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Technology · Connections · Results

Documenting and Reporting Changes in Your IODF

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Session 2844

Before we begin….
a Brief History lesson

- Does anyone remember a product named SHAMAN?
  - It was an acronym for System HArdware MANager
  - Marketed by NewEra Software
    - Read an IOCP into a Windows application and provided a GUI to view, manage and report on IOCP components.

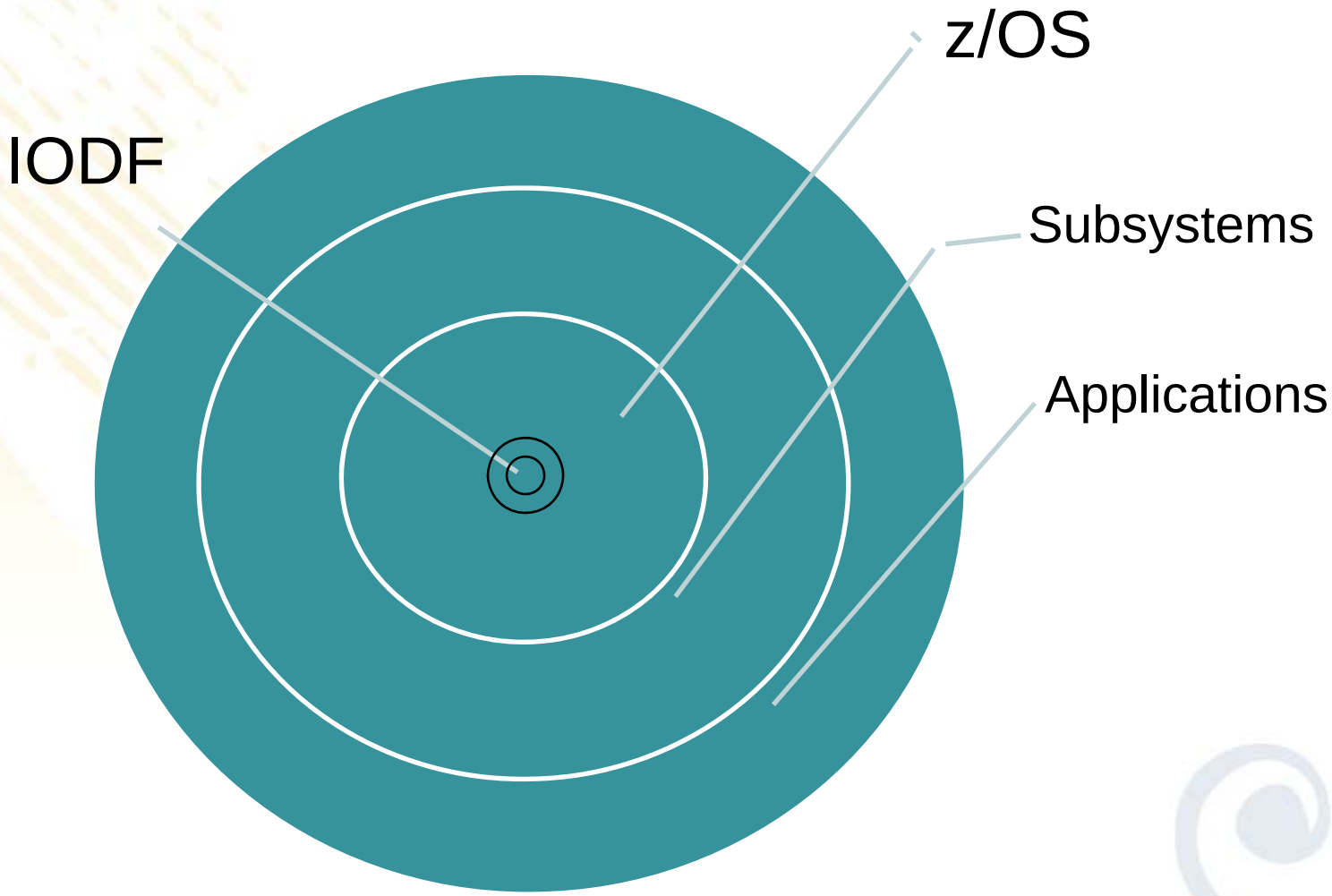
Before we begin….
a Brief History lesson

- All the rights to SHAMAN were sold to IBM
  - It became Hardware Configuration Manager for HCD
    - HCM for HCD

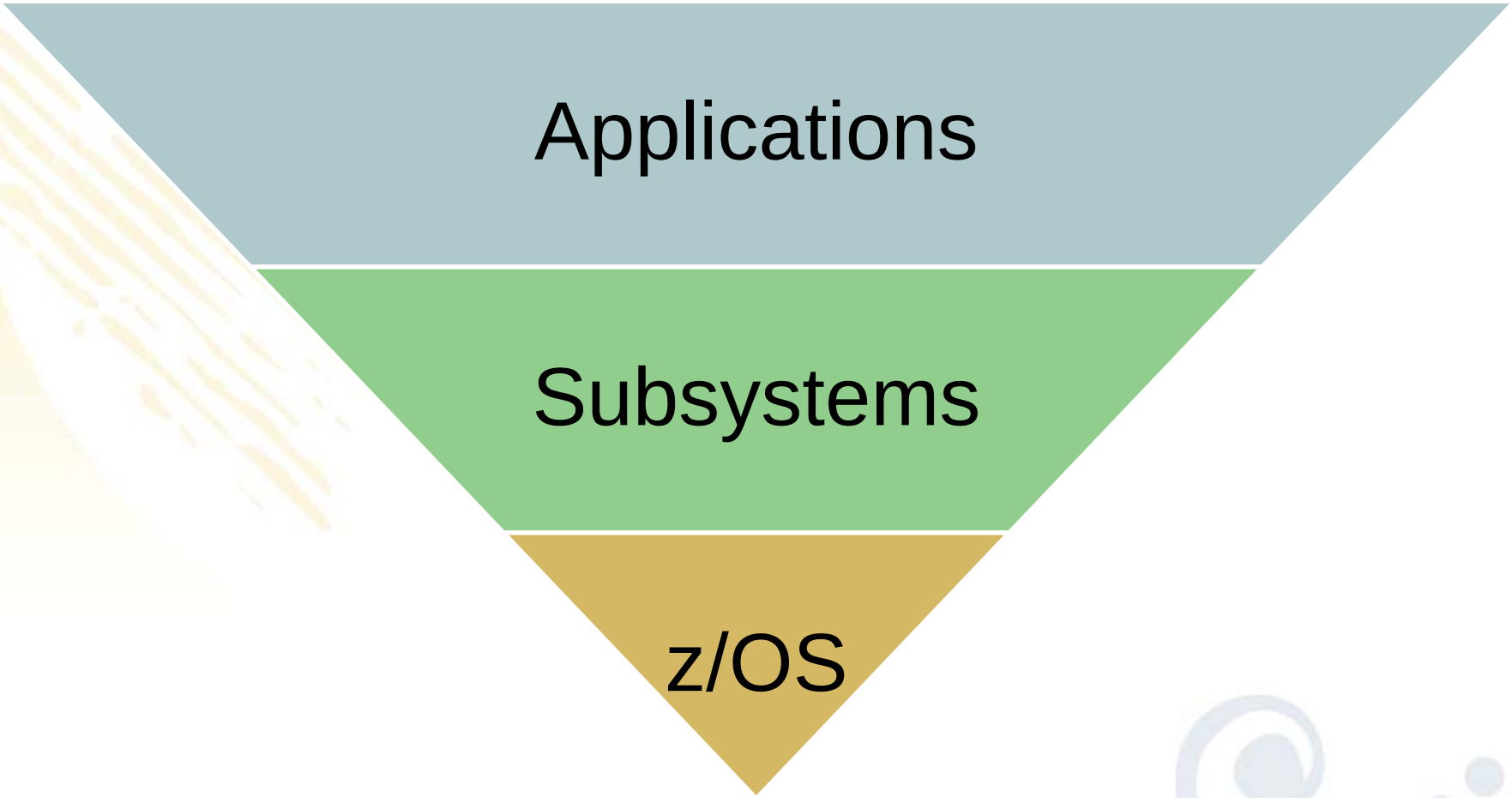
Topics in this Session

- Why do we need to provide Change reporting and Documentation for the IODF?
- What needs to change so that we can provide better reporting for the IODF?
- Where and How do I start to do a better job of understanding the IODF?
- What is being provided as tools to assist in this new approach to managing the IODF?

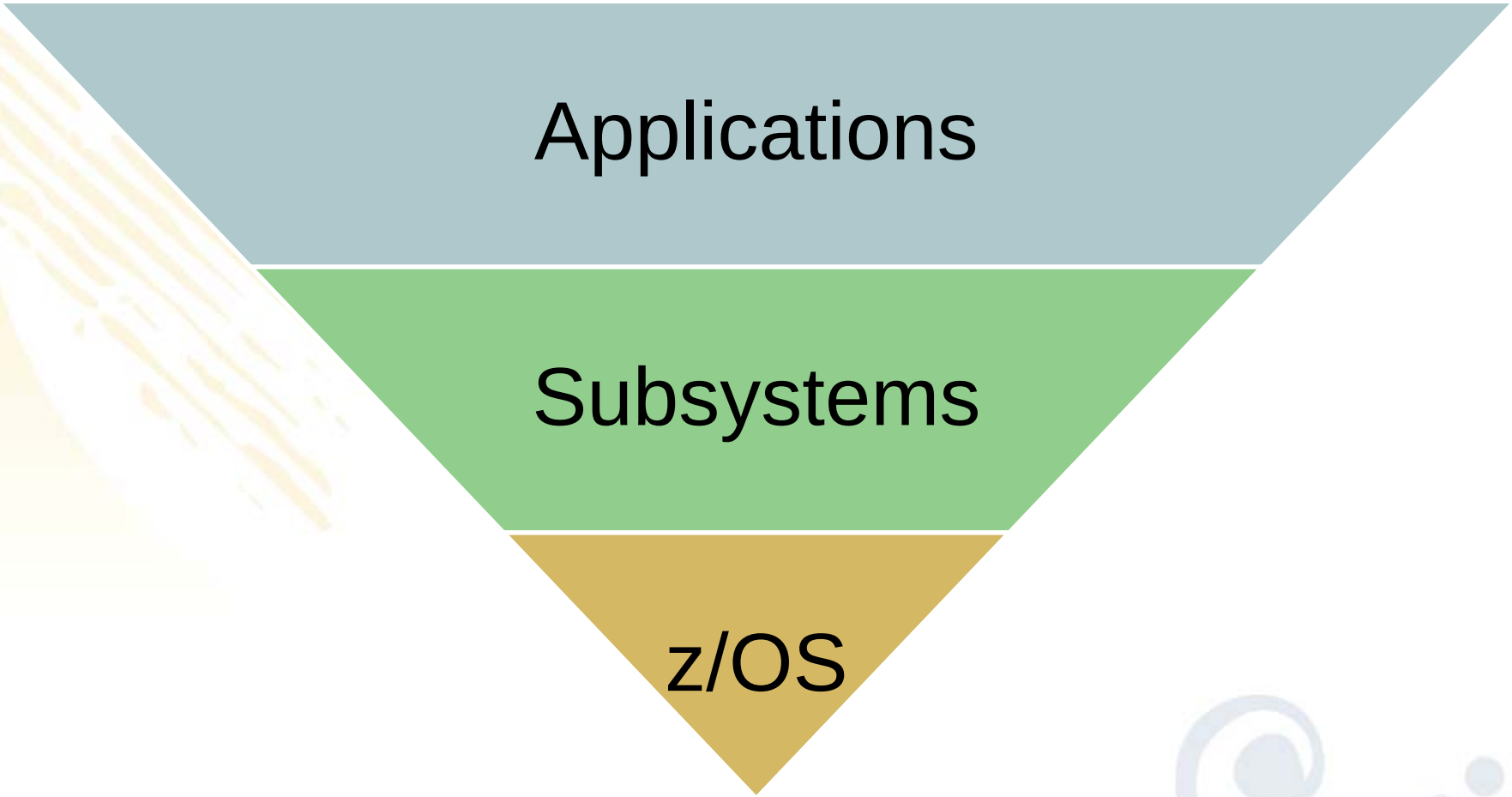
Why the IODF?



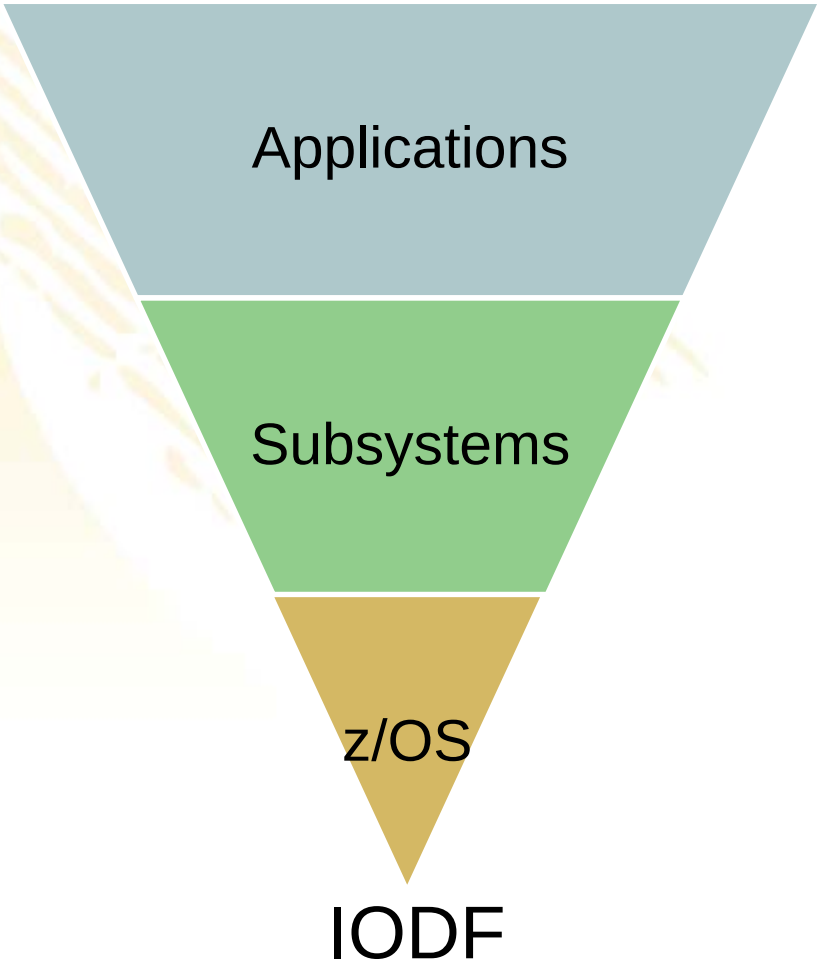
Why the IODF?



Why the IODF?



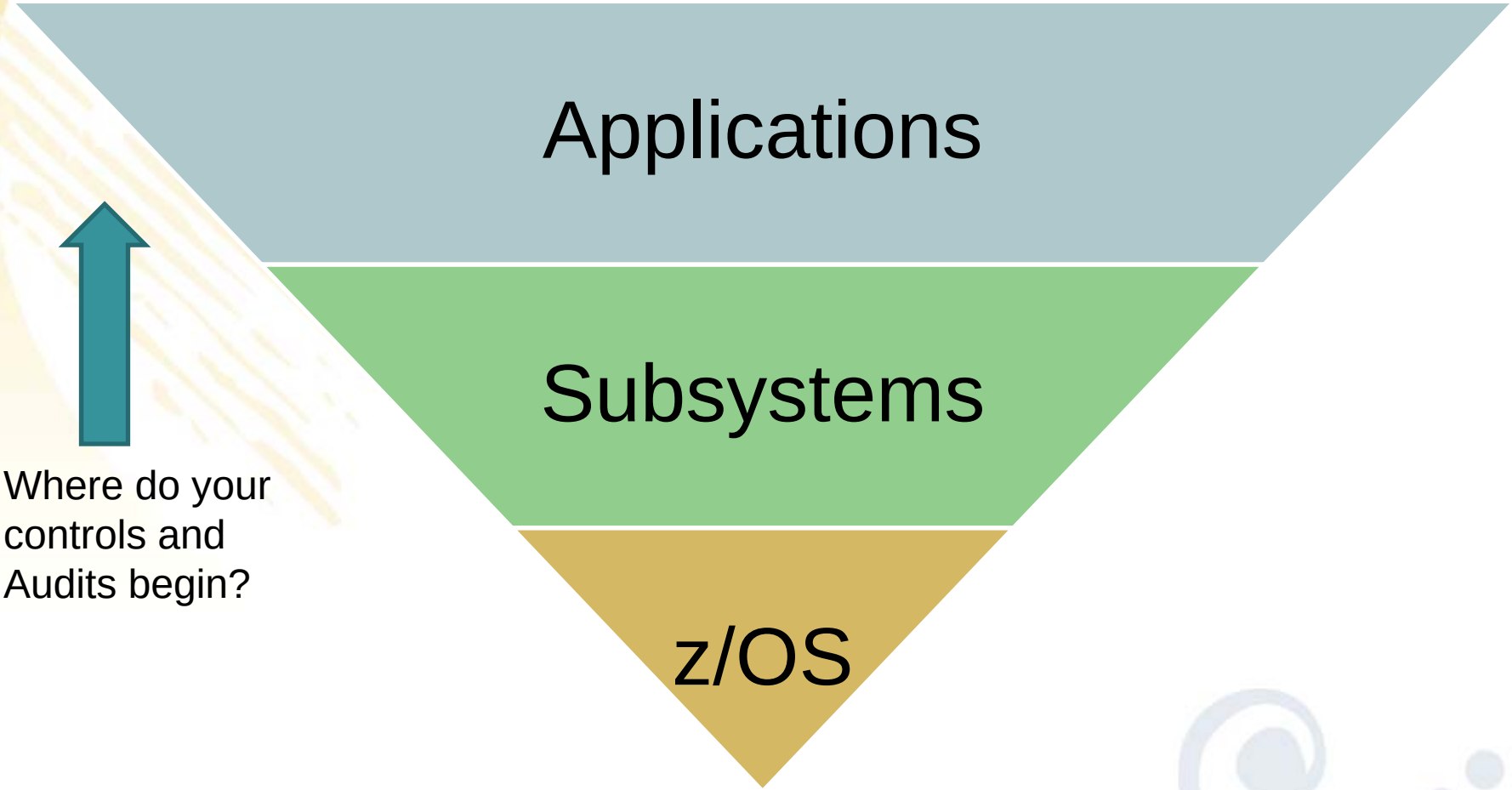
Why the IODF ?



Why the IODF?

- IODF is managed differently than other z/OS functions
  - HCD interface is hard to use
  - Small number of staff make changes to IODF
    - Sharing of information is difficult using standard reports
- Auditors have little knowledge or access to HCD
- Change reporting is not transparent
- Management controls over IODF are less than any other functional area of z/OS and Applications.

Why the IODF?



Where do your controls and Audits begin?

Why the IODF?

- Controls and reviews seldom include the IODF
  - Exposes organizations to risk
  - Incomplete reviews and compliance reports
    - Who signs off the report?
- The Attitude of “It works; leave it alone” puts too much at risk

What needs to Change regarding the IODF

- Manage the IODF as any other z/OS data source
  - Usable reporting
  - Access to data
  - Change detection and reporting
  - Available analysis tools
- Integrate status reporting with other critical z/OS elements
- Ensure accuracy in content

Where do we start?

- Start with your IODF
  - Extract the IOCP, OSCP and SWCP elements
  - Create a structured view of the elements.
    - Understand the structure at the IOCP, CSS and LPAR levels
- Blueprint that structure for change detection and reporting
- Inspect the structure for risks and possible points of failure
- Provide analysis tools for easy investigative access to the data

What we at NewEra Software have been providing

- An approach to help you ‘Get Started’
- A no cost IODF Check up
- Use of our Software, The IODF Explorer.
- An open mind and a responsive development plan

What we at NewEra Software have been providing

- **Start with your IODF**
  - **Extract the IOCP, OSCP and SWCP elements**
  - **Create a structured view of the elements.**
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What we at NewEra Software have been providing

```
----------------- Image SENTRY - Scenario Selection/Definition -- IODF ----
  Option ===>

  Cm -Labels- -------Descriptions----- Cm -Labels- -------Descriptions-------
  -- -------- ------------------------ -- -------- --------------------------
  .. Test000A Test Scenario A z/10____ .. ________ ________________________________
  .. Test000B Test Scenario B 2 z/10s  .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
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  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________
  .. ________ ________________________________ .. ________ ________________________________

  S=Selecting a Scenario - I=Importing - E=Exporting - C=To Compare Scenarios
```
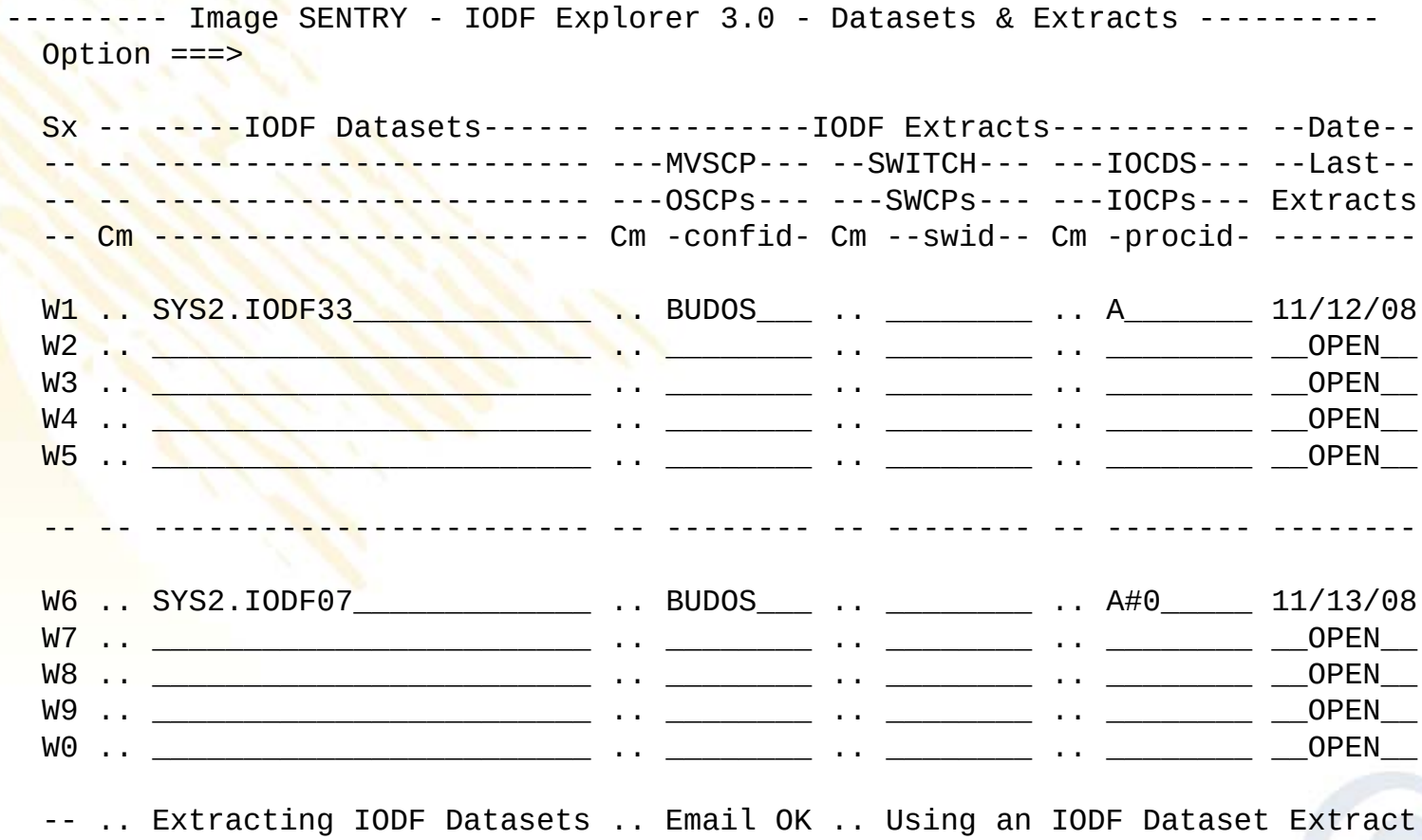
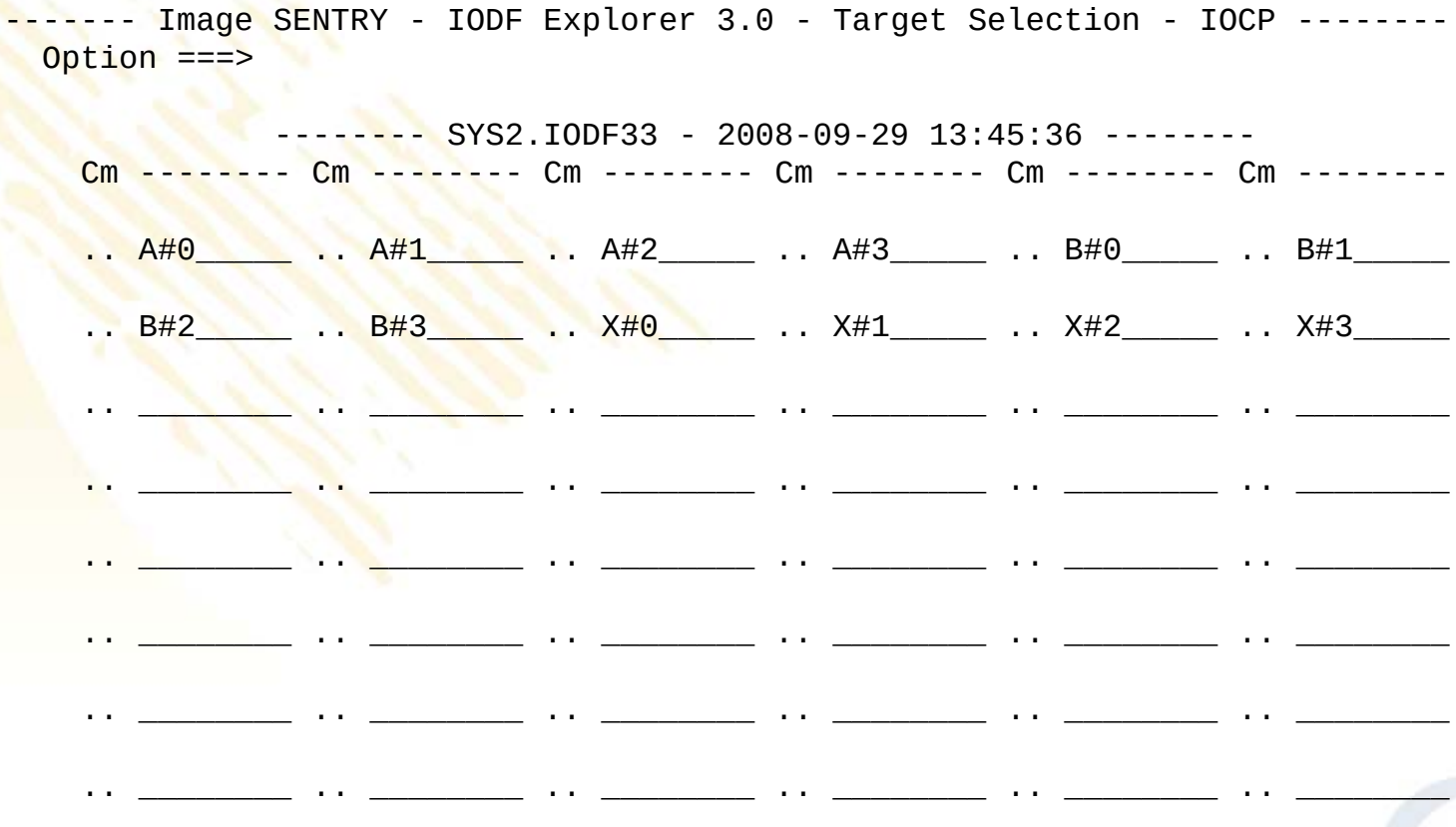

What we at NewEra Software have been providing



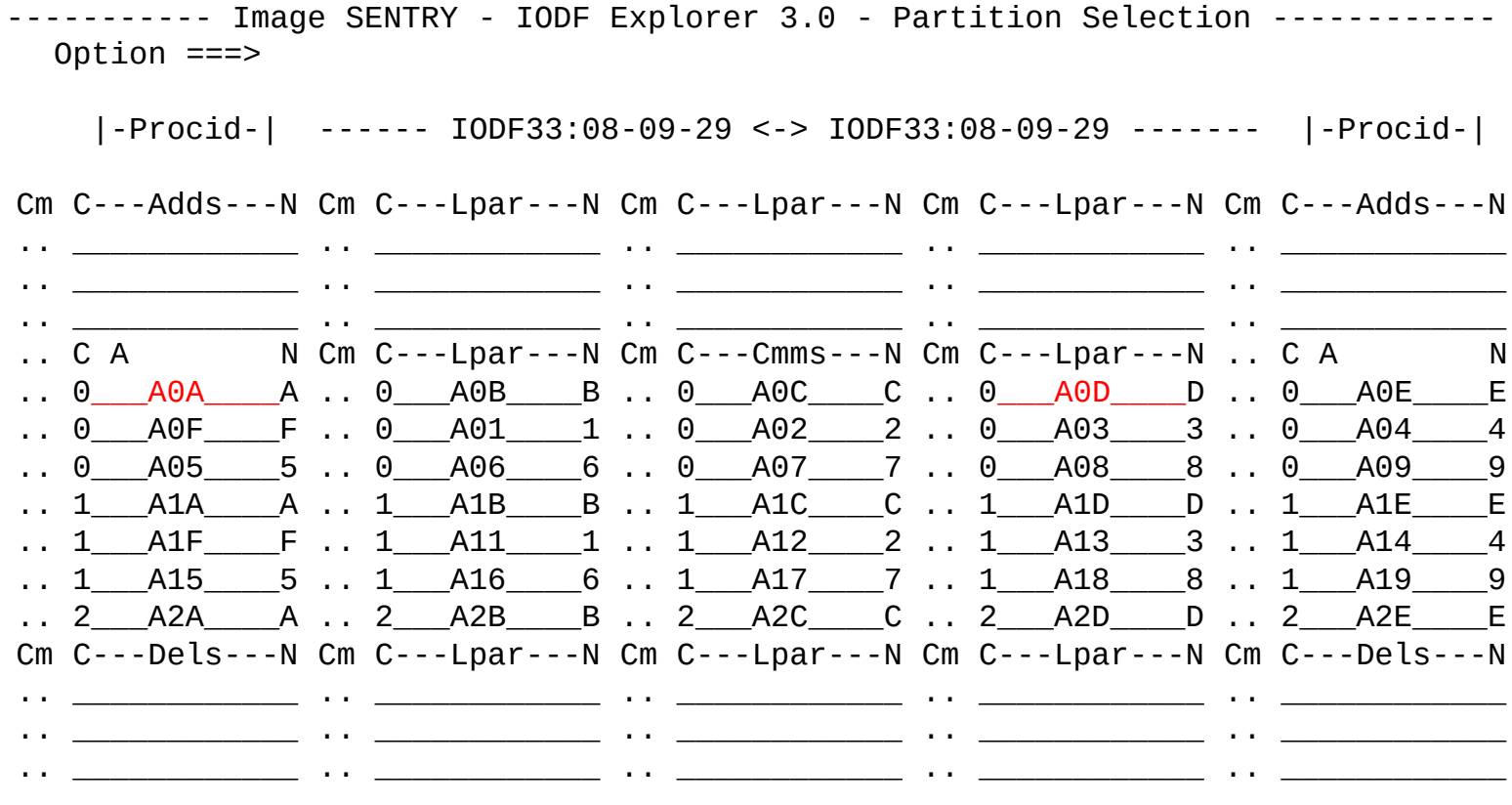
```
--------- Image SENTRY - IODF Explorer 3.0 - Datasets & Extracts ----------
  Option ===>

  Sx -- -----IODF Datasets------ -----------IODF Extracts----------- --Date--
  -- -- ------------------------ ---MVSCP--- --SWITCH--- ---IOCDS--- --Last--
  -- -- ------------------------ ---OSCPs--- ---SWCPs--- ---IOCPs--- Extracts
  -- Cm ------------------------ Cm -confid- Cm --swid-- Cm -procid- --------

  W1 .. SYS2.IODF33_____________ .. BUDOS___ .. ________ .. A_______ 11/12/08
  W2 .. ________________________ .. ________ .. ________ .. ________ __OPEN__
  W3 .. ________________________ .. ________ .. ________ .. ________ __OPEN__
  W4 .. ________________________ .. ________ .. ________ .. ________ __OPEN__
  W5 .. ________________________ .. ________ .. ________ .. ________ __OPEN__

  -- -- ------------------------ -- -------- -- -------- -- -------- --------

  W6 .. SYS2.IODF07_____________ .. BUDOS___ .. ________ .. A#0_____ 11/13/08
  W7 .. ________________________ .. ________ .. ________ .. ________ __OPEN__
  W8 .. ________________________ .. ________ .. ________ .. ________ __OPEN__
  W9 .. ________________________ .. ________ .. ________ .. ________ __OPEN__
  W0 .. ________________________ .. ________ .. ________ .. ________ __OPEN__

  -- .. Extracting IODF Datasets .. Email OK .. Using an IODF Dataset Extract
```

What we at NewEra Software have been providing



Working directly with Targets found in an IODF Element

What we at NewEra Software have been providing



What we at NewEra Software have been providing

```
--------------- Image SENTRY - IODF Explorer 3.0 - EDS00001 ---------------
  Option ===>

  -----OSCP Targets------ | -----SWCP Targets------ | -----IOCP Targets------
  .. SYS0.IODF43          | .. SYS0.IODF43          | .. SYS0.IODF43
  -----Wks/01/02/09------ | -----Wks/01/02/09------ | -----Wks/01/02/09------
  .. D1AC1___ .. D1GMC___ | .. 07 .. __ .. __ .. __ | .. CPU3#0__ .. _________
  .. D1AE1___ .. D1GMK___ | .. 08 .. __ .. __ .. __ | .. CPU3#1__ .. _________
  .. D1AE2___ .. D1MCA___ | .. 6C .. __ .. __ .. __ | .. CPU4#0__ .. _________
  .. D1AH2___ .. D1MCB___ | .. 6D .. __ .. __ .. __ | .. CPU4#1__ .. _________
  .. D1AH3___ .. D1MCI___ | .. __ .. __ .. __ .. __ | .. CPU4#2__ .. _________
  .. D1AH6___ .. D1MVL___ | .. __ .. __ .. __ .. __ | .. CPU4#3__ .. _________
  .. D1AY1___ .. D1NM1___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1EDL___ .. D1OP1___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1EDP___ .. D1PAM___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1EDS___ .. D1PAN___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1EDU___ .. D1SKJ___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1ED1___ .. D1SKU___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1ED3___ .. D1SP1___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1ED4___ .. D1SP9___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1GMA___ .. D1ST8___ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  .. D1GMB___ .. PRD1____ | .. __ .. __ .. __ .. __ | .. _________ .. _________
  R=Report - W=Wsheet - I=Inspect - S=Search - T=EDTab - C=Compare - Email NO
```

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What we at NewEra Software have been providing

```
 Menu  Utilities  Compilers  Help
 sssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss
 BROWSE    IFO.IFOE.PDIOCP43.EDS00001.$$CPU3#0($IOCNS Line 00000020 Col 001 080
 Command ===>                                                 Scroll ===> CSR
ISN8891I +-------------+-------------+-----------+-------------+-------------+
ISN8891I |  PARTITION  |  CSSCHPIDS  |  FI/ESCON  |  CNTLUNITS  |  IODEVICES  |
ISN8891I +-------------+-------------+-----------+-------------+-------------+
ISN8891I |             |             |           |             |             |
ISN8891I | add-del-chg | add-del-chg | add-dl-chg | add-del-chg | add-del-chg |
ISN8891I | --- --- --- | --- --- --- | --- -- --- | --- --- --- | --- --- --- |
ISN8891C |   0   0   0 |   0   0   0 |   0  0   0 |   1   0   0 |   1   0   0 |
ISN8891I | === === === | === === === | === == === | === === === | === === === |
ISN8891I |             |             |           |             |             |
ISN8891I +-add---------+-------------+-----------+-------------+---------add-+
ISN8891I | SS/NAME/NUM | SS/CHPID/PA |  SID/UNIT  |  UNIT/TYPE  | DEVUN/CTLUN |
ISN8891I +-add---------+-------------+-----------+-------------+---------add-+
ISN8891I |             |             |           |             |             |
ISN8891I |             |             |           |  1A00/3590  |  1A00/1A00  |
ISN8891I |             |             |           |             |             |
ISN8891I +-del---------+-------------+-----------+-------------+---------del-+
ISN8891I | SS/NAME/NUM | SS/CHPID/PA |  SID/UNIT  |  UNIT/TYPE  | DEVUN/CTLUN |
ISN8891I +-del---------+-------------+-----------+-------------+---------del-+
ISN8891I |             |             |           |             |             |
ISN8891I |             |             |           |             |             |
```

What we at NewEra Software have been providing

```
+-------------------------------------------------------------------------+
|                                                                         |
| ...1 CNTLUNIT STATEMENT HAS BEEN ADDED.                                 |
|                                                                         |
+------+------+----+-----+---------+---------+-----------------------+
| CTLU | TYPE | AD | SHR | PROTOCL | SERLNUM |  CTLUNIT DESCRIPTION  |
+------+------+----+-----+---------+---------+-----------------------+
> 1A00 > 3590 |  0 |  -  |    --   | ------- | 'STK_ATL#31_-_E43'    <
|      |-------------css/path/link-----------+-----swport/unitadd----+
|      |                                     |                       |
|      | PATH=CSS(0)=97                      | PORT=---              |
|      | LINK=CSS(0)=F5                      | ADDR=(00,16)          |
|      |                                     |                       |
+------+------+----+-----+---------+---------+-----------------------+
```

What we at NewEra Software have been providing

```
-------- Image Sentry - OSCP Report Library - EDS00001/OSCP/D1AC1 ---------
  Option ===>

       Status Last Update:01/21/09 and Time:14:41:53 - Update User:GBAGS2

  Cm -Member- -----Status Summaries--- Cm -Member- -------Full Reports-------
  .. $OSCPSUM OSCP z/OS Software______ .. $OSCPMAP OSCP z/OS Software________
  .. $NIPSSUM NIP Consoles____________ .. $NIPSMAP NIP Consoles_____________
  .. $ETABSUM Eligible Devices________ .. $ETABMAP Eligible Devices__________
  .. $CTLUSUM Control Units___________ .. $CTLUMAP Control Units_____________
  .. $OSDVSUM I/O Devices_____________ .. $OSDVMAP I/O Devices_____________
  .. ________ _____________________________ .. ________ _____________________________
  .. ________ _____________________________ .. ________ _____________________________
  .. ________ _____________________________ .. ________ _____________________________
  .. ________ _____________________________ .. ________ _____________________________
  .. ________ _____________________________ .. ________ _____________________________
  .. ________ _____________________________ .. ________ _____________________________
  Cm -Member- -----Change Summaries--- Cm -Member- ------Change Details------
  .. $OSCNSUM Last Change Report______ .. $OSCNMAP Last Change Report________
  .. ________ _____________________________ .. ________ _____________________________
  .. ________ _____________________________ .. ________ _____________________________

              .. Update OSCP Reports                                  EMAIL NO
```

What we at NewEra Software have been providing

```
| IODevices Status at System Initialization:                            |
|                                                                       |
|  +--Status At IPL --------------------------------------------------+
|  |                                                                   |
|  |       Online                 Offline               UnDeclared    |
|  |                                                                   |
|  | 3270 ---------------+--------------------+-------------------- |
|  |                                                                   |
|  |                      | 0000 0200 0700 0701 |                      |
|  |                      | 0702 0703 0704 0705 |                      |
|  |                      | 0706 0707 0708 0709 |                      |
|  |                      | 070A 070B 070C 070D |                      |
|  |                      | 070E 070F 0900      |                      |
|  |                                                                   |
|  | 3590 ---------------+--------------------+-------------------- |
|  |                                                                   |
|  | 0400 0401 0402 0403 | 0430 0431 0432 0433 |                      |
|  |                      | 04B0 04B2 04C0 04C1 |                      |
|  |                      | 04C2 04C3 9200 9300 |                      |
|  |                                                                   |
```

What we at NewEra Software have been providing

```
-------- Image Sentry - IOCP Report Library - EDS00001/IOCP/CPU3#0 --------
  Option ===>

       Status Last Update:01/21/09 and Time:14:59:13 - Update User:GBAGS2

  Cm -Member- -----Status Summaries--- Cm -Member- -------Full Reports-------
  .. $IOCPSUM IOCP z/OS Hardware______ .. $IOCPMAP IOCP z/OS Hardware________
  .. $LPARSUM Partitions_____________ .. $LPARMAP Partitions_________________
  .. $CHIPSUM Channel Paths__________ .. $CHIPMAP Channel Paths_____________
  .. $CTLUSUM Control Units__________ .. $CTLUMAP Control Units_____________
  .. $IODVSUM I/O Devices____________ .. $IODVMAP I/O Devices_______________
  .. $SWCPSUM Ficon/Escon____________ .. $SWCPMAP Switch Ports_______________
  .. ________ _______________________ .. $KEYEXPS Keyword Exceptions________
  .. ________ _______________________ .. ________ _________________________
  .. ________ _______________________ .. ________ _________________________
  .. ________ _______________________ .. ________ _________________________
  .. ________ _______________________ .. ________ _________________________
  Cm -Member- -----Change Summaries--- Cm -Member- ------Change Details------
  .. $IOCNSUM Last Change Report_____ .. $IOCNMAP Last Change Report________
  .. ________ _______________________ .. ________ _________________________
  .. ________ _______________________ .. ________ _________________________

              .. Update IOCP Reports                                EMAIL NO
```

What we at NewEra Software have been providing

LPAR Summary Report

NUMB	LPAR NAME	CSS(x)	USED	LPAR DESCRIPTION
4 >	D1AE1	CSS(0)	OS	PRODPLEX CSS CPU3
3 >	D1AE2	CSS(0)	OS	----------
E >	D1MVL	CSS(0)	OS	----------
6 >	D1SP9	CSS(0)	OS	----------
9 >	D1ST8	CSS(0)	OS	----------
F >	D1XB3	CSS(0)	CF	----------
1 >	PRD1	CSS(0)	OS	----------
7 >	ST01	CSS(0)	OS	----------
8 >	ST02	CSS(0)	OS	----------
A >	SYHM	CSS(0)	OS	----------
B >	SYIM	CSS(0)	OS	----------
C >	SYJM	CSS(0)	OS	----------
D >	SYKM	CSS(0)	OS	----------
5 >	S001	CSS(0)	OS	----------
2 >	TST1	CSS(0)	OS	----------

What we at NewEra Software have been providing

LPAR Detail Map

```
+------+-----------+--------+------+----------------------------------+
| NUMB | LPAR NAME | CSS(x) | USED |        LPAR DESCRIPTION          |
+------+-----------+--------+------+----------------------------------+
>   4  >    D1AE1  | CSS(0) |  OS  | PRODPLEX CSS CPU3                |
|      +------------list,chpid,css,pchid,chpid_type,swid-------------+
|                                                                     |
|       LPAR Pathways Listed:2                                        |
|                                                                     |
|         A,CC,0,1CC,CNC,08   A,EC,0,1FC,CNC,07                      |
|                                                                     |
+------+-----------+--------+------+----------------------------------+
| NUMB | LPAR NAME | CSS(x) | USED |        LPAR DESCRIPTION          |
+------+-----------+--------+------+----------------------------------+
>   3  >    D1AE2  | CSS(0) |  OS  |          ------------            |
|      +------------list,chpid,css,pchid,chpid_type,swid-------------+
|                                                                     |
|       LPAR Pathways Listed:33                                       |
|                                                                     |
|         A,68,0,270,FCV,0B   A,69,0,271,FCV,0B   A,82,0,142,CNC,01   |
```

What we at NewEra Software have been providing

```
+--Physical to Logical CHPID Mapping-----------------------
|
| 744 Channel Paths Found - Sorted by NBR
|
|   pid.id.nbr pid.id.nbr pid.id.nbr pid.id.nbr pid.id.nbr
|   ---------- ---------- ---------- ---------- ----------
|
|   CHPID Type/nbr:FC/40    -----------FICON-----------
|
|   123.A3.26  3D0.7C.26  3E0.7B.26  3D1.53.26  122.FC.26
|   173.FB.26  102.7A.25  311.79.25  1D1.F8.25  172.A2.24
|   340.7D.24  3C0.FD.24  152.FA.24  331.78.23  1F1.F9.23
|   3E1.52.22  150.F0.17  100.70.17  170.F1.16  1A0.71.16
|   101.75.14  310.74.14  330.73.14  1C0.72.14  151.F5.14
|   1F0.F4.14  1D0.F3.14  120.F2.14  361.55.10  341.54.10
|   3B1.A5.8   3C1.A4.8   153.A1.7   103.51.7   1C1.77.6
|   1A1.76.6   121.F7.6   171.F6.6   3B0.A0.5   360.50.5
|
```

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What we at NewEra Software have been providing

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UCB NOT IN AVAILABLE UCW POOL			UCW NOT IN AVAILABLE UCB POOL		
Device has no logical paths			Device has no connections		
REQUESTS	GRANTED	DENIED	REQUESTS	GRANTED	DENIED
17046	16950	96	17668	16950	718
OSCP STATEMENT ORPHANS:7			IOCP STATEMENT ORPHANS:143		
unit,range,type			unit,range,type		
0010,016,3270	0210,016,3270		0492,016,3480	0700,001,3270	
6C20,016,FCTC	6C30,016,FCTC		0701,001,3270	0702,001,3270	
6C60,016,FCTC	E100,015,OSA		0703,001,3270	0704,001,3270	
E1FE,001,OSAD			0705,001,3270	0706,001,3270	
			0707,001,3270	0708,001,3270	
			0709,001,3270	070A,001,3270	

What we at NewEra Software have been providing

ESOTERIC	TOKS	VIOS	UCW REQUESTS	GRANTED	DENIED
As Defined	00	00	25008	25008	0
ATL1	--	----	4	4	0
None Denied					
ATL2	--	----	4	4	0
None Denied					
CART	--	----	30	30	0

What we at NewEra Software have been providing

```
31 IO Devices in 48 MACRO Statements have no matching Control Unit

0010 Z10ECC#0.1 IODDTL 0010/000E 0010 015   OSA --- --- --- --- 000E 10 --- -
0010 Z10ECC#0.1 IODDTL 0010/0015 0010 015   OSA --- --- --- --- 0015 10 --- -
0010 Z10ECC#0.1 IODDTL 0010/1F00 0010 015   OSA --- --- --- --- 1F00 10 --- -
001F Z10ECC#0.1 IODDTL 001F/000E 001F 001  OSAD --- --- --- --- 000E FE --- -
001F Z10ECC#0.1 IODDTL 001F/0015 001F 001  OSAD --- --- --- --- 0015 FE --- -
001F Z10ECC#0.1 IODDTL 001F/1F00 001F 001  OSAD --- --- --- --- 1F00 FE --- -
0500 Z10ECC#0.1 IODDTL 0500/002B 0500 120  3270   X --- --- --- 002B 00 --- -
0580 Z10ECC#0.1 IODDTL 0580/002C 0580 120  3270   X --- --- --- 002C 00 --- -
0100 Z10ECC#0.1 IODDTL 0100/0100 0100 060   OSA --- --- --- --- 0100 00 --- -
013C Z10ECC#0.1 IODDTL 013C/0100 013C 001  OSAD --- --- --- --- 0100 FE --- -
0340 Z10ECC#0.1 IODDTL 0340/0301 0340 016  3270   X --- --- --- 0301 40 --- Y
0340 Z10ECC#0.1 IODDTL 0340/2E70 0340 016  3270   X --- --- --- 2E70 00 --- -
0300 Z10ECC#0.1 IODDTL 0300/0302 0300 016  3270   X --- --- --- 0302 00 --- Y
0300 Z10ECC#0.1 IODDTL 0300/0307 0300 016  3270   X --- --- --- 0307 00 --- Y
0300 Z10ECC#0.1 IODDTL 0300/0320 0300 016  3270   X --- --- --- 0320 00 --- -
0300 Z10ECC#0.1 IODDTL 0300/0321 0300 016  3270   X --- --- --- 0321 00 --- -
0300 Z10ECC#0.1 IODDTL 0300/0330 0300 016  3270   X --- --- --- 0330 00 --- -
0300 Z10ECC#0.1 IODDTL 0300/67B0 0300 016  3279   2 --- --- --- 67B0 00 --- Y
0300 Z10ECC#0.1 IODDTL 0300/7060 0300 016  3279   2 --- --- --- 7060 00 --- Y
```

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What we at NewEra Software have been providing

- Compare
  - An IODF to another IODF
  - Element Compare
    - OSCP <> OSCP
    - IOCP <> IOCP
    - CSS <> CSS
    - LPAR <> LPAR

All Compares available within an IODF or across multiply IODF's

What we at NewEra Software have been providing

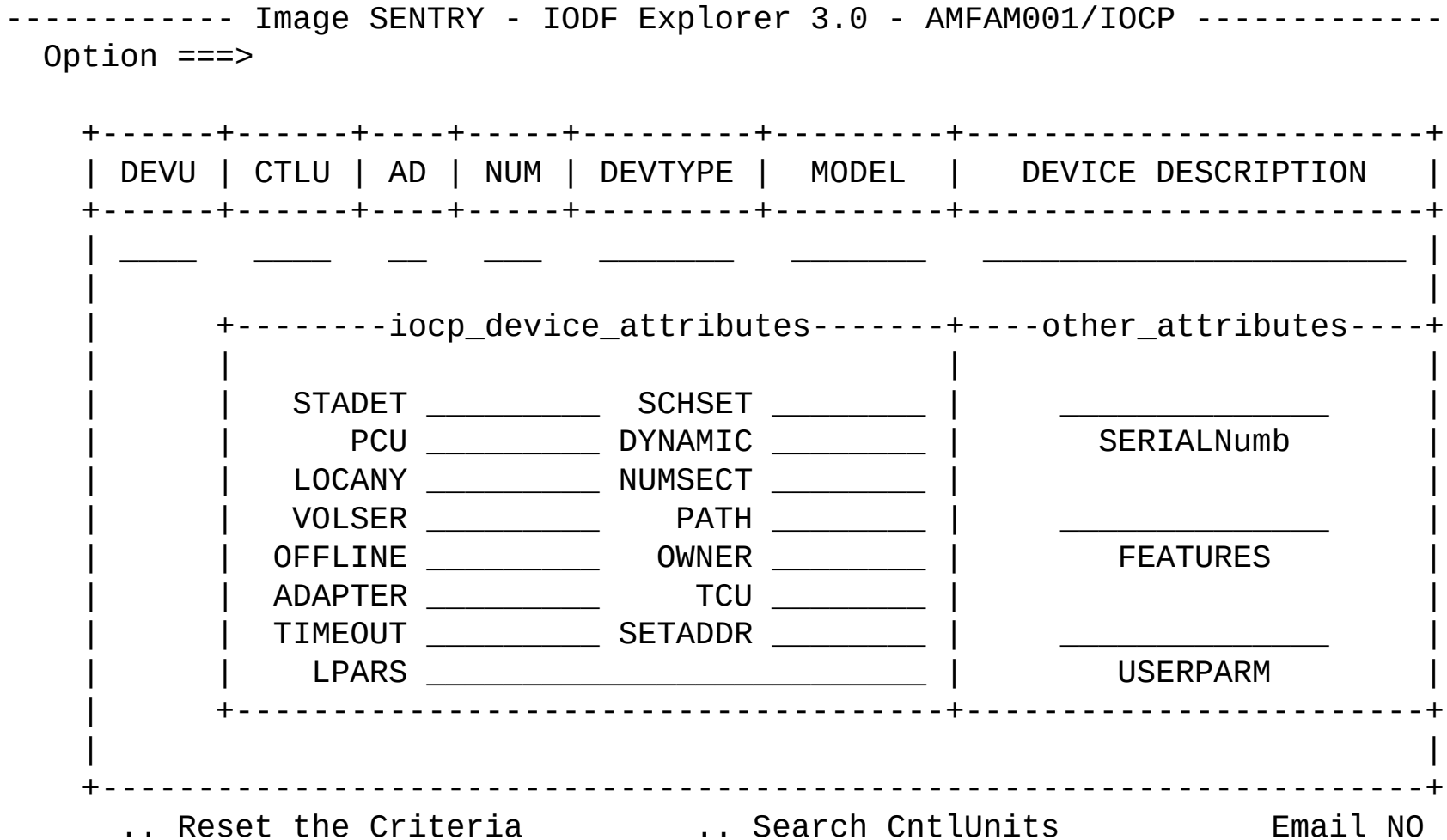
IOCP	CONTROL UNITS			I/O DEVICES		
	NHQ9CF3E	COMMON	GRL9CEFE	NHQ9CF3E	COMMON	GRL9CEFE
SUMMARY	42	78	46	66	161	177
	Unique:NHQ9CF3E			Unique:NHQ9CF3E		
	0000 0200 04B0 04C0 6230			0000 0010 0020 0030 0040		
	6240 6260 62C0 6320 6340			0050 0060 0200 0210 0220		
	6360 63C0 6420 6430 6620			0230 0240 0250 0260 04B0		
	6630 66C0 6C20 6C30 6C60			04B2 04C0 04C1 04C2 04C3		
	D420 D430 E000 E100 E200			6230 6240 6260 62C0 6320		
	E300 E500 E600 ED12 ED13			6340 6360 63C0 6420 6430		
	ED66 ED67 EE00 F420 F430			6620 6630 66C0 6C20 6C30		
	F450 F4A0 F540 F560 F5A0			6C60 D420 D430 E000 E0FE		
	FA40 FA50			E100 E1FE E200 E2FE E300		
				E3FE E500 E5FE E600 E6FE		

What we at NewEra Software have been providing

- Searches
  - In an IODF
  - Element Search
    - OSCP
    - IOCP
    - CSS
    - LPAR

All Searches available within an IODF or across multiply IODF’s

What we at NewEra Software have been providing



What we at NewEra Software have been providing

- Worksheets
  - Interactive displays of IODF details for all defined devices
  - Element Worksheets
    - OSCP
    - IOCP
    - CSS
    - LPAR

  All worksheets provide for customized reports and Comma delimited file export.

What we at NewEra Software have been providing

```
----------------------- IMAGE Sentry - IODF Explorer 3.0 --- Row 1 to 13 of 22
 -Image FOCUS 0.3-                Wks/12/02/08                    -Logical View-
------------------- SYS1.IODF03 - 2008-12-02 14:10:21 - IOCP -----------------
Option ===>                                                  Scroll ===> CSR
Row Select: Attributes Descriptions
--------------- To View a Configuration Select a Component Type --------------
Partitions    Channel Paths    FiEscon Switches    Control Units    I/O Devices
--- To Sort select a Sub-Head, To Query enter above Sub-Head, PFK1 for Help ---
----Targets---- ------------Input-Output Devices Defined to Processor----------

_ ____ ______ _ ____ ___ ______ _____ ____ __________ _ ________________________
S Numb ProcId M Unit Rng -Type- Model Ctlu --Serial-- I ------Description------
_ 0001 GRL9CE 1 0400 001   3590 ----- 0400 ---------- - MANUAL_MAGSTAR_400_____
_ 0002 GRL9CE 1 0401 001   3590 ----- 0400 ---------- - MANUAL_MAGSTAR_401_____
_ 0003 GRL9CE 1 0402 001   3590 ----- 0400 ---------- - MANUAL_MAGSTAR_402_____
_ 0004 GRL9CE 1 0403 001   3590 ----- 0400 ---------- - MANUAL_MAGSTAR_403_____
_ 0005 GRL9CE 1 0430 001   3590 ----- 0430 ---------- - IBM_MAN_3590_430_______
_ 0006 GRL9CE 1 0431 001   3590 ----- 0430 ---------- - IBM_MAN_3590_431_______
_ 0007 GRL9CE 1 0432 001   3590 ----- 0430 ---------- - IBM_MAN_3590_432_______
_ 0008 GRL9CE 1 0433 001   3590 ----- 0430 ---------- - IBM_MAN_3590_433_______
_ 0286 GRL9CE 1 9200 004   3590 ----- 9200 ---------- - GRL_3592_______________
_ 0287 GRL9CE 1 9300 004   3590 ----- 9300 ---------- - NHQ_3592_______________
_ 0353 NHQ9CF 2 0430 001   3590 ----- 0430 ---------- - IBM_MAN_3590_430_______
_ 0354 NHQ9CF 2 0431 001   3590 ----- 0430 ---------- - IBM_MAN_3590_431_______
```

What we at NewEra Software have been providing

- Start with your IODF
  - Extract the IOCP, OSCP and SWCP elements
  - Create a structured view of the elements.
    - Understand the structure at the IOCP, CSS and LPAR levels
- Blueprint that structure for change detection and reporting
- Inspect the structure for risks and possible points of failure
- Provide analysis tools for easy investigation access to the data

A FREE OFFER from NewEra Software

Seven Steps to Demystifying Your IODF

1. Send an email to support@newera.com with your contact information and request for the IODF routine to run.
2. We will email you the routine to run.
3. Email your extracts to support@newera.com.
4. We will import your data into the IODF Explorer and generate reports to show you.
5. We will schedule a 45 minute webcast to show you the reports and interactive worksheets that can help you better understand your IODF.
6. A better understanding of your IODF can help you to make changes to Tune-Up your configuration.
7. NewEra Software guarantees to keep your information confidential.

NewEra Software, Inc.

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