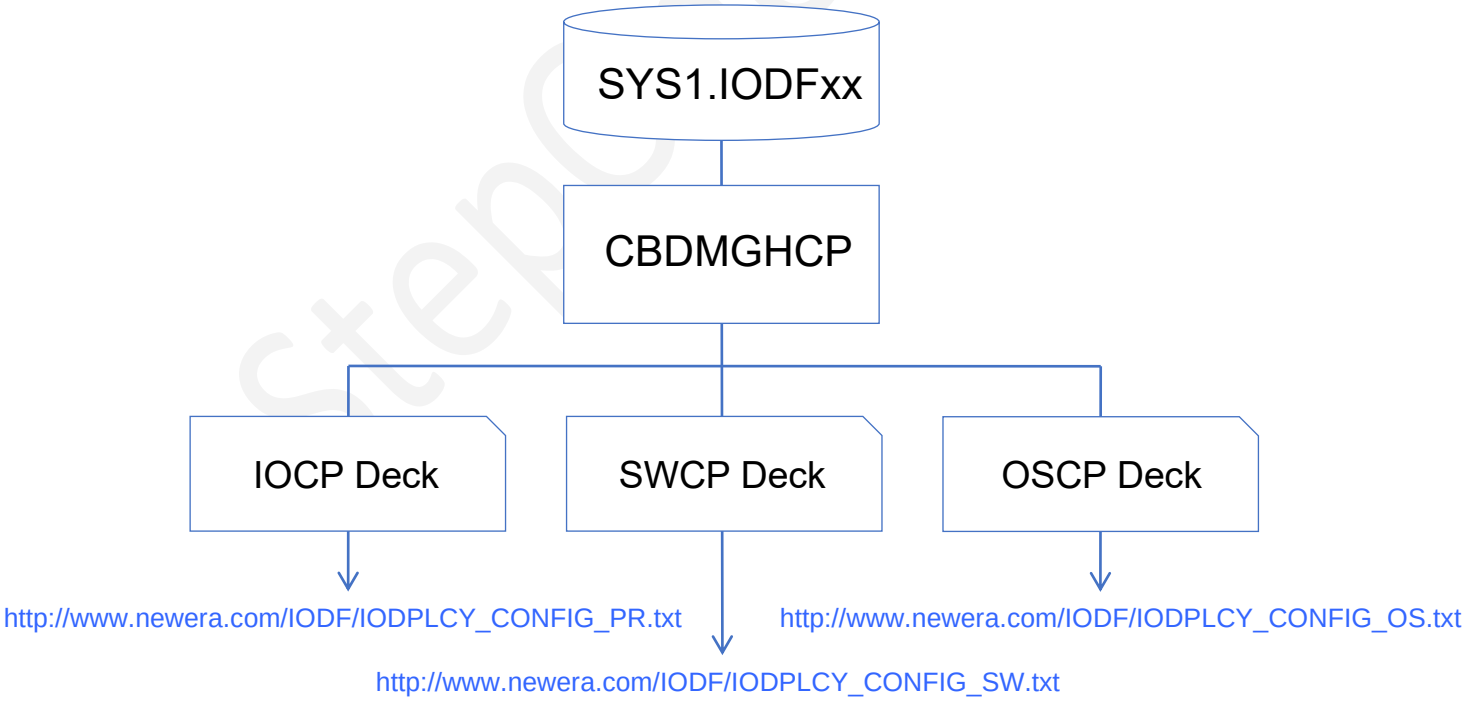
StepOne a Rexx Executable and it and its Documentation are distributed as a web download file. The **StepOne** Executable is in clear text format while the Documentation is a PDF. Once uploaded to the zEnterprise, the Executable is run directly from the z/OS Time Sharing Option (TSO) Command Shell, generally available under Option 6 of TSO. The Documentation is viewed using the Adobe Acrobat Reader.

3.2 Configuration

StepOne is uniquely configured for each installation by updating a set of Keyword values found in the heading of the Rexx Executable. The **StepOne** documentation and/or your system programmer can help you select settings that best satisfy your specific needs. Settings can be updated repeatedly at any time. Access to the named or discovered IODF Dataset is accomplished using the standard IBM utility module CBDMGHCP. All working datasets are allocated using the TSO UserId of the user executing and are deleted from the system automatically when users terminate their **StepOne** session. **StepOne** has no appreciable resource requirements and will have little or no noticeable impact on overall system performance.

3.3 Extraction

When access to a targeted IODF is available **StepOne** will automatically extract its Configuration Programs (CP) and temporarily store them for use during an active session. The module used for the extraction is provided by IBM and called by **StepOne** as shown below. Those that would like to test the extraction process before actually using **StepOne** should follow the links shown below to download a specific extractor and its operational instructions.



3.4 z/Enterprise Configuration Review

Only when the Configuration Baseline is fully understood should you proceed with the selection of one or more LPAR Audit Targets. The collections of Exhibits described in Section 7 are designed to make the identification and selection of LPAR Targets meaningful, requiring a minimum of assistance from your assigned System Programmer.

4 Configuration

The configuration of each **StepOne** Application installation is controlled by a set of paired Keywords and their assigned values. These are found at the top of the application itself; see the Sample Configuration Records at the end of the section.

To configure **StepOne** open the application in TEXT Editor (TSO/ISPF 3.4 will work) and supply required or optional values as defined below:

4.1 Required Keywords and their Values

A value is required for each of the following. Where applicable, if you would like StepOne to determine a value, set the value to ***AUTO***

4.1.1 IODFDNS

Set this value to ***AUTO*** or to the fully qualified name of a target IODF Dataset. If ***AUTO*** is used the target IODF Dataset will be that currently in use by the running system.

4.1.2 WORKHLQ

Set this value to ***AUTO*** or to the prefix to be used by **StepOne** in its allocation of its temporary working datasets. If ***AUTO*** is used **StepOne** will set the prefix to the users TsoUserId.

4.1.3 OPTION6

Set this value to 'YES' to indicate that the StepOne Application is to be called from TSO and/or IFO Option 6. Set value to 'NOP' if the application is to be called from a BATCH execution process.

4.1.4 SHOWPANEL

When **StepOne** is called from TSO and/or IFO Option 6 set this value to 'YES' to display the application's Interactive Interface. To only display a defined report, set the value to 'NOP'.

4.1.5 PASSWORD

When **StepOne** is configured to operate interactively it is best practice to assign the Application Password using this keyword. Change the password as needed to satisfy the requirements of your engagement. To bypass password processing set the value to a null (‘’).

4.2 Optional Keywords and their Values

4.2.1 PROCID

Used in conjunction with batch report processing this keyword names and limits processing to one or more Central Processing Complexes (CPC) contained within an IODF.

4.2.2 LPARID

Used in conjunction with batch report processing this keyword names and limits processing to one or more Logical Partitions (LPAR) within a named Central Processing Complex (CPC) contained within an IODF.

4.2.3 RLEVEL

Used in conjunction with batch report processing this keyword defines the Report Level that will be used to build and display a configuration path report.

4.2.4 HEADER01 – 10

Used in conjunction with configuration path reporting these Keywords may be used to specify a client report heading that will appear in all reports. Headings are automatically centered in the report.

4.2.5 LOADSN01 – 10

These are special purpose keywords that allow **StepOne** to extend its processing and extraction beyond SYS1-9.IPLPARM and SYS1.PARMLIB, the normal resident locations of the LOADxx members. If such members are to be included in a configuration review, use these keywords to specify their fully qualified dataset value.

4.3 Sample Configuration Records

```
/******************************** REXX *************** 19611 ********/
/*          INTEGRITY CONTROL ENVIRONMENT APPLICATIONS - STEPONE      */
/*********************************************************************/
/*  NewEra Software, Inc.  Morgan Hill, CA 95037 - 408.520.7100       */
/*  Copyright 2001-2017, 2018, 2019, 2020, & 2021 All Rights Reserved */
/*  Last Updated 08.30.2013 Updated By Paul Robichaux prr@newera.com  */
/*********************************************************************/
/*       Supply the following Required Dataset Name or Qualifier     */
/*********************************************************************/

IODFDSN = PROBI1.IODF87          ;     WORKHLQ = IFO.IFOP

/* USE '*AUTO*' FOR RUNNING SYSTEM        USE '*AUTO*' FOR TSO USERID */

/*********************************************************************/
/*               Optional Control Execution Environment              */
/*********************************************************************/

OPTION6 = 'YES'                  ;     SHOWPANEL = 'YES'

/* USE 'NOP' FOR BATCH PROCESS            USE 'YES' FOR INTERACTIVE   */

/*********************************************************************/
/*                   Optional StepOne Access Password                */
/*********************************************************************/

PASSWORD= 'Amazing'

/* Set PASSSWORD= '' TO BYPASS APPLICATION PASSWORD PROCESSING        */

/*********************************************************************/
/*        Optionally supply the following configuration names        */
/*********************************************************************/

PROCID = 'CPUDA'                 ;     LPARID = 'DBOC'

/* '*AUTO*' TO SHOW ALL PROCESSORS  ;     '*AUTO*' TO SHOW ALL LPARS  */
/* OR USE 'PROCID,PROCID,ETC'             OR USE 'LPARID,LPARID,ETC'  */

/*********************************************************************/
/*         Optionally Modify the Depth of the Reporting Level        */
/*********************************************************************/

RLEVEL = '*AUTO*'

/* '*AUTO*' TO REPORT IOCP CONFIGURATION INFORMATION AT ALL LEVELS    */
/* OR USE 'NAME' TO TERMINATE REPORTING AT PROCESSORS INFORMATION     */
/* OR USE 'LCSS' TO TERMINATE REPORTING AT LOGICAL CHANNEL SUBSYSTEMS */
/* OR USE 'LPAR' TO TERMINATE REPORTING AT LOGICAL PARTITIONS         */
/* OR USE 'PATH' TO TERMINATE REPORTING AT CHANNEL PATH IDENTIFIER    */
/* OR USE 'CTLU' TO TERMINATE REPORTING AT CONTROL UNITS              */
/* OR USE 'UNIT' TO TERMINATE REPORTING AT IODEVICE UNITS (LOWEST)    */
/* OR USE 'UCWS' ADD DEVICE UCB DETAIL TO UNIT LEVEL REPORTING        */

/*********************************************************************/
/*              Optionally Setup a Master Report Header              */
/*********************************************************************/
```

```
HEADER01= 'StepOne'
HEADER02= ''
HEADER03= ''
HEADER04= ''
HEADER05= ''
HEADER06= ''
HEADER07= ''
HEADER08= ''
HEADER09= ''
HEADER10= ''

/* ADD TEXT AS NEEDED, BLANKS ARE BLANK LINES, ALL LINES SELF-CENTER  */

/*********************************************************************/
/*                    Optional Loadxx Member Datasets                */
/*********************************************************************/

LOADSN01= 'PROBI1.SYS1.IPLPARM'
LOADSN02= 'PROBI1.SYS1.PARMLIB'
LOADSN03= ''
LOADSN04= ''
LOADSN05= ''
LOADSN06= ''
LOADSN07= ''
LOADSN08= ''
LOADSN09= ''
LOADSN10= ''

/* Set LOADDXX= '' TO BYPASS ADDING DATASET TO LOADXX SEARCH ORDER    */

/*********************************************************************/
/*            PLEASE, NO MODIFICATIONS BELOW THIS HEADER             */
/*          Program Defaults, Subroutines and Logic Follow           */
/*********************************************************************/
```

4.4 The Next Step

When you and/or your assigned z/OS System Programmer have configured **StepOne** and you have been given a TSO User ID and the required dataset allocation authority, you ready to Logon.

5 Logging On

5.1 Under TSO or IFO Option 6

Using the TSO Command Shell, TSO or IFO Option 6, call the STEPONE application by entering its fully qualified dataset and/or dataset(member) name on the panel command line, see the example below, and pressing enter.

EX 'your_userid.stepone'
or
EX 'your_userid.workdsn(stepone)'

If the PASSWORD Keyword is specified as part of the **StepOne** configuration this action would immediately display the Password Entry Panel. If the PASSWORD Keyword is not active (PASSWORD= ' '), the panel is bypassed and IODF extraction begins immediately.

If the panel is displayed, use PFK1 to display panel specific help and then PFK3 to return.

5.2 The Password Entry Panel

```
          StepOne  2.0 - zEnterprise Configuration Baseline


          -------------- Application Access Control --------------

                              Enter Password ________

SMFid: S0W1        System: S0W1     Sysplex: SVSCPLEX Serial: 0CBBB12097
          z/OS: V2R4 Last IPLed: MONDAY 09.30.2020 15:42:71

      Running IODF: SYS1.IODF00        Defined IODF: PROBI1.IODF87


            The Integrity Control Environment  ICE  is Active

          System Security provided by IBM - RACF Release: 7760
```

5.2.1 Entering the Password

If the PASSWORD Keyword specified during the configuration step is matched, this action will immediately begin IODF Extraction; allow 1-3 minutes. When extraction is finished the

StepOne Primary Menu is displayed. If the PASSWORD is not matched the Password Entry Panel is redisplayed.

5.2.2 Selecting the Running IODF

By default **StepOne** will extract and process Configuration Programs (CP) found in the defined/configured IODF. However, if the Running System's IODF is different and it is the preferred target, it may be selected, after the password has been entered, by placing the cursor under the Running IODF dataset name and pressing enter.

This action will cause **StepOne** to process the Running IODF and not the Defined IODF.

5.2.3 The Password Entry Panel Decoded

The Password Entry Panel contains the following Information:

Heading:	Description
SMFId	The System Management Identifier of the system running **StepOne.**
SYSTEM	The name assigned to the System running **StepOne** at IPL time.
SYSPLEX	The name assigned to the Sysplex in which the System is running.
SERIAL	The Serial Number of the Central Processing Complex housing the Sysplex.
z/OS	The Release Level of z/OS used by the System/Sysplex pair.
LAST IPL	The Date and Time of the last successful IPL of the System/Sysplex pair.
RUNNING	The full qualified Dataset name of the IODF Dataset used by running system.
DEFINED	The IODF Dataset defined to StepOne during configuration.

When the Integrity Controls Environment is active the Password Entry Panel contains the following additional Information:

Heading:	Description
ICE Active	Indicates that StepOne is running in the Integrity Controls Environment.
ESM Release	The Name and Release Level of the External Security Manager (ESM).

5.3 The Next Step

Once the IODF extraction is complete and the StepOne Primary Menu is displayed you will want to take a few minutes to familiarize yourself with the zEnterprise Configuration information it contains.

5.3.1 Note this possible Warning Message

If the Serial Number of the running system, as displayed in the Password Entry Panel, does not match any of the CPC Serial Numbers specified in the target IODF, then a warning message is displayed. This detected mismatch has no effect on the extraction process or subsequent use of StepOne.

If your target of interest is the running system, exit your current session and logon again. When you return to the Password Panel enter your password but before you press enter, place the cursor under the Running System IODF value and then press enter. This set of actions will now result in the extraction of the Running System's IODF. If the Warning Message persists consult with your assigned System Programmer.

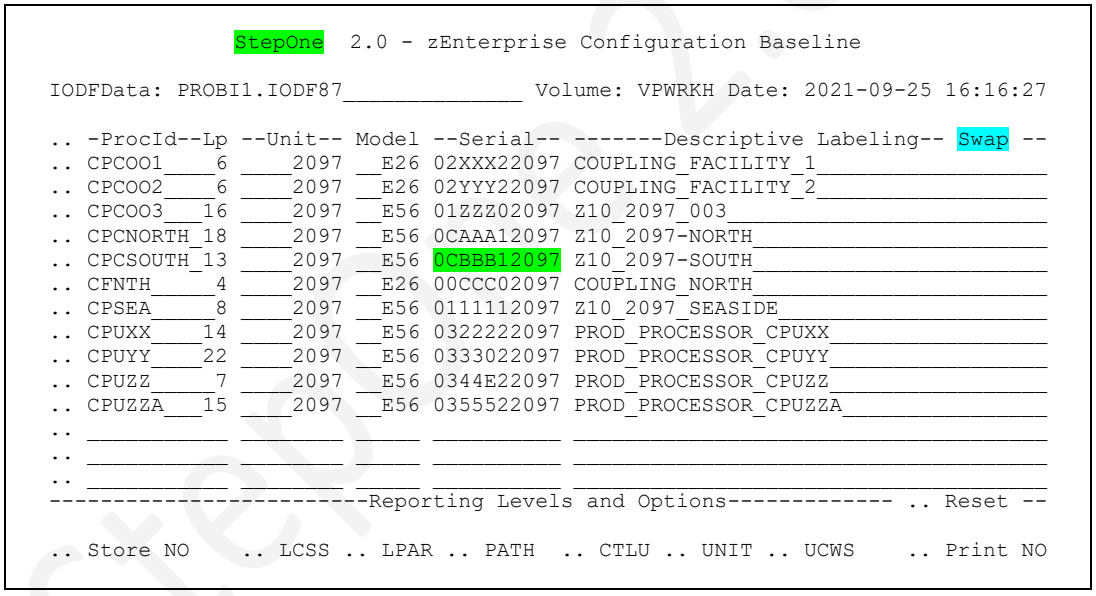
6 Familiarization

Following a successful logon and IODF extraction the StepOne Primary Menu is displayed.

6.1 The Primary Menu

The **StepOne** Primary Menu shows a summary of the Central Processing Complex (CPC) Units contained in the target IODF. In the sample Primary Menu shown below, eleven CPC Units are listed.

Once the panel is displayed use PFK1 to display panel specific help and then PFK3 to return.



```
                StepOne  2.0 - zEnterprise Configuration Baseline

IODFData: PROBI1.IODF87_______________ Volume: VPWRKH Date: 2021-09-25 16:16:27

.. -ProcId--Lp --Unit-- Model --Serial-- -------Descriptive Labeling-- Swap --
.. CPCOO1____6 ____2097 __E26 02XXX22097 COUPLING_FACILITY_1_____________________
.. CPCOO2____6 ____2097 __E26 02YYY22097 COUPLING_FACILITY_2_____________________
.. CPCOO3___16 ____2097 __E56 01ZZZ02097 Z10_2097_003___________________________
.. CPCNORTH_18 ____2097 __E56 0CAAA12097 Z10_2097-NORTH_________________________
.. CPCSOUTH_13 ____2097 __E56 0CBBB12097 Z10_2097-SOUTH_________________________
.. CFNTH_____4 ____2097 __E26 00CCC02097 COUPLING_NORTH__________________________
.. CPSEA_____8 ____2097 __E56 0111112097 Z10_2097_SEASIDE_______________________
.. CPUXX____14 ____2097 __E56 0322222097 PROD_PROCESSOR_CPUXX___________________
.. CPUYY____22 ____2097 __E56 0333022097 PROD_PROCESSOR_CPUYY___________________
.. CPUZZ_____7 ____2097 __E56 0344E22097 PROD_PROCESSOR_CPUZZ___________________
.. CPUZZA___15 ____2097 __E56 0355522097 PROD_PROCESSOR_CPUZZA__________________
.. ____________ ________ ____ __________ ______________________________________
.. ____________ ________ ____ __________ ______________________________________
.. ____________ ________ ____ __________ ______________________________________
-------------------------Reporting Levels and Options------------ .. Reset --

.. Store NO    .. LCSS .. LPAR .. PATH  .. CTLU .. UNIT .. UCWS    .. Print NO
```

If a Serial Number match is found when comparing the Running System's Serial Number to those found within the targeted IODF, the Serial Number matching the target is highlighted.

6.1.1 SWAP

Take note of the Descriptive Labeling 'Swap' option shown in the upper right of the panel. Cursor under this white text and press enter to swap the processor descriptions to an alternate set of descriptive text. To return to the original text cursor under the now red text and press enter.

The Primary Menu Decoded

6.1.1.1 Information Descriptors

The Primary Menu contains the following Information Descriptors:

Heading:	Description
IODFData	The fully qualified name of the selected IODF Dataset.
IODFDate	The date when the selected IODF Dataset was last updated.
Procid	The ID assigned to the Central Processing Complex (CPC).
Lp	The Number of Logical Partitions (LPAR) within a named CPC.
Unit	The IBM assigned Unit description of the named CPC.
Model	The IBM assigned Model description of the named CPC.
Serial	The IBM assigned Serial Number of the named CPC.
Description	The textual description of the CPC.

6.1.1.2 Selectable Reports

The Primary Menu contains the following Selectable Reports:

Heading:	Description
LCSS	Used to select the LCSS Configuration Report.
LPAR	Used to select the LCSS + LPAR Configuration Report.
PATH	Used to select the LCSS + LPAR + PATH Configuration Report.
CTLU	Used to select the LCSS + LPAR + PATH + CTLU Configuration Report.
UNIT	Used to select the LCSS + LPAR + PATH + CTLU + UNIT Configuration Report.
UCWS	Used to add UCW information to the UNIT Configuration Report.

6.1.1.3 Selectable Options

The Primary Menu contains the following Selectable Options:

Heading:	Description
Store	Displays the Move/Copy Utility following Configuration Report display.
Print	Displays the Hardcopy Utility following Configuration Report display.
Reset	Resets the Primary Menu to its default state.

6.1.2 Logical Partition Exploration

Enter either ‘I’ or ‘O ‘on the command line before a Procid Target and press enter to display either the IOCP LPAR Interface or the OSCP LPAR Interface.

6.2 The IOCP LPAR Interface

The IOCP LPAR Interface presents a listing of Logical Partitions by assigned Procid, LCSS, LPAR Number and Name and the LPARs Description as defined within the context of the targeted Processor (Procid).

```
        StepOne  2.0 - zEnterprise Configuration Base Row 1 to 15 of 16
                                -LCSS Partitions-
---------------- Configuration Worksheet - Lpars in CPC:CPCOO1 ----------------
Row Selection: Select Lpar Baseline
- Line -------------------Logical Partitions----------------- -Active Elements-
_ ____ ________ _ _ *_______ ___________________________________ _____ _____ _____
S Numb -ProcId- L N --Lpar-- --------Descriptive Text--------- Chpid Cntlu -IOD-
_ 0001 CPCOO1   0 1 AXOC     OS,SXPLEX                           147   348   188
_ 0002 CPCOO1   0 2 FGBR     OS,SYPLEX                           147   348   188
_ 0003 CPCOO1   0 3 TGBW     OS,SZPLEX                           147   348   188
_ 0046 CPCOO1   3 1 RTGP     OS,High_Availibility_Lpar           137   207   145
_ 0047 CPCOO1   3 2 RTTP     OS,XXX High_Impact_Lpar             134   209   145
_ 0048 CPCOO1   3 3 DDDB     OS,YYY_High_Impact_Lpar             134   209   145
_ 0049 CPCOO1   3 4 RTSP     OS,ZZZ_High_Impact_Lpar             132   205   145
_ 0050 CPCOO1   3 5 CFRX     CF,Primary_CF                         3     0     0
_ 0051 CPCOO1   3 6 WDCP     OS,Auto_Finance_Lpar                136   211   145
_ 0052 CPCOO1   3 7 DFER     OS,Health_Insurance_Lpar            141   214   146
_ 0053 CPCOO1   3 8 HJKU     OS,XXX_Low_Impact_Lpar              141   210   146
_ 0054 CPCOO1   3 9 NTH1     CF,SECONDARY_CF_Lpar                  6     0     0
_ 0055 CPCOO1   3 A STH1     OS,YYY_Low_Impact_Lpar              132   205   145
_ 0056 CPCOO1   3 B EST1     OS,ZZZ_Low_Impact_Lpar              141   210   146
_ 0057 CPCOO1   3 C WST1     OS,INTERNAL_Control_Lpar            134   209   145
_
```

A summary of each LPARs Active Path Elements is presented in the columns headed: Chpid, Cntlu and IOD. Cursor under any specific Active Element, shown in white text, and press enter to display a detailed Component Worksheet listing all of the elements that compose your selection. Use PFK3 to return.

6.2.1.1 Shared Configuration Elements

If you would like to determine which LPARs share Configuration Elements within the selected CPC with another LPAR you must first establish an LPAR Baseline. To do this select the Baseline Target by placing an ‘S’ before LPAR Target and press enter. This action will redisplay the panel with values associated with the selected LPAR shown above the column headers and highlighted in RED. The ‘-Active Element-‘ Header will now read ‘-Shared Elements-’ and the values shown below it: Chpid, Cntlu, I/O should now be read as the configuration shared by an LPAR with the Baseline LPAR.

```
        StepOne  2.0 - zEnterprise Configuration Base Row 1 to 15 of 16
                                -LCSS Partitions-
---------------- Configuration Worksheet - Lpars in CPC:CPCOO1 ----------------
Row Selection: Select Lpar Baseline
- Line -------------------Logical Partitions----------------- -Shared Elements-
_ 0047 CPCOO1__ 3 2 RTTP____ OS,XXX High_Impact_Lpar_________ __134 __209 __145
S Numb -ProcId- L N --Lpar-- --------Descriptive Text-------- Chpid Cntlu -IOD-
_ 0001 CPCOO1   0 1 AXOC     OS,SXPLEX                          106     6     5
_ 0002 CPCOO1   0 2 FGBR     OS,SYPLEX                          106     6     5
_ 0003 CPCOO1   0 3 TGBW     OS,SZPLEX                          106     6     5
_ 0046 CPCOO1   3 1 RTGP     OS,High_Availibility_Lpar          134   209   145
_ 0047 CPCOO1   3 2 RTTP     OS,XXX High_Impact_Lpar            134   209   145
_ 0048 CPCOO1   3 3 DDDB     OS,YYY_High_Impact_Lpar            134   209   145
_ 0049 CPCOO1   3 4 RTSP     OS,ZZZ_High_Impact_Lpar            132   205   145
_ 0050 CPCOO1   3 5 CFRX     CF,Primary_CF                        0     0     0
_ 0051 CPCOO1   3 6 WDCP     OS,Auto_Finance_Lpar               134   209   145
_ 0052 CPCOO1   3 7 DFER     OS,Health_Insurance_Lpar           134   209   145
_ 0053 CPCOO1   3 8 HJKU     OS,XXX_Low_Impact_Lpar             134   209   145
_ 0054 CPCOO1   3 9 NTH1     CF,SECONDARY_CF_Lpar                 0     0     0
_ 0055 CPCOO1   3 A STH1     OS,YYY_Low_Impact_Lpar             132   205   145
_ 0056 CPCOO1   3 B EST1     OS,ZZZ_Low_Impact_Lpar             134   209   145
```

To switch your view to non-shared elements press the enter key again. Note that the LPAR Baseline values above the column headers are now shown in YELLOW. The '-Shared Elements-' will now read '-Unique Elements-' and the values shown below it: Chpid, Cntlu, I/O should now be read as configured uniquely to an LPAR when compared to the Baseline LPAR.

6.2.1.1 Unique Configuration Elements

Press enter again to toggle back to the prior element view i.e. between the Shared and Unique Configuration Elements relative to the selected LPAR Baseline. Use PFK3 to return to the Active Element View.

```
        StepOne  2.0 - zEnterprise Configuration Base Row 1 to 15 of 16
                                -LCSS Partitions-
---------------- Configuration Worksheet - Lpars in CPC:CPCOO1 ----------------
Row Selection: Select Lpar Baseline
- Line -------------------Logical Partitions----------------- -Unique Elements-
_ 0047 CPCOO1__ 3 2 RTTP____ OS,XXX High_Impact_Lpar_________ __134 __209 __145
S Numb -ProcId- L N --Lpar-- --------Descriptive Text-------- Chpid Cntlu -IOD-
_ 0001 CPCOO1   0 1 AXOC     OS,SXPLEX                           41    41    42
_ 0002 CPCOO1   0 2 FGBR     OS,SYPLEX                           41    41    42
_ 0003 CPCOO1   0 3 TGBW     OS,SZPLEX                           41    41    42
_ 0046 CPCOO1   3 1 RTGP     OS,High_Availibility_Lpar            3     0     0
_ 0047 CPCOO1   3 2 RTTP     OS,XXX High_Impact_Lpar              0     0     0
_ 0048 CPCOO1   3 3 DDDB     OS,YYY_High_Impact_Lpar              0     0     0
_ 0049 CPCOO1   3 4 RTSP     OS,ZZZ_High_Impact_Lpar              0     0     0
_ 0050 CPCOO1   3 5 CFRX     CF,Primary_CF                        3     0     0
_ 0051 CPCOO1   3 6 WDCP     OS,Auto_Finance_Lpar                 2     0     0
_ 0052 CPCOO1   3 7 DFER     OS,Health_Insurance_Lpar             7     1     1
_ 0053 CPCOO1   3 8 HJKU     OS,XXX_Low_Impact_Lpar               7     1     1
_ 0054 CPCOO1   3 9 NTH1     CF,SECONDARY_CF_Lpar                 6     0     0
_ 0055 CPCOO1   3 A STH1     OS,YYY_Low_Impact_Lpar               0     0     0
_ 0056 CPCOO1   3 B EST1     OS,ZZZ_Low_Impact_Lpar               7     1     1
```

A summary of each LPARs Shared or Unique Path Elements is presented in the columns headed: Chpid, Cntlu and IOD. Cursor under any specific Element, shown in white text, and press enter to display a detailed Component Worksheet listing all Shared and/or Unique elements. Use PFK3 to return to the Active Elements Worksheet.

6.2.2 IOCP LPAR - Active Element Worksheets

The IOCP LPAR Worksheet is supported by three Active Element Worksheets; one each for CHPID, Control Unit and I/O Device Configuration.

6.2.2.1 IOCP LPAR – Active CHPID Configurations

```
        StepOne  2.0 - zEnterprise Configuration Bas Row 1 to 14 of 147
                                                          --Channel Paths--
-------- Configuration Worksheet - 147 Active Channel Paths - Lpar:HBOC -------
Row Selection: Show Unit Control Work Detail
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- -UCW- -----Channel Descriptions-----
_ ____ ________ _ ________ __ ___ ____ ___ _____ ________________________________
S Numb -ProcId- L --Lpar-- Id Pid Type Rec Total -------Descriptive Text-------
_ 0001 CPCOO1   0 AXOC     00 1B0 FC   --- 06913 NONE PROVIDED
_ 0002 CPCOO1   0 AXOC     01 440 FC   --- 06913 NONE PROVIDED
_ 0003 CPCOO1   0 AXOC     02 660 FC   --- 06913 NONE PROVIDED
_ 0004 CPCOO1   0 AXOC     03 260 FC   --- 06913 NONE PROVIDED
_ 0005 CPCOO1   0 AXOC     04 450 FC   --- 06913 NONE PROVIDED
_ 0006 CPCOO1   0 AXOC     05 6A0 FC   --- 06913 NONE PROVIDED
_ 0007 CPCOO1   0 AXOC     06 250 FC   --- 06913 NONE PROVIDED
_ 0008 CPCOO1   0 AXOC     07 3B0 FC   --- 06913 NONE PROVIDED
_ 0009 CPCOO1   0 AXOC     08 180 FC   --- 06432 NONE PROVIDED
_ 0010 CPCOO1   0 AXOC     09 3D0 FC   --- 06432 NONE PROVIDED
_ 0011 CPCOO1   0 AXOC     0A 620 FC   --- 06432 NONE PROVIDED
_ 0012 CPCOO1   0 AXOC     0B 1D0 FC   --- 06432 NONE PROVIDED
_ 0013 CPCOO1   0 AXOC     0C 350 FC   --- 06432 NONE PROVIDED
_ 0014 CPCOO1   0 AXOC     0D 540 FC   --- 06432 NONE PROVIDED
```

6.2.2.2 IOCP LPAR – Active Control Unit Configurations

```
      StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 14 of 1,694
                                                          ----Full Path----
-------- Configuration Worksheet - 348 Active Control Units - Lpar:AXOC -------
Row Selection: Show All CntUnit Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- --Attached Control Units-- -Devices-

S Line -ProcId- L --Lpar-- Id Pid Type Rec Nmb Ctlu -Type- Shr Ua,Nmb Nmb -Ucw-
_ 0059 CPCOO1   0 AXOC     02 660 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0001 CPCOO1   0 AXOC     00 1B0 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0088 CPCOO1   0 AXOC     03 260 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0117 CPCOO1   0 AXOC     04 450 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0146 CPCOO1   0 AXOC     05 6A0 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0175 CPCOO1   0 AXOC     06 250 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0204 CPCOO1   0 AXOC     07 3B0 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0030 CPCOO1   0 AXOC     01 440 FC   --- 001 2000   2107 Not 00,256 001 00032
_ 0060 CPCOO1   0 AXOC     02 660 FC   --- 002 2300   2107 Not 00,256 001 00032
_ 0002 CPCOO1   0 AXOC     00 1B0 FC   --- 002 2300   2107 Not 00,256 001 00032
_ 0089 CPCOO1   0 AXOC     03 260 FC   --- 002 2300   2107 Not 00,256 001 00032
_ 0118 CPCOO1   0 AXOC     04 450 FC   --- 002 2300   2107 Not 00,256 001 00032
_ 0147 CPCOO1   0 AXOC     05 6A0 FC   --- 002 2300   2107 Not 00,256 001 00032
_ 0176 CPCOO1   0 AXOC     06 250 FC   --- 002 2300   2107 Not 00,256 001 00032
```

6.2.2.3 IOCP LPAR - Active I/O Device Configurations

```
      StepOne  2.0 - zEnterprise Configuration B Row 1 to 14 of 1,320
                                                          ----Full Path----
--------- Configuration Worksheet - 188 Active I/O Devices - Lpar:AXOC --------
Row Selection: Show All Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- CtlUnits -----Attached Devices------

S Line -ProcId- L --Lpar-- Id Pid Type Rec Ctlu Acc Nmb S Unit Acc -Type- -UCW-
_ 0057 CPCOO1   0 AXOC     02 660 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0001 CPCOO1   0 AXOC     00 1B0 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0085 CPCOO1   0 AXOC     03 260 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0113 CPCOO1   0 AXOC     04 450 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0141 CPCOO1   0 AXOC     05 6A0 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0169 CPCOO1   0 AXOC     06 250 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0197 CPCOO1   0 AXOC     07 3B0 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0029 CPCOO1   0 AXOC     01 440 FC   --- 2000 Alw 001 1 20E0 Alw  3390A 00032
_ 0058 CPCOO1   0 AXOC     02 660 FC   --- 2300 Alw 002 1 23E0 Alw  3390A 00032
_ 0002 CPCOO1   0 AXOC     00 1B0 FC   --- 2300 Alw 002 1 23E0 Alw  3390A 00032
_ 0086 CPCOO1   0 AXOC     03 260 FC   --- 2300 Alw 002 1 23E0 Alw  3390A 00032
_ 0114 CPCOO1   0 AXOC     04 450 FC   --- 2300 Alw 002 1 23E0 Alw  3390A 00032
_ 0142 CPCOO1   0 AXOC     05 6A0 FC   --- 2300 Alw 002 1 23E0 Alw  3390A 00032
_ 0170 CPCOO1   0 AXOC     06 250 FC   --- 2300 Alw 002 1 23E0 Alw  3390A 00032
```

6.2.3 IOCP LPAR - Shared Element Worksheets

The IOCP LPAR Worksheet is supported by three Shared Element Worksheets; one each for CHPID, Control Unit and I/O Device Configuration.

6.2.3.1 IOCP LPAR – Shared CHPID Configurations

```
        StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 14 of 106
                                                              --Channel Paths--
-------------- 106 ChpIds Spanned on CPCOO1   by (3)RTTP & (0)AXOC ------------
Row Selection: Show Unit Control Work Detail
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- -UCW- -----Channel Descriptions-----
_ ____ ________ _ ________ __ ___ ____ ___ _____ _______________________________
S Numb -ProcId- L -Target- Id Pid Type Rec Total -------Descriptive Text-------
S 0097 CPCOO1   0 AXOC     C0 120 OSD  --- 00096 OSA
_ 0104 CPCOO1   0 AXOC     C7 400 OSD  --- 00016 OSA VMA0
_ 0103 CPCOO1   0 AXOC     C6 520 OSD  --- 00016 OSA CMXX EBYY XBZZ IBBSS
_ 0100 CPCOO1   0 AXOC     C3 610 OSD  --- 00016 OSA VMGC
_ 0099 CPCOO1   0 AXOC     C2 210 OSD  --- 00016 OSA
_ 0089 CPCOO1   0 AXOC     5A 1A2 FC   --- 00008 CPCP PRIMARY
_ 0095 CPCOO1   0 AXOC     90 --- CIB  --- 00000 AXOC to CF2S CFX2
_ 0094 CPCOO1   0 AXOC     5F 151 FC   --- 00000 NONE PROVIDED
_ 0093 CPCOO1   0 AXOC     5E 341 FC   --- 00000 NONE PROVIDED
_ 0092 CPCOO1   0 AXOC     5D 5B1 FC   --- 00000 VIO
_ 0091 CPCOO1   0 AXOC     5C 5B0 FC   --- 00000 NONE PROVIDED
_ 0090 CPCOO1   0 AXOC     5B 372 FC   --- 00000 CPCP SECONDARY
_ 0088 CPCOO1   0 AXOC     59 1D2 FC   --- 00000 NONE PROVIDED
_ 0087 CPCOO1   0 AXOC     58 221 FC   --- 00000 NONE PROVIDED
```

- Show all Control Unit Sharing of CHPID – C0

```
     StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 14 of 57
                                                              ----Full Path----
--------- 5952 UCWs Shared - ChpId 02 on CPC001   by (3)SGGP & (3)F1CB --------
Row Selection: Show All Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- --------Shared Devices-------- Total
_ 0003 CPC001   3 RTTP____ CO 120 OSD_ ___ ____ ___ ___ _ ____ ___ ______ _____
S Line -ProcId- L -Target- Id Pid Type Rec Ctlu Acc Nmb S Unit Acc -Type- -UCW-
_ 0115 CPC001   3 RTTP     CO 120 OSD  --- 0089 Alw --- - None --- ------ 00001
_ 0116                                 2003 Alw --- - None --- ------ 00001
_ 0117                                 2303 Alw --- - None --- ------ 00001
_ 0118                                 2603 Alw --- - None --- ------ 00001
_ 0119                                 2903 Alw --- - None --- ------ 00001
_ 0120                                 2C03 Alw 001 0 2C00 Alw  3390B 00225
_ 0121                                 2C03 Alw 002 1 2CE0 Alw  3390A 00257
_ 0122                                 2F03 Alw 003 0 2F00 Alw  3390B 00225
_ 0123                                 2F03 Alw 004 1 2FE0 Alw  3390A 00257
_ 0124                                 3003 Alw 005 1 30C0 Alw  3390A 00065
_ 0125                                 3303 Alw 006 1 33C0 Alw  3390A 00065
_ 0126                                 3603 Alw 007 1 36C0 Alw  3390A 00065
_ 0127                                 3903 Alw 008 1 39C0 Alw  3390A 00065
_ 0128                                 3C03 Alw 009 1 3CC0 Alw  3390A 00065
```

6.2.3.2 IOCP LPAR – Shared Control Unit Configurations

```
        StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 6 of 6
                                                              ----Full Path----
---------------- 6 Cntlus Shared on CPCOO1 by (3)RTTP & (0)AXOC ---------------
Row Selection: Show All CntUnit Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- ---Shared Control Units--- -Devices-
_ ____ ________ _ ________ __ ___ ____ ___ ___ ____ ______ ___ _____ ___ _____
S Line -ProcId- L -Target- Id Pid Type Rec Nmb Ctlu -Type- Shr Ua,Nmb Nmb -Ucw-
  0001 CPC001   0 AXOC     5A 1A2 FC   --- 001 7650   FCTC --- 00,8   000 00000
S 0002 CPC001   0 AXOC     C0 120 OSD  --- 002 0F00    OSA Not --,--- 001 00001
_ 0003 CPC001   0 AXOC     C2 210 OSD  --- 003 0F20    OSA Not --,--- 001 00001
_ 0004 CPC001   0 AXOC     C3 610 OSD  --- 004 0F70    OSA --- --,--- 001 00001
_ 0005 CPC001   0 AXOC     C6 520 OSD  --- 005 0F60    OSA Not --,--- 001 00001
_ 0006 CPC001   0 AXOC     C7 400 OSD  --- 006 0F30    OSA Not --,--- 001 00001
_
****************************** Bottom of data ********************************
```

- Show all Sharing of Control Unit – 0F00

```
        StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 14 of 14
                                                              ----Full Path----
------------ Shared Usage of CntUnit 0F00 by LPARs in CPC:CPC001   -----------
Row Selection: Show the Shared CntUnit Report
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- --Selected Control Units-- -Devices-
_ 0002 CPC001   0 HBOC____ C0 120 OSD_ --- 002 0F00 OSA___ Not --,--- 001 00001
S Line -ProcId- L --Lpar-- Id Pid Type Rec Nmb Ctlu -Type- Shr Ua,Nmb Nmb -Ucw-
_ 0001 CPC001   0 HBOC     C0 120 OSD  --- 002 0F00    OSA Not --,--- 001 00001
_ 0002 CPC001   0 IBBR     C0 120 OSD  --- 002 0F00    OSA Not --,--- 001 00001
_ 0003 CPC001   0 IBBW     C0 120 OSD  --- 002 0F00    OSA Not --,--- 001 00001
_ 0004 CPC001   3 B2SP     C0 190 OSD  --- 196 0F00    OSA Not --,--- 001 00001
_ 0005 CPC001   3 CMC1     C0 190 OSD  --- 196 0F00    OSA Not --,--- 001 00001
_ 0006 CPC001   3 F1CB     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0007 CPC001   3 IBB7     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0008 CPC001   3 K1CP     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0009 CPC001   3 SGGP     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0010 CPC001   3 S1WP     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0011 CPC001   3 S4RP     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0012 CPC001   3 S8GT     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0013 CPC001   3 S9GP     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
_ 0014 CPC001   3 TCNA     C0 190 OSD  --- 200 0F00    OSA Not --,--- 001 00001
```

6.2.3.3 IOCP LPAR - Shared I/O Device Configurations

```
        StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 5 of 5
                                                              ----Full Path----
--------------- 5 Devices Shared on CPC001   by (3)RTTP & (0)HBOC -------------
Row Selection: Show All Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- CtlUnits ------Shared Devices-------

_ ____ ________ _ ________ __ ___ ____ ___ ____ ___ ___ _ ____ ___ ______ _____
S Line -ProcId- L -Target- Id Pid Type Rec Ctlu Acc Nmb S Unit Acc -Type- -UCW-
  0001 CPC001   0 HBOC     C0 120 OSD  --- 0F00 Alw 001 0 0F0F Alw   OSAD 00001
S 0002 CPC001   0 HBOC     C2 210 OSD  --- 0F20 Alw 002 0 0F2F Alw   OSAD 00001
_ 0003 CPC001   0 HBOC     C3 610 OSD  --- 0F70 Alw 003 0 0F7F Alw   OSAD 00001
_ 0004 CPC001   0 HBOC     C6 520 OSD  --- 0F60 Alw 004 0 0F6F Alw   OSAD 00001
_ 0005 CPC001   0 HBOC     C7 400 OSD  --- 0F30 Alw 005 0 0F3F Alw   OSAD 00001
****************************** Bottom of data ********************************
```

- Show all Sharing of Device – 0F2F

```
        StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 14 of 14
                                                              ----Full Path----
------------- Shared Usage of Device 0F2F by LPARs in CPC:CPC001   ------------
Row Selection: Show the Shared Device Report
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- CtlUnits ------Selected Device------
_ 0002 CPC001   0 HBOC     C2 210 OSD  --- 0F20 Alw 002 0 0F2F Alw OSAD   00001
S Line -ProcId- L -Target- Id Pid Type Rec Ctlu Acc Nmb S Unit Acc -Type- -UCW-
_ 0001 CPC001   0 HBOC     C2 210 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0002 CPC001   0 IBBR     C2 210 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0003 CPC001   0 IBBW     C2 210 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0004 CPC001   3 SGGP     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0005 CPC001   3 S1WP     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0006 CPC001   3 F1CB     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0007 CPC001   3 B2SP     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0008 CPC001   3 K1CP     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0009 CPC001   3 S4RP     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0010 CPC001   3 S9GP     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0011 CPC001   3 CMC1     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0012 CPC001   3 S8GT     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0013 CPC001   3 TCNA     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
_ 0014 CPC001   3 IBB7     C2 310 OSD  --- 0F20 ALW 001 0 0F2F Alw   OSAD 00001
```

6.2.4 IOCP LPAR - Unique Element Worksheets

The IOCP LPAR Worksheet is supported by three Unique Element Worksheets; one each for CHPID, Control Unit and I/O Device Configuration. These Worksheets are modeled off of their matching Shared Element Worksheets.

6.2.4.1 IOCP LPAR – Unique CHPID Configurations

See Shared CHPID Configuration Worksheet.

6.2.4.2 IOCP LPAR – Unique Control Unit Configurations

See Shared Control Unit Configuration Worksheet.

6.2.4.3 IOCP LPAR - Unique I/O Device Configurations

See Shared I/O Device Configuration Worksheet.

6.3 The OSCP LPAR Interface

The OSCP LPAR Interface presents a table of Logical Partitions separated into Logical Channel Subset (LCSS) columns by assigned LPAR Name accompanied with the associated Device Path Unit Control Work (UCW) totals as defined and accessible to the LPAR from within the targeted Processor (Procid).

```
                StepOne  2.0 - zEnterprise Configuration Baseline

-ProcId- --Unit-- Model --Serial-- ------Processor Descriptive Labeling-----
CPCNORTH_____2097 __E56 0CAAA12097 Z10_2097-NORTH_____________________________

# ------LCSS0------  ------LCSS1------  ------LCSS2------  ------LCSS3------
- Cm --Lpar--Ucws--  Cm --Lpar--Ucws--  Cm --Lpar--Ucws--  Cm --Lpar--Ucws--
1 .. *_____________  .. *_____________  .. *_____________  .. QWE1______8423
2 .. ABNB_____32191  .. *_____________  .. *_____________  .. QWE2______8423
3 .. *_____________  .. *_____________  .. *_____________  .. QWE3____NoUcws
4 .. *_____________  .. *_____________  .. LDRZ______9573  .. PPU1______8423
5 .. *_____________  .. *_____________  .. ADDY______9589  .. PPI2____NoUcws
6 .. CBCB_____42901  .. *_____________  .. WDDX______9605  .. PPY3______8423
7 .. *_____________  .. *_____________  .. *_____________  .. OIKJ______8423
8 .. *_____________  .. *_____________  .. *_____________  .. JAAS______8439
9 .. *_____________  .. *_____________  .. *_____________  .. NTHS______8439
A .. *_____________  .. *_____________  .. LMKR_______516  .. STHS______8423
B .. *_____________  .. *_____________  .. JHDF_______516  .. *_____________
C .. *_____________  .. *_____________  .. OOKK______9589  .. *_____________
D .. *_____________  .. *_____________  .. *_____________  .. *_____________
E .. *_____________  .. *_____________  .. *_____________  .. *_____________
F .. *_____________  .. *_____________  .. *_____________  .. *_____________
```

6.3.1 Display the Full LPAR IOCP/UCW Worksheet

To display an LPARs IOCP Configuration Pathing in a Worksheet Listing cursor under the LPAR Name and press enter. Use PFK1 for Help, PFK3 to return.

```
      StepOne  2.0 - zEnterprise Configuration Bas Row 1 to 14 of 536
                                                        ----Full Path----
----- Configuration Worksheet - 47003 UCWs - LPAR:HBOC LCSS:3 CPC:CDC1CPL1 ----
Row Selection: Show Controller or Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- ------Controllers------ ----------IODevices---------
_ ____ ________ _ ________ ____ ________ ___ _____ _ ____ _______ ___ ___ ______
S Numb -ProcId- L --Lpar-- Ctlu --Type-- Shr Class S Unit -Type- Shr Ucw -Ucws-
_ 0001 CDC1CPL1 0 HBOC     2000     2107 Not LCTLU 0 2000  3390B Yes 224 000224
_ 0002 CDC1CPL1 0 HBOC     2000     2107 Not LCTLU 1 20E0  3390A Yes 032 000256
_ 0003 CDC1CPL1 0 HBOC     2300     2107 Not LCTLU 0 2300  3390B Yes 224 000480
_ 0004 CDC1CPL1 0 HBOC     2300     2107 Not LCTLU 1 23E0  3390A Yes 032 000512
_ 0005 CDC1CPL1 0 HBOC     2600     2107 Not LCTLU 0 2600  3390B Yes 192 000704
_ 0006 CDC1CPL1 0 HBOC     2600     2107 Not LCTLU 1 26E0  3390A Yes 032 000736
_ 0007 CDC1CPL1 0 HBOC     2900     2107 Not LCTLU 0 2900  3390B Yes 224 000960
_ 0008 CDC1CPL1 0 HBOC     2900     2107 Not LCTLU 1 29E0  3390A Yes 032 000992
_ 0009 CDC1CPL1 0 HBOC     2E00     2107 Not LCTLU 0 2E00  3390B Yes 224 001216
_ 0010 CDC1CPL1 0 HBOC     2E00     2107 Not LCTLU 1 2EE0  3390A Yes 032 001248
_ 0011 CDC1CPL1 0 HBOC     4000     2107 Not LCTLU 0 4000  3390B Yes 224 001472
_ 0012 CDC1CPL1 0 HBOC     4000     2107 Not LCTLU 1 40E0  3390A Yes 032 001504
_
```

6.3.1.1 Control Unit Shared Usage Worksheet

```
       StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 14 of 24
                                                          ----Full Path----
------------- Shared Usage of CntUnit 2300 by LPARs in CPC:CDC1CPL1 -----------
Row Selection: Show the Shared CntUnit Report
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- --Selected Control Units-- -Devices-
_ 0003 CDC1CPL1 0 RTTB____ __ ___ ____ ___ ____ 2300 ______ ___ ______ ___ _____
S Line -ProcId- L --Lpar-- Id Pid Type Rec Nmb Ctlu -Type- Shr Ua,Nmb Nmb -Ucw-
_ 0001 CPC001   0 RTTB     00 1B0 FC   --- 002 2300   2107 Not 00,256 002 00256
_ 0002                    01 440
_ 0003                    02 660
_ 0004                    03 260
_ 0005                    04 450
_ 0006                    05 6A0
_ 0007                    06 250
_ 0008                    07 3B0
_ 0009 CPC001   0 RXXB     00 1B0 FC   --- 002 2300   2107 Not 00,256 002 00256
_ 0010                    01 440
_ 0011                    02 660
_ 0012                    03 260
_ 0013                    04 450
_ 0014                    05 6A0
```

6.3.1.2 I/O Device Shared Usage Worksheet

```
       StepOne  2.0 - zEnterprise Configuration Baseline Row 1 to 14 of 48
                                                          ----Full Path----
------------- Shared Usage of Device 23E0 by LPARs in CPC:CPC001   ------------
Row Selection: Show the Shared Device Report
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -----Partition----- -Channel Paths- CtlUnits ------Selected Device------
_ 0004 CPC001   0 RTTB____ __ ___ ____ ___ 2300 ___ ___ 1 23E0 ___ 3390A_ 00032
S Line -ProcId- L --Lpar-- Id Pid Type Rec Ctlu Acc Nmb S Unit Acc -Type- -UCW-
_ 0001 CPC001   0 RTTB     00 1B0 FC   --- 2300 ALW 001 1 23E0 Alw  3390A 00032
_ 0002                    01 440                  002
_ 0003                    02 660                  003
_ 0004                    03 260                  004
_ 0005                    04 450                  005
_ 0006                    05 6A0                  006
_ 0007                    06 250                  007
_ 0008                    07 3B0                  008
_ 0009 CPC001   0 RXXB     00 1B0 FC   --- 2300 ALW 001 1 23E0 Alw  3390A 00032
_ 0010                    01 440                  002
_ 0011                    02 660                  003
_ 0012                    03 260                  004
_ 0013                    04 450                  005
_ 0014                    05 6A0                  006
```

6.3.2 Displaying the OSCP Configuration Worksheet

To display a listing of possible OSCP Configurations that might be matched with a selected IOCP LPAR place an 'O' on the command line before the LPAR name and press enter. Use PFK3 to return.

```
       StepOne  2.0 - zEnterprise Configuration Base Row 1 to 14 of 45
                                                          --Active Device--
----------- Selected LPAR:RCNB - 45 OS Control Programs Discovered ------------
Row Selection: Select OSCP Baseline  List LOADxx Members  View OSCP Source Deck
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -Configurations- Load ED -Active Device- ------OS Control Program-------
_ ____ ________ __ ____ __ _ __ ___ ____ ______ ________________________________
S Numb --Name-- Id Type xx # Id Nip Numb -Ucbs- -------Descriptive Text--------
_ 0001 ADEV     00 MVS  RB 2 86 --- 0663 048810 SBPLEX
_ 0002 BDEV     00 MVS  -- - 87 --- 0561 048094 SBPLEX
_ 0003 CXYZ     00 MVS  -- - 68 --- 0668 048844 SBPLEX
_ 0004 CDEV     00 MVS  -- - 88 --- 0639 048772 SBPLEX
_ 0005 CVC      00 MVS  -- - 00 006 0096 003456 CHASE HOME FINANCE
_ 0006 CMCY     00 MVS  -- - 00 --- 0166 002055 CMCY PROD AT CDC1
_ 0007 DXYZ     00 MVS  -- - 65 --- 0661 048818 SBPLEX
_ 0008 DDEV     00 MVS  -- - 89 --- 0549 047998 SBPLEX
_ 0009 EXYZ     00 MVS  -- - 66 --- 0663 049388 SBPLEX
_ 0010 XYZD     00 MVS  -- - 00 --- 0148 008895 CARD SERVICES XYZA DEVELOPMENT
_ 0011 XYZP     00 MVS  -- - 00 --- 0145 008902 CARD SERVICES XYZA PRODUCTION
_ 0012 XYZT     00 MVS  -- - 00 --- 0147 008878 CARD SERVICES XYZA TEST
_ 0013 AXOC     00 MVS  -- - 66 --- 0650 048720 SBPLEX
_ 0014 IBBE     00 MVS  -- - 66 --- 0642 048656 INTRA SITE BACKUP LPAR EXYZ
_
```

6.4 Matching IOCP and OSCP Configurations

6.4.1 IOCP to OSCP Eligible Device Table Matching Worksheet

```
          StepOne  2.0 - zEnterprise Configuration  Row 1 to 14 of 37,898
                                                              --EDT/EDT Match--
---------- Configuration Worksheet - UCW to UCB Unit Address Matching ---------
Row Selection: Show All Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Total ----CPC-CPC001  -UCWs-47003---- Unit -------OS-CXYZ-UCBs-048844--------
_ _____ ________ _ ____ ___ ___ _____ _ ETAB ____ ___ ___ ______ _ _ _ ________
S Lines -LCSS:0- S UCWs Rng Cnt Class C Mtch UCBs Rng Cnt -Type- O D N UnitName
_ 00083 XYVV     * -**- -*- -*- -***- * ETAB 01B0   4   1   3480 Y Y - LRPCCART
_ 00103 XYVV     * -**- -*- -*- -***- * ETAB 0200   4   1   3490 Y Y -    CDROM
_ 00108 XYVV     * -**- -*- -*- -***- * ETAB 0300   4   1   3490 N Y -   CDROM0
_ 00160 XYVV     * -**- -*- -*- -***- * ETAB 0500  16   1   3420 Y Y -      9TR
_ 00176 XYVV     * -**- -*- -*- -***- * ETAB 0510  16   1   3490 Y Y -    36TRK
_ 00192 XYVV     * -**- -*- -*- -***- * ETAB 0520  16   1   3480 Y Y -  EXTTAPE
_ 00208 XYVV     * -**- -*- -*- -***- * ETAB 0530  16   1   3490 Y Y -    36TRK
_ 00224 XYVV     * -**- -*- -*- -***- * ETAB 0540   4   1   3590 Y Y - TAPE3590
_ 00244 XYVV     * -**- -*- -*- -***- * ETAB 0800   4   1   3490 N Y -    CDROM
_ 00248 XYVV     * -**- -*- -*- -***- * ETAB 0900   4   1   3490 Y Y -    CDROM
_ 00258 XYVV     * -**- -*- -*- -***- * ETAB 0B10   1   1   3490 N Y -  CDROM10
_ 00259 XYVV     * -**- -*- -*- -***- * ETAB 0B11   1   1   3490 N Y -  CDROM11
_ 00260 XYVV     * -**- -*- -*- -***- * ETAB 0B12   1   1   3490 N Y -  CDROM12
_ 00261 XYVV     * -**- -*- -*- -***- * ETAB 0B13   1   1   3490 N Y -  CDROM13
```

6.4.2 IOCP to OSCP NIP Console Matching Worksheet

```
          StepOne  2.0 - zEnterprise Configuration Row 1 to 6 of 6
                                                              --NIP/NIP Match--
---------- Configuration Worksheet - UCW to UCB Unit Address Matching ---------
Row Selection: Show All Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Total ----CPC-CPC001  -UCWs-47003---- Unit -------OS-CVC-UCBs-003456---------
_ _____ ________ _ ____ ___ ___ _____ _ NIPS ____ ___ ___ ______ _ _ _ _______
S Lines -LCSS:0- S UCWs Rng Cnt Class C Mtch UCBs Rng Cnt -Type- O D N -ConfId-
_ 01088 XYVV     0 1E00 120   1 TERML - NIPS 1E00 120   1   3270 N Y Y      CVC
_ 01200 XYVV     0 1E70 120 113 TERML - NIPS 1E70 120 113   3270 N Y Y      CVC
_ 01208 XYVV     0 1E80 120   1 TERML - NIPS 1E80 120   1   3270 N Y Y      CVC
_ 01328 XYVV     0 1F00 120   1 TERML - NIPS 1F00 120   1   3270 N Y Y      CVC
_ 01448 XYVV     0 1F80 120   1 TERML - NIPS 1F80 120   1   3270 N Y Y      CVC
_ 01544 XYVV     0 1FE0 120  97 TERML - NIPS 1FE0 120  97   3270 N Y Y      CVC
****************************** Bottom of data ******************************
```

6.4.3 IOCP to OSCP Device Matching Worksheet

```
          StepOne  2.0 - zEnterprise Configuration Row 1 to 14 of 166
                                                          --IOD/IOD Match--
---------- Configuration Worksheet - UCW to UCB Unit Address Matching ---------
Row Selection: Show All Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Total ----CPC-CPC001---UCWs-47003---- Unit -------OS-CMCY-UCBs-002055--------
_ _____ ________ _ ____ ___ ___ _____ _ ____ ____ ___ ___ ______ _ _ _ ________
S Lines -LCSS:0- S UCWs Rng Cnt Class C Mtch UCBs Rng Cnt -Type- O D N -ConfId-
_ 00001 XYVV     * -**- -*- -*- -***- * OSCP 095A   1   1   3745 N Y -     CXCY
_ 00002 XYVV     * -**- -*- -*- -***- * OSCP 095B   1   1   3745 N Y -     CXCY
_ 00003 XYVV     * -**- -*- -*- -***- * OSCP 095C   1   1   3745 N Y -     CXCY
_ 00004 XYVV     * -**- -*- -*- -***- * OSCP 095D   1   1   3745 N Y -     CXCY
_ 00005 XYVV     0 0F00  15   1 ADPTR - BOTH 0F00  15   1    OSA N Y -     CXCY
_ 00020 XYVV     0 0F0F   1   1 ADPTR   BOTH 0F0F   1   1   OSAD N Y -     CXCY
_ 00021 XYVV     * -**- -*- -*- -***- * OSCP 0F10  15   1    OSA N Y -     CXCY
_ 00036 XYVV     * -**- -*- -*- -***- * OSCP 0F1F   1   1   OSAD N Y -     CXCY
_ 00037 XYVV     0 0F20  15   1 ADPTR - BOTH 0F20  15   1    OSA N Y -     CXCY
_ 00052 XYVV     0 0F2F   1   1 ADPTR   BOTH 0F2F   1   1   OSAD N Y -     CXCY
_ 00053 XYVV     0 0F30  15   1 ADPTR - BOTH 0F30  15   1    OSA N Y -     CXCY
_ 00068 XYVV     0 0F3F   1   1 ADPTR   BOTH 0F3F   1   1   OSAD N Y -     CXCY
_ 00069 XYVV     * -**- -*- -*- -***- * OSCP 0F40  15   1    OSA N Y -     CXCY
_ 00084 XYVV     * -**- -*- -*- -***- * OSCP 0F4F   1   1   OSAD N Y -     CXCY
```

6.4.4 UCW to UCB Matching Worksheet

```
          StepOne  2.0 - zEnterprise Configuration Row 435 to 448 of 49,670
                                                          --UCB/UCW Match--
---------- Configuration Worksheet - UCW to UCB Unit Address Matching ---------
Row Selection: Show All Device Shared Usage
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Total ----CPC-CPC001---UCWs-47003---- Unit -------OS-ADEV-UCBs-048810--------
_ _____ ________ _ ____ ___ ___ _____ _ ____ ____ ___ ___ ______ _ _ _ ________
S Lines -LCSS:0- S UCWs Rng Cnt Class C Mtch UCBs Rng Cnt -Type- O D N -ConfId-
_ 00435 XYVV       0F85       6         BOTH 0F85       6                   CXCY
_ 00436 XYVV       0F86       7         BOTH 0F86       7                   CXCY
_ 00437 XYVV       0F87       8         BOTH 0F87       8                   CXCY
_ 00438 XYVV       0F88       9         BOTH 0F88       9                   CXCY
_ 00439 XYVV       0F89      10         BOTH 0F89      10                   CXCY
_ 00440 XYVV       0F8A      11         BOTH 0F8A      11                   CXCY
_ 00441 XYVV       0F8B      12         BOTH 0F8B      12                   CXCY
_ 00442 XYVV       0F8C      13         BOTH 0F8C      13                   CXCY
_ 00443 XYVV       0F8D      14         BOTH 0F8D      14                   CXCY
_ 00444 XYVV       0F8E      15         BOTH 0F8E      15                   CXCY
_ 00445 XYVV     0 0F8F   1   1 ADPTR   BOTH 0F8F   1   1   OSAD N Y -     CXCY
_ 00446 XYVV     * -**- -*- -*- -***- * OSCP 0F90  15   1    OSA N Y -     CXCY
_ 00447 XYVV     * -**- -*- -*- -***- * OSCP 0F91       2                   CXCY
_ 00448 XYVV     * -**- -*- -*- -***- * OSCP 0F92       3                   CXCY
_ 00449 XYVV       188C      13         IOCP -**- -*- -*- --**-- * * *     CXCY
```

6.4.5 Displaying the LOADxx Analytic Worksheet

```
         StepOne  2.0 - zEnterprise Configuration Row 26 to 39 of 39
                                                              --Loadxx Member--
-------- Selected LPAR:HBOC - LOADxx Worksheet - 39 Members Discovered --------
Row Selection: View Loadxx Content  Show ParmLib Content  Filter Loadxx ParmLib
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line -IPL- ---IODF Keywords Values--- -Load- ------Load Member Location------
_ ____ _____ _______ __ ________ __ _ _ ______ ______ _________________________
S Numb State --Name- Sx --Dhlq-- Et D S Member Volume ---------Dataset---------
_ 0026 NoUse DEV     00 SYS1     00 Y - LOADAZ VPWRKH PROBI1.SYS1.IPLPARM
_ 0027 NoUse IBERTAL 00 SYS1     00 Y - LOADBB VPWRKH PROBI1.SYS1.IPLPARM
_ 0028 NoUse SDMALT  00 SYS1     00 Y - LOADCC VPWRKH PROBI1.SYS1.IPLPARM
_ 0029 NoUse HCS     00 SYS1     00 Y - LOADCK VPWRKH PROBI1.SYS1.IPLPARM
_ 0030 NoUse JES25   00 SYS1     00 Y - LOADCM VPWRKH PROBI1.SYS1.IPLPARM
_ 0031 NoUse JES24   00 SYS1     00 Y - LOADCT VPWRKH PROBI1.SYS1.IPLPARM
_ 0032 NoUse JES24   00 SYS1     00 Y - LOADDD VPWRKH PROBI1.SYS1.IPLPARM
_ 0033 NoUse WOTSTAL 00 SYS1     00 N - LOADEE VPWRKH PROBI1.SYS1.IPLPARM
_ 0034 NoUse HIS7    00 SYS1     00 Y - LOADFS VPWRKH PROBI1.SYS1.IPLPARM
_ 0035 NoUse HTSZVO  00 SYS1     00 Y - LOADF2 VPWRKH PROBI1.SYS1.IPLPARM
_ 0036 NoUse HTSYVH  00 SYS1     00 Y - LOADF3 VPWRKH PROBI1.SYS1.IPLPARM
_ 0037 NoUse MVS     00 SYS1     00 Y - LOADJ3 VPWRKH PROBI1.SYS1.IPLPARM
_ 0038 InUse ADEV    01 SYS1     00 Y - LOADRB VPWRKH PROBI1.SYS1.IPLPARM
_ 0039 InUse MVSB0   99 SYS1     00 Y - LOAD01 VPWRKH PROBI1.SYS1.IPLPARM
```

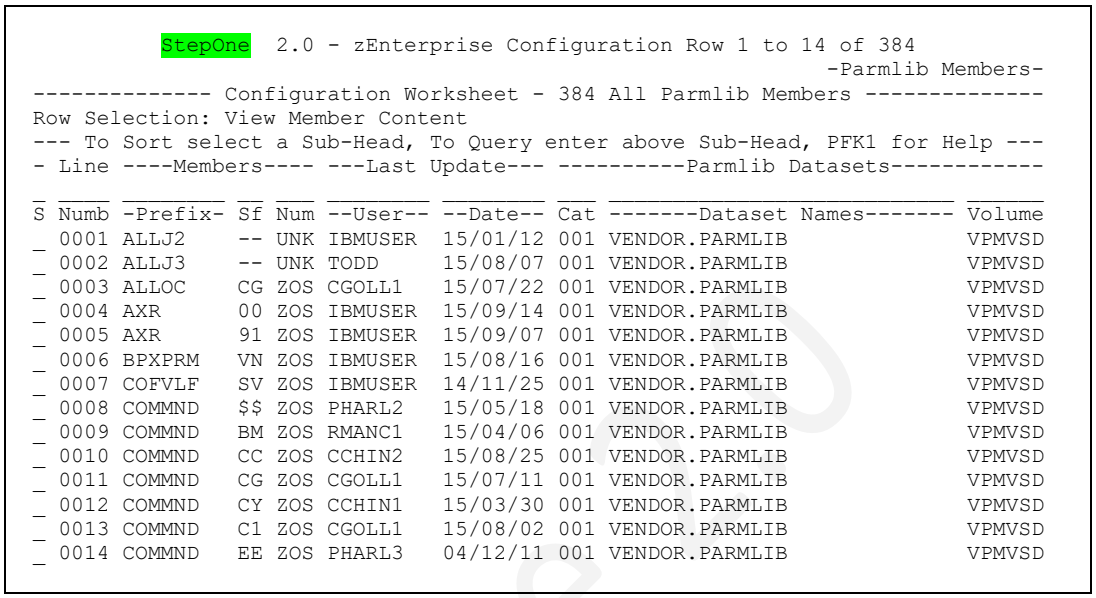
6.4.6 Displaying the LOADxx Filter Worksheet

```
              StepOne  2.0 - zEnterprise Configuration Baseline

 Cm Member ----------------------IPL Parm Dataset---------------------- Volume
 .. LOADJ3 SYS1.IPLPARM_____________________________________________ VPMVSB

 ----------LOADxx Filters----------- || -----------Filtered Values-- IPLCheck
 Cm -HWNAME- Cm LPARNAME Cm VMUSERID || Cm Parmlib Datasets-----------------
 -- -------- -- -------- -- -------- || -- ---------------- Dsn Concatenation
 /. CDC1CPL1 /. HBOC____ /. (BLANKS) || .. VENDOR.PARMLIB_____________________
 == ======== == ======== == ======== || .. SVTSC.PARMLIB_____________________
 .. ________ .. ________ .. ________ || .. LVL0.PARMLIB_____________________
 .. ________ .. ________ .. ________ || .. SYS1.PARMLIB_____________________
 .. ________ .. ________ .. ________ || .. _____________________________________
 .. ________ .. ________ .. ________ || .. _____________________________________
 .. ________ .. ________ .. ________ || .. _____________________________________
 .. ________ .. ________ .. ________ || .. _____________________________________
 .. ________ .. ________ .. ________ || .. _____________________________________
 .. ________ .. ________ .. ________ || .. _____________________________________
 .. ________ .. ________ .. ________ || Cm IEASYM Suffix--- System Symbol Lst
 .. ________ .. ________ .. ________ || .. (W1,J3,SV,VN)_____________________
 .. ________ .. ________ .. ________ || Cm IEASYS Suffix--- Directors & Parms
 .. ________ .. ________ .. ________ || .. (00,LV,SV,VN)_____________________
                                     ||
```

6.4.7 Displaying the PARMLIB Analytic Worksheet



```
          StepOne  2.0 - zEnterprise Configuration Row 1 to 14 of 384
                                                              -Parmlib Members-
-------------- Configuration Worksheet - 384 All Parmlib Members --------------
Row Selection: View Member Content
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
- Line ----Members---- ---Last Update--- ----------Parmlib Datasets------------
_ ____ ________ __ ___ ________ ________ ___ ________________________________ ______
S Numb -Prefix- Sf Num --User-- --Date-- Cat -------Dataset Names------- Volume
_ 0001 ALLJ2    -- UNK IBMUSER  15/01/12 001 VENDOR.PARMLIB                VPMVSD
_ 0002 ALLJ3    -- UNK TODD     15/08/07 001 VENDOR.PARMLIB                VPMVSD
_ 0003 ALLOC    CG ZOS CGOLL1   15/07/22 001 VENDOR.PARMLIB                VPMVSD
_ 0004 AXR      00 ZOS IBMUSER  15/09/14 001 VENDOR.PARMLIB                VPMVSD
_ 0005 AXR      91 ZOS IBMUSER  15/09/07 001 VENDOR.PARMLIB                VPMVSD
_ 0006 BPXPRM   VN ZOS IBMUSER  15/08/16 001 VENDOR.PARMLIB                VPMVSD
_ 0007 COFVLF   SV ZOS IBMUSER  14/11/25 001 VENDOR.PARMLIB                VPMVSD
_ 0008 COMMND   $$ ZOS PHARL2   15/05/18 001 VENDOR.PARMLIB                VPMVSD
_ 0009 COMMND   BM ZOS RMANC1   15/04/06 001 VENDOR.PARMLIB                VPMVSD
_ 0010 COMMND   CC ZOS CCHIN2   15/08/25 001 VENDOR.PARMLIB                VPMVSD
_ 0011 COMMND   CG ZOS CGOLL1   15/07/11 001 VENDOR.PARMLIB                VPMVSD
_ 0012 COMMND   CY ZOS CCHIN1   15/03/30 001 VENDOR.PARMLIB                VPMVSD
_ 0013 COMMND   C1 ZOS CGOLL1   15/08/02 001 VENDOR.PARMLIB                VPMVSD
_ 0014 COMMND   EE ZOS PHARL3   04/12/11 001 VENDOR.PARMLIB                VPMVSD
_
```

6.5 Common Worksheet Operations

The StepOne Worksheets allow you to analyze your IODF data in several ways. You can sort (ascending or descending order), filter (specify a specific value), and query (specify a value for a specific data column) using the operators described below.

6.5.1 Sorting the Worksheet

You can sort the data in ascending or descending order. Using this panel as an example, look at the data in the "Numb" column. Each line entry has a number associated with it. Initially, the numbers are sorted in ascending order.

- Place your cursor on the "Numb" column heading and press <ENTER>. Notice that the line items are now sorted in descending order.
- Placing your cursor on the "Numb" column heading and pressing <ENTER> again will return the column to ascending order.
- Now try sorting the "Unit" and "Type" fields.

6.5.2 Filtering a Worksheet

You can filter the data by selecting a specific value from the data column. Using this panel as an example, look at the data in the "Type" column. Initially, the entries are not sorted.

- Place your cursor on the first data line with a "Type" of "3390A", and press <ENTER>. Notice that only the line items for Type=3390A are shown.
- Placing your cursor on the "3390A" you selected and pressing <ENTER> twice will clear the filter (e.g. display the worksheet in its original format).

6.5.3 Worksheet Column Query

You can column query the data by specifying a value for a specific data column. Using this panel as an example, look at the data in the "Type" column. Initially, the entries are not sorted.

- Place your cursor on the field above the "Type" column heading, type "3390A", and press <ENTER>. Notice that only the line items for Type=3390A are shown.
- Place your cursor on the "Numb" column heading and press <ENTER> to clear the column query (e.g. display the worksheet in its original format).

6.6 IODF Configuration Reports

The Configuration Report Set provided by **StepOne** is progressive, meaning the data presented becomes more and more detailed as successive options are selected. The table below shows the Report Content at each level of reporting.

Report Level	Report Content					
LCSS	LCSS					
LPAR	LCSS	LPAR				
PATH	LCSS	LPAR	PATH			
CTLU	LCSS	LPAR	PATH	CTLU		
UNIT	LCSS	LPAR	PATH	CTLU	UNIT	
UCWS	LCSS	LPAR	PATH	CTLU	UNIT	UCWS

As shown in the sample reports the number of records increase from as little 28 when the LCSS option is selected to over 34,000 when the UNIT and/or UCWS option is selected for a single Central Processing Complex (CPC).

6.6.1 Building Configuration Reports

To display a Configuration Report select one or more ProcIds and a corresponding Report Level using a forward slash '/' and press enter.

```
                StepOne  2.0 - zEnterprise Configuration Baseline

IODFData: PROBI1.IODF87_______________ Volume: VPWRKH Date: 2021-09-25 16:16:27

.. -ProcId--Lp --Unit-- Model --Serial-- -------Descriptive Labeling-- Swap --
.. CPCOO1____6 ____2097 __E26 02XXX22097 COUPLING_FACILITY_1_____________________
.. CPCOO2____6 ____2097 __E26 02YYY22097 COUPLING_FACILITY_2_____________________
.. CPCOO3___16 ____2097 __E56 01ZZZ02097 Z10_2097_003___________________________
/. CPCNORTH_18 ____2097 __E56 0CAAA12097 Z10_2097-NORTH_________________________
.. CPCSOUTH_13 ____2097 __E56 0CBBB12097 Z10_2097-SOUTH_________________________
.. CFNTH_____4 ____2097 __E26 00CCC02097 COUPLING_NORTH__________________________
.. CPSEA_____8 ____2097 __E56 0111112097 Z10_2097_SEASIDE_______________________
.. CPUXX____14 ____2097 __E56 0322222097 PROD_PROCESSOR_CPUXX___________________
.. CPUYY____22 ____2097 __E56 0333022097 PROD_PROCESSOR_CPUYY___________________
.. CPUZZ_____7 ____2097 __E56 0344E22097 PROD_PROCESSOR_CPUZZ___________________
.. CPUZZA___15 ____2097 __E56 0355522097 PROD_PROCESSOR_CPUZZA__________________
.. ___________ ________ _____ __________ ________________________________________
.. ___________ ________ _____ __________ ________________________________________
.. ___________ ________ _____ __________ ________________________________________
------------------------Reporting Levels and Options------------- .. Reset --

.. Store NO    .. LCSS .. LPAR /. PATH  .. CTLU .. UNIT .. UCWS    .. Print NO
```

6.6.2 Common Reporting Options

6.6.2.1 Store

Use this option to display the TSO/ISPF Move/Copy Utility and store a selected Configuration Report using a dataset name of your choosing.

6.6.2.2 Print

Use this option to display the TSO/ISPF Hardcopy Utility and route a selected Configuration Report to a printer of your choosing.

6.6.2.3 Reset

Use this option to reset all Configuration Report options and selection to their default states.

6.6.3 Configuration Report Samples

6.6.3.1 Configuration Report Header and Footer

Report header values include:

- User defined header lines (up to 10 in sample only one is used - StepOne)
- Source IODF Dataset
- Report Date and Time Stamp
- Processor Identifier (ProcId)
- Report Level

Report footer values include:

- Fully qualified report dataset name
- NewEra Saluation

```
/*****************************************************************************/
/*                                                                           */
/*                                StepOne                                    */
/*                                                                           */
/*        Source IODFDsn:PROBI1.IODF87 Time Stamp:2021-09-25 16:16:27        */
/*                Report Date:2021/09/25 Report Time:11:49:47                */
/*                                                                           */
/*        Processor Configuration Report - PROCID:CDC1CPUA LEVEL:LCSS        */
/*                                                                           */
/*****************************************************************************/
|
/*****************************************************************************/
/*                                                                           */
/*              RPTDSN:IFO.IFOP.$STEPONE.$TEMP.$REPORTS                      */
/*                                                                           */
/*****************************************************************************/
 NewEra Software, Inc.
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******************************** Bottom of Data ********************************
```

6.6.3.2 LCSS Configuration Report

Incremental Processor ID and LCSS values add to report include:

- Processor identifier (ProcId)
- Processor Description
- Processor Unit designator
- Processor Model designator
- Processor Local System Name (LSYSTEM)
- Processor Serial Number
- For each Logical Channel Subsystem (LCSS) its description

```
/*****************************************************************************/
/*                                                                           */
/*                                  StepOne                                  */
/*                                                                           */
/*        Source IODFDsn:PROBI1.IODF87 Time Stamp:2021-09-25 16:16:27        */
/*                Report Date:2021/09/25 Report Time:11:49:47                */
/*                                                                           */
/*        Processor Configuration Report - PROCID:CDC1CPUA LEVEL:LCSS        */
/*                                                                           */
/*****************************************************************************/
|
ICE0000I +-------------------------------------------------------------------+
ICE0000I | NAME:CPC0001 DESC:z10_2097-E56/705_Serial#:                       |
ICE0000I | UNIT:2097 MODEL:E56 LSYSTEM:CPC0001 SERIAL:0XCVB12097             |
ICE0000I |     LCSS:0 DESC:---                                              |
ICE0000I |     LCSS:1 DESC:---                                              |
ICE0000I |     LCSS:2 DESC:---                                              |
ICE0000I |     LCSS:3 DESC:---                                              |
ICE0000I +-------------------------------------------------------------------+
/*****************************************************************************/
/*                                                                           */
/*              RPTDSN:IFO.IFOP.$STEPONE.$TEMP.$REPORTS                      */
/*                                                                           */
/*****************************************************************************/
 NewEra Software, Inc.
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******************************** Bottom of Data ********************************
```

6.6.3.3 LPAR Configuration Report

Incremental LPAR values added to report include:

- Logical Partition (LPAR) Number (HEX 1-F)
- Logical Partition (LPAR) Name
- Logical Partition (LPAR) Type (OS or CF)
- Logical Partition (LPAR) Description

Note that LPAR:0 should be interpreted as meaning no LPARS are defined to the related Logical Channel Subsystem (LCSS).

```
/*****************************************************************************/
/*                                                                           */
/*                                  StepOne                                  */
/*                                                                           */
/*        Source IODFDsn:PROBI1.IODF87 Time Stamp:2021-09-25 16:16:27        */
/*                Report Date:2021/09/25 Report Time:11:49:47                */
/*                                                                           */
/*        Processor Configuration Report - PROCID:CPC0001 LEVEL:LPAR         */
/*                                                                           */
/*****************************************************************************/
|
ICE0000I +-------------------------------------------------------------------+
ICE0000I | NAME:CPC0001 DESC:z10_2097-E56/705_Serial#:                       |
ICE0000I | UNIT:2097 MODEL:E56 LSYSTEM:CPC0001 SERIAL:0XCVB12097             |
ICE0000I |     LCSS:0 DESC:---                                              |
ICE0000I |         LPAR:2 DESC:RCNB OS,GDDR_LPAR_RCNB                       |
ICE0000I |         LPAR:6 DESC:XXYZ OS,SBPLEX_LPAR_XXYZ_TEST                |
ICE0000I |     LCSS:1 DESC:---                                              |
ICE0000I |         LPAR:0 DESC:NONE NO_LPARS_DEFINED                        |
ICE0000I |     LCSS:2 DESC:---                                              |
ICE0000I |         LPAR:4 DESC:L3DR OS,L3DR                                 |
ICE0000I |         LPAR:5 DESC:A2DR OS,A2DR                                 |
ICE0000I |         LPAR:6 DESC:W2DR OS,W2DR                                 |
ICE0000I |         LPAR:A DESC:M3DR OS,M3DR                                 |
ICE0000I |         LPAR:B DESC:H1DR OS,H1DR                                 |
ICE0000I |         LPAR:C DESC:W1DR OS,W1DR                                 |
ICE0000I |     LCSS:3 DESC:---                                              |
ICE0000I |         LPAR:1 DESC:S7GP OS,FUNDS_High_Impact_Lpar               |
ICE0000I |         LPAR:2 DESC:S2WT OS,Wholesale_Low_Impact                 |
ICE0000I |         LPAR:3 DESC:CFR2 CF,Retail_Alt_CF_Lpar                   |
ICE0000I |         LPAR:4 DESC:B1ST OS,MRSC_Low_Impact_Lpar                 |
ICE0000I |         LPAR:5 DESC:CFG1 CF,FUNDS_Primary_CF_Lpar                |
ICE0000I |         LPAR:6 DESC:TCNB OS,GDDR_Control_Lpar                    |
ICE0000I |         LPAR:A DESC:IBB9 OS,S9_Internal_Recovery_Lpar            |
ICE0000I +-------------------------------------------------------------------+
/*****************************************************************************/
/*                                                                           */
/*                  RPTDSN:IFO.IFOP.$STEPONE.$TEMP.$REPORTS                  */
/*                                                                           */
/*****************************************************************************/
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******************************** Bottom of Data ********************************
```

6.6.3.4 PATH Configuration Report

Incremental PATH values added to report include:

- Logical Channel Path Identifier
- Physical Channel Path Identifier
- Channel Path Type
- Sharing Indicator
- Reconfigurable Indicator
- Channel Path Description

```
/*****************************************************************************/
/*                                                                           */
/*                                  StepOne                                  */
/*                                                                           */
/*        Source IODFDsn:PROBI1.IODF87 Time Stamp:2021-09-25 16:16:27        */
/*                Report Date:2021/09/25 Report Time:11:49:47                */
/*                                                                           */
/*        Processor Configuration Report - PROCID:CPC0001 LEVEL:PATH         */
/*                                                                           */
/*****************************************************************************/
|
ICE0000I +-------------------------------------------------------------------+
ICE0000I | NAME:CPC0001 DESC:z10_2097-E56/705_Serial#:                       |
ICE0000I | UNIT:2097 MODEL:E56 LSYSTEM:CPC0001 SERIAL:0XCVB12097             |
ICE0000I |     LCSS:0 DESC:---                                              |
ICE0000I |         LPAR:2 DESC:RCNB OS,GDDR_LPAR_RCNB                       |
ICE0000I |             PATH:00,5F0,FC ,S/- DESC:NONE_PROVIDED               |
ICE0000I |             PATH:01,260,FC ,S/- DESC:NONE_PROVIDED               |
ICE0000I |         LPAR:6 DESC:XXYZ OS,SBPLEX_LPAR_XXYZ_TEST                |
ICE0000I |             PATH:00,5F0,FC ,S/- DESC:NONE_PROVIDED               |
ICE0000I |             PATH:04,440,FC ,S/- DESC:NONE_PROVIDED               |
ICE0000I |             PATH:05,450,FC ,S/- DESC:NONE_PROVIDED               |
ICE0000I |             PATH:FF,---,IQD,S/- DESC:HYPERSOCKETS                |
ICE0000I |     LCSS:1 DESC:---                                              |
ICE0000I |         LPAR:0 DESC:NONE NO_LPARS_DEFINED                        |
ICE0000I |     LCSS:2 DESC:---                                              |
ICE0000I |         LPAR:4 DESC:L3DR OS,L3DR                                 |
ICE0000I |             PATH:00,5C1,FC ,S/- DESC:DMX3_2500#1_s/n_0330        |
ICE0000I |             PATH:01,5F3,FC ,S/- DESC:DMX3_2500#1_s/n_0330        |
ICE0000I |             PATH:02,142,FC ,S/- DESC:DMX3_2500#1_s/n_0330        |
ICE0000I |             PATH:03,1B3,FC ,S/- DESC:DMX3_2500#1_s/n_0330        |
ICE0000I |             PATH:E5,---,CIB,-/- DESC:L3DR_TO_CF1B_CFLA1          |
ICE0000I |         LPAR:5 DESC:A2DR OS,A2DR                                 |
ICE0000I |             PATH:00,5C1,FC ,S/- DESC:DMX3_2500#1_s/n_0330        |
ICE0000I |             PATH:01,5F3,FC ,S/- DESC:DMX3_2500#1_s/n_0330        |
ICE0000I |             PATH:02,142,FC ,S/- DESC:DMX3_2500#1_s/n_0330        |

...

/*****************************************************************************/
/*                                                                           */
/*                  RPTDSN:IFO.IFOP.$STEPONE.$TEMP.$REPORTS                  */
/*                                                                           */
/*****************************************************************************/
 NewEra Software, Inc.
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******************************** Bottom of Data ********************************
```

6.6.3.5 CTLU Configuration Report

Incremental CTLU values added to report include:

- Control Unit Device Address
- CSHR when the Control Unit is openly shared with other LPARs
- CPRT when the Control Unit is restrictively shared with other LPARs
- CNOP when the Control Unit is prohibited from serving the named LPAR

```
/*******************************************************************************/
/*                                                                             */
/*                                  StepOne                                    */
/*                                                                             */
/*        Source IODFDsn:PROBI1.IODF87 Time Stamp:2021-09-25 16:16:27          */
/*                Report Date:2021/09/25 Report Time:11:49:47                  */
/*                                                                             */
/*        Processor Configuration Report - PROCID:CPC0001 LEVEL:CTLU           */
/*                                                                             */
/*******************************************************************************/
|
ICE0000I +-----------------------------------------------------------------+
ICE0000I | NAME:CPC0001 DESC:z10_2097-E56/705_Serial#:                      |
ICE0000I | UNIT:2097 MODEL:E56 LSYSTEM:CPC0001 SERIAL:0XCVB12097            |
ICE0000I |     LCSS:0 DESC:---                                             |
ICE0000I |         LPAR:2 DESC:RCNB OS,GDDR_LPAR_RCNB                      |
ICE0000I |             PATH:00,5F0,FC ,S/- DESC:NONE_PROVIDED              |
ICE0000I |                 CTLU:2000,CSHR                                  |
ICE0000I |                 CTLU:2300,CSHR                                  |
ICE0000I |                 CTLU:2600,CSHR                                  |
ICE0000I |                 CTLU:2900,CSHR                                  |
ICE0000I |                 CTLU:2E00,CSHR                                  |
ICE0000I |                 CTLU:4000,CSHR                                  |
ICE0000I |                 CTLU:4300,CSHR                                  |
ICE0000I |                 CTLU:4600,CSHR                                  |
ICE0000I |                 CTLU:4900,CSHR                                  |
ICE0000I |             PATH:01,260,FC ,S/- DESC:NONE_PROVIDED              |
ICE0000I |                 CTLU:2000,CSHR                                  |
ICE0000I |                 CTLU:2300,CSHR                                  |
ICE0000I |                 CTLU:2600,CSHR                                  |
ICE0000I |                 CTLU:2900,CSHR                                  |
ICE0000I |                 CTLU:2E00,CSHR                                  |
ICE0000I |                 CTLU:C300,CPRT                                  |
ICE0000I |             PATH:4D,1E3,FC ,S/- DESC:VTS                        |
ICE0000I |             PATH:5A,1A3,FC ,S/- DESC:FCTC_Primary               |
ICE0000I |                 CTLU:7650,CSHR                                  |
ICE0000I |                 CTLU:7A00,CSHR                                  |
ICE0000I |                 CTLU:7A10,CNOP                                  |
ICE0000I |                 CTLU:7A20,CNOP                                  |

...

/*******************************************************************************/
/*                                                                             */
/*                 RPTDSN:IFO.IFOP.$STEPONE.$TEMP.$REPORTS                     */
/*                                                                             */
/*******************************************************************************/
 NewEra Software, Inc.
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****************************** Bottom of Data ******************************
```

6.6.3.6 UNIT Configuration Report

Incremental CTLU values added to report include:

- I/O Device Unit Address (Often referred to as the Head-of-String)
- DSHR when the Control Unit is openly shared with other LPARs
- DPRT when the Control Unit is restrictively shared with other LPARs
- DNOP when the Control Unit is prohibited from serving the named LPAR

```
/*****************************************************************************/
/*                                                                           */
/*                                StepOne                                    */
/*                                                                           */
/*        Source IODFDsn:PROBI1.IODF87 Time Stamp:2021-09-25 16:16:27        */
/*                Report Date:2021/09/25 Report Time:11:49:47                */
/*                                                                           */
/*        Processor Configuration Report - PROCID:CPC0001 LEVEL:UNIT         */
/*                                                                           */
/*****************************************************************************/
|
ICE0000I +-------------------------------------------------------------------+
ICE0000I | NAME:CPC0001 DESC:z10_2097-E56/705_Serial#:                       |
ICE0000I | UNIT:2097 MODEL:E56 LSYSTEM:CPC0001 SERIAL:0XCVB12097             |
ICE0000I |     LCSS:0 DESC:---                                              |
ICE0000I |         LPAR:2 DESC:RCNB OS,GDDR_LPAR_RCNB                       |
ICE0000I |             PATH:00,5F0,FC ,S/- DESC:NONE_PROVIDED               |
ICE0000I |                 CTLU:2000,CSHR                                   |
ICE0000I |                     UNIT:2000,DSHR                               |
ICE0000I |                     UNIT:20E0,DSHR                               |
ICE0000I |                 CTLU:2300,CSHR                                   |
ICE0000I |                     UNIT:2300,DSHR                               |
ICE0000I |                     UNIT:23E0,DSHR                               |
ICE0000I |                 PATH:01,260,FC ,S/- DESC:NONE_PROVIDED           |
ICE0000I |                 CTLU:2000,CSHR                                   |
ICE0000I |                     UNIT:2000,DSHR                               |
ICE0000I |                     UNIT:20E0,DSHR                               |
ICE0000I |                 CTLU:2300,CSHR                                   |
ICE0000I |                     UNIT:2300,DSHR                               |
ICE0000I |             PATH:5A,5C3,FC ,S/- DESC:FCTC_Primary                 |
ICE0000I |                 CTLU:7522,CSHR                                   |
ICE0000I |                     UNIT:7520,DNOP                               |
ICE0000I |                 CTLU:784A,CSHR                                   |
ICE0000I |                     UNIT:7848,DPRT                               |
ICE0000I |                 CTLU:787A,CSHR                                   |
ICE0000I |                     UNIT:7878,DPRT                               |

...

/*****************************************************************************/
/*                                                                           */
/*                  RPTDSN:IFO.IFOP.$STEPONE.$TEMP.$REPORTS                  */
/*                                                                           */
/*****************************************************************************/
 NewEra Software, Inc.
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******************************** Bottom of Data ********************************
```

6.6.3.7 UCWS Configuration Report

Incremental UCWS value added to report include:

- The number of I/O Devices, inclusive of the Head-of-String, that may be configured.

```
/*****************************************************************************/
/*                                                                           */
/*                                StepOne                                    */
/*                                                                           */
/*        Source IODFDsn:PROBI1.IODF87 Time Stamp:2021-09-235 16:16:27        */
/*                Report Date:2021/09/25 Report Time:11:49:47                */
/*                                                                           */
/*        Processor Configuration Report - PROCID:CPC0001 LEVEL:UCWS         */
/*                                                                           */
/*****************************************************************************/
|
ICE0000I +-------------------------------------------------------------------+
ICE0000I | NAME:CPC0001 DESC:z10_2097-E56/705_Serial#:                       |
ICE0000I | UNIT:2097 MODEL:E56 LSYSTEM:CPC0001 SERIAL:0XCVB12097             |
ICE0000I |     LCSS:0 DESC:---                                               |
ICE0000I |         LPAR:2 DESC:RCNB OS,GDDR_LPAR_RCNB                        |
ICE0000I |             PATH:00,5F0,FC ,S/- DESC:NONE_PROVIDED                |
ICE0000I |                 CTLU:2000,CSHR                                    |
ICE0000I |                     UNIT:2000,DSHR UCWS:224                       |
ICE0000I |                     UNIT:20E0,DSHR UCWS:32                        |
ICE0000I |                 CTLU:2300,CSHR                                    |
ICE0000I |                     UNIT:2300,DSHR UCWS:224                       |
ICE0000I |                     UNIT:23E0,DSHR UCWS:32                        |
ICE0000I |                 CTLU:2600,CSHR                                    |
ICE0000I |                     UNIT:2600,DSHR UCWS:224                       |
ICE0000I |                     UNIT:26E0,DSHR UCWS:32                        |
ICE0000I |                 CTLU:2900,CSHR                                    |
ICE0000I |                     UNIT:4000,DSHR UCWS:224                       |
ICE0000I |                     UNIT:40E0,DSHR UCWS:32                        |
ICE0000I |                 CTLU:9503,CSHR                                    |
ICE0000I |                     UNIT:95C0,DSHR UCWS:64                        |
ICE0000I |                 CTLU:9803,CSHR                                    |
ICE0000I |                     UNIT:9800,DSHR UCWS:192                       |
ICE0000I |                     UNIT:98C0,DSHR UCWS:64                        |
ICE0000I |                 CTLU:9B03,CSHR                                    |
ICE0000I |                     UNIT:9B00,DSHR UCWS:192                       |
ICE0000I |                     UNIT:9BC0,DSHR UCWS:64                        |
ICE0000I |                 CTLU:9E03,CSHR                                    |
ICE0000I |                     UNIT:9E00,DSHR UCWS:192                       |
ICE0000I |                     UNIT:9EC0,DSHR UCWS:64                        |

...

/*****************************************************************************/
/*                                                                           */
/*                 RPTDSN:IFO.IFOP.$STEPONE.$TEMP.$REPORTS                   */
/*                                                                           */
/*****************************************************************************/
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****************************** Bottom of Data ******************************
```
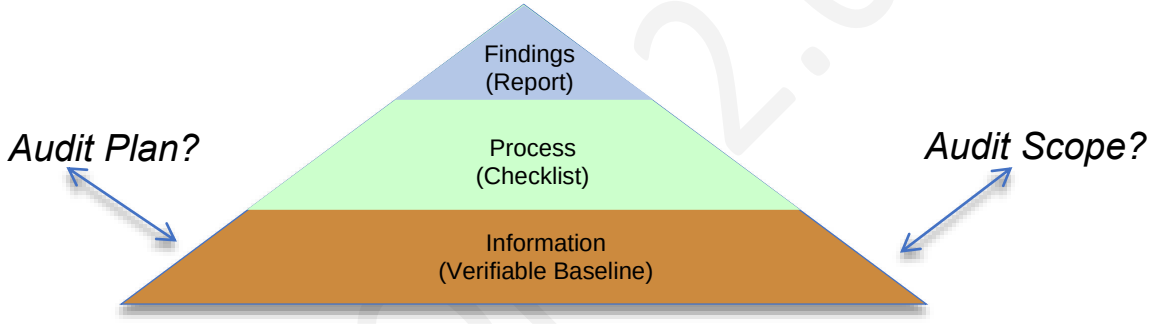
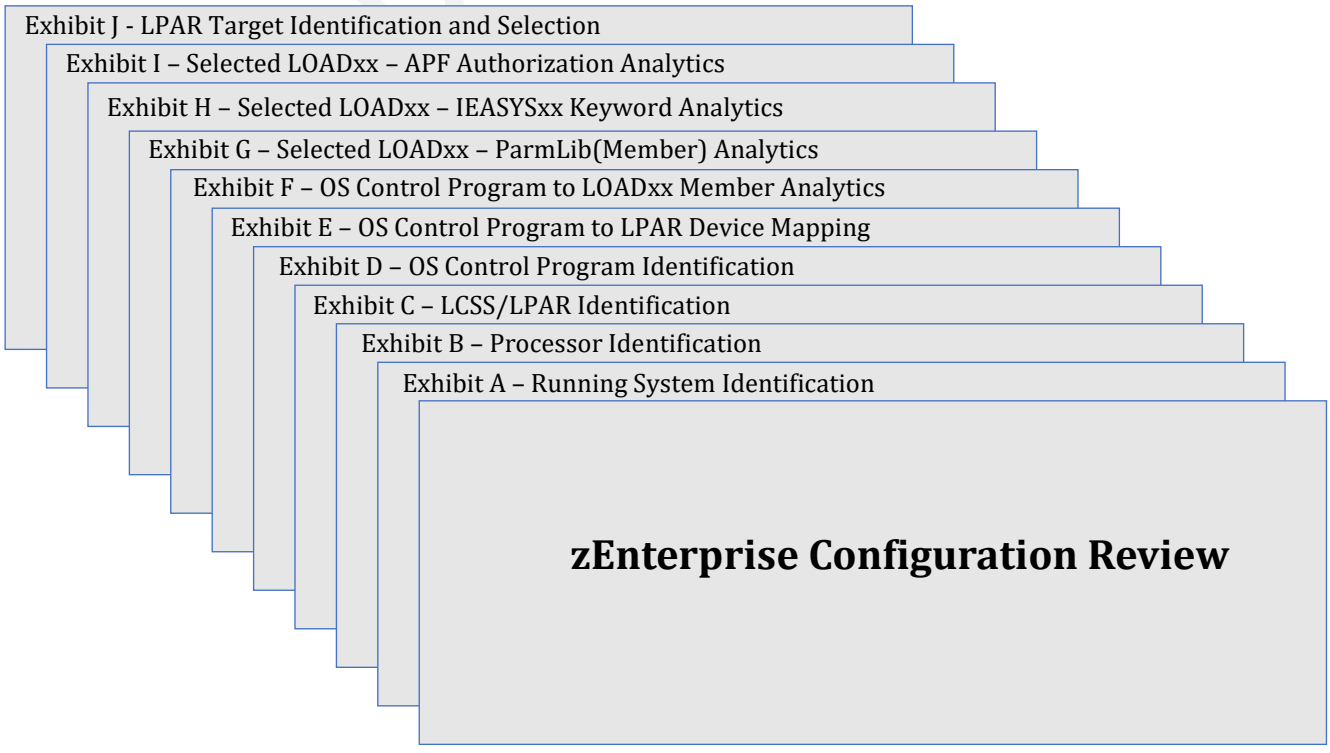

7 Sample zEnterprise Configuration Review

The conventional wisdom of many Audit Plans and Tools ignore what many consider obvious and begin deep in the details of the Operating System (OS) and External Security Manager (ESM). StepOne takes a different approach to zEnterprise auditing, allowing you to quickly and efficiently create a Verifiable Baseline of system configuration components and connections. You should use this Configuration Baseline as an integral part of your Audit Planning process, ultimately scaling the Scope of the Audit to a level that satisfies both your review needs and those of your client.

Only when the Configuration Baseline is fully understood should you proceed with the selection of one or more LPAR Audit Targets. The collection of Exhibits described in this section is designed to make the identification and selection of LPAR Targets meaningful, requiring a minimum of assistance from your assigned System Programmer.



Intended primarily as supporting documentation for prescribed Audit Processes and resulting Audit Findings, StepOne supports the following Exhibit Set. The Information in each Exhibit is automatically extracted and presented in report format. Each Exhibit is described in this section.



7.1 Running System Identification – Exhibit A

Exhibit A Running System Identification		
Description	**Value**	**Comments**
SMFid		
System		
Sysplex		
Serial Number		
Operating System		
Last IPLed		
Running IODF		
Defined IODF		
ICE Active		
ESM Active		
Engagement		
Reference		
Client		
Location		
Beginning Date		
Prepared by		

7.2 Processor Identification – Exhibit B

Exhibit B

Processor Identification

IODF Dataset_____Last IODF Update_____

Procid	LPARs	Serial	Description

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.3 LCSS/LPAR Identification – Exhibit C

Exhibit C

LCSS/LPAR Identification

IODF Dataset_____Last IODF Update_____

ProcId_____Serial Number_____

LPAR	LCSS0	LCSS1	LCSS2	LCSS3
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.4 OS Control Program Identification – Exhibit D

Exhibit D OS Control Program Identification IODF Dataset_____Last IODF Update_____			
ConfigId	Type	UCBs	Description

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.5 OS Control Program to LPAR Device Mapping – Exhibit E

Exhibit E OS Control Program to LPAR Device Mapping IODF Dataset_____Last IODF Update_____ OS ConfigId_____LPAR Name_____			
I/O Device Unit Address	Device Configured		Description
	To OS	To LPAR	

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.6 OS Control Program to LOADxx Member Analytics – Exhibit F

Exhibit F

OS Control Program to LOADxx Member Analytics

IODF Dataset_____Last IODF Update_____

Member	Source Dataset	IODF		Used By ConfigID	Comment
		HLQ	Suffix		

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.7 Selected LOADxx - ParmLib DSN(Mbr) Analytics – Exhibit G

Exhibit G LOADxx Named ParmLib Dataset(Member) Analytics IODF Dataset_____Last IODF Update_____ LOADxx Member_____Source Dataset_____					
ParmLib Elements			z/OS	Last Updated	
Member	Suffix	Source Dataset		USER	Date

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.8 Selected LOADxx Member - IEASYSxx Analytics – Exhibit H

Exhibit H

Selected LOADxx Member - IEASYSxx Keyword Analytics

IODF Dataset_____Last IODF Update_____

LOADxx Member_____Source Dataset_____

Keyword	Type	Keyword Values	Source IEASYSxx Member

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.9 Selected LOADxx Member – APF Analytics – Exhibit I

Exhibit I

Selected LOADxx Member - IEASYSxx Keyword Analytics

IODF Dataset_____Last IODF Update_____

LOADxx Member_____Source Dataset_____

APF Candidates		Candidate Validation			
Dataset Name	Volume	Modules	Dataset	Duplicate	Volume

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

7.10 LPAR Audit Target Identification and Selection

Exhibit J

LPAR Audit Target Identification and Selection

IODF Dataset_____Last IODF Update_____

Central Processing Complex			Logical Partition		
Procid	Serial	Location	Name	LOADxx	OSCP

Engagement	
Reference	
Client	
Location	
Beginning Date	
Prepared by	

8 Appendix

8.1 IODF Dataset Best Practices

8.1.1 Establish and Enforce Limits

- Access to HCD/HCM
- NONE/READ/UPDATE Authority to SYS1.IODFxx
- Access to the Hardware Management Console (HCM)
- Access to the System Element (SE)
- Access to the Management Network (URM)
- Access to LOADxx Members – SYSn.IPLPARM
- Access to System Parameters – SYS1.PARMLIB
- Access to NIPS and System Consoles
- Require “Activity Logging” ON

8.1.2 Document and Periodically Review Initialization Process

- Power On Reset (POR)
- Initial z/OS Program Load (IPL)
- Disaster Recovery/Business Continuity

8.2 IODF as the Absolute zEnterprise Baseline

There is no longer a debate about the vital role played by the IODF as the Absolute zEnterprise Baseline. For those who may be new to the zEnterprise platform additional reading and study may be needed. The absolute best reference work is shown below.

8.2.1 z/Enterprise Reference Material

z/Auditing Essentials - Volume 1
zEnterprise Hardware - An Introduction for Auditors
Edited By Julie-Ann Williams - julie@sysprog.co.uk

Co-Authored by:

- Julie-Ann Williams
- Craig Warren
- Martin Underwood
- Steve Tresadern

8.2.2 What an Industry Expert says about z/Audit Essentials

This has been an interesting book for me to review. I have been involved with data security since 1972 when I formed the SHARE Security Project and we developed the security requirements for future IBM Operating Systems. And, when I was not satisfied with the IBM response to those requirements (RACF), I developed ACF2 to prove that the requirements could be accomplished. RACF and Top Secret now also meet those requirements.

But, my whole focus was on data security in an operating environment and I never thought much about the steps before the system was IPL'd and the External Security Manager (ACF2, RACF or Top Secret) was active. This book opened my eyes to the issues involved before the IPL is complete including the LOADxx set of parameters that define where the Operating System Parameters are stored and the layout of the storage devices, how they are mapped – and even added dynamically by activating a new Input/Output Definition File (IODF)! When presenting on security vulnerabilities, I often give examples of system integrity vulnerabilities caused by sharing of storage devices containing production data or libraries between production and development LPARs or systems, but this book brings the whole concept forward, clarifies it and explains how this can be correctly managed.

Although some Auditors may believe this book gives them more information than they needed to know, it certainly should open their eyes to issues that should be looked at for a complete audit. The book provides the big picture of how all the pieces fit together and gives them the basis for asking the right questions – many of which I am sure they did not know.

I really have to give Julie-Ann, Martin, Craig and Steve credit for the details and the explanations that they provide. I am sure it was not easy. Even experienced Systems Programmers would have some difficulty embracing these concepts and Auditors who did not come out of that environment would have a steep learning curve. I cannot wait for Volume 2 which covers the auditing concepts for z/OS in the operating environment.

Barry Schrager – May 2011

8.3 Added Value with ICE Core Integration

8.3.1 z/OS System Inspection

8.3.2 Access to the IBM Health Checker for z/OS

8.3.3 Access to The Control Editor's Control Journals

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