

z/TPF EE V1.1

z/TPFDF V1.1

TPF Toolkit for WebSphere® Studio V3

TPF Operations Server V1.2



IBM Software Group

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TPF Debugger TPF Views

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AIM Enterprise Platform Software

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TPF Debugger TPF Views

Views delivered:

- ECB
- Data Level
- DECB

All views backed by XML files located in the TPFSHARE directory allowing user customization.

The screenshot displays the IBM TPF Debugger interface with the following components:

- Top Panel:** Shows the current process and thread information: "9.57.13.89.qdb0 [Compiled Application]", "Platform: ZTPF Connection: 9.57.13.89:1024", "Thread: TPF Thread 0B124000 (Stopped)", "Execution Pt.: : 0x0000000390EDB3AC", "QDB0 : qdb0.o : QDB0", "invokeDriver : cvzz.o : CVZZ", "CVZZ : cvzz.o : CVZZ", and "Process: 0B124000 Program: QDB0".
- Variables Panel:** Lists variables with their names and values:

Name	Value
addr	**
port	7999
testcase	0
i	0
num_parms	0
file_ptr	"x01"
- Source Code Panel:** Shows the source code for "qdb0.cpp" at line 30, which is highlighted in blue. The code includes:


```

      26 int num_parms=0; /* for saving IPRSE_parse rc*/
      27 int i=0;
      28 int testcase=0;
      29 unsigned short port = 7999;
      30 char *addr = NULL;
      31 char *file = NULL;
      
```
- Breakpoints Panel:** Shows a breakpoint set at "Entry [_Z18DataLevelFill testv]".
- Console Panel:** Contains tabs for "ECB", "DECB", "Data Level", "Debug Console", and "Memory".
- ECB Tree Panel:** Shows a tree view of the ECB structure, including "ECB : Layout ztp", "CHW", "BAD", "W00-103", "W00", "004", "008", "012", "016", "020", "024", "028", "032", and "036".
- ECB Dump Panel:** Displays a hexadecimal dump of the ECB data at address 0xB100000. The dump is organized into columns for different fields (CHW, BAD, W00, FA0-FA9, FAC) and rows for data bytes (0-3, 4-7, 8-B, C-F).

Address	0 - 3	4 - 7	8 - B	C - F
B100000	CHW 00000000	BAD 00000000	W00 C4C2E4C7	004 C3E5E9E9
B100010	008 80B00000	012 00000000	016 00000000	020 00000000
B100020	024 00000000	028 00000000	032 00000000	036 00000000
B100030	040 01000000	044 00000000	048 00000000	052 E2D4D7C2
B100040	056 010000C2	060 80B00000	064 00000000	068 00000000
B100050	072 00008400	076 04000000	080 E3C5E2E3	084 00000000
B100060	088 00000000	092 037C58C8	096 00000000	100 00000000
B100070	SW1 00000000	CM1 01000000	FA0 00000000	00000000
B100080	FA1 00000000	00000000	FA2 00000000	00000000
B100090	FA3 00000000	00000000	FA4 00000000	00000000
B1000A0	FA5 00000000	00000000	FA6 00000000	00000000
B1000B0	FA7 00000000	00000000	FA8 00000000	00000000
B1000C0	FA9 00000000	00000000	FAC 00000000	00000000
B1000D0	FAB 00000000	00000000		
- ECB EBCDIC Panel:** Shows the EBCDIC representation of the ECB data at address 0xB100000. The dump is organized into columns for different fields (DBUG, CVZZ, SMPB, TEST) and rows for data bytes (0-3, 4-7, 8-B, C-F).

0 - 3	4 - 7	8 - B	C - F
rrrr	rrrr	DBUG	CVZZ
0^rr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrB	0^rr	rrrr	rrrr
rrdr	0^rr	TEST	rrrr
rrrr	0^1H	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr

ECB View

The screenshot displays the IBM ECB View interface with three main panes:

- ECB Tree:** A hierarchical tree view on the left showing the structure of the ECB. The root is 'ecbptr <ECB>', which contains 'ECB : Layout ztp'. Under this, there are fields 'CHW', 'BAD', and 'W00-103'. The 'W00-103' field is expanded to show sub-fields 'W00', '004', '008', '012', '016', '020', '024', '028', '032', and '036'.
- ECB Dump:** A table in the center showing the raw data dump for 'ecbptr : 0xB100000 <ECB Dump>'. The table has columns for Address, Field Name, and hexadecimal values for octets 0-3, 4-7, 8-B, and C-F.
- ECB EBCDIC:** A table on the right showing the EBCDIC representation for 'ecbptr : 0xB100000 <ECB EBCDIC>'. The table has columns for octets 0-3, 4-7, 8-B, and C-F, with corresponding EBCDIC characters.

Address		0 - 3		4 - 7		8 - B		C - F	
B100000	CHW	00000000		BAD	00000000	W00	C4C2E4C7	004	C3E5E9E9
B100010	008	80B00000		012	00000000	016	00000000	020	00000000
B100020	024	00000000		028	00000000	032	00000000	036	00000000
B100030	040	01000000		044	00000000	048	00000000	052	E2D4D7C2
B100040	056	010000C2		060	80B00000	064	00000000	068	00000000
B100050	072	00008400		076	04000000	080	E3C5E2E3	084	00000000
B100060	088	00000000		092	037C58C8	096	00000000	100	00000000
B100070	SW1	00000000		CM1	01000000	FA0	00000000		00000000
B100080	FA1	00000000			00000000	FA2	00000000		00000000
B100090	FA3	00000000			00000000	FA4	00000000		00000000
B1000A0	FA5	00000000			00000000	FA6	00000000		00000000
B1000B0	FA7	00000000			00000000	FA8	00000000		00000000
B1000C0	FA9	00000000			00000000	FAA	00000000		00000000
B1000D0	FAB	00000000			00000000	FAC	00000000		00000000

0 - 3	4 - 7	8 - B	C - F
rrrr	rrrr	DEBUG	CVZZ
0^rr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	SMPB
rrrrB	0^rr	rrrr	rrrr
rrdr	0err	TEST	rrrr
rrrr	L@iH	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr
rrrr	rrrr	rrrr	rrrr

- Tree, Dump, and EBCDIC panes can be toggled on or off to suit preference or need by the buttons in the upper right hand corner.
- Additional mappings can be viewed in these panes such as ASCII, full XML map, or etc.

ECB View

The screenshot displays the IBM ECB View interface, which is divided into three main panes:

- ECB Tree:** Shows a hierarchical tree view of the ECB structure. The 'W00' field is selected and highlighted in red.
- ECB Dump:** Shows a table of memory addresses and fields. The 'W00' field is highlighted in red. The table has columns for Address, Field Name, and data values.
- ECB EBCDIC:** Shows the same data in EBCDIC format. The 'DEBUG' field is highlighted in red.

Arrows indicate that the three panes are linked, so clicking on a field in one pane highlights the same field in the other two panes.

Address	Field	0 - 3	4 - 7	8 - B	C - F
B100000	CHW	00000000	BAD	00000000	W00
B100010	008	80B00000	012	00000000	016
B100020	024	00000000	028	00000000	032
B100030	040	01000000	044	00000000	048
B100040	056	010000C2	060	80B00000	064
B100050	072	00008400	076	04000000	080
B100060	088	00000000	092	037C58C8	096
B100070	SW1	00000000	CM1	01000000	FA0
B100080	FA1	00000000		00000000	FA2
B100090	FA3	00000000		00000000	FA4
B1000A0	FA5	00000000		00000000	FA6
B1000B0	FA7	00000000		00000000	FA8
B1000C0	FA9	00000000		00000000	FAA
B1000D0	FAB	00000000		00000000	FAC

- The three panes are linked so that if you click on a field in one pane, the same field is highlighted in the other two panes.

ECB View (Dump pane)

Address		0 - 3		4 - 7		8 - B		C - F
B100000	CHW	00000000	BAD	00000000	W00	C4C2E4C7	004	C3E5E9E9
B100010	008	80B00000	012	00000000	016	00000000	020	00000000
B100020	024	00000000	028	00000000	032	00000000	036	00000000
B100030	040	01000000	044	00000000	048	00000000	052	E2D4D7C2
B100040	056	010000C2	060	80B00000	064	00000000	068	00000000
B100050	072	00008400	076	04000000	080	E3C5E2E3	084	00000000
B100060	088	00000000	092	037C58C8	096	00000000	100	00000000
B100070	SW1	00000000	CM1	01000000	FA0	00000000		00000000
B100080	FA1	00000000		00000000	FA2	00000000		00000000
B100090	FA3	00000000		00000000	FA4	00000000		00000000
B1000A0	FA5	00000000		00000000	FA6	00000000		00000000
B1000B0	FA7	00000000		00000000	FA8	00000000		00000000
B1000C0	FA9	00000000		00000000	FAA	00000000		00000000
B1000D0	FAB	00000000		00000000	FAC	00000000		00000000
B1000E0	FAD	00000000		00000000	FAE	00000000		00000000

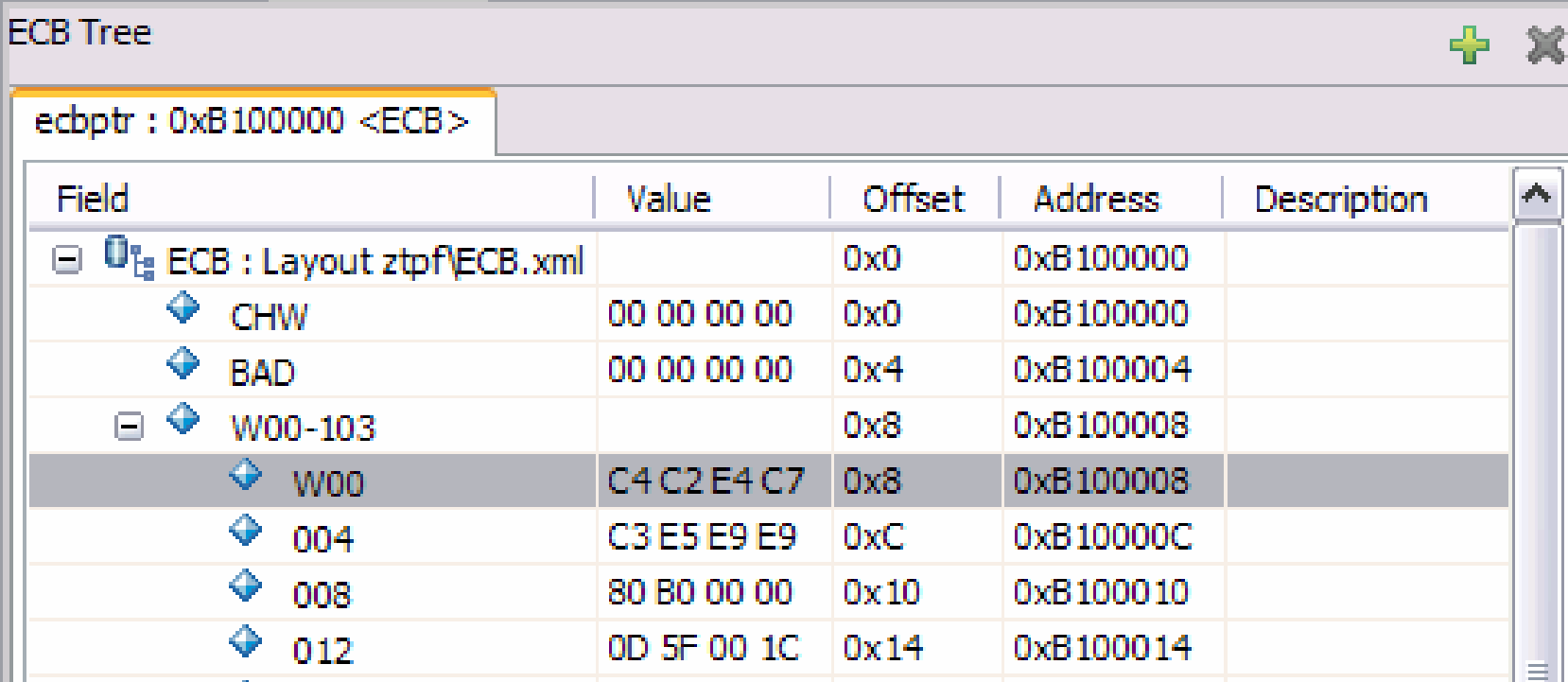
- Dump pane modeled after “Entry Blk” section of TPF dumps.
- Dump labels appear on 4 byte boundaries.

ECB View (EBCDIC pane)

0 - 3	4 - 7	8 - B	C - F
r r r r	r r r r	DEBUG	CVZZ
ø^ r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	SMPB
r r r B	ø^ r r	r r r r	r r r r
r r d r	ø r r r	TEST	r r r r
r r r r	L@iH	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r
r r r r	r r r r	r r r r	r r r r

- ECBDIC view provides EBCDIC translation.

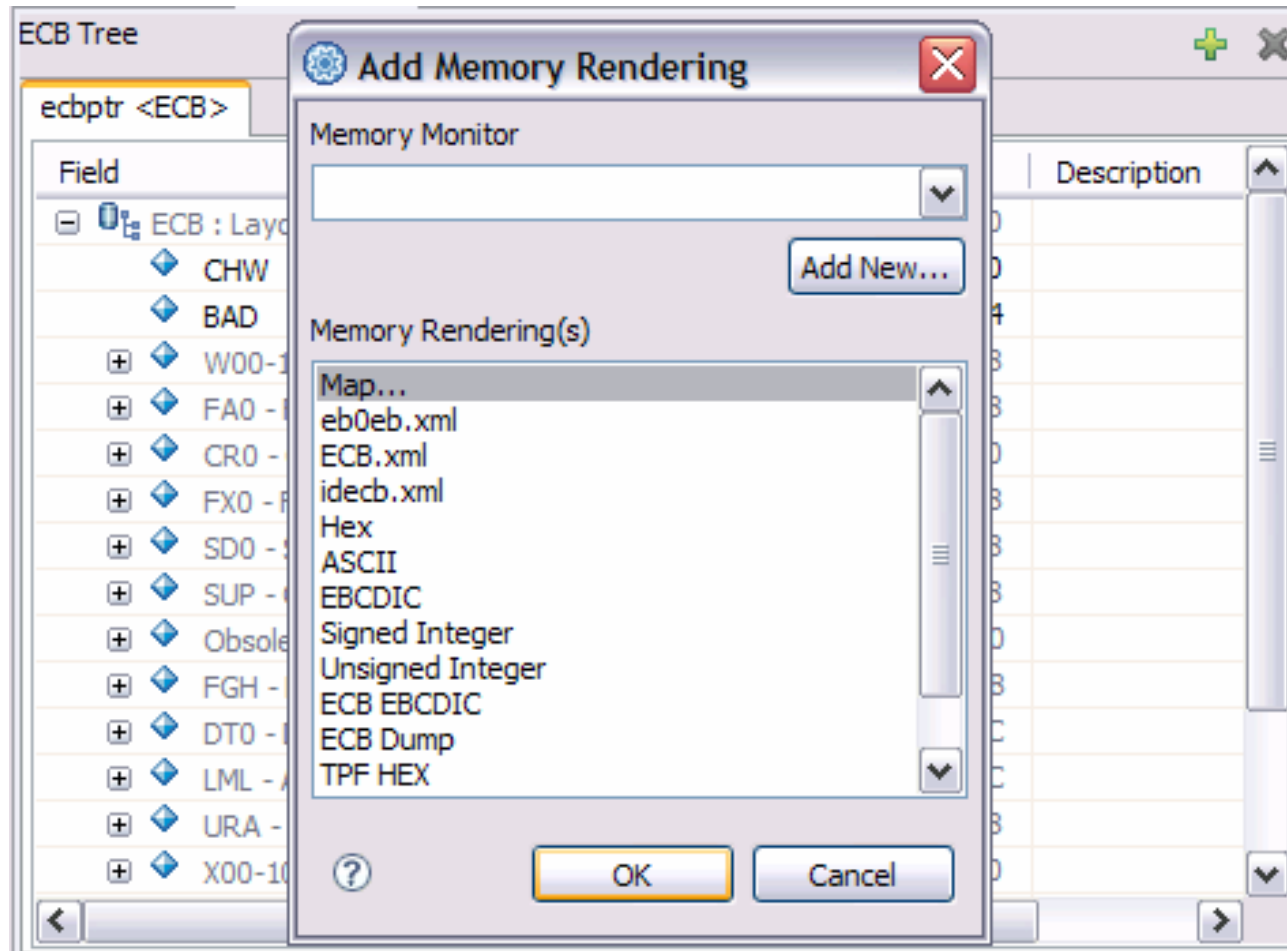
ECB View (Tree pane)




Field	Value	Offset	Address	Description
ECB : Layout ztpf\ECB.xml		0x0	0xB100000	
◆ CHW	00 00 00 00	0x0	0xB100000	
◆ BAD	00 00 00 00	0x4	0xB100004	
◆ W00-103		0x8	0xB100008	
◆ W00	C4 C2 E4 C7	0x8	0xB100008	
◆ 004	C3 E5 E9 E9	0xC	0xB10000C	
◆ 008	80 B0 00 00	0x10	0xB100010	
◆ 012	0D 5F 00 1C	0x14	0xB100014	

- Tree view allows quick navigation of the ECB.
- Tree view XML only shows dump labels.

ECB View (Tree pane opening eb0eb.xml)

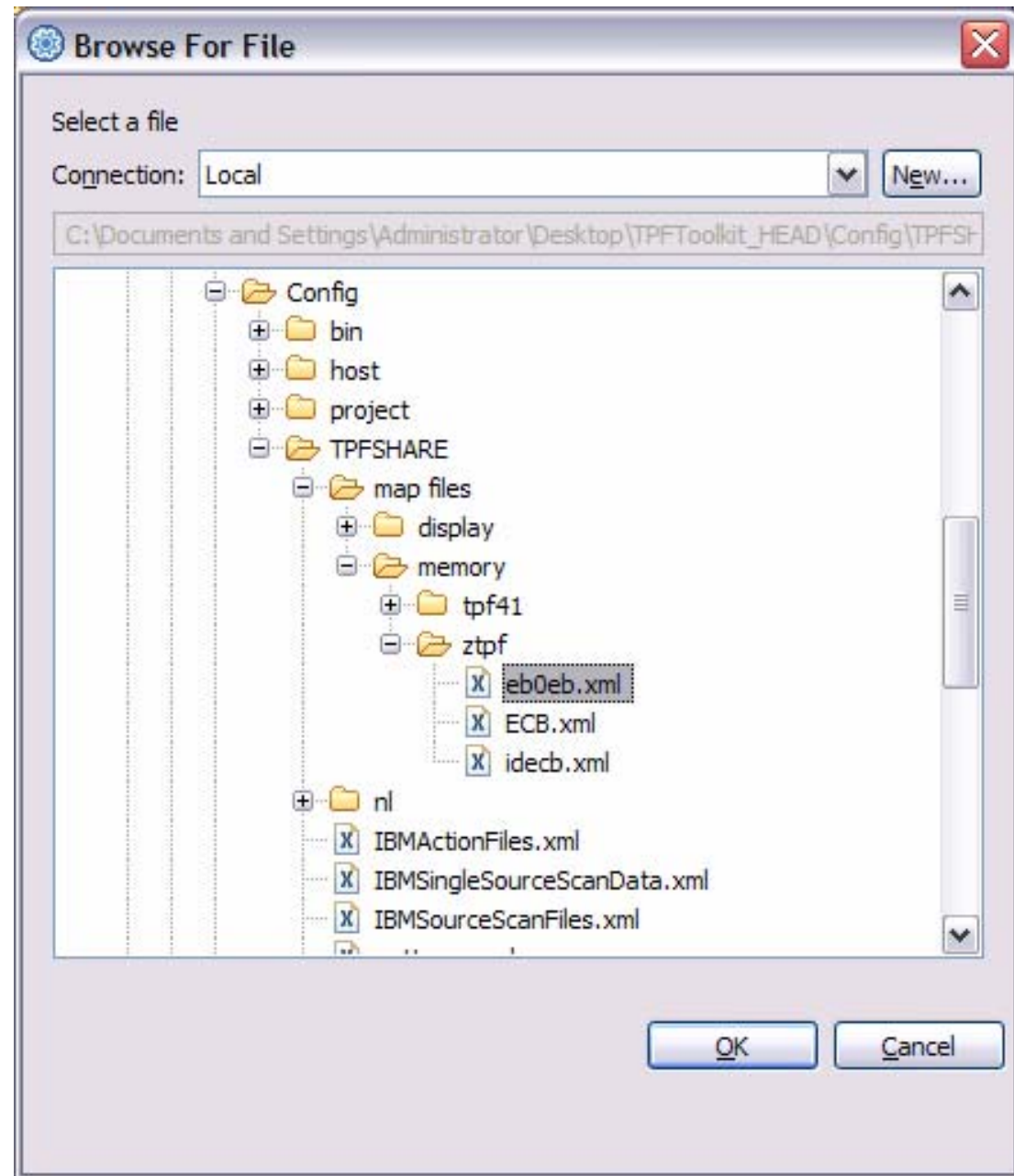


- To open the full XML map of the ECB: click the green  and choose Map...

ECB View

(Tree pane opening eb0eb.xml)

- Choose the respective eb0eb.xml in the config/TPFSHARE/map files/memory/ztpf/eb0eb.xml directory and click OK



ECB View (Tree pane with eb0eb.xml)

Field	Value	Offset	Address	Description
FIELD : Layout ztpf\eb0eb.		0x0	0xB100000	
+ [] [] [] []		0x0	0xB100000	
- [] [] [] [] CE1CHW		0x0	0xB100000	
◆ CE1CHW	00 00 00 00	0x0	0xB100000	CHAIN WORD
◆ CE1BAD	00 00 00 00	0x4	0xB100004	POST INTERRUPT BRANCH ...
- [] [] [] [] EBW000		0x8	0xB100008	
◆ EBW000	D	0x8	0xB100008	WORK AREA
◆ EBW001	B	0x9	0xB100009	*
◆ EBW002	U	0xA	0xB10000A	*
◆ EBW003	G	0xB	0xB10000B	*
◆ EBW004	C	0xC	0xB10000C	*
◆ EBW005	V	0xD	0xB10000D	*
◆ EBW006	Z	0xE	0xB10000E	*
◆ EBW007	Z	0xF	0xB10000F	*
◆ EBW008	Ø	0x10	0xB100010	*
◆ EBW009	^	0x11	0xB100011	*

- Utilizes the new XML ORG_GROUP support to show every field in the EB0EB.

ECB View (XML flexibility)

- XML views are highly customizable
 - Click and drag columns to reorder
 - Click and drag to resize columns
 - Edit value
 - Find field
 - Show types (from XML)
 - Choosing columns to display
 - Choosing offset display type (decimal or hex)
 - Representation of data (hex, ASCII, or EBCDIC)
 - Ability to modify the XML maps

ECB View

(Choose columns)

- Right click and choose “Choose Columns”

ECB Tree

ecbptr <ECB> ecbptr : 0xB100000 <FIELD>

Field	Value	Offset	Address	D
CE1CHW	00 00 00 00	0x0	0xB100000	CH
CE1BAD	00 00			PC
EBW000				WC
EBW001	D			*
EBW002	B			*
EBW003	U			*
EBW004	G			*
EBW005	C			*
EBW006	V			*
EBW007	Z			*
EBW008	Z			*
EBW009	∅			*
EBW010	^			*
EBW011				*
EBW012				*
EBW013	.			*
EBW014	□			*
EBW015	▮			*
EBW016				*

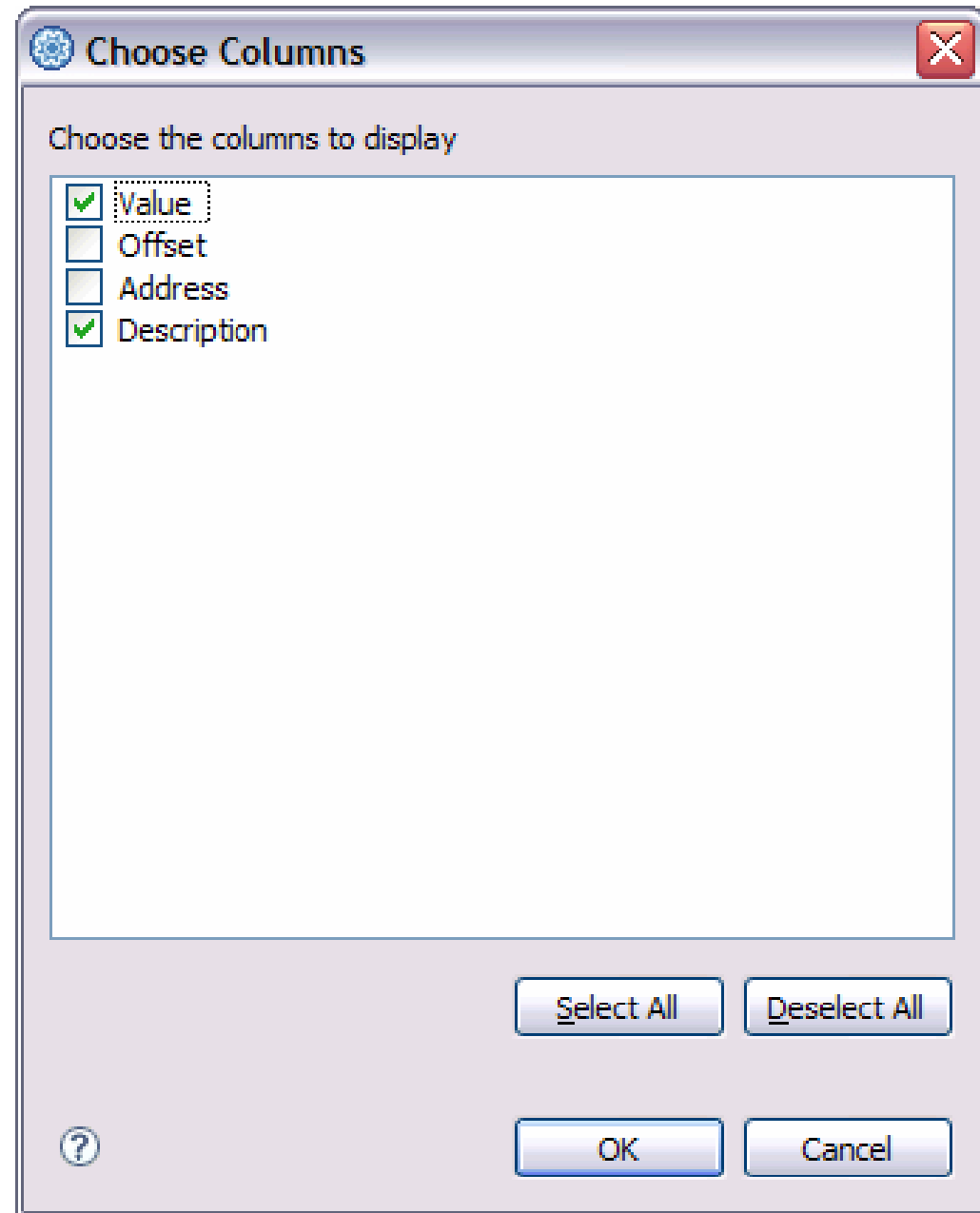
Context menu options:

- Edit Value
- Find Field...
- Show Types
- Choose Columns...**
- Choose offset display
- Edit Description...
- Representation
- Manage Groups...
- Rebuild Map
- Expand Entire Map
- Open Map File (eb0eb.xml)
- Export Map File...
- Copy to Clipboard
- Print
- Collapse All

ECB View

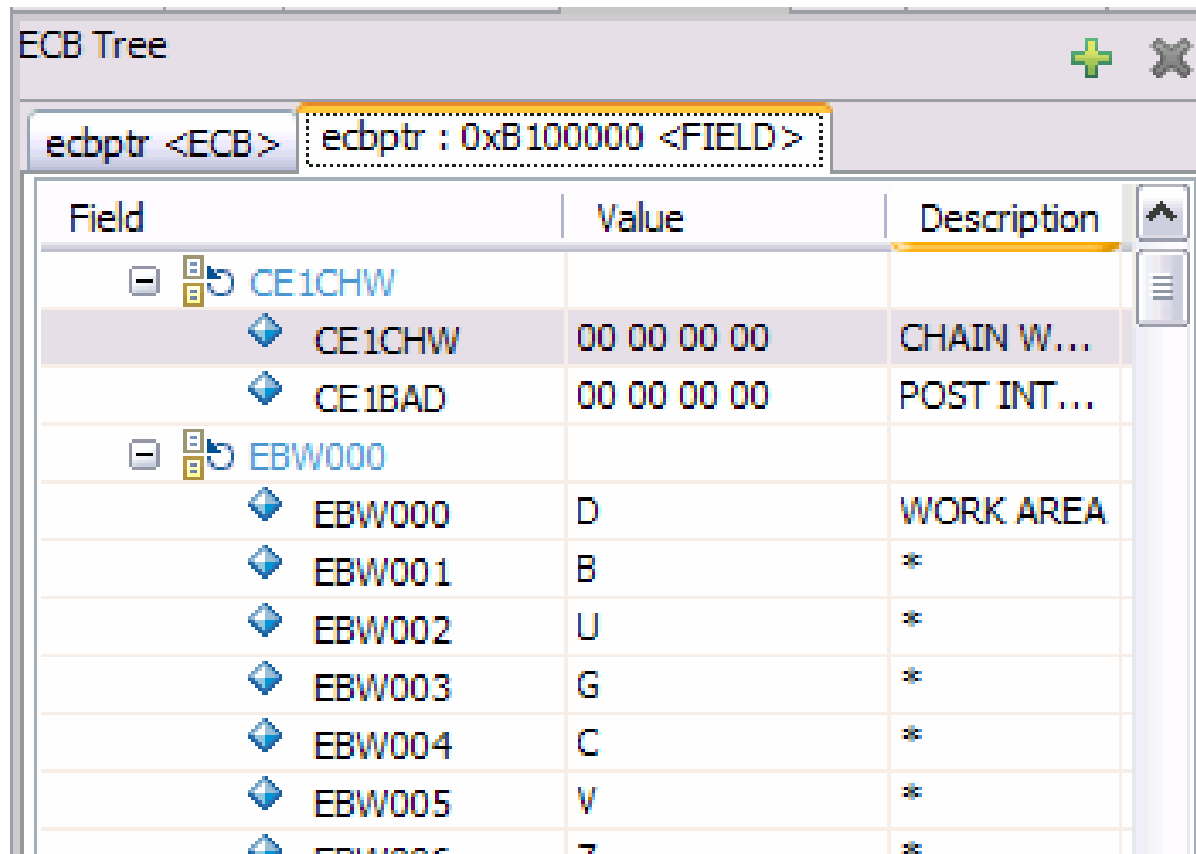
(Choose columns)

- Select and/or deselect the columns you want to display.



ECB View

(Choose columns)



The screenshot shows a window titled "ECB Tree" with a toolbar containing a green plus sign and a grey X. Below the toolbar, there are two tabs: "ecbptr <ECB>" and "ecbptr : 0xB100000 <FIELD>". The main area contains a table with three columns: "Field", "Value", and "Description". The table is organized into two main sections: "CE1CHW" and "EBW000".

Field	Value	Description
CE1CHW		
CE1CHW	00 00 00 00	CHAIN W...
CE1BAD	00 00 00 00	POST INT...
EBW000		
EBW000	D	WORK AREA
EBW001	B	*
EBW002	U	*
EBW003	G	*
EBW004	C	*
EBW005	V	*
EBW006	7	*

ECB View

(Find Field)

- Right click and choose “Find Field”

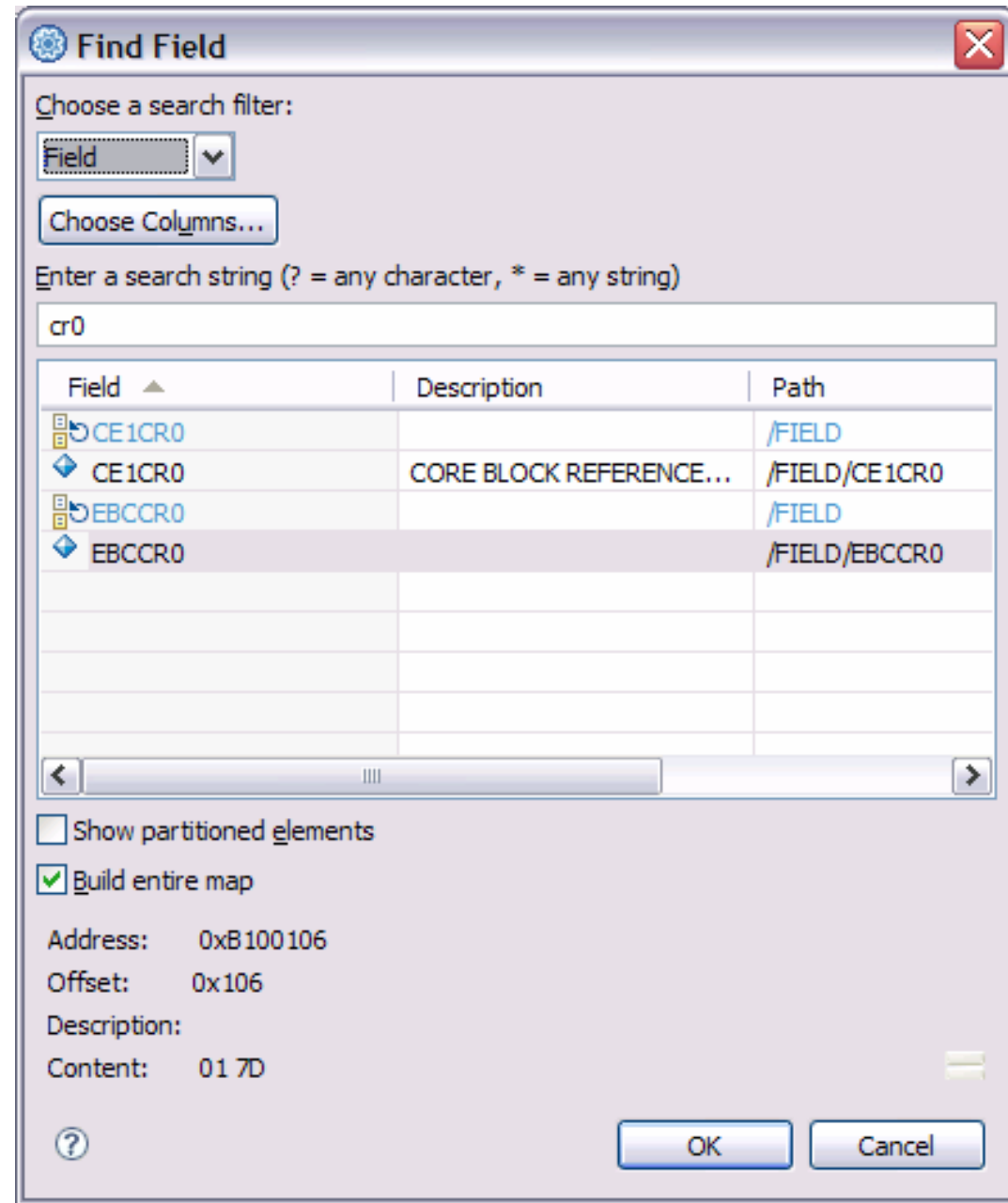
The screenshot shows the 'ECB Tree' window with a table of fields. A right-click context menu is open over the 'EBW000' field. The menu options are:

- Edit Value
- Find Field... (highlighted)
- Show Types
- Choose Columns...
- Edit Description...
- Representation
- Manage Groups...
- Rebuild Map
- Expand Entire Map
- Open Map File (eb0eb.xml)
- Export Map File...
- Copy to Clipboard
- Print
- Collapse All

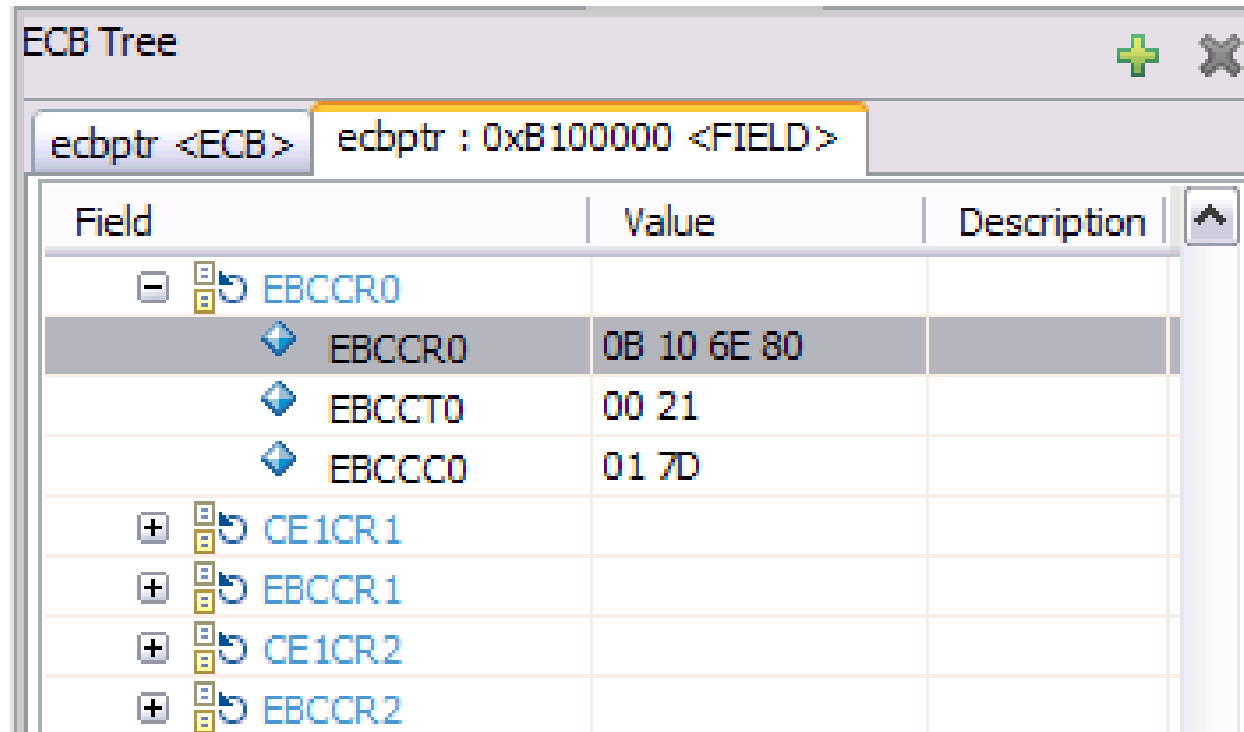
Field	Value	Descript
CE1CHW		
CE1CHW	00 00 00 00	CHATTN W
CE1BAD		
EBW000		
EBW001		
EBW002		
EBW003		
EBW004		
EBW005		
EBW006		
EBW007		
EBW008		
EBW009		
EBW010		
EBW011		
EBW012		
EBW013		
EBW014		
EBW015		
FRW016		

ECB View (XML find field)

- Ability to search on the field names, description, and etc.
- Selection displays information at the bottom.
- Double click field opens XML map at that location.



ECB View (Find Field)



The screenshot shows a window titled "ECB Tree" with a tab for "ecbptr : 0xB100000 <FIELD>". Below the tab is a table with three columns: "Field", "Value", and "Description". The table lists several fields, with "EBCCR0" selected and highlighted in grey. The "Value" column contains hexadecimal values for the selected fields.

Field	Value	Description
EBCCR0	0B 10 6E 80	
EBCCT0	00 21	
EBCCC0	01 7D	
CE1CR1		
EBCCR1		
CE1CR2		
EBCCR2		

ECB View (Edit Description)

- Double click the description field
- Or right click and choose “Edit Description”

ECB Tree

ecbptr <ECB> ecbptr : 0xB100000 <FIELD>

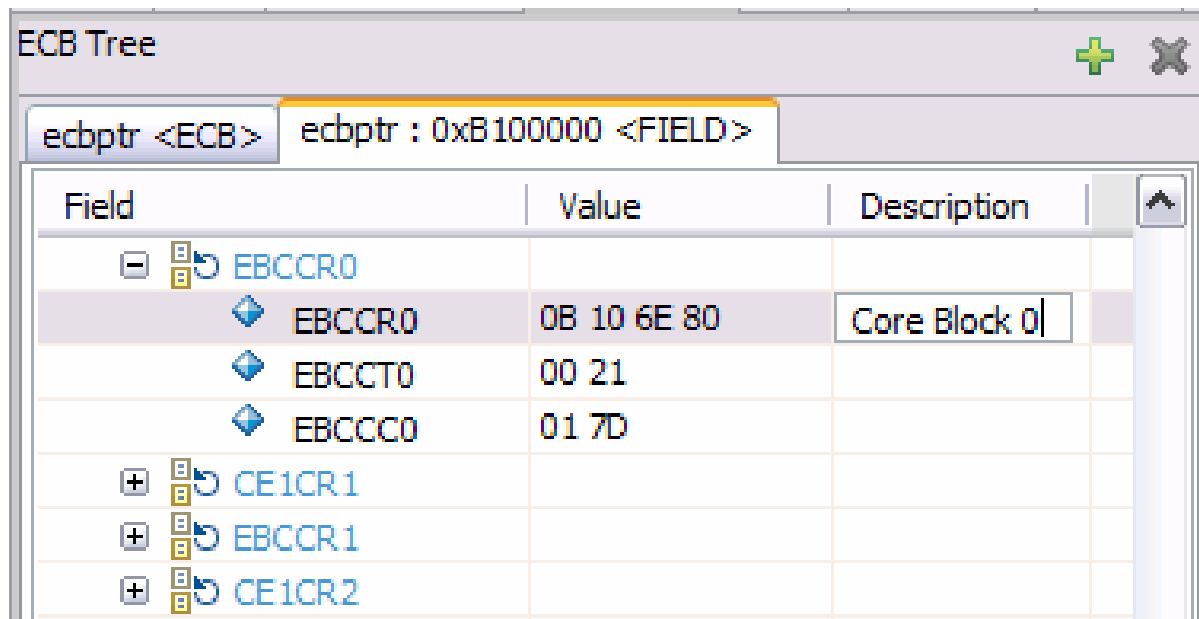
Field	Value	Description
[-] [+] [E] [B] EBCCR0		
[+] [E] [B] EBCCR0	0B 10 00 00	
[+] [E] [B] EBCCT0	00 2	
[+] [E] [B] EBCCC0	01 7	
[+] [E] [B] CE1CR1		
[+] [E] [B] EBCCR1		
[+] [E] [B] CE1CR2		
[+] [E] [B] EBCCR2		
[+] [E] [B] CE1CR3		
[+] [E] [B] EBCCR3		
[+] [E] [B] CE1CR4		
[+] [E] [B] EBCCR4		
[+] [E] [B] CE1CR5		
[+] [E] [B] EBCCR5		
[+] [E] [B] CE1CR6		
[+] [E] [B] EBCCR6		
[+] [E] [B] CE1CR7		
[+] [E] [B] EBCCR7		
[+] [E] [B] CE1CR8		
[+] [E] [B] EBCCR8		
-		

Context menu options:

- Edit Value
- Find Field...
- Show Types
- Choose Columns...
- Edit Description...
- Representation
- Manage Groups...
- Rebuild Map
- Expand Entire Map
- Open Map File (eb0eb.xml)
- Export Map File...
- Copy to Clipboard
- Print
- Collapse All

ECB View (Edit Description)

- Enter your text and hit enter

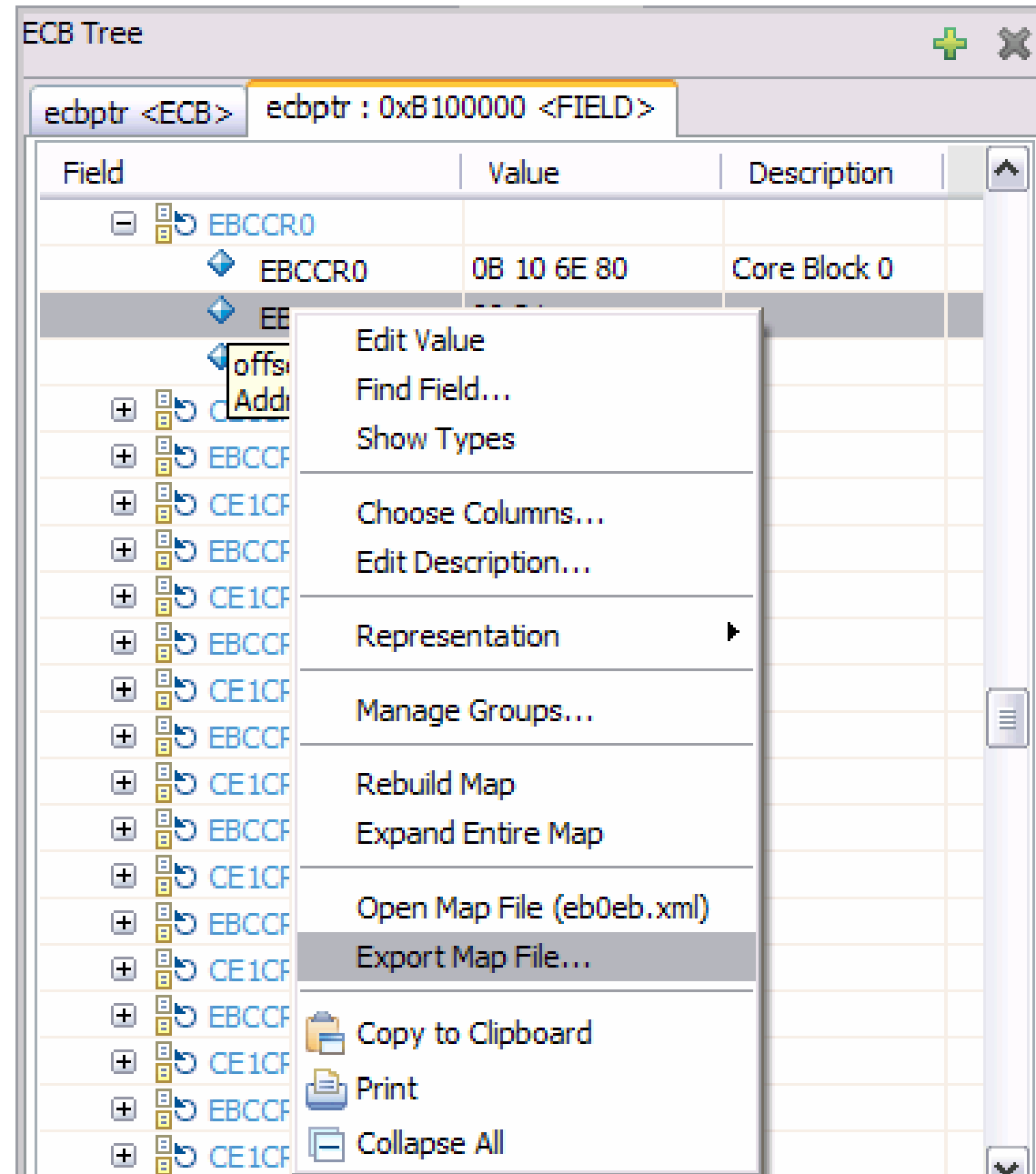


The screenshot shows a window titled "ECB Tree" with a tab labeled "ecbptr <ECB>". Below the tab is a text field containing "ecbptr : 0xB100000 <FIELD>". The main area contains a table with three columns: "Field", "Value", and "Description".

Field	Value	Description
EBCCR0		
EBCCR0	0B 10 6E 80	Core Block 0
EBCCT0	00 21	
EBCCC0	01 7D	
CE1CR1		
EBCCR1		
CE1CR2		

ECB View (Export Map)

- Once changes are made, right click and choose “Export Map File” save the changes to the XML file.



ECB View (Edit XML file)

- Right click and choose “Open Map File” to edit the current XML File.

ECB Tree

ecbptr <ECB> ecbptr : 0xB100000 <FIELD>

Field	Value	Descripti
[-] [Map] EBCCR0		
[Map] EBCCR0	0B 10 6E 80	Core Block
[Map] EBCCT0		
[Map] EBCCC0		
[+] [Map] CE1CR1		
[+] [Map] EBCCR1		
[+] [Map] CE1CR2		
[+] [Map] EBCCR2		
[+] [Map] CE1CR3		
[+] [Map] EBCCR3		
[+] [Map] CE1CR4		
[+] [Map] EBCCR4		
[+] [Map] CE1CR5		
[+] [Map] EBCCR5		
[+] [Map] CE1CR6		
[+] [Map] EBCCR6		
[+] [Map] CE1CR7		
[+] [Map] EBCCR7		
[+] [Map] CE1CR8		
[+] [Map] EBCCR8		
[+] [Map] CE1CR9		

Edit Value

Find Field...

Show Types

Choose Columns...

Edit Description...

Representation ▶

Manage Groups...

Rebuild Map

Expand Entire Map

Open Map File (eb0eb.xml)

Export Map File...

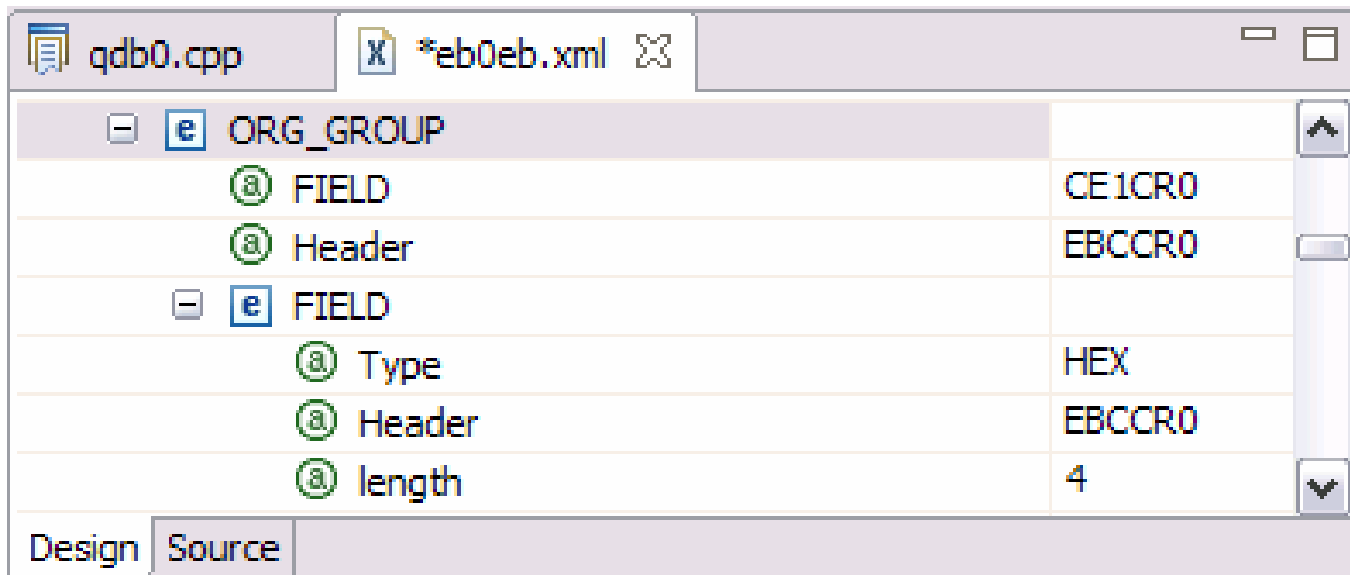
[Copy] Copy to Clipboard

[Print] Print

[Collapse] Collapse All

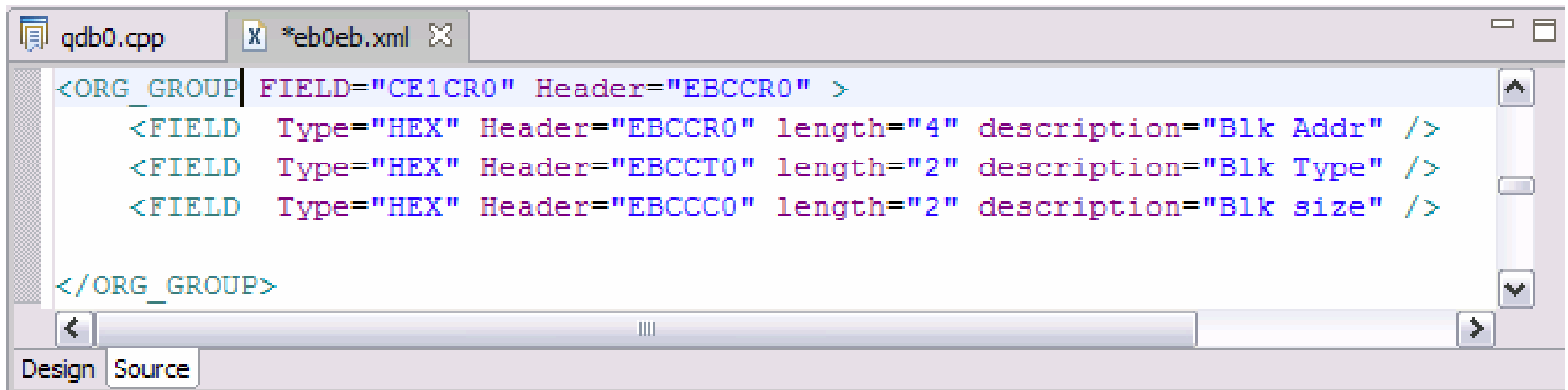
ECB View (XML editing)

- Ability to edit XML files in Design view (notice tab in lower left corner).



ECB View (XML editing)

- Ability to edit XML files in Source view.



The screenshot shows an IDE window with two tabs: 'qdb0.cpp' and '*eb0eb.xml'. The 'Source' view is active, displaying the following XML code:

```
<ORG_GROUP FIELD="CE1CR0" Header="EBCCR0" >  
  <FIELD Type="HEX" Header="EBCCR0" length="4" description="Blk Addr" />  
  <FIELD Type="HEX" Header="EBCCT0" length="2" description="Blk Type" />  
  <FIELD Type="HEX" Header="EBCCC0" length="2" description="Blk size" />  
</ORG_GROUP>
```

The IDE interface includes a scroll bar on the right and a status bar at the bottom with 'Design' and 'Source' tabs.

ECB View (XML editing)

- To apply the saved changes in the XML map, right click and choose “Rebuild Map”.

ECB Tree


ecbptr <ECB> ecbptr : 0xB100000 <FIELD>

Field	Value	Description
[-] [+] [i] [r] EBCCR0		
[+] [i] [r] EBCCR0	0B 10 6E 80	Core Block 0
[+] [i] [r] EBCCR1		
[+] [i] [r] EBCCR2		
[+] [i] [r] EBCCR3		
[+] [i] [r] EBCCR4		
[+] [i] [r] EBCCR5		
[+] [i] [r] EBCCR6		
[+] [i] [r] EBCCR7		
[+] [i] [r] EBCCR8		
[+] [i] [r] EBCCR9		
















Context menu options:

- Edit Value
- Find Field...
- Show Types
- Choose Columns...
- Edit Description...
- Representation
- Manage Groups...
- Rebuild Map**
- Expand Entire Map
- Open Map File (eb0eb.xml)
- Export Map File...
- Copy to Clipboard
- Print
- Collapse All

ECB View (XML editing)

ECB Tree 

ecbptr <ECB> ecbptr : 0xB100000 <FIELD>

Field	Value	Description
  EBCCR0		
 EBCCR0	0B 10 6E 80	Blk Addr
 EBCCT0	00 21	Blk Type
 EBCCC0	01 7D	Blk size
  CE1CR1		
  EBCCR1		
  CE1CR2		
  EBCCR2		
  CE1CR3		

Data Level View

Console Tasks ECB DECB Data Level Debug Console Memory

Data Level Table

ecbptr : 0xB100000 <Data Level Table>

Name	Blk Addr	Blk Type	Blk Size	RID	RCC	File Addr	File Ext	SUD	Rec Held	DETAC	Cnt
D0	0B106E80	0021	017D	0000	00	00000000	0000000000000000	00	No	00	
D1	0B108000	0001	0FFF	0000	00	00000000	0000000000000000	00	No	00	
D2	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
D3	0B106480	0021	017D	E7C9	00	102905A4	0000000000000000	00	Yes	00	
D4	0B106C00	0021	017D	E7C9	00	102905A4	0000000000000000	00	Yes	00	
D5	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
D6	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
D7	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
D8	0B106C00	0001	017D	0000	00	00000000	0000000000000000	00	No	00	
D9	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
DA	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
DB	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
DC	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
DD	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
DE	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	
DF	00000000	0001	0000	0000	00	00000000	0000000000000000	00	No	00	

- Data level view shows the contents of the 16 data levels.
- Rec Held indicates the file address is held in the record hold table for this ECB.
- Backed by two XML files: config/TPFSHARE/map files/memory/ztpf/eb0eb.xml for location and config/TPFSHARE/map files/display/ztpf/DataLevelDisplay.xml for the layout.

DECB View

Addr	Name	Blk Addr	Blk Type	Blk Size	RID	RCC	File Addr	File Ext	SUD	Rec Held	DETAC Cnt
0B108020		0B106600	0021	017D	E7C9	00	00000000102905A3	0000000000000000	00	Yes	0000
0B108D20	QDCA.FIWHC.FIND	0B106C00	0001	017D	E7C9	09	00000000102905A1	0000000000000000	00	No	0000
0B108DA0	QDCA.FIWHC.FILE	0B106A80	0001	017D	E7C9	09	00000000102905A2	0000000000000000	00	No	0000
0B108E20	QDCA.COPY.LEVEL	0B106900	0021	017D	0000	00	0000000000000000	0000000000000000	00	No	0000
0B108EA0	QDCA.COPY.DECB	0B106780	0021	017D	0000	00	0000000000000000	0000000000000000	00	No	0000
0B108F20		0B106A80	0021	017D	E7C9	00	00000000102905A3	0000000000000000	00	Yes	0000

- DECBC view contains information about the created DECBCs.
- Backed by two XML files: config/TPFSHARE/map files/memory/ztpf/idecb.xml for location and config/TPFSHARE/map files/display/ztpf/DecbDisplay.xml for the layout.

ECB, Data Level, and DECB Views Delivery

- Tentatively targeted for 2Q 2007
- TPF Toolkit V3.2
- TPF Debugger APARs:
 - TPF 4.1 PJ31891
 - z/TPF PJ31890

ECB, Data Level, and DECB Views Discussion

- In the future, what additional functionality would you like to see in these views?
- What additional behaviors would be beneficial? For example: translating Blk Type to the string values: L0, L1, L2, and etc.
- What additional interaction with these views would be desirable? For example: Right click on a data level gives option to do getcc, relcc, and etc.

Potential Future TPF Views

- SW00SR (DF structure)
- Data Level DETAC Lists
- DECB DETAC Lists
- Heap (all malloc entries and contents)
- Other views?

SW00SR View Sketch (Context pane shown)

addr	wid	ref	dsect	sws	swi	cmd	rtn	nky	pca	rec	fad	ord
3800	FDEE	GR91SR	GR91SR	F123	01	OPEN	00	09	10	04	12	00
4200	FD05	GR91SR	GR91SR	F543	12	READ	00	12	20	08	50	00

Tree	Context	File Info	Keys	LREC	XML Map
+ Context	PROGRAM STAMP			SW00PGM	Q X D G
+ File Info	FILE IDENTIFIER			SW00WID	FDEE
+ Keys	ACTUAL TPFDF COMMAND			SW00CMD	OPEN
+ LREC	ERROR 1			SW00RTN	00
+ XML Map	ERROR 2			SW00RT2	04
	ERR COUNT SINCE OPEN			SW00RT1	00
	BAM RETURN INDICATORS			SW00RT3	00
	CURRENT FILE ADDRESS			SW00CFA8	000000000809CF80
	CURRENT CORE ADDRESS			SW00CCA	0092A300
	CURRENT NAB			SW00NAB	001A
	INITIAL NAB VALUE			SW00INB	001A
	CURRENT LREC CORE ADDR.			SW00REC	04
	...				

SW00SR View Sketch (File Info pane shown)

addr	wid	ref	dsect	sws	swi	cmd	rtn	nky	pca	rec	fad	ord
3800	FDEE	GR91SR	GR91SR	F123	01	OPEN	00	09	10	04	12	00
4200	FD05	GR91SR	GR91SR	F543	12	READ	00	12	20	08	50	00

Tree	Context	File Info	Keys	LREC	XML Map
+ Context	RECORD ID SW00BID FDEE				
+ File Info	REFERENCE NAME SW00DRE GR91SR				
+ Keys	LAST USED FILE REF NAME SW00LRF GR91SR				
+ LREC	ADDRESS OF LAST USED FILE SW00SWB 00FF5398				
+ XML Map	FILE TYPE SW00RCT 0000				
	RETR. ALGORITHM BV SW00RBV 0000				
	INTERLEAVING FACTOR SW00ILV 0000				
	NUMBER OF PARTITIONS SW00PTN 0000				
	OPTION BYTE 1 SW00OP1 00 (or translate to EQU)				
	OPTION BYTE 2 SW00OP2 00 (or translate to EQU)				
	OPTION BYTE 3 SW00OP3 00 (or translate to EQU)				
	OPTION BYTE 4 SW00OP4 00 (or translate to EQU)				
	OPTION BYTE 5 SW00OP5 00 (or translate to EQU)				

SW00SR View Sketch

(Keys pane shown)

addr	wid	ref	dsect	sws	swi	cmd	rtn	nky	pca	rec	fad	ord
3800	FDEE	GR91SR	GR91SR	F123	01	OPEN	00	09	10	04	12	00
4200	FD05	GR91SR	GR91SR	F543	12	READ	00	12	20	08	50	00

Tree	Context	File Info	Keys	LREC	XML Map
+ Context	EXTENDED KEY AREA				
+ File Info	KEY INDICATORS				
+ Keys	ADDRESS OF KEYLIST				
+ LREC	KEY 1 SEARCH ARG ADDRESS				
+ XML Map	KEY 2 SEARCH ARG ADDRESS				
	KEY 3 SEARCH ARG ADDRESS				
	KEY 4 SEARCH ARG ADDRESS				
	KEY 5 SEARCH ARG ADDRESS				
	KEY 6 SEARCH ARG ADDRESS				
	KEY INSTRUCTIONS				
			SWOKEY	00000000	
			SW00NKY	09	
			SW00KLS	00000000	
			SW00KS1	00000000	
			SW00KS2	00000000	
			SW00KS3	00000000	
			SW00KS4	00000000	
			SW00KS5	00000000	
			SW00KS6	00000000	
			KEY 1	CLI 95804002	
				BC 474E0004	
				BC 477E0018	
				. . .	

SW00SR View Sketch (LREC pane shown)

addr	wid	ref	dsect	sws	swi	cmd	rtn	nky	pca	rec	fad	ord
3800	FDEE	GR91SR	GR91SR	F123	01	OPEN	00	09	10	04	12	00
4200	FD05	GR91SR	GR91SR	F543	12	READ	00	12	20	08	50	00

Tree	<i>Context</i>	<i>File Info</i>	<i>Keys</i>	LREC	<i>XML Map</i>
<ul style="list-style-type: none"> + Context + File Info + Keys + LREC + XML Map 	<ul style="list-style-type: none"> + Key 60 + Key 70 + Key 80 - Key 90 <ul style="list-style-type: none"> - Field 1 - Field 2 - Field 3 - Field 4 - Field 5 				

SW00SR View Sketch (XML map pane shown)

addr	wid	ref	dsect	sws	swi	cmd	rtn	nky	pca	rec	fad	ord
3800	FDEE	GR91SR	GR91SR	F123	01	OPEN	00	09	10	04	12	00
4200	FD05	GR91SR	GR91SR	F543	12	READ	00	12	20	08	50	00

Tree	<i>Context</i>	<i>File Info</i>	<i>Keys</i>	<i>LREC</i>	XML Map
<pre> + Context + File Info + Keys + LREC - XML Map + SW00SWC + SW00SPT . . . </pre>	<pre> + SW00SWC + SW00SPT + SW00HDR - SW00BID - SW00BID = FDEE - SW00DLN = 0x00 - SW00PGM = QXDG - SW00KLS = 00000000 . . . </pre>				

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