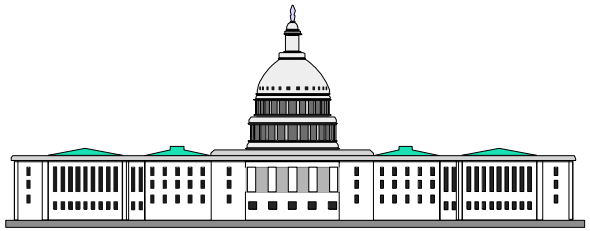
IBM z990/z890 CHPID Mapping Tool



John Hughes

IBM Washington Systems Center
Gaithersburg, Maryland. USA

Mapping Tool-General

- Java™ based Standalone application
- Sessions can be saved to allow for interruptions
  - Also good for documentation
- Currently available for z900/z800/z990/z890 at IBM Resource Link™ site
  - **www.ibm.com**/servers/resourcelink
- One tool for z800/z900/z990/z890

More than just an option for z990/z890.....

Overview-z900/z800

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- Helps assign CHPIDs to ports
  - CHPIDs in IOCP Input File for availability mode
- Creates a mapping file (trm file) used to assign CHPIDs to ports during machine installation
- Generates reports to help with cabling
  - CHPID Report with frame layouts
  - FQC report
  - Control Unit reports
- Could accept default CHPIDS and change HCD
- Does not help creating/consolidating IOCP Input Files

Overview-z990/z890

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- No default CHPIDs
- Helps assign PCHIDs to CHPIDs in IOCP Input File
- Updates z990/z890 IOCP Input File with "PCHID" keyword
- Generates reports to help with cabling
  - CHPID Report with frame layouts
  - FQC report
  - Control Unit reports
- Does not help creating/consolidating IOCP Input Files

CHPID Mapping Tool-Changes From Earlier Versions

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- Supports CFReport, in addition to current hardware config file obtained from Resource Link (.hwc file)
  - Highly recommended that the .hwc file be used
  - Good for tool familarization and planning
- z900/z800 code merged with z990/z890 code
  - One tool
- Tool version + CCN in the title bar
- Append .txt to IOCP file if no extension supplied
- File overwrite check while creating IOCP Input File
- HTML page break while printing (will print each of the frames on new page while printing CHPID Report)
  - (May work only while printing from IE)
- "Create Updated IOCP File" instead of "Export ...."

Inputs-z900/z800

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- Valid z900/z800 IOCP Input File for availability mode
  - Not required for manual mode
- Hardware Configuration File (HWC) for the order (CCN) or CFR file
  - Available at Resource Link
  - CFReport from e-config

Inputs-z990/z890

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- Valid z990/z890 IOCP Input File for both manual or availability modes
  - With no "PCHID" keywords or with "PCHID" keywords
- Hardware Configuration File (HWC) for the order (CCN) or CFR file
  - Available at Resource Link
  - CFReport from e-config

Modes

- Manual remap feature
  - z990/z890: assign CHPIDs to PCHIDs
  - z900/z800: assign CHPIDs to ports
- Availability
  - z990/z890: assigns PCHIDS based on Control Unit priority
  - z900/z800: assigns CHPIDs to ports based on ControlUnit priority
- For z990/z890, can preserve existing PCHID/CHPID
  - PCHID to CHPID assignment stored in IOCDS
- For z900/z800, **only** used for initial install
  - Mapping stored in trm file on diskette
  - CCN data can be specially loaded for an MES in some cases that may require it
    - Contact John Hughes at the WSC (jjhughes@us.ibm.com)

Switch allowed between two modes

z900/z800 Availability Mapping- Goal

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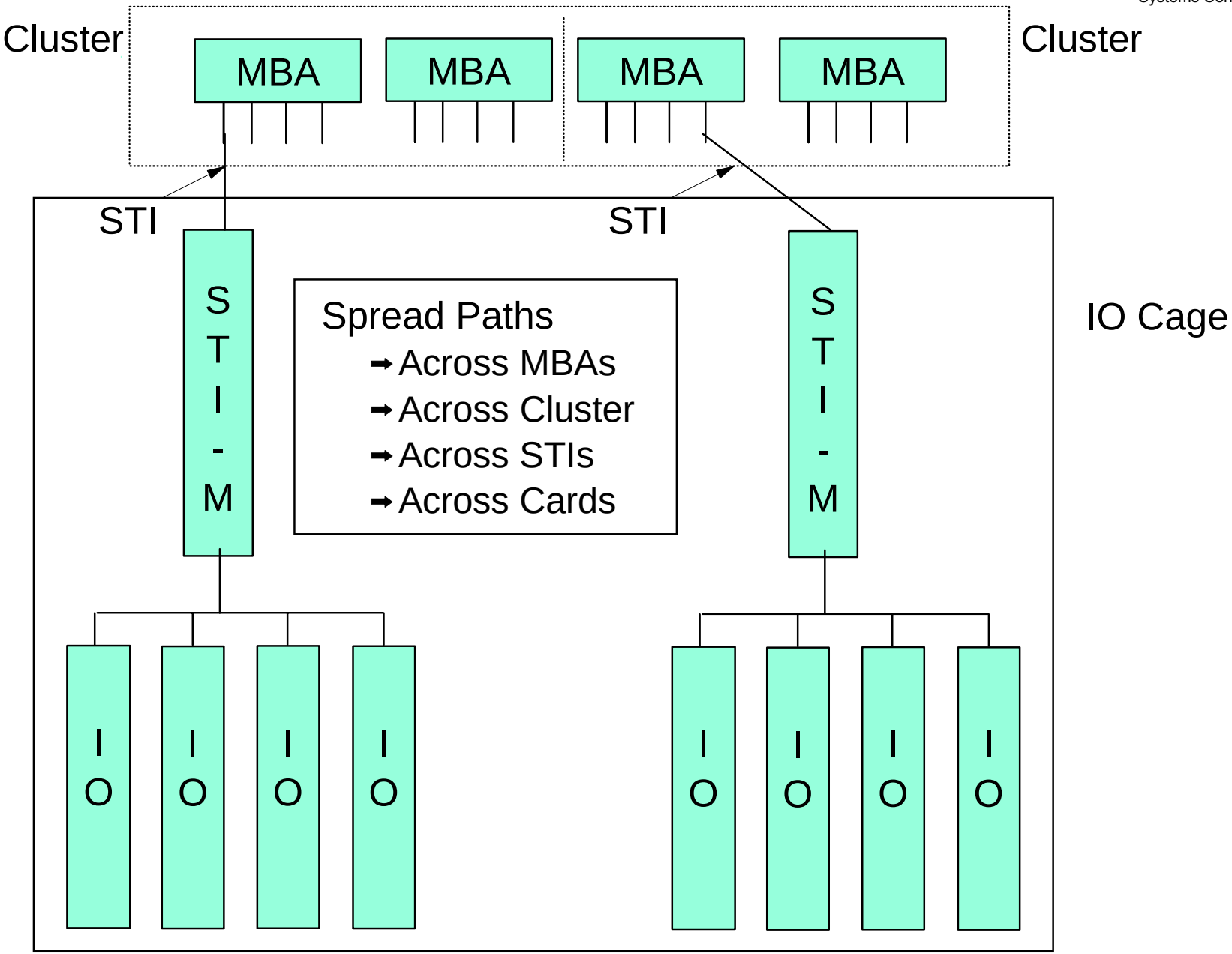

z990/z890 Availability Mapping- Goal

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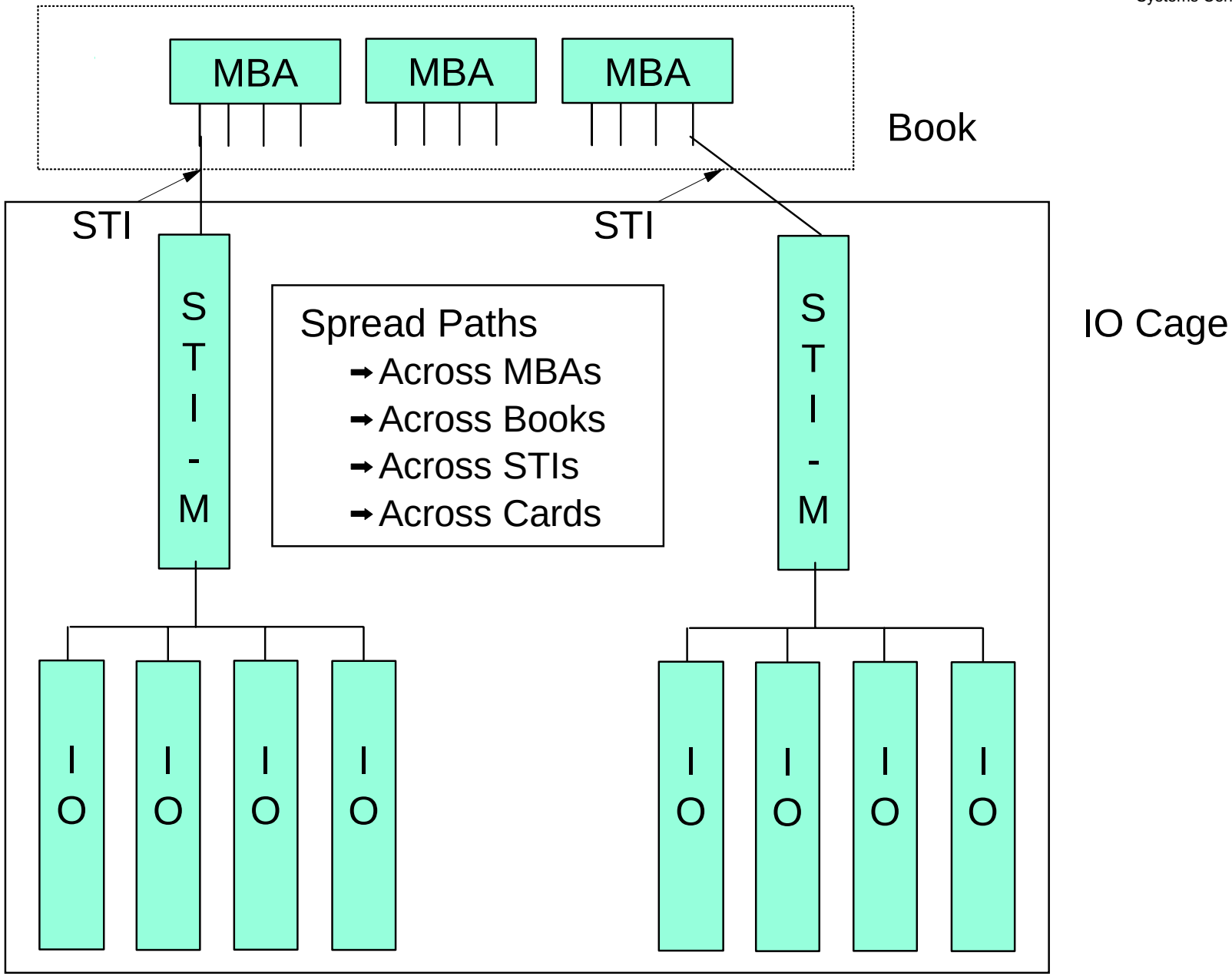

Availability Mapping - Control Unit Priorities

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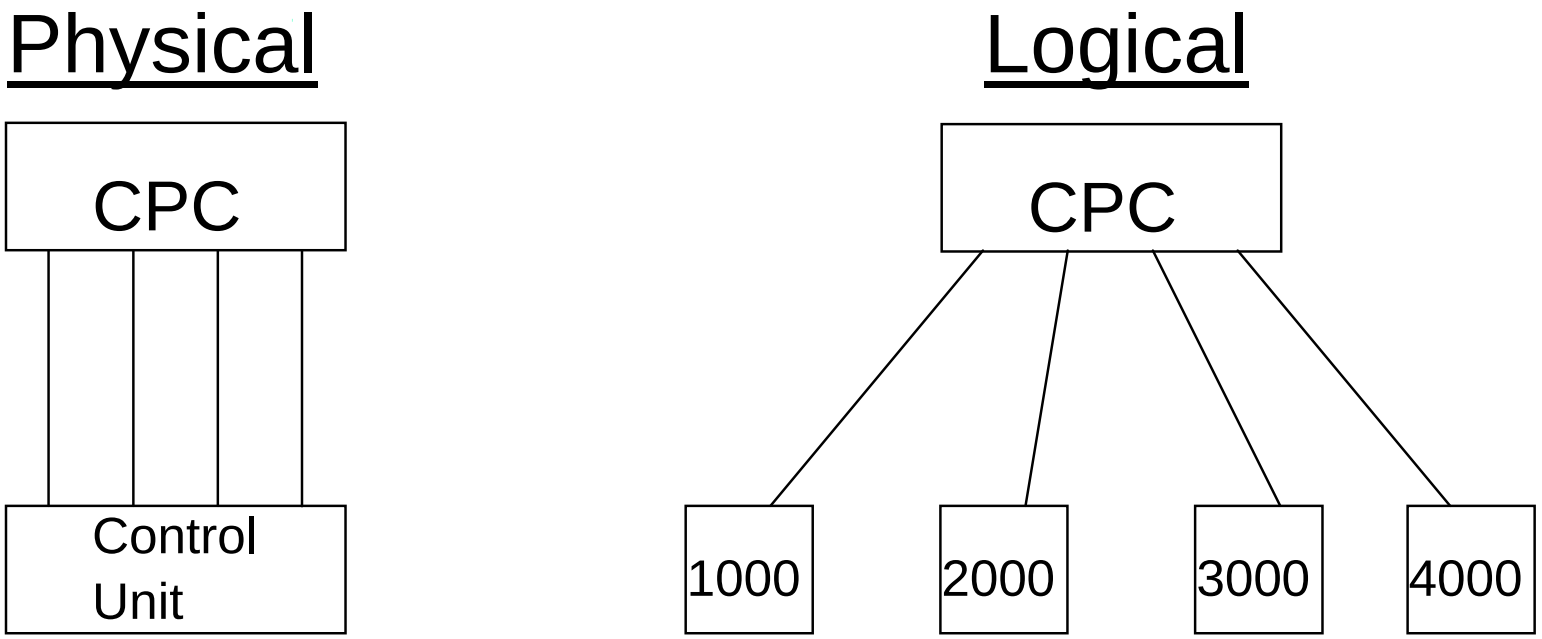
- "Priority" was a bad term to choose
  - ➡ Has nothing to do with the importance
  - ➡ Is only used within the mapping tool
  - ➡ Is really the order of processing
    - ✓ Which control unit's CHPIDs get mapped first, second, etc.
    - ✓ Law of diminishing returns applies
- Considerations
  - ➡ Grouping of multiple control units
    - ✓ Treat all of the CHPIDs as a single entity
  - ➡ Daisy chained Control Units
    - ✓ Need only priortize the first one that has all the CHPIDs.

Example 1- Multiple Control Units Given Same Priority



- Same priority assigned to 1000,2000,3000,4000
  - Same physical control unit but multiple CNTLUNIT defs

Example 2- Multiple Control Units Given Same Priority

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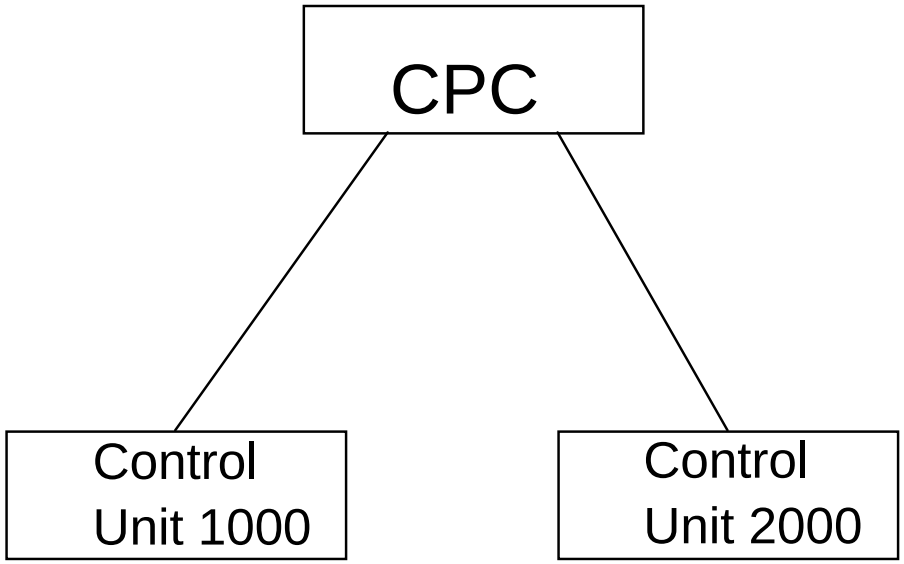
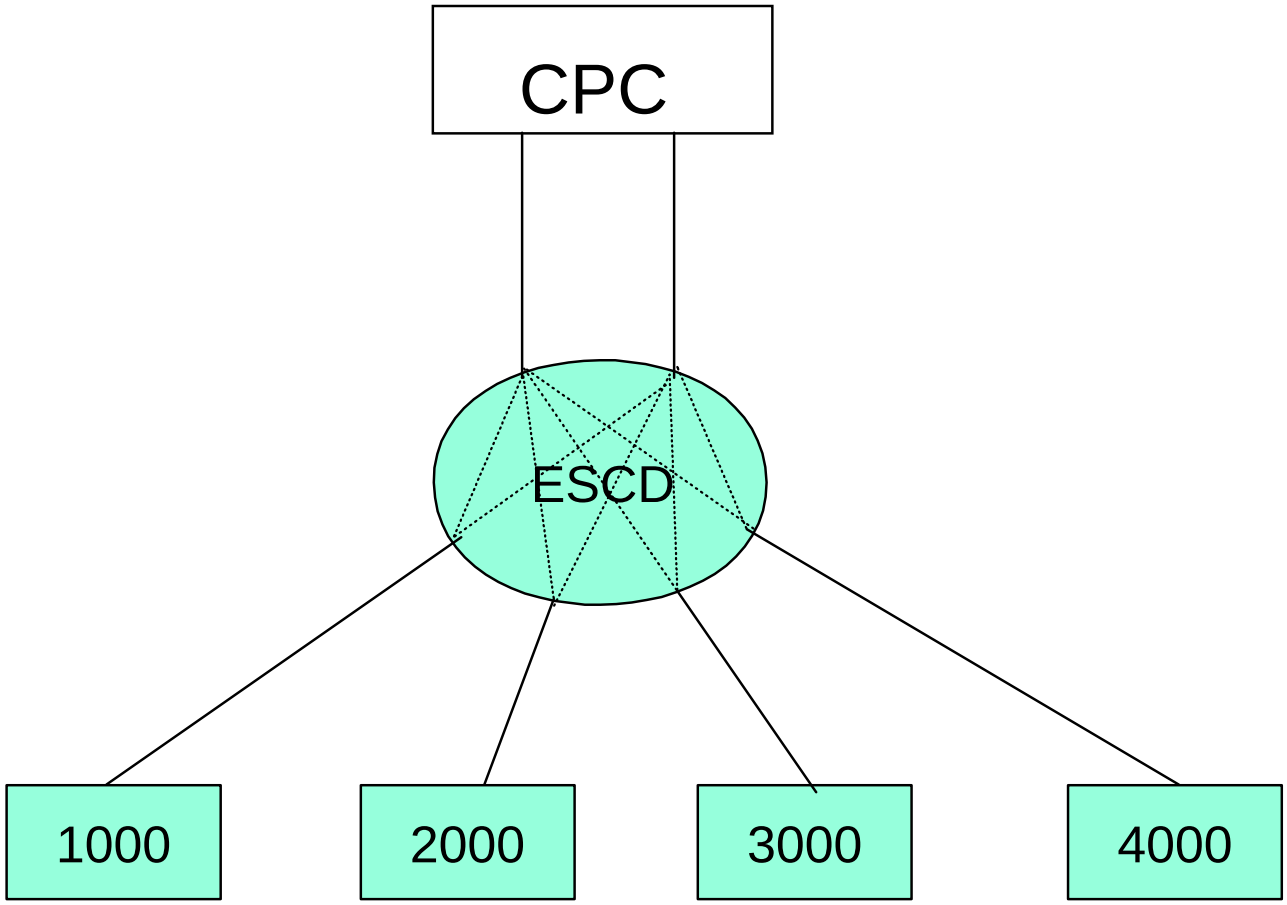


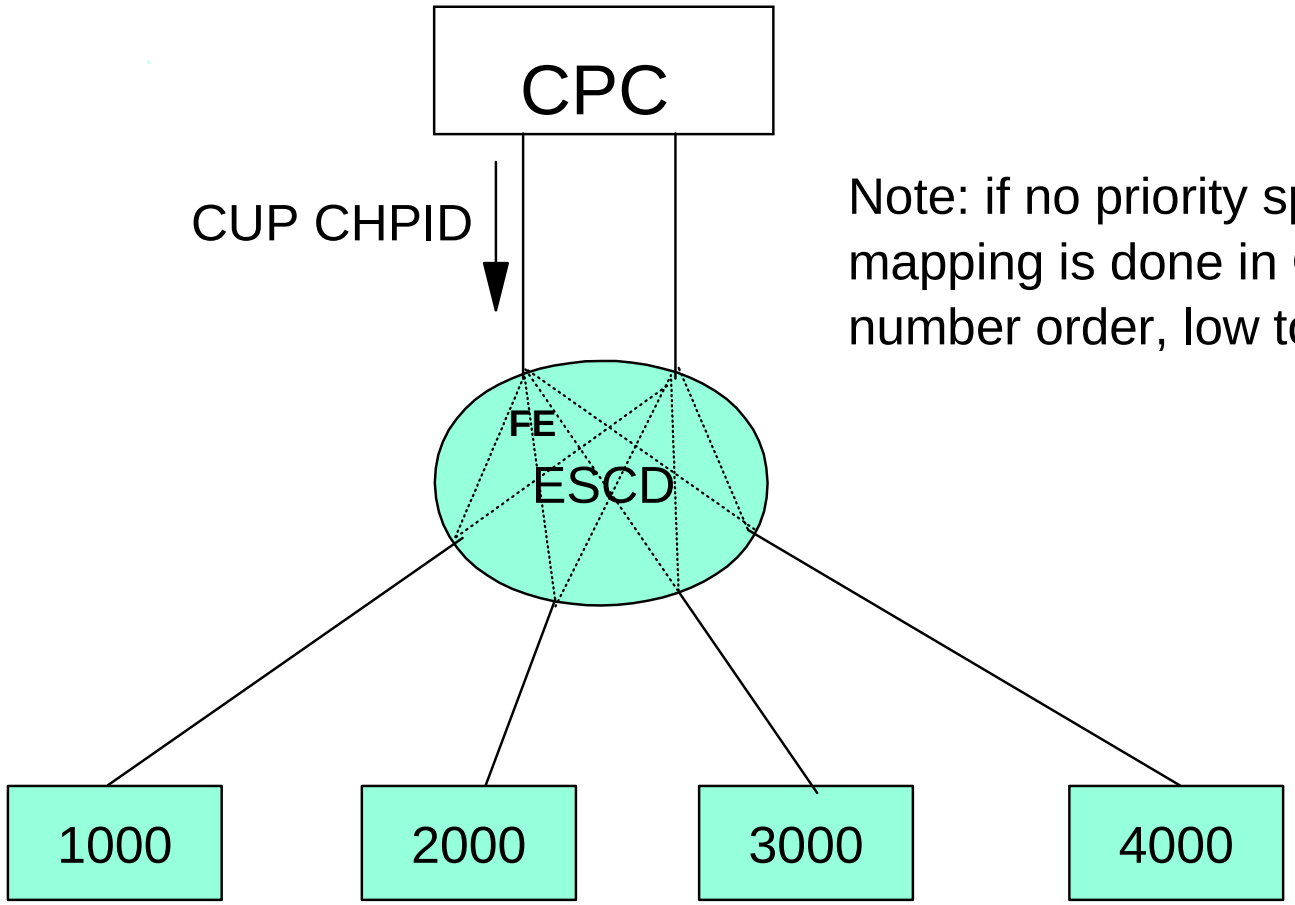
- Same priority assigned to 1000,2000
  - Master and Alternate Console Controllers
  - Critical Tape Devices
  - DASD strings with multiple control unit definitions
  - etc.

Example 3- Multiple Control Units Daisy Chained



- ➡ Only need give a priority to 1000
  - CHPIDs spread for 1000 will apply for the others

Example 4- Availability Mapping and use of CUP



Note: if no priority specified, mapping is done in CNTLUNIT number order, low to high

- Defining a CUP will generate a CNTLUNIT for the director
  - Will "piggy back" on existing path(s)
- Availability Mapping should always include priorities
  - Don't priortize the CUP CNTLUNITs

z900/z800: Assigning CHPIDs to Ports (Availability)

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HCD

1. Create IODF for z900/z800 with CHPIDs

2. Create production IODF

3. Create IOCP deck
(Same file used as input to Standalone IOCP)

IOCP Deck with CHPIDs

H/W Config Report

CHPID Mapping Tool

4. Run CHPID mapping tool. It will produce a file with the CHPID to port mapping

trm file on diskette

Reports

Import to mapping task on CPC

z900/z800: Assigning CHPIDs to Ports (Manual)

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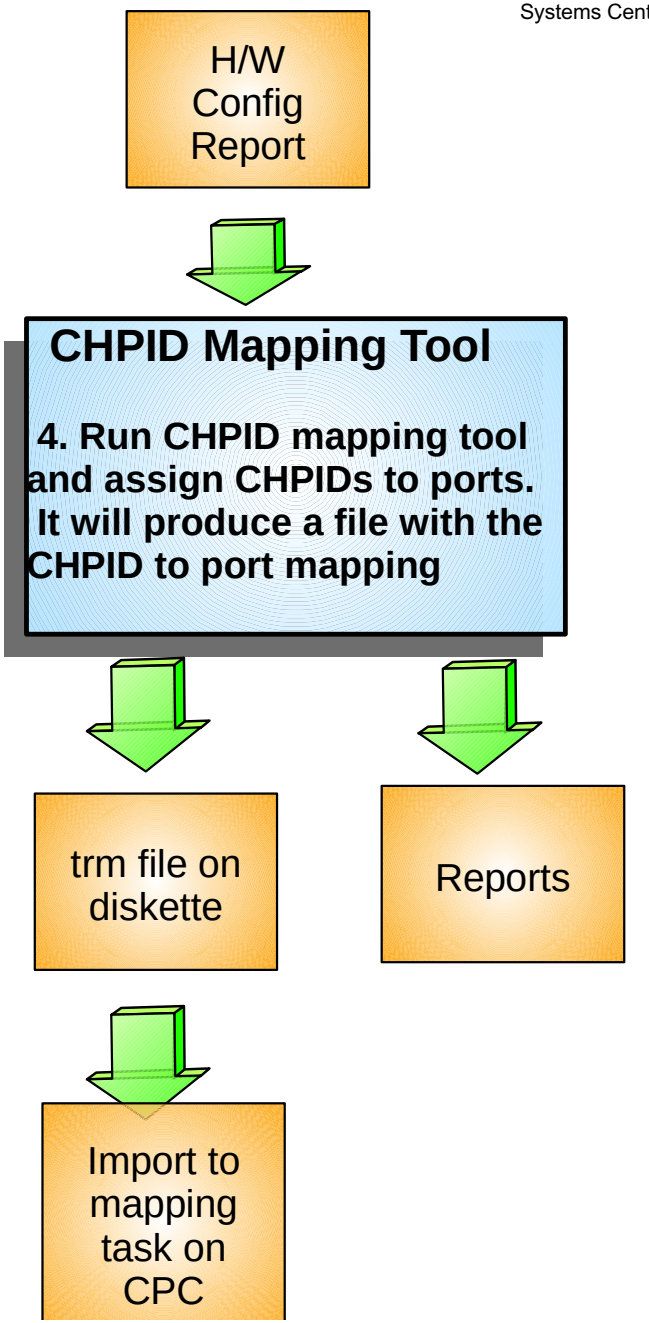
HCD

1. Create IODF for z900/z800 with CHPIDs

2. Create production IODF

3. Create IOCP deck
(Same file used as input to Standalone IOCP)



z990/z890: Assigning PCHIDS

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HCD

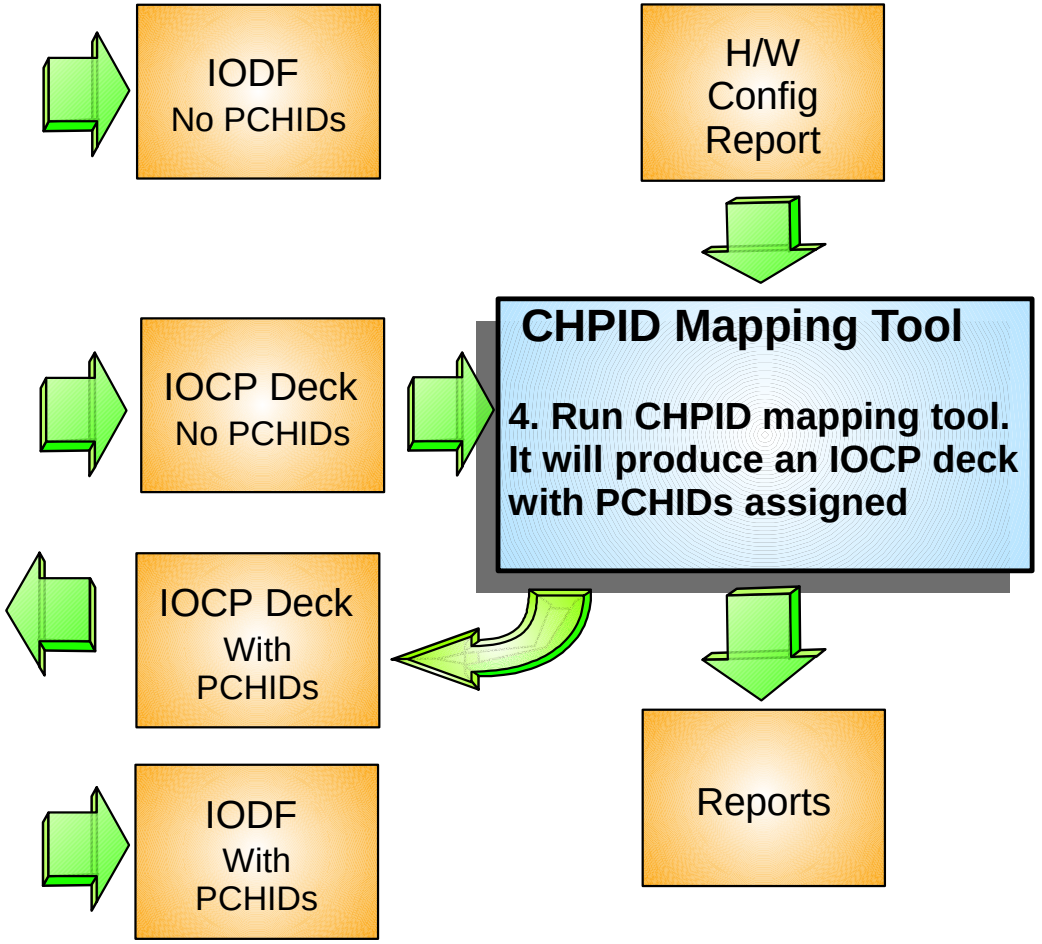
1. Create IODF for z990/z890 without PCHIDs

2. Create semi-production IODF (validated work IODF) - HCD option 2.12 =
Build production I/O definition file

3. Create IOCP deck without PCHIDs - HCD option 2.3 =
Build IOCP input data set

5. Import IOCP deck with PCHIDs into IODF - HCD option 5.1 =
Migrate IOCP/OS data,
Migrate option 3 (PCHIDs)

6. Create a production IODF - HCD option 2.1 =
Build production I/O definition file



z990/z890: Assigning PCHIDS for an MES

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HCD

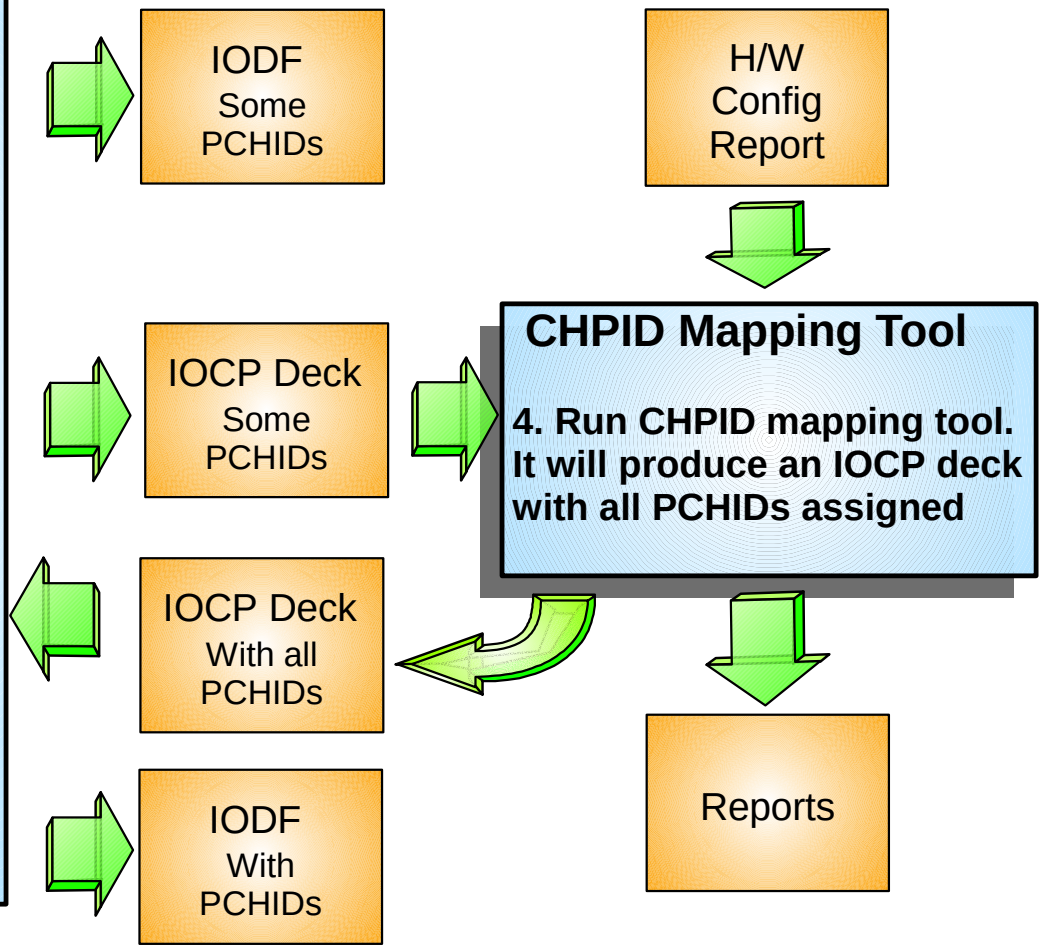
1. Update IODF for z990/z890 without PCHIDs for new channels

2. Create semi-production IODF (validated work IODF) - HCD option 2.12 =
Build production I/O definition file

3. Create IOCP deck without PCHIDs for new channels- HCD option 2.3 =
Build IOCP input data set

5. Import IOCP deck with PCHIDs into IODF - HCD option 5.1 =
Migrate IOCP/OS data,
Migrate option 3 (PCHIDs)

6. Create a production IODF - HCD option 2.1 =
Build production I/O definition file



Note: Existing PCHID assignments will be preserved unless

z990 WARNING!

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At the point the IOCP is downloaded from HCD for input to the mapping tool, HCD and the IOCP file are synchronized by a token. If there are **any** changes made in HCD while using the mapping tool, it will not be possible to migrate the updated output from the mapping tool back into HCD to complete the process.

z990 CHPID Mapping Tool Demo

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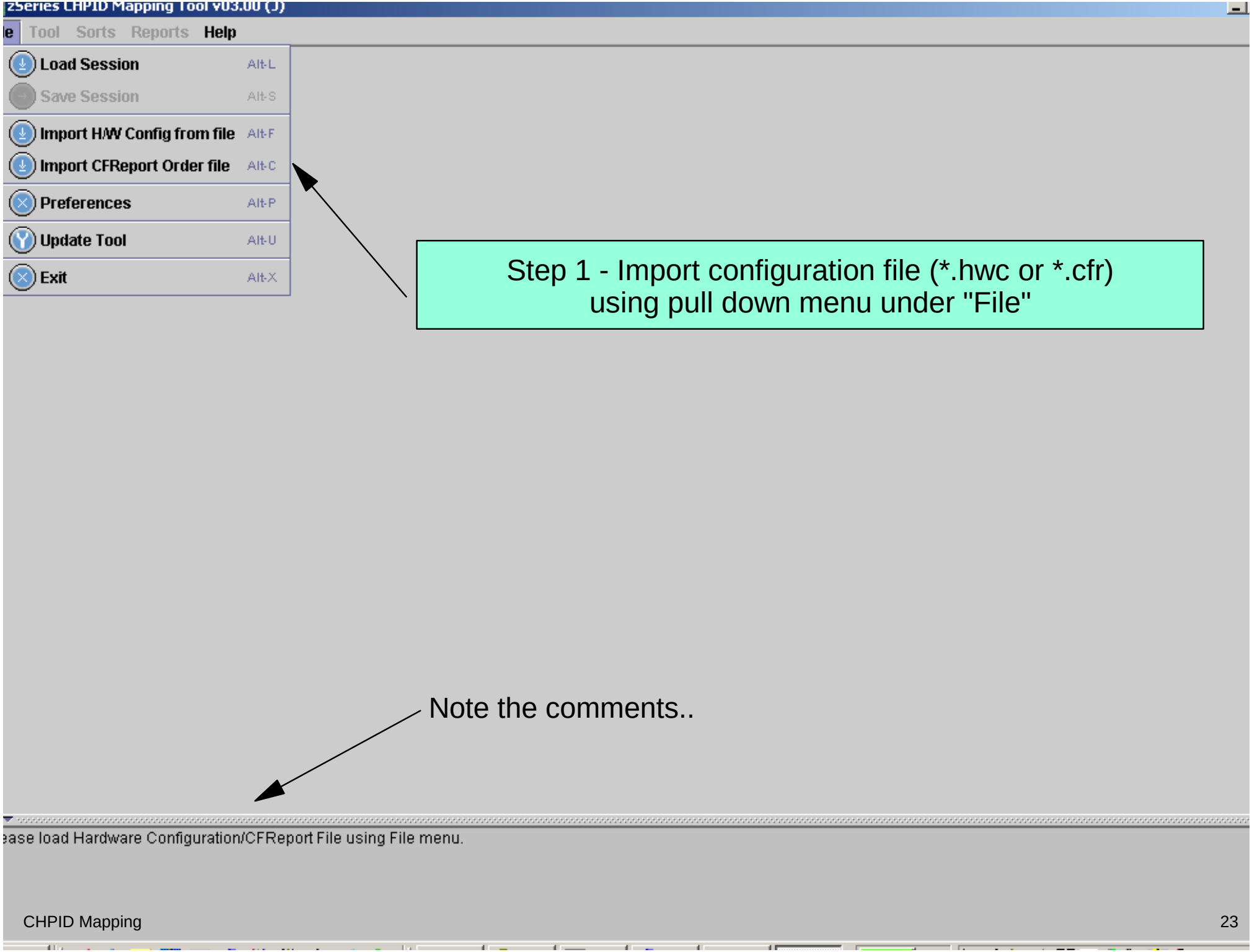
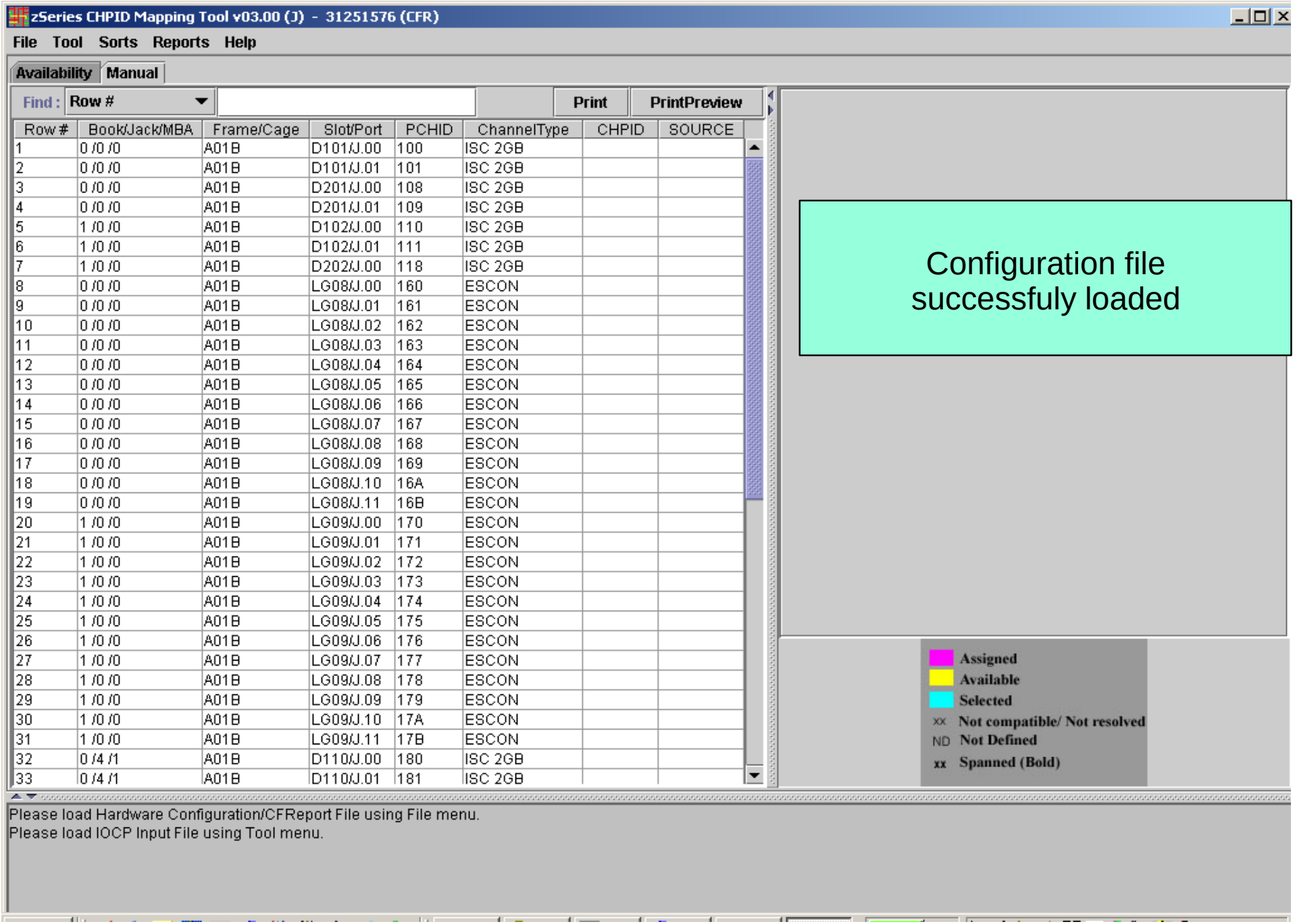
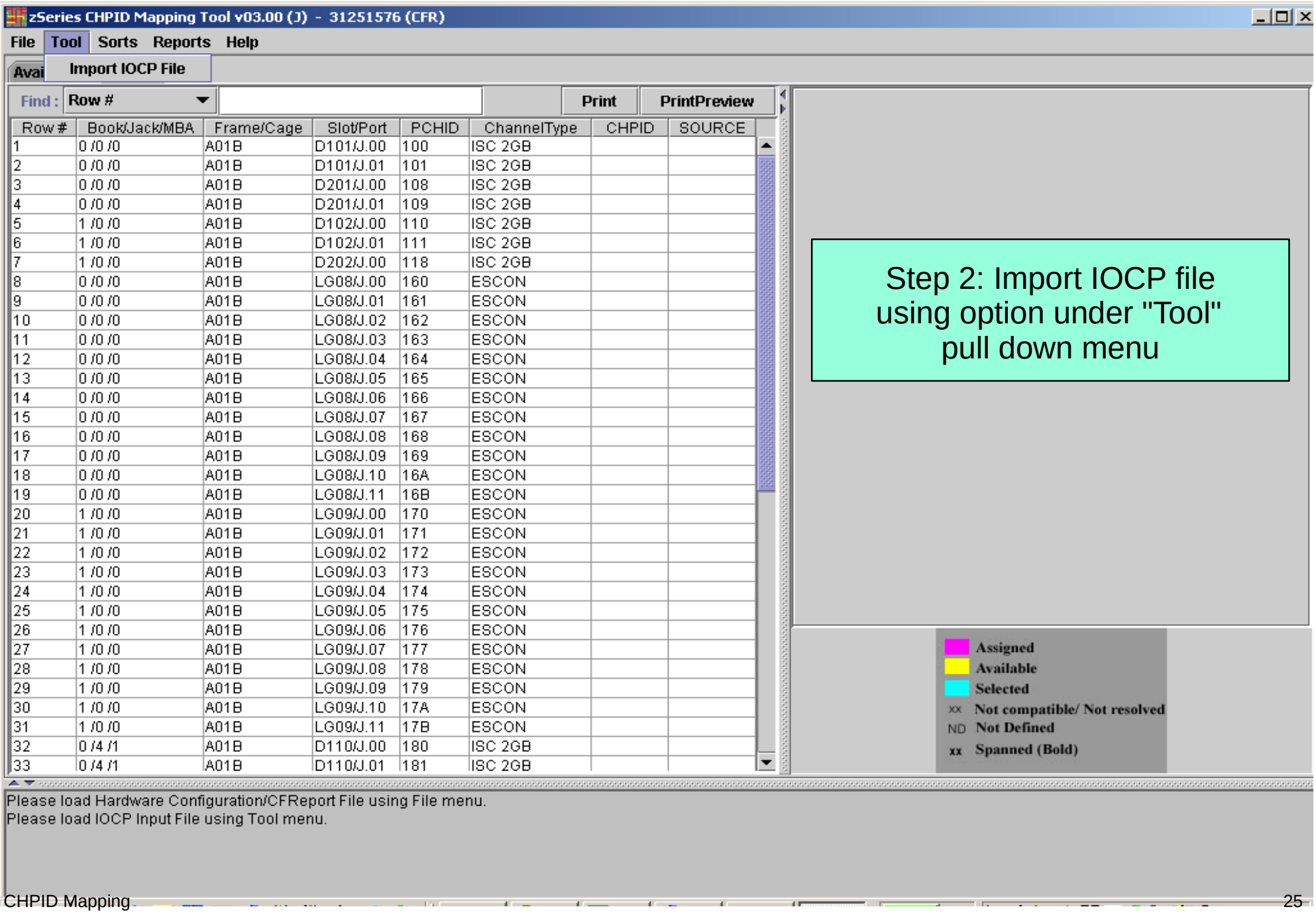
CHPID Mapping Tool - Backup Charts for non-live demo


zSeries CHPID Mapping Tool v03.00 (J)
e Tool Sorts Reports Help
Load Session Alt-L
Save Session Alt-S
Import H/W Config from file Alt-F
Import CFReport Order file Alt-C
Preferences Alt-P
Update Tool Alt-U
Exit Alt-X
Step 1 - Import configuration file (*.hwc or *.cfr)
using pull down menu under "File"
Note the comments..
ease load Hardware Configuration/CFReport File using File menu.


zSeries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File Tool Sorts Reports Help
Availability Manual
Find : Row #
Print PrintPreview
Row # | Book/Jack/MBA | Frame/Cage | Slot/Port | PCHID | ChannelType | CHPID | SOURCE
1 | 0 /0 /0 | A01B | D101/J.00 | 100 | ISC 2GB
2 | 0 /0 /0 | A01B | D101/J.01 | 101 | ISC 2GB
3 | 0 /0 /0 | A01B | D201/J.00 | 108 | ISC 2GB
4 | 0 /0 /0 | A01B | D201/J.01 | 109 | ISC 2GB
5 | 1 /0 /0 | A01B | D102/J.00 | 110 | ISC 2GB
6 | 1 /0 /0 | A01B | D102/J.01 | 111 | ISC 2GB
7 | 1 /0 /0 | A01B | D202/J.00 | 118 | ISC 2GB
8 | 0 /0 /0 | A01B | LG08/J.00 | 160 | ESCON
9 | 0 /0 /0 | A01B | LG08/J.01 | 161 | ESCON
10 | 0 /0 /0 | A01B | LG08/J.02 | 162 | ESCON
11 | 0 /0 /0 | A01B | LG08/J.03 | 163 | ESCON
12 | 0 /0 /0 | A01B | LG08/J.04 | 164 | ESCON
13 | 0 /0 /0 | A01B | LG08/J.05 | 165 | ESCON
14 | 0 /0 /0 | A01B | LG08/J.06 | 166 | ESCON
15 | 0 /0 /0 | A01B | LG08/J.07 | 167 | ESCON
16 | 0 /0 /0 | A01B | LG08/J.08 | 168 | ESCON
17 | 0 /0 /0 | A01B | LG08/J.09 | 169 | ESCON
18 | 0 /0 /0 | A01B | LG08/J.10 | 16A | ESCON
19 | 0 /0 /0 | A01B | LG08/J.11 | 16B | ESCON
20 | 1 /0 /0 | A01B | LG09/J.00 | 170 | ESCON
21 | 1 /0 /0 | A01B | LG09/J.01 | 171 | ESCON
22 | 1 /0 /0 | A01B | LG09/J.02 | 172 | ESCON
23 | 1 /0 /0 | A01B | LG09/J.03 | 173 | ESCON
24 | 1 /0 /0 | A01B | LG09/J.04 | 174 | ESCON
25 | 1 /0 /0 | A01B | LG09/J.05 | 175 | ESCON
26 | 1 /0 /0 | A01B | LG09/J.06 | 176 | ESCON
27 | 1 /0 /0 | A01B | LG09/J.07 | 177 | ESCON
28 | 1 /0 /0 | A01B | LG09/J.08 | 178 | ESCON
29 | 1 /0 /0 | A01B | LG09/J.09 | 179 | ESCON
30 | 1 /0 /0 | A01B | LG09/J.10 | 17A | ESCON
31 | 1 /0 /0 | A01B | LG09/J.11 | 17B | ESCON
32 | 0 /4 /1 | A01B | D110/J.00 | 180 | ISC 2GB
33 | 0 /4 /1 | A01B | D110/J.01 | 181 | ISC 2GB
Configuration file successfuly loaded
Assigned
Available
Selected
xx Not compatible/ Not resolved
ND Not Defined
xx Spanned (Bold)
Please load Hardware Configuration/CFReport File using File menu.
Please load IOCP Input File using Tool menu.


zSeries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File
Tool
Sorts
Reports
Help
Import IOCP File
Find :
Row #
Print
PrintPreview
Row # | Book/Jack/MBA | Frame/Cage | Slot/Port | PCHID | ChannelType | CHPID | SOURCE
1 | 0 /0 /0 | A01B | D101/J.00 | 100 | ISC 2GB
2 | 0 /0 /0 | A01B | D101/J.01 | 101 | ISC 2GB
3 | 0 /0 /0 | A01B | D201/J.00 | 108 | ISC 2GB
4 | 0 /0 /0 | A01B | D201/J.01 | 109 | ISC 2GB
5 | 1 /0 /0 | A01B | D102/J.00 | 110 | ISC 2GB
6 | 1 /0 /0 | A01B | D102/J.01 | 111 | ISC 2GB
7 | 1 /0 /0 | A01B | D202/J.00 | 118 | ISC 2GB
8 | 0 /0 /0 | A01B | LG08/J.00 | 160 | ESCON
9 | 0 /0 /0 | A01B | LG08/J.01 | 161 | ESCON
10 | 0 /0 /0 | A01B | LG08/J.02 | 162 | ESCON
11 | 0 /0 /0 | A01B | LG08/J.03 | 163 | ESCON
12 | 0 /0 /0 | A01B | LG08/J.04 | 164 | ESCON
13 | 0 /0 /0 | A01B | LG08/J.05 | 165 | ESCON
14 | 0 /0 /0 | A01B | LG08/J.06 | 166 | ESCON
15 | 0 /0 /0 | A01B | LG08/J.07 | 167 | ESCON
16 | 0 /0 /0 | A01B | LG08/J.08 | 168 | ESCON
17 | 0 /0 /0 | A01B | LG08/J.09 | 169 | ESCON
18 | 0 /0 /0 | A01B | LG08/J.10 | 16A | ESCON
19 | 0 /0 /0 | A01B | LG08/J.11 | 16B | ESCON
20 | 1 /0 /0 | A01B | LG09/J.00 | 170 | ESCON
21 | 1 /0 /0 | A01B | LG09/J.01 | 171 | ESCON
22 | 1 /0 /0 | A01B | LG09/J.02 | 172 | ESCON
23 | 1 /0 /0 | A01B | LG09/J.03 | 173 | ESCON
24 | 1 /0 /0 | A01B | LG09/J.04 | 174 | ESCON
25 | 1 /0 /0 | A01B | LG09/J.05 | 175 | ESCON
26 | 1 /0 /0 | A01B | LG09/J.06 | 176 | ESCON
27 | 1 /0 /0 | A01B | LG09/J.07 | 177 | ESCON
28 | 1 /0 /0 | A01B | LG09/J.08 | 178 | ESCON
29 | 1 /0 /0 | A01B | LG09/J.09 | 179 | ESCON
30 | 1 /0 /0 | A01B | LG09/J.10 | 17A | ESCON
31 | 1 /0 /0 | A01B | LG09/J.11 | 17B | ESCON
32 | 0 /4 /1 | A01B | D110/J.00 | 180 | ISC 2GB
33 | 0 /4 /1 | A01B | D110/J.01 | 181 | ISC 2GB
Step 2: Import IOCP file using option under "Tool" pull down menu
Assigned
Available
Selected
xx Not compatible/ Not resolved
ND Not Defined
xx Spanned (Bold)
Please load Hardware Configuration/CFReport File using File menu.
Please load IOCP Input File using Tool menu.

IOCP File for import to CHPID Mapping Tool

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Session A - [32 x 80]

File Edit View Communication Actions Window Help

```
EDIT       HUGHES.IOCP07.TEXT                              Columns 00001 00072
Command ===>                                                 Scroll ===> PAGE
****** ***************************** Top of Data ********************************
==MSG> -CAUTION- Data contains invalid (non-display) characters. Use command
==MSG>           ===> FIND P'.' to position cursor to these
000001          ID     MSG1='''Input for CHPID Mapping Tool''',                *
000002                 MSG2='HUGHES.IODF07.WORK - 2003-11-08 13:48',           *
000003                 SYSTEM=(2084,1),                                        *
000004                 TOK=('Z990',0000000A3A6A208413484467010331 2F00000000,000*
000005                 00000,'03-11-08','13:48:44','        ','        ')
000006          RESOURCE PARTITION=((CSS(0),(CF01,3),(LPAR1,1),(LPAR2,2)),(CSS*
000007                 (1),(LPARA,1),(LPARB,2))),                              *
000008                 MAXDEV=((CSS(0),64512),(CSS(1),49152))
000009          CHPID PATH=(CSS(0),00),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
000010                 SWITCH=01,TYPE=CNC
000011          CHPID PATH=(CSS(0),01),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
000012                 SWITCH=01,TYPE=CNC
000013          CHPID PATH=(CSS(0),02),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
000014                 SWITCH=01,TYPE=CNC
000015          CHPID PATH=(CSS(0),03),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
000016
000017                                                              R2),(=)),  *
000018
000019                                                              R2),(=)),  *
000020                 SWITCH=01,TYPE=CNC
000021          CHPID PATH=(CSS(0),10),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
000022                 SWITCH=02,TYPE=CNC
000023          CH
000024
000025          CH
 F1=Help       F2=S
 F7=Up         F8=Down      F9=Swap      F10=Left     F11=Right    F12=CRetriev
```

IOCP File-no PCHIDs defined

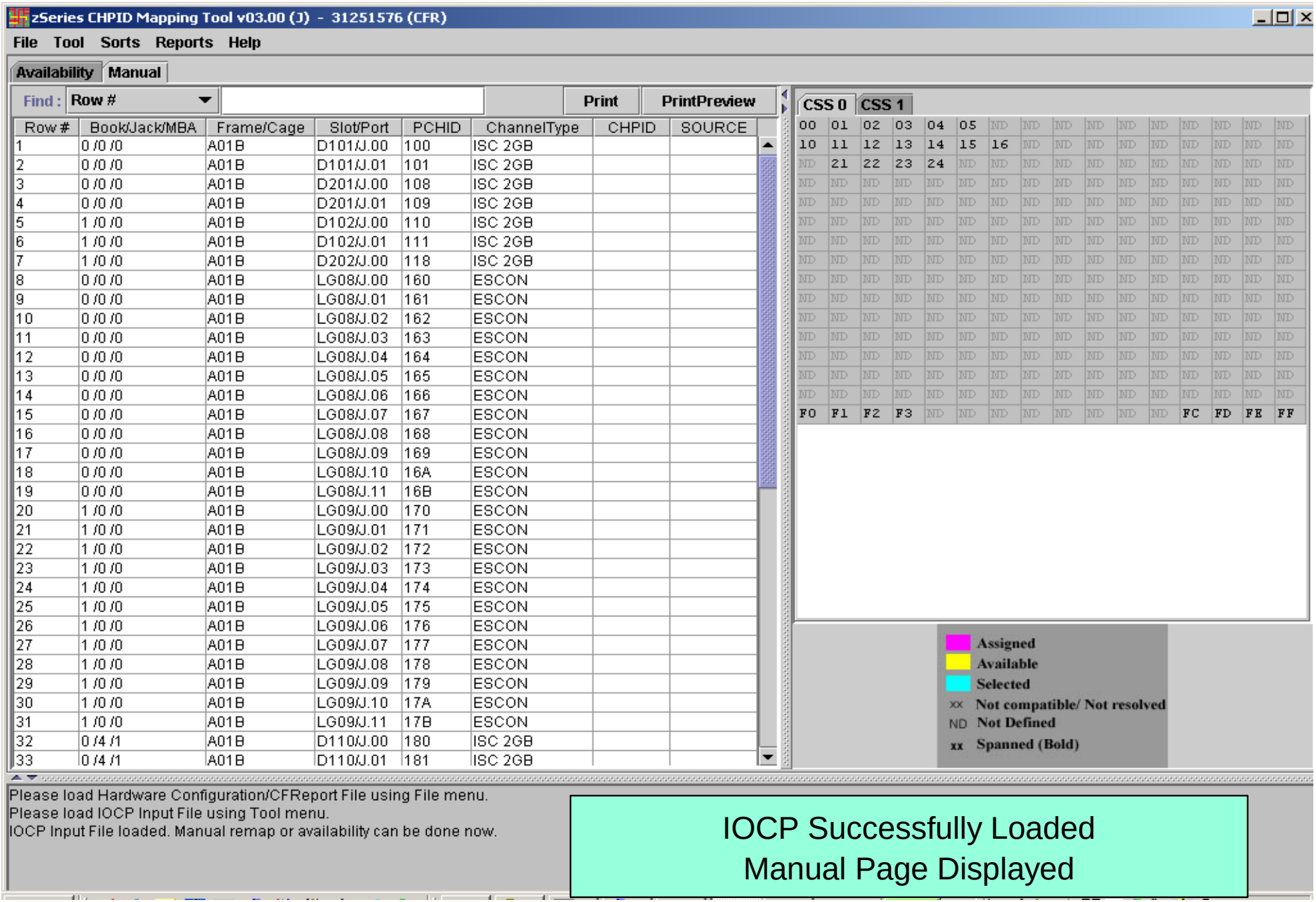
Download to workstation which contains the CHPID mapping tool

MA a 02/015

Connected to remote server/host wsc1.washington.ibm.com using port 23

Possible Message

This message only indicates there is more hardware on the machine than is defined in the IOCP. If expected, then no problem.


z5eries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File Tool Sorts Reports Help
Availability Manual
Find : Row #
Print PrintPreview
Row # Book/Jack/MBA Frame/Cage Slot/Port PCHID ChannelType CHPID SOURCE
1 0 /0 /0 A01B D101/J.00 100 ISC 2GB
2 0 /0 /0 A01B D101/J.01 101 ISC 2GB
3 0 /0 /0 A01B D201/J.00 108 ISC 2GB
4 0 /0 /0 A01B D201/J.01 109 ISC 2GB
5 1 /0 /0 A01B D102/J.00 110 ISC 2GB
6 1 /0 /0 A01B D102/J.01 111 ISC 2GB
7 1 /0 /0 A01B D202/J.00 118 ISC 2GB
8 0 /0 /0 A01B LG08/J.00 160 ESCON
9 0 /0 /0 A01B LG08/J.01 161 ESCON
10 0 /0 /0 A01B LG08/J.02 162 ESCON
11 0 /0 /0 A01B LG08/J.03 163 ESCON
12 0 /0 /0 A01B LG08/J.04 164 ESCON
13 0 /0 /0 A01B LG08/J.05 165 ESCON
14 0 /0 /0 A01B LG08/J.06 166 ESCON
15 0 /0 /0 A01B LG08/J.07 167 ESCON
16 0 /0 /0 A01B LG08/J.08 168 ESCON
17 0 /0 /0 A01B LG08/J.09 169 ESCON
18 0 /0 /0 A01B LG08/J.10 16A ESCON
19 0 /0 /0 A01B LG08/J.11 16B ESCON
20 1 /0 /0 A01B LG09/J.00 170 ESCON
21 1 /0 /0 A01B LG09/J.01 171 ESCON
22 1 /0 /0 A01B LG09/J.02 172 ESCON
23 1 /0 /0 A01B LG09/J.03 173 ESCON
24 1 /0 /0 A01B LG09/J.04 174 ESCON
25 1 /0 /0 A01B LG09/J.05 175 ESCON
26 1 /0 /0 A01B LG09/J.06 176 ESCON
27 1 /0 /0 A01B LG09/J.07 177 ESCON
28 1 /0 /0 A01B LG09/J.08 178 ESCON
29 1 /0 /0 A01B LG09/J.09 179 ESCON
30 1 /0 /0 A01B LG09/J.10 17A ESCON
31 1 /0 /0 A01B LG09/J.11 17B ESCON
32 0 /4 /1 A01B D110/J.00 180 ISC 2GB
33 0 /4 /1 A01B D110/J.01 181 ISC 2GB
CSS 0 CSS 1
00 01 02 03 04 05 ND ND ND ND ND ND ND ND ND ND
10 11 12 13 14 15 16 ND ND ND ND ND ND ND ND ND
ND 21 22 23 24 ND ND ND ND ND ND ND ND ND ND ND
F0 F1 F2 F3 ND ND ND ND ND ND ND ND FC FD FE FF
Assigned
Available
Selected
xx Not compatible/ Not resolved
ND Not Defined
xx Spanned (Bold)
Please load Hardware Configuration/CFReport File using File menu.
Please load IOCP Input File using Tool menu.
IOCP Input File loaded. Manual remap or availability can be done now.
IOCP Successfully Loaded
Manual Page Displayed

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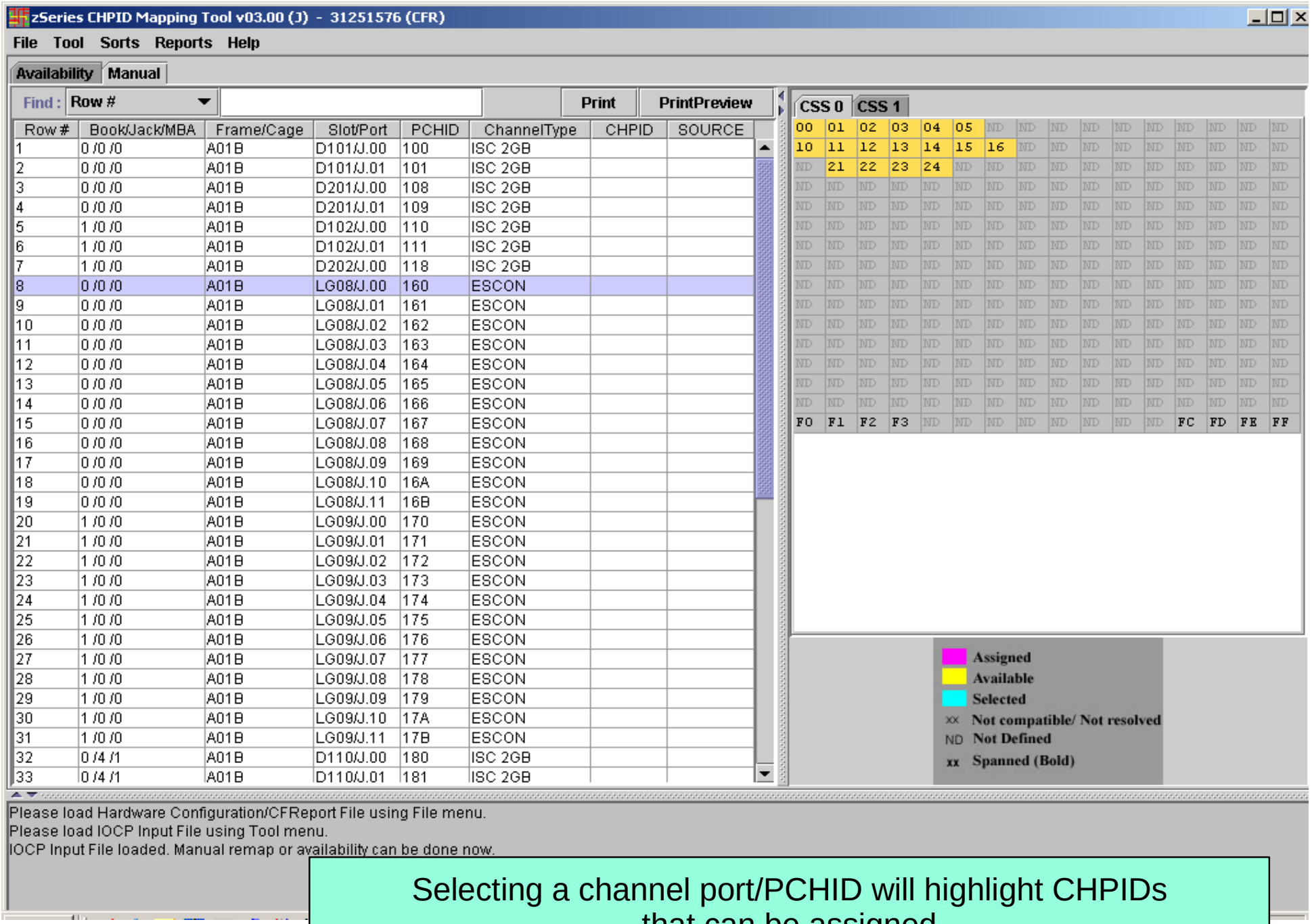
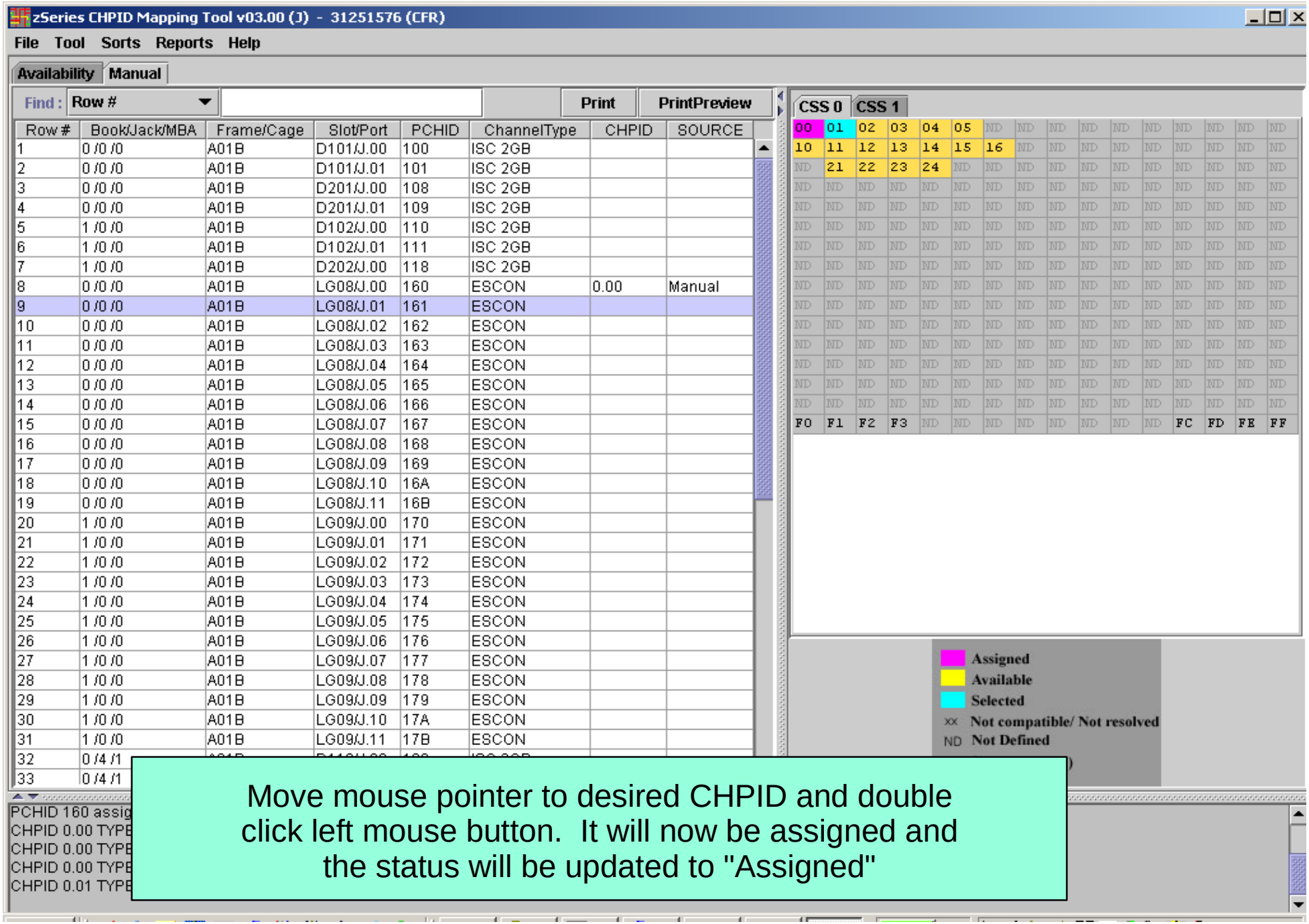
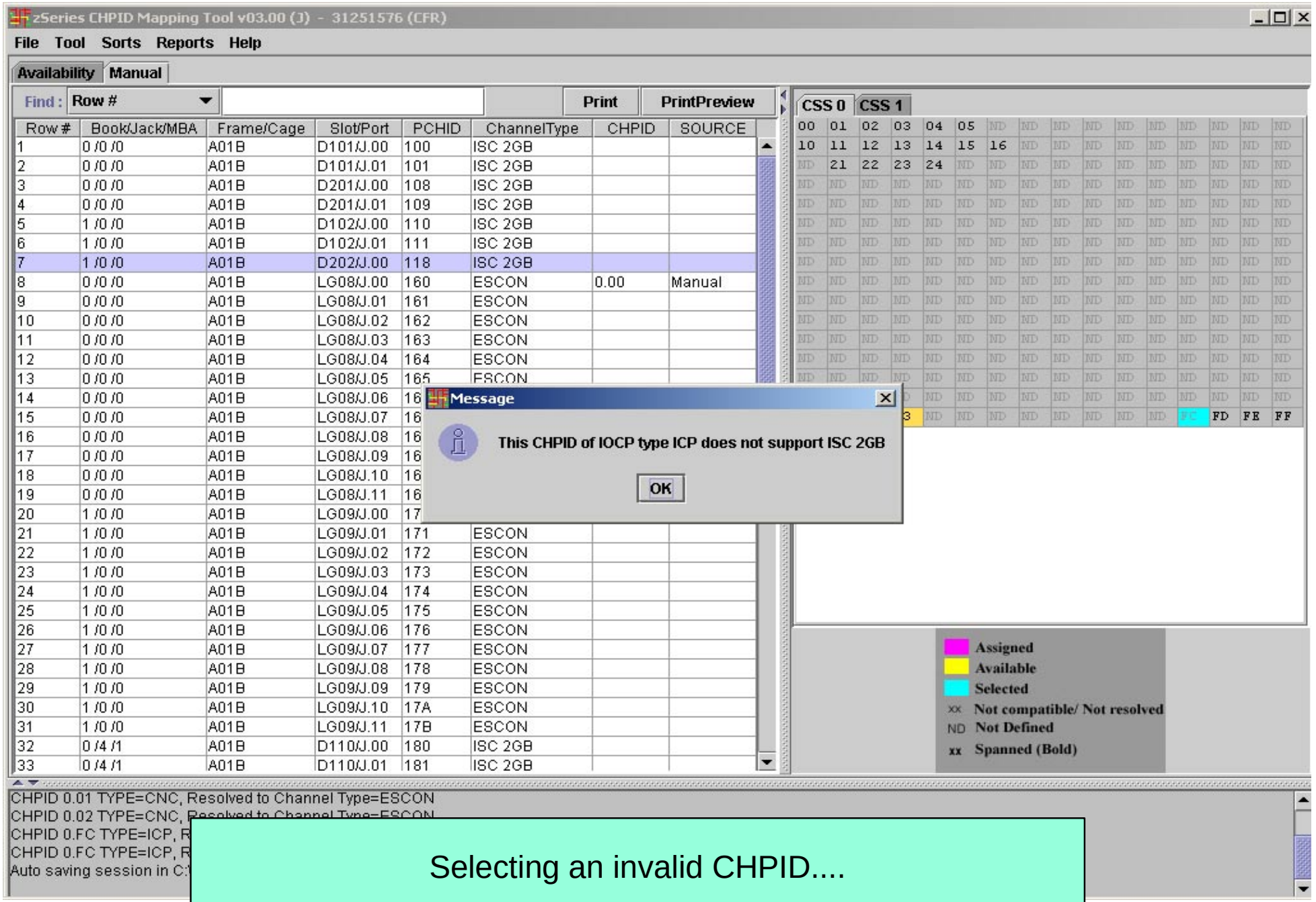
Manual CHPID Mapping

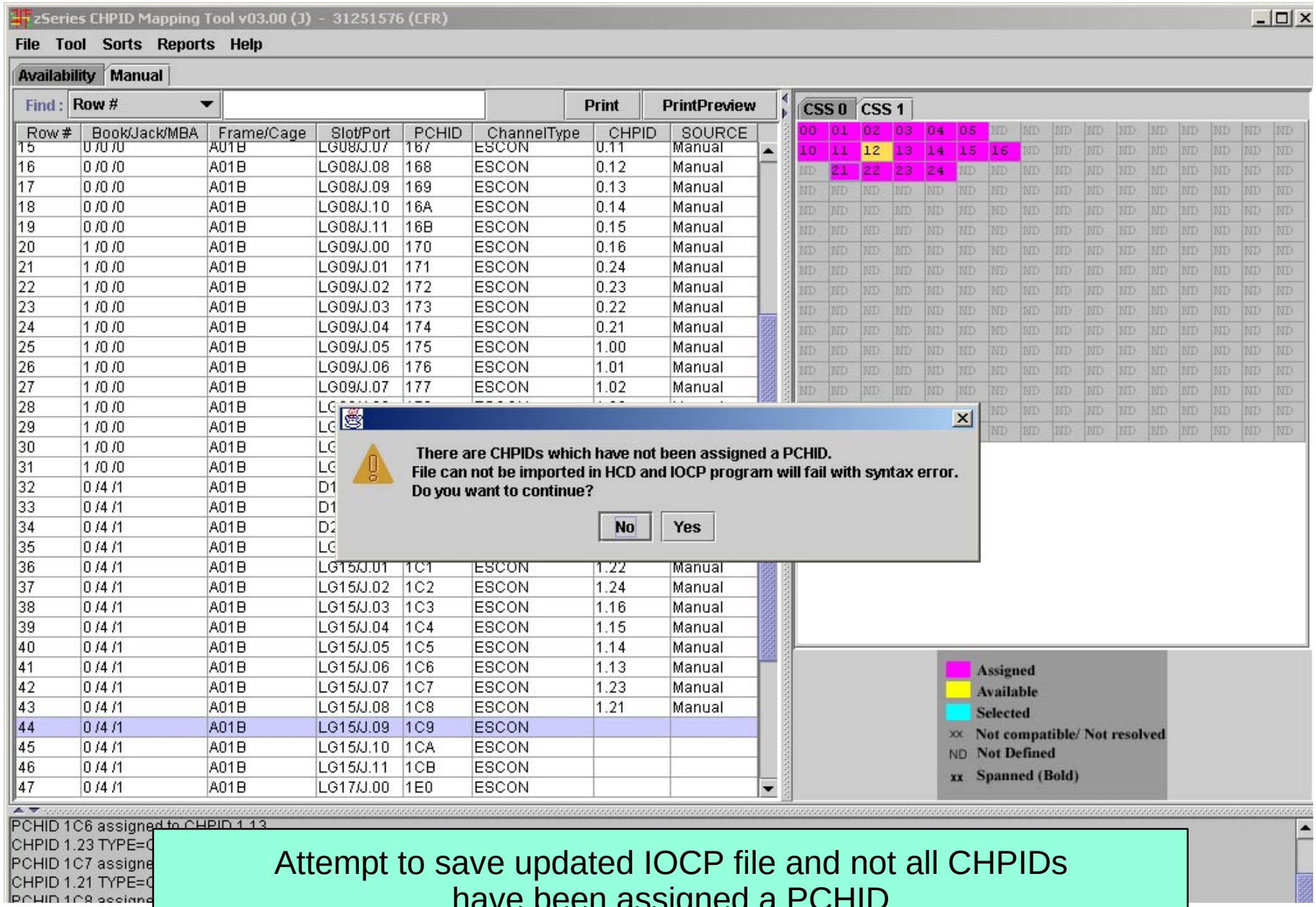


Selecting a channel port/PCHID will highlight CHPIDs that can be assigned


zSeries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File Tool Sorts Reports Help
Availability Manual
Find : Row #
Print PrintPreview
Row # Book/Jack/MBA Frame/Cage Slot/Port PCHID ChannelType CHPID SOURCE
1 0 /0 /0 A01B D101/J.00 100 ISC 2GB
2 0 /0 /0 A01B D101/J.01 101 ISC 2GB
3 0 /0 /0 A01B D201/J.00 108 ISC 2GB
4 0 /0 /0 A01B D201/J.01 109 ISC 2GB
5 1 /0 /0 A01B D102/J.00 110 ISC 2GB
6 1 /0 /0 A01B D102/J.01 111 ISC 2GB
7 1 /0 /0 A01B D202/J.00 118 ISC 2GB
8 0 /0 /0 A01B LG08/J.00 160 ESCON 0.00 Manual
9 0 /0 /0 A01B LG08/J.01 161 ESCON
10 0 /0 /0 A01B LG08/J.02 162 ESCON
11 0 /0 /0 A01B LG08/J.03 163 ESCON
12 0 /0 /0 A01B LG08/J.04 164 ESCON
13 0 /0 /0 A01B LG08/J.05 165 ESCON
14 0 /0 /0 A01B LG08/J.06 166 ESCON
15 0 /0 /0 A01B LG08/J.07 167 ESCON
16 0 /0 /0 A01B LG08/J.08 168 ESCON
17 0 /0 /0 A01B LG08/J.09 169 ESCON
18 0 /0 /0 A01B LG08/J.10 16A ESCON
19 0 /0 /0 A01B LG08/J.11 16B ESCON
20 1 /0 /0 A01B LG09/J.00 170 ESCON
21 1 /0 /0 A01B LG09/J.01 171 ESCON
22 1 /0 /0 A01B LG09/J.02 172 ESCON
23 1 /0 /0 A01B LG09/J.03 173 ESCON
24 1 /0 /0 A01B LG09/J.04 174 ESCON
25 1 /0 /0 A01B LG09/J.05 175 ESCON
26 1 /0 /0 A01B LG09/J.06 176 ESCON
27 1 /0 /0 A01B LG09/J.07 177 ESCON
28 1 /0 /0 A01B LG09/J.08 178 ESCON
29 1 /0 /0 A01B LG09/J.09 179 ESCON
30 1 /0 /0 A01B LG09/J.10 17A ESCON
31 1 /0 /0 A01B LG09/J.11 17B ESCON
32 0 /4 /1
33 0 /4 /1
CSS 0 CSS 1
00 01 02 03 04 05 ND ND ND ND ND ND ND ND ND ND
10 11 12 13 14 15 16 ND ND ND ND ND ND ND ND ND
ND 21 22 23 24 ND ND ND ND ND ND ND ND ND ND ND
F0 F1 F2 F3 ND ND ND ND ND ND ND ND FC FD FE FF
Assigned
Available
Selected
xx Not compatible/ Not resolved
ND Not Defined
PCHID 160 assig
CHPID 0.00 TYPE
CHPID 0.00 TYPE
CHPID 0.00 TYPE
CHPID 0.01 TYPE
Move mouse pointer to desired CHPID and double click left mouse button. It will now be assigned and the status will be updated to "Assigned"



Selecting an invalid CHPID....



Attempt to save updated IOCP file and not all CHPIDs have been assigned a PCHID

Note: Do not leave this panel until you respond to this message...or use "alt/tab" to surface the message waiting on a response.

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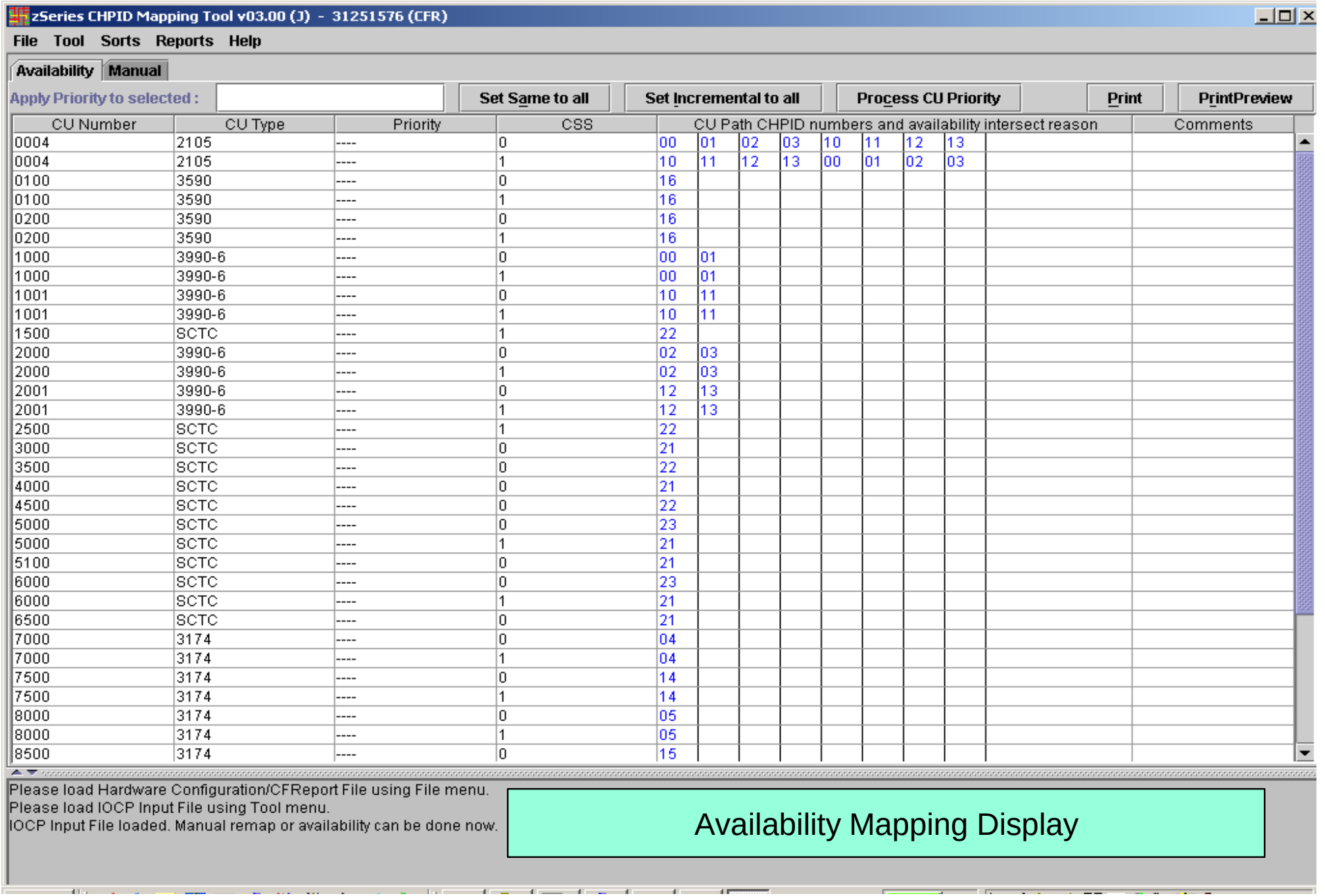
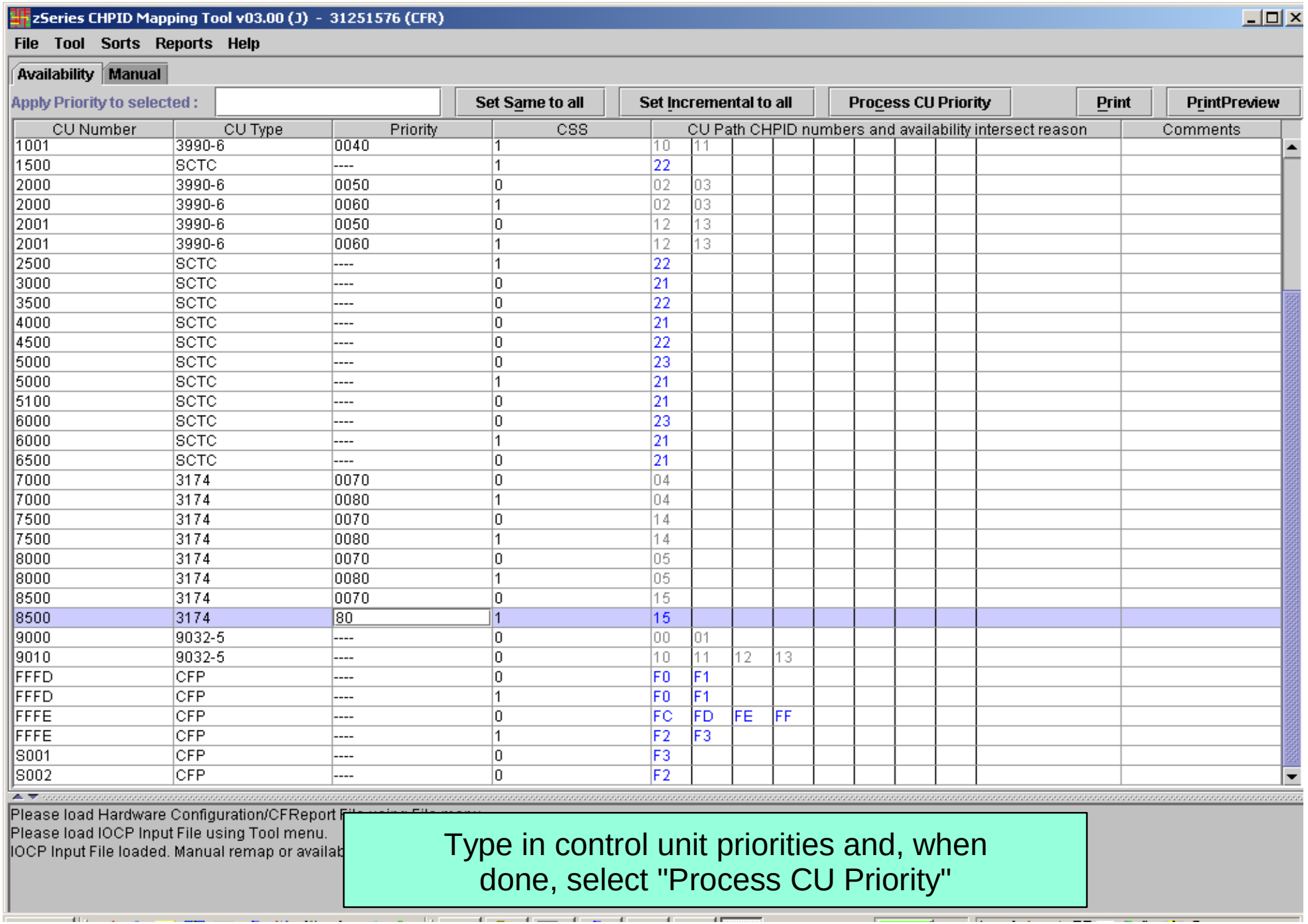
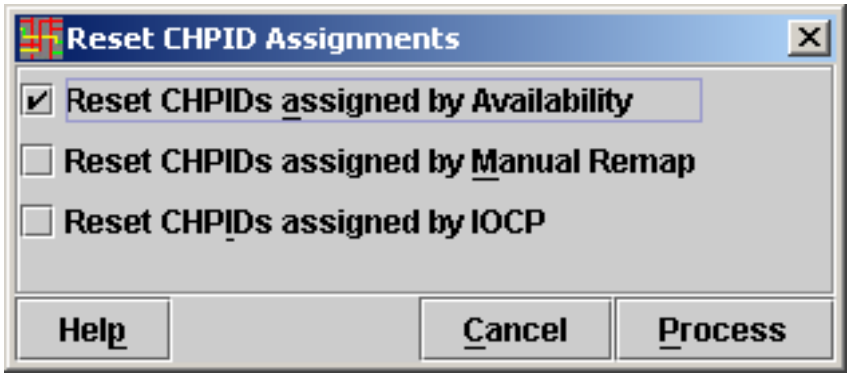
Availability Mapping

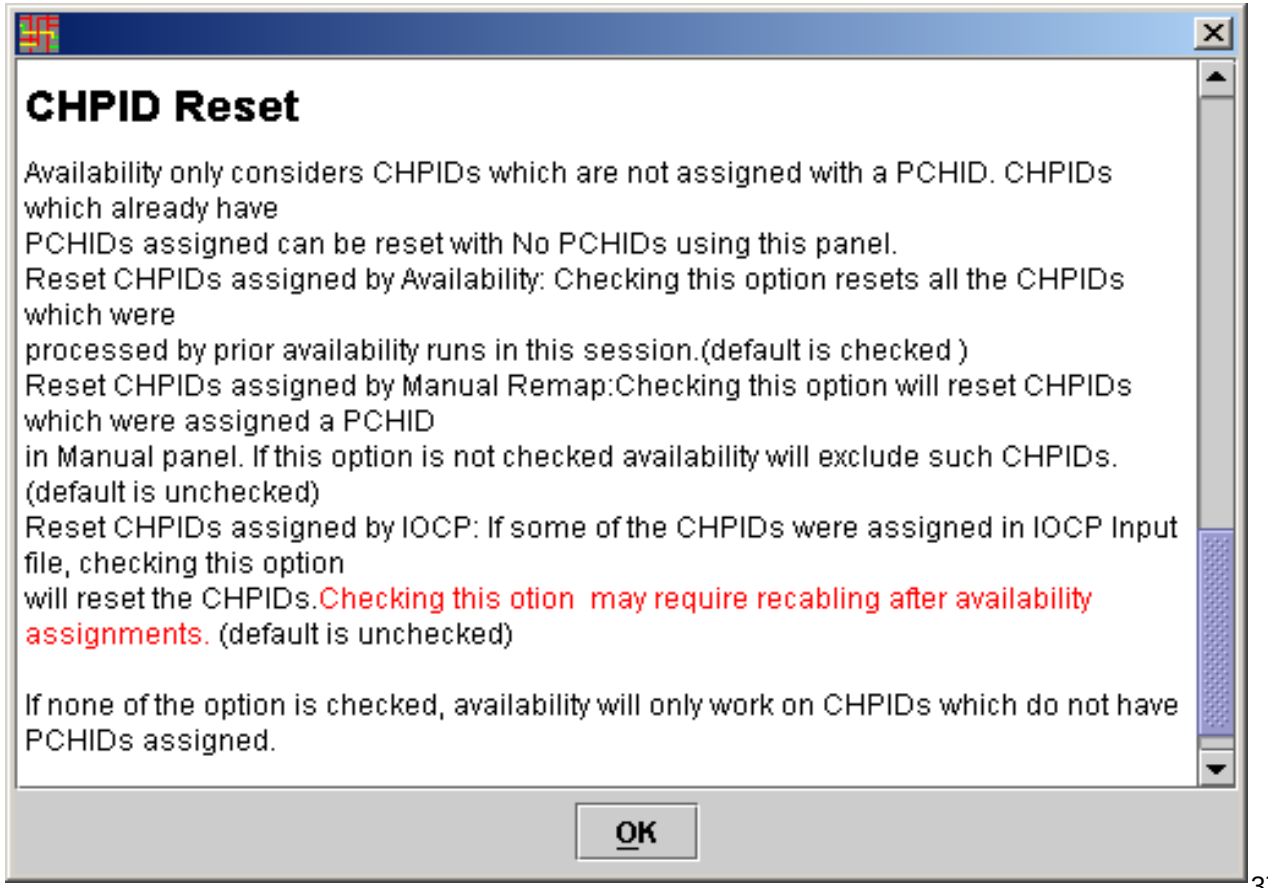


Availability Mapping Display

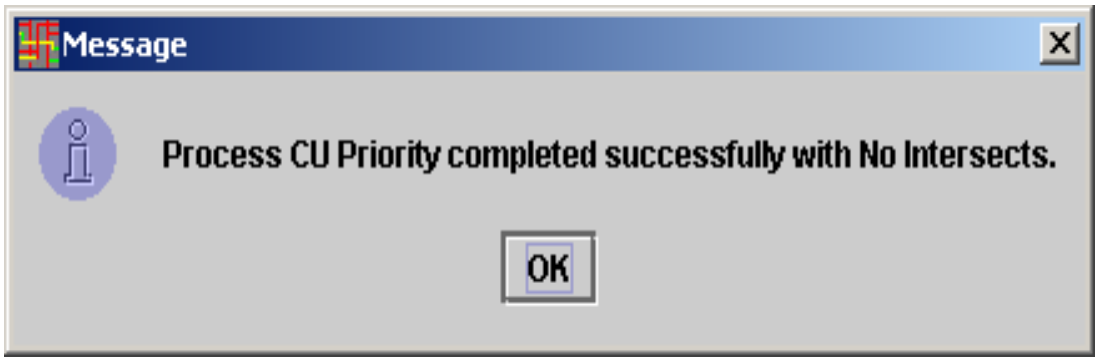

zSeries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File Tool Sorts Reports Help
Availability Manual
Apply Priority to selected :
Set Same to all
Set Incremental to all
Process CU Priority
Print
PrintPreview
CU Number CU Type Priority CSS CU Path CHPID numbers and availability intersect reason Comments
1001 3990-6 0040 1 10 11
1500 SCTC ---- 1 22
2000 3990-6 0050 0 02 03
2000 3990-6 0060 1 02 03
2001 3990-6 0050 0 12 13
2001 3990-6 0060 1 12 13
2500 SCTC ---- 1 22
3000 SCTC ---- 0 21
3500 SCTC ---- 0 22
4000 SCTC ---- 0 21
4500 SCTC ---- 0 22
5000 SCTC ---- 0 23
5000 SCTC ---- 1 21
5100 SCTC ---- 0 21
6000 SCTC ---- 0 23
6000 SCTC ---- 1 21
6500 SCTC ---- 0 21
7000 3174 0070 0 04
7000 3174 0080 1 04
7500 3174 0070 0 14
7500 3174 0080 1 14
8000 3174 0070 0 05
8000 3174 0080 1 05
8500 3174 0070 0 15
8500 3174 80 1 15
9000 9032-5 ---- 0 00 01
9010 9032-5 ---- 0 10 11 12 13
FFFD CFP ---- 0 F0 F1
FFFD CFP ---- 1 F0 F1
FFFE CFP ---- 0 FC FD FE FF
FFFE CFP ---- 1 F2 F3
S001 CFP ---- 0 F3
S002 CFP ---- 0 F2
Please load Hardware Configuration/CFReport
Please load IOCP Input File using Tool menu.
IOCP Input File loaded. Manual remap or availab
Type in control unit priorities and, when done, select "Process CU Priority"



"Process CU Priority" selected
-Options

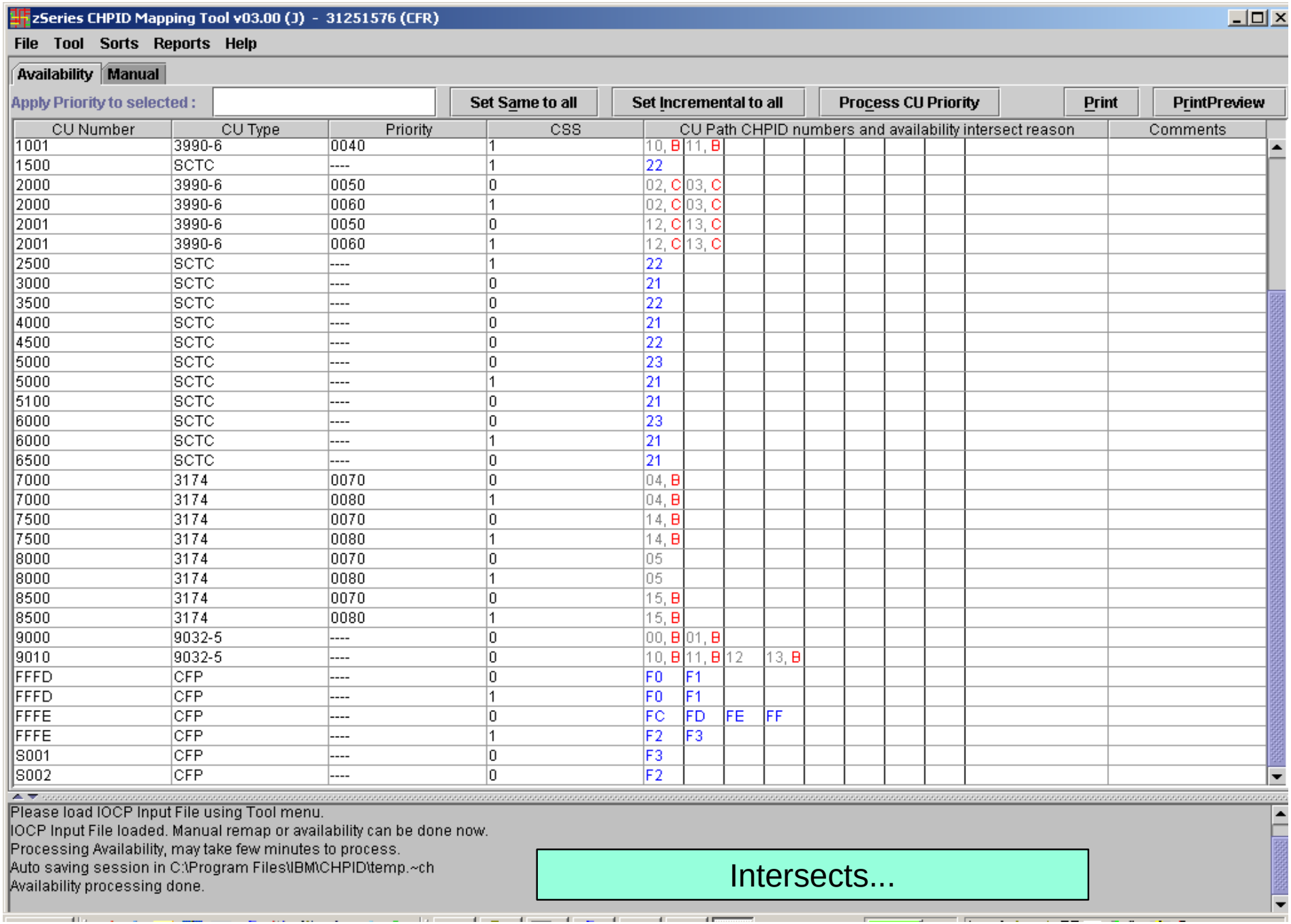


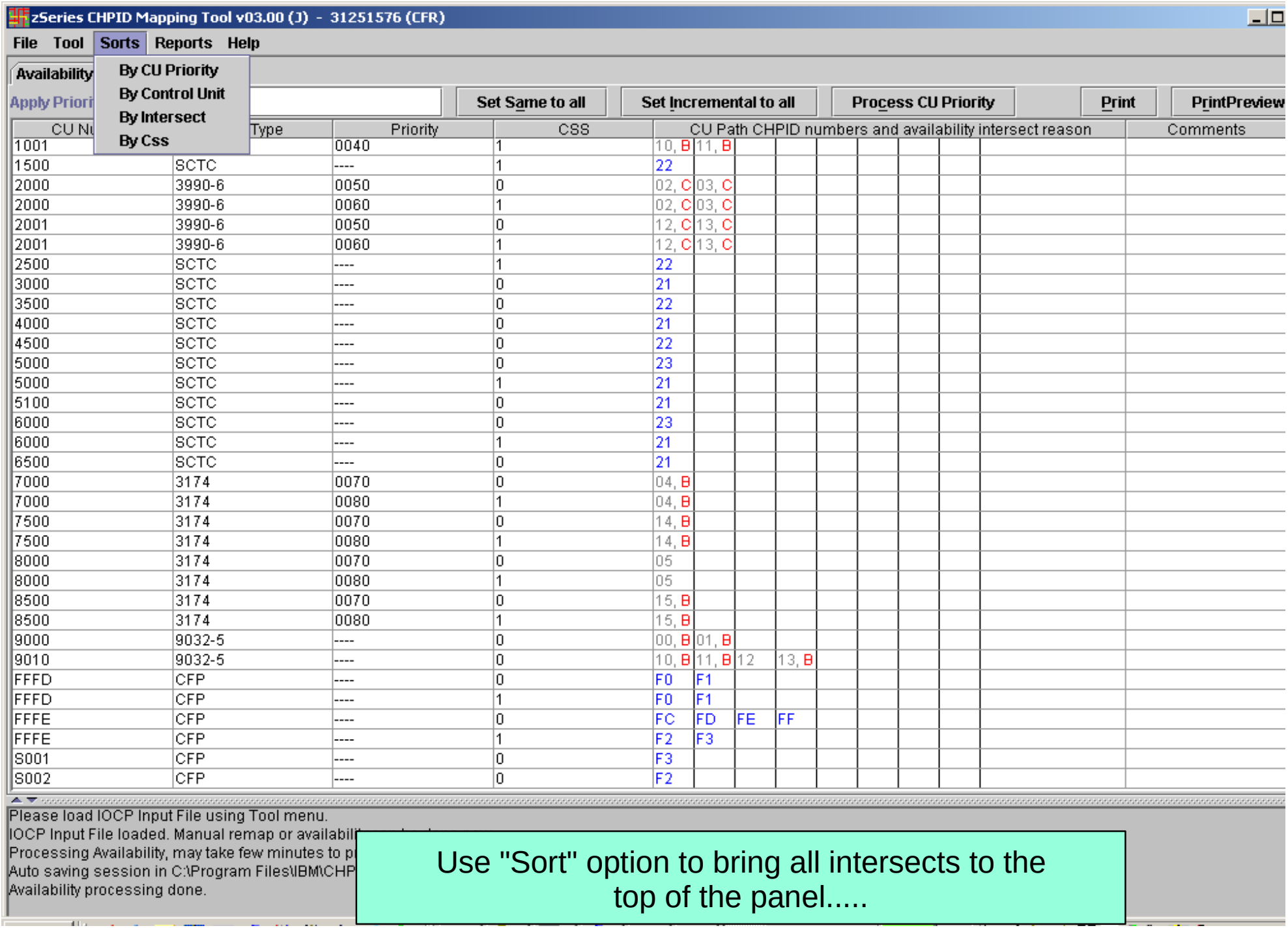
Possible Results of Process CU Priority

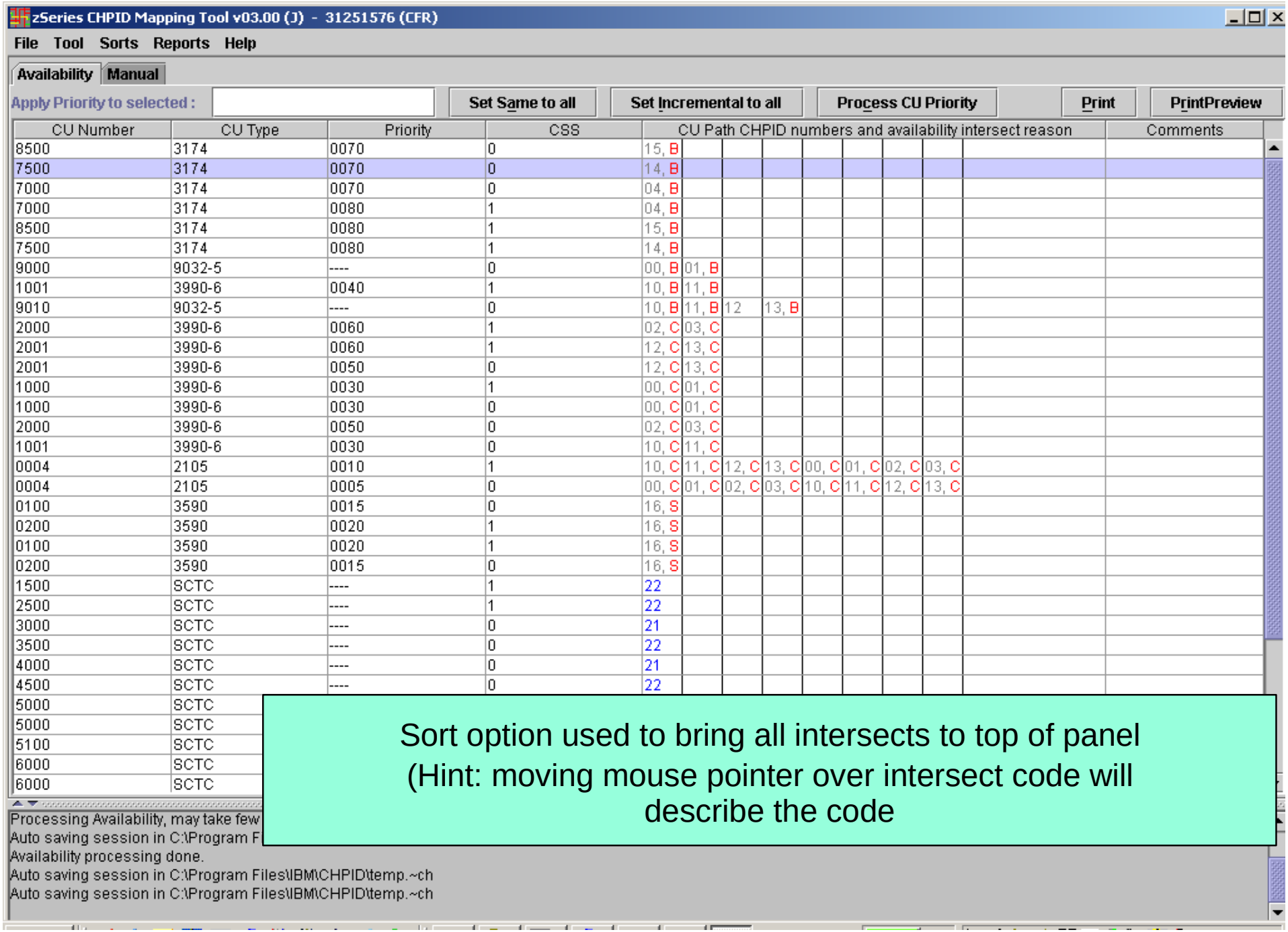


Good

Not so good


zSeries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File Tool Sorts Reports Help
Availability Manual
Apply Priority to selected :
Set Same to all
Set Incremental to all
Process CU Priority
Print
PrintPreview
CU Number | CU Type | Priority | CSS | CU Path CHPID numbers and availability intersect reason | Comments
1001 | 3990-6 | 0040 | 1 | 10, B 11, B
1500 | SCTC | ---- | 1 | 22
2000 | 3990-6 | 0050 | 0 | 02, C 03, C
2000 | 3990-6 | 0060 | 1 | 02, C 03, C
2001 | 3990-6 | 0050 | 0 | 12, C 13, C
2001 | 3990-6 | 0060 | 1 | 12, C 13, C
2500 | SCTC | ---- | 1 | 22
3000 | SCTC | ---- | 0 | 21
3500 | SCTC | ---- | 0 | 22
4000 | SCTC | ---- | 0 | 21
4500 | SCTC | ---- | 0 | 22
5000 | SCTC | ---- | 0 | 23
5000 | SCTC | ---- | 1 | 21
5100 | SCTC | ---- | 0 | 21
6000 | SCTC | ---- | 0 | 23
6000 | SCTC | ---- | 1 | 21
6500 | SCTC | ---- | 0 | 21
7000 | 3174 | 0070 | 0 | 04, B
7000 | 3174 | 0080 | 1 | 04, B
7500 | 3174 | 0070 | 0 | 14, B
7500 | 3174 | 0080 | 1 | 14, B
8000 | 3174 | 0070 | 0 | 05
8000 | 3174 | 0080 | 1 | 05
8500 | 3174 | 0070 | 0 | 15, B
8500 | 3174 | 0080 | 1 | 15, B
9000 | 9032-5 | ---- | 0 | 00, B 01, B
9010 | 9032-5 | ---- | 0 | 10, B 11, B 12 13, B
FFFD | CFP | ---- | 0 | F0 F1
FFFD | CFP | ---- | 1 | F0 F1
FFFE | CFP | ---- | 0 | FC FD FE FF
FFFE | CFP | ---- | 1 | F2 F3
S001 | CFP | ---- | 0 | F3
S002 | CFP | ---- | 0 | F2
Please load IOCP Input File using Tool menu.
IOCP Input File loaded. Manual remap or availability can be done now.
Processing Availability, may take few minutes to process.
Auto saving session in C:\Program Files\IBM\CHPID\temp.~ch
Availability processing done.
Intersects...


zSeries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File Tool Sorts Reports Help
By CU Priority
By Control Unit
By Intersect
By Css
Availability
Apply Priori
Set Same to all
Set Incremental to all
Process CU Priority
Print
PrintPreview
CU Nu
Type
Priority
CSS
CU Path CHPID numbers and availability intersect reason
Comments
1001 0040 1 10, B 11, B
1500 SCTC ---- 1 22
2000 3990-6 0050 0 02, C 03, C
2000 3990-6 0060 1 02, C 03, C
2001 3990-6 0050 0 12, C 13, C
2001 3990-6 0060 1 12, C 13, C
2500 SCTC ---- 1 22
3000 SCTC ---- 0 21
3500 SCTC ---- 0 22
4000 SCTC ---- 0 21
4500 SCTC ---- 0 22
5000 SCTC ---- 0 23
5000 SCTC ---- 1 21
5100 SCTC ---- 0 21
6000 SCTC ---- 0 23
6000 SCTC ---- 1 21
6500 SCTC ---- 0 21
7000 3174 0070 0 04, B
7000 3174 0080 1 04, B
7500 3174 0070 0 14, B
7500 3174 0080 1 14, B
8000 3174 0070 0 05
8000 3174 0080 1 05
8500 3174 0070 0 15, B
8500 3174 0080 1 15, B
9000 9032-5 ---- 0 00, B 01, B
9010 9032-5 ---- 0 10, B 11, B 12 13, B
FFFD CFP ---- 0 F0 F1
FFFD CFP ---- 1 F0 F1
FFFE CFP ---- 0 FC FD FE FF
FFFE CFP ---- 1 F2 F3
S001 CFP ---- 0 F3
S002 CFP ---- 0 F2
Please load IOCP Input File using Tool menu.
IOCP Input File loaded. Manual remap or availabil
Processing Availability, may take few minutes to p
Auto saving session in C:\Program Files\IBM\CHP
Availability processing done.
Use "Sort" option to bring all intersects to the top of the panel.....



Sort option used to bring all intersects to top of panel
(Hint: moving mouse pointer over intersect code will describe the code

The problem?.....not enough channels on machine

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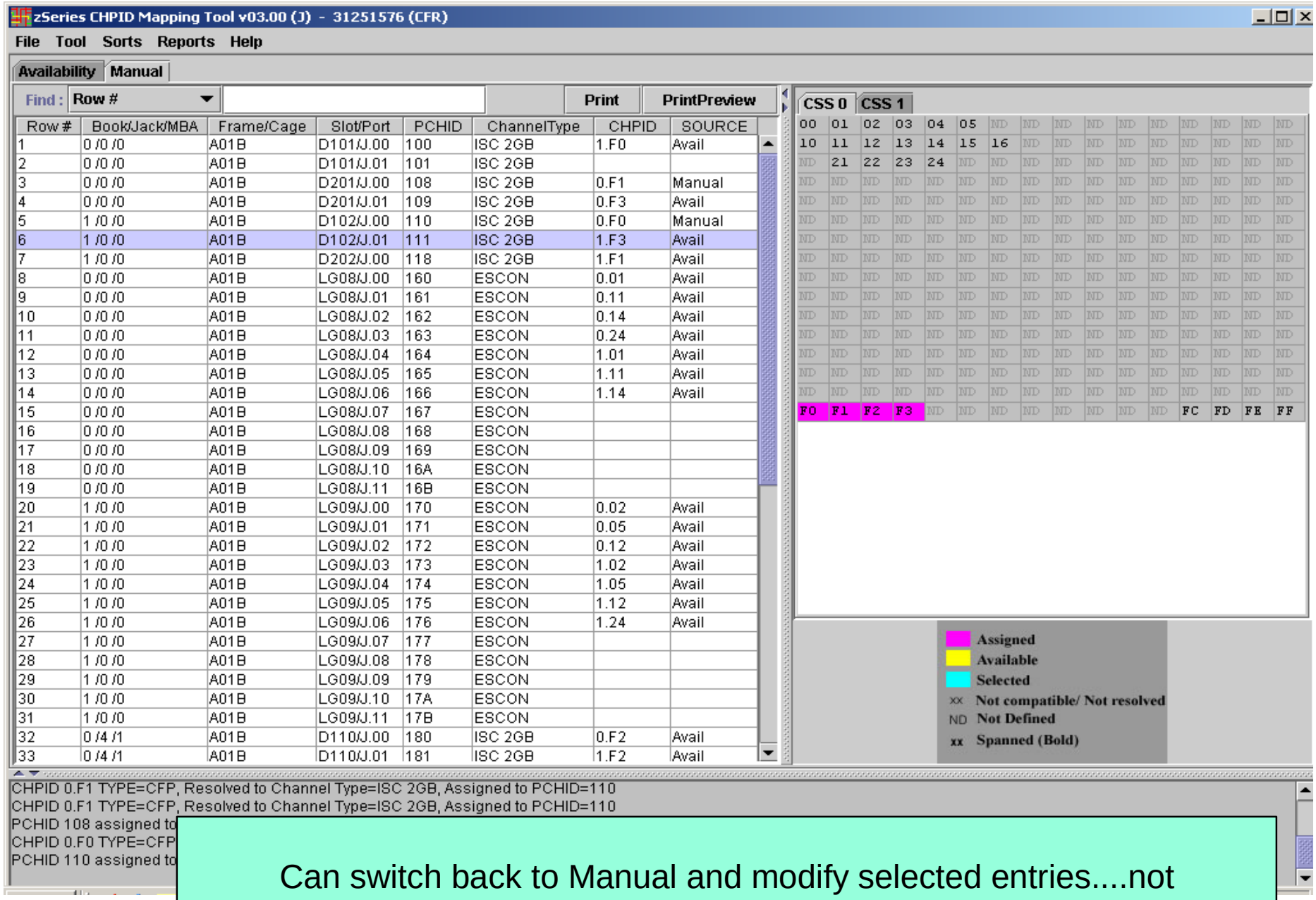
Product	Description	Qty
2084-B16	IBM ESERVER ZSERIES 990	1
0112	I/O CAGE FULL CARD AIRFLOW	19
0152	CEC	1
0217	ISC-MOTHER CARD	3
0218	ISC-DAUGHTER CARD	6
0219	ISC-3 PORT ON F/C 218	10
0225	STI AFB-C 1/2 AIRFLOW	5
0322	ESTI-M CARD	3
0518	INTEGRATED COUPLING FACILITY	1
0716	CP	4
0868	PCI X CRYPTO COPROCESSOR	2
1008	8 GB MEMORY CARD	4
1216	MODEL B16	1
2323	16 PORT ESCON CD.	4
2324	ESCON CHAN PORT ENABLE	12
2602	16 GB MEMORY	1
3062	SERVICE ELEMENT TR/EN	2
3863	CPACF DES/TDES ENABLEMENT	1
4404	4-WAY PROCESSOR	1
6154	ETR 1 PORT	2
7721	B16 1 I/O CAGE	1
8993	14 FT 250V CORD (US,CAN,JAP)	1
9964	SITE TOOL KIT	1

Look at CHPID Report to see impact....

Book/Jack/MBA	Cage	Slot	F/C	CSS.CHPID/PCHID/Ports
0/ J.0/ 0	A01B	D101	0218	1.F0/100/J00 ----/101/J01
0/ J.0/ 0	A01B	D201	0218	0.F0/108/J00 0.F3/109/J01
1/ J.0/ 0	A01B	D102	0218	0.F1/110/J00 1.F3/111/J01
1/ J.0/ 0	A01B	D202	0218	1.F1/118/J00
0/ J.0/ 0	A01B	03	0868	----/120/P00
1/ J.0/ 0	A01B	04	0868	----/130/P00
0/ J.0/ 0	A01B	08	2323	0.01/160/J00 0.11/161/J01 0.14/162/J02 0.24/163/J03 1.01/164/J04 1.11/165/J05 1.14/166/J06 ----/167/J07 ----/168/J08 ----/169/J09 ----/16A/J10 ----/16B/J11
1/ J.0/ 0	A01B	09	2323	0.02/170/J00 0.05/171/J01 0.12/172/J02 1.02/173/J03 1.05/174/J04 1.12/175/J05 1.24/176/J06 ----/177/J07 ----/178/J08 ----/179/J09 ----/17A/J10 ----/17B/J11
0/ J.4/ 1	A01B	D110	0218	0.F2/180/J00 1.F2/181/J01
0/ J.4/ 1	A01B	D210	0218	----/188/J00
0/ J.4/ 1	A01B	15	2323	0.03/1C0/J00 0.13/1C1/J01 0.15/1C2/J02 0.21/1C3/J03 0.23/1C4/J04 1.03/1C5/J05 1.13/1C6/J06 1.15/1C7/J07 1.16/1C8/J08 1.23/1C9/J09 ----/1CA/J10 ----/1CB/J11
0/ J.4/ 1	A01B	17	2323	0.00/1E0/J00 0.04/1E1/J01 0.10/1E2/J02 0.16/1E3/J03 0.22/1E4/J04 1.00/1E5/J05 1.04/1E6/J06 1.10/1E7/J07 1.21/1E8/J08 1.22/1E9/J09 ----/1EA/J10 ----/1EB/J11

Note: Control Unit 0004 in either LCSS uses CHPIDs
00,01,02,03,10,11,12,13
- 00,10 - Same card
- 01,11 - Same card
- 02,12 - Same card
- 03,13 - Same card

If loss of card
- -still have 6 of 8 paths



Can switch back to Manual and modify selected entries....not recommended unless you really know what you are doing!

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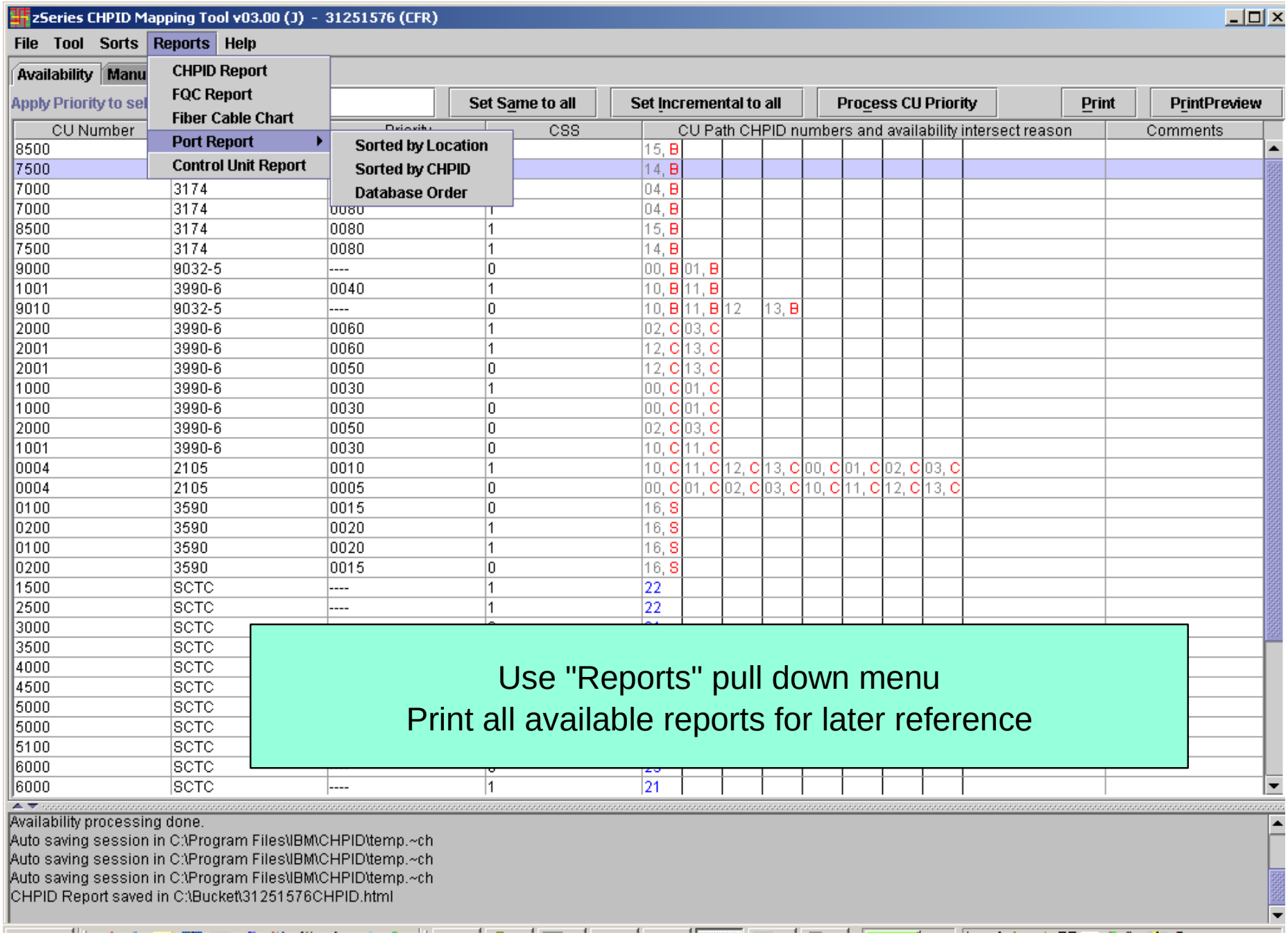
CHPID Mapping Tool - Reports


zSeries CHPID Mapping Tool v03.00 (J) - 31251576 (CFR)
File Tool Sorts Reports Help
CHPID Report
FQC Report
Fiber Cable Chart
Port Report
Control Unit Report
Sorted by Location
Sorted by CHPID
Database Order
Availability
Set Same to all
Set Incremental to all
Process CU Priority
Print
PrintPreview
CU Number
CSS
CU Path CHPID numbers and availability intersect reason
Comments
Use "Reports" pull down menu
Print all available reports for later reference
Availability processing done.
Auto saving session in C:\Program Files\IBM\CHPID\temp.~ch
Auto saving session in C:\Program Files\IBM\CHPID\temp.~ch
Auto saving session in C:\Program Files\IBM\CHPID\temp.~ch
CHPID Report saved in C:\Bucket\31251576CHPID.html

Reports

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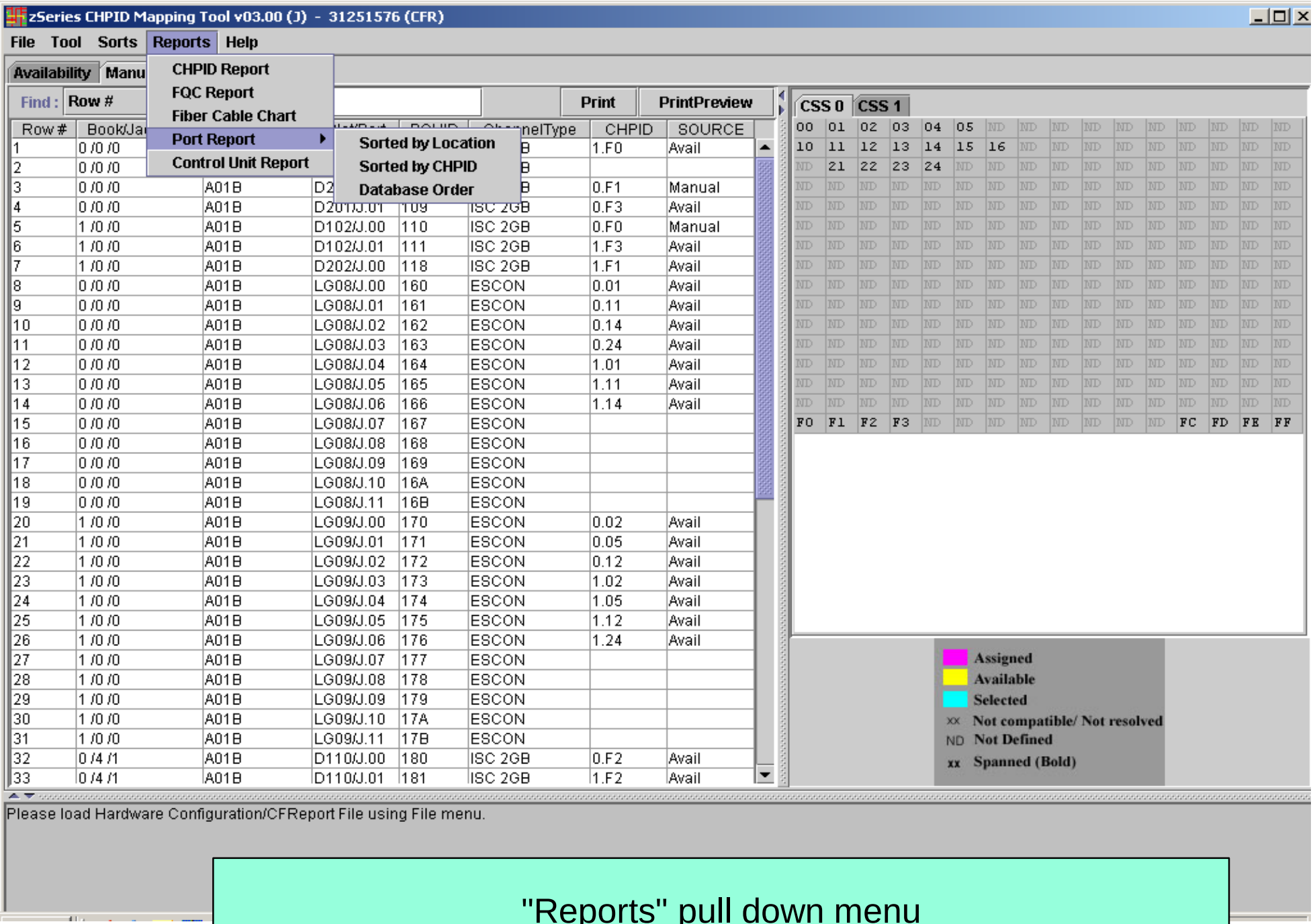
- Several to choose from
  - Print all now
- Will be saved as an HTML file
  - Can be edited with appropriate word processing application



"Reports" pull down menu

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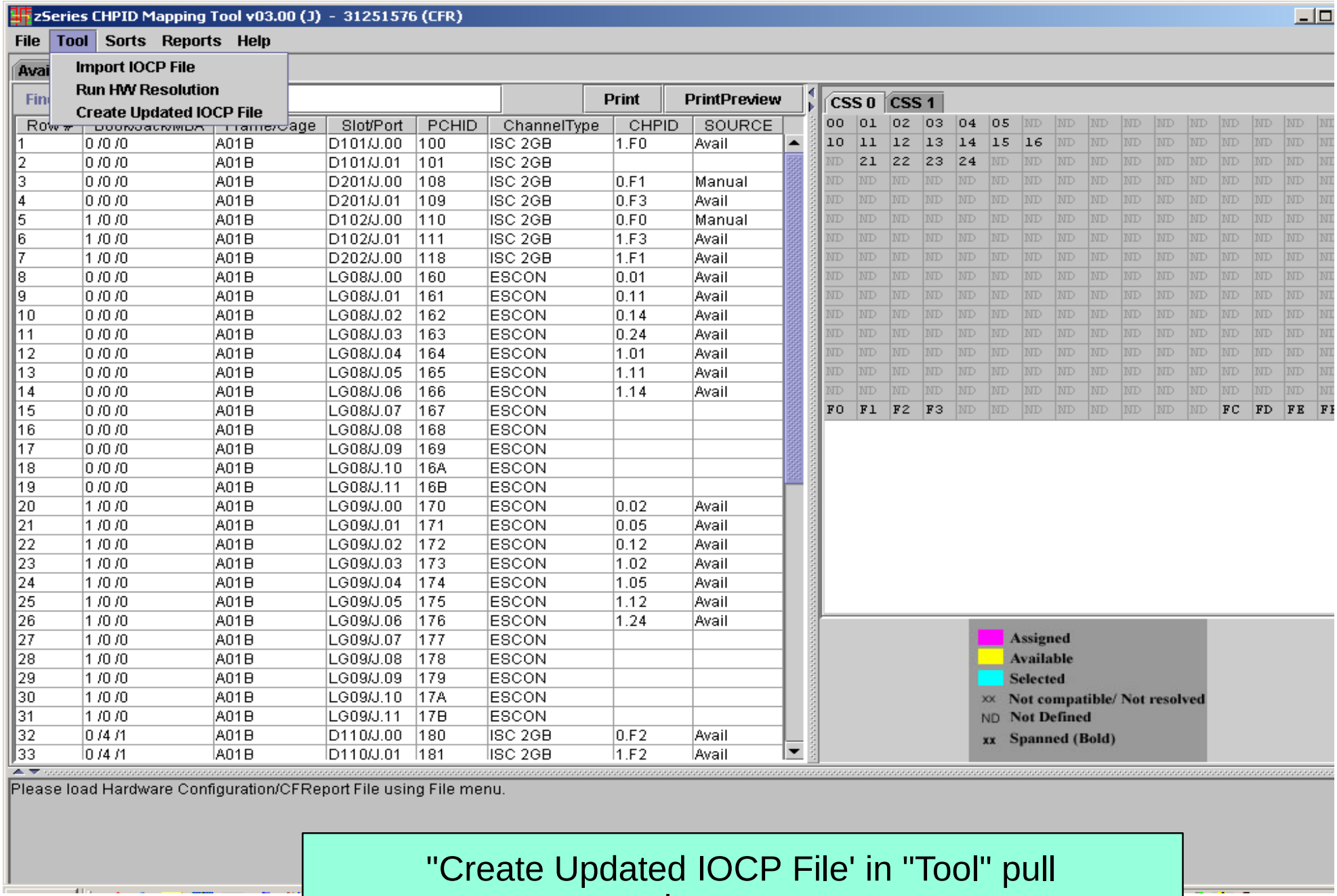
CHPID Mapping-Create Updated IOCP



"Create Updated IOCP File' in "Tool" pull down menu

Good advice.....

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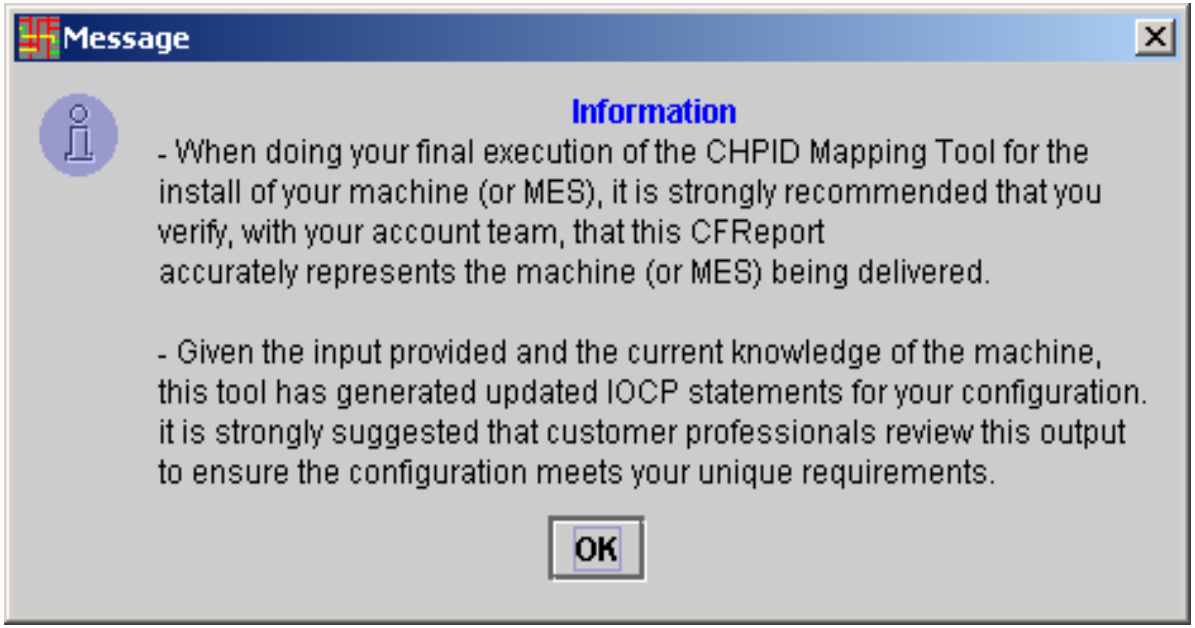

Note: Message generated when using a *.cfr file

Updated IOCP File...

```
ID    MSG1='''Input for CHPID Mapping Tool''',                          *
            MSG2='HUGHES.IODF07.WORK - 2003-11-08 13:48',               *
            SYSTEM=(2084,1),                                            *
            TOK=('Z990',0000000A3A6A208413484467010331 2F00000000,000*
            00000,'03-11-08','13:48:44','        ','        ')
      RESOURCE PARTITION=((CSS(0),(CF01,3),(LPAR1,1),(LPAR2,2)),(CSS*
            (1),(LPARA,1),(LPARB,2))),                                  *
            MAXDEV=((CSS(0),64512),(CSS(1),49152))
      CHPID PATH=(CSS(0),00),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
            SWITCH=01,TYPE=CNC,                                         *
            PCHID=1E0
      CHPID PATH=(CSS(0),01),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
            SWITCH=01,TYPE=CNC,                                         *
            PCHID=160
      CHPID PATH=(CSS(0),02),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
            SWITCH=01,TYPE=CNC,                                         *
            PCHID=170
      CHPID PATH=(CSS(0),03),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
            SWITCH=01,TYPE=CNC,                                         *
            PCHID=1C0
      CHPID PATH=(CSS(0),04),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
            SWITCH=01,TYPE=CNC,                                         *
            PCHID=1E1
      CHPID PATH=(CSS(0),05),SHARED,PARTITION=((LPAR1,LPAR2),(=)),   *
            SWITCH=01,TYPE=CNC,                                         *
            PCHID=171
                  (etc.).
```

Questions?

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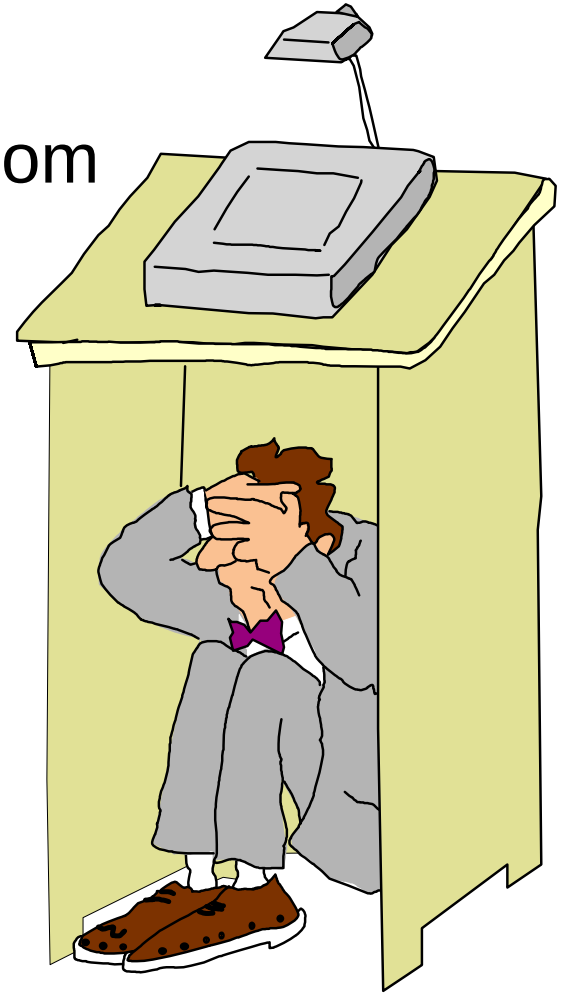
John Hughes
301-240-3542
jjhughes@us.ibm.com