



This is the tutorial for the IMS™ feature of IBM's File Manager for z/OS®, one of the IBM zSeries® problem determination tools.

- **Creating templates**
 - About templates and views
 - Create or update a template

- **Browse or edit an IMS database with a template**
 - Starting the editor
 - The display formats and zoom
 - Display different segment types
 - Find, change, scope, and locate data
 - Insert, repeat, repeat all, and delete segments
 - Print from the editor
 - End, quit, save, undo and cancel



This is part two of the section that describes how to browse or edit a database using a template. It starts where part one left off. In this part, you will learn some commands to work with data, such as find, change, insert, and repeat.

Find, change, scope, and locate data



Topics in this section:

▪ What commands are used to work with data?

- **Find**
 - search for data in segments
- **Change**
 - search for and modify data in segments
- **Locate**
 - search for column names
- **Show**
 - display all segment types, or only one type
 - adjust the scope to only one, or all types
- **Scope**
 - adjust the scope to the entire database, or only segments in the current DB record



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Next you will see commands commonly used to work with data. Find commands are used to search for data in segments. Change commands search for and modify data in segments. Locate is used to search for column or field names. The Show command is used to control whether the browser or editor should display all segment types, or only one type. And the scope command is used to adjust the scope of Find and Change commands.

Select the key value



```
Process  Options  Help
-----
FM/IMS          Edit : Database Positioning          Chkpt FM000001 taken
Command ==>>> _____ Scroll CSR

Subsystem IMSB Database USRSCN      Key sequence          Format TABL
View C      Temporary          Key
Cmd SXE Level Segment Description len Key value
s SX 1      CUSTADDR Cust Addr 10 0003874923
  X 2      TOTUSE  Total Usage 6 .....
  X 3      PRMUSE  Primary Usage 8 .....
  X 3      OFFUSE  Off Prime Usage 8 .....
  X 4      OFFDTL  Off Prime Dettl 8 .....
  X 2      BALDUE  Balance Due 6 .....
  X 3      BALHIST Balance Detail 6 .....
**** End of data ****

F1=Help      F2=Split      F3=Exit      F4=CRetriev  F5=Key >=    F7=Ba
F8=Forward   F9=Swap       F10=Actions  F12=Cancel

Enter
```

In this example, the editor is used. In earlier sections, you saw how to start the editor. Starting from the database positioning screen, select a segment type for positioning, and press Enter.

Positioned to the top of the database



```
Process  Options  Help
-----  -
FM/IMS                               Edit : IMS Database USRSCN
Command ==>>> |

CHKPID FM000001 Autosave ON SHOW SUP ON Scope DB Format TABL
SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
AN 1:10 AN 11:10 AN 21:30
<---+----> <---+----> <---+----1---->
**** Top of window ****
 1 CUSTADDR 0003874923 3273325564 BILL BUFFALO JR
 2 TOTUSE Key=200303
 3 PRMUSE Key=20030301
 3 PRMUSE Key=20030302
 3 PRMUSE Key=20030303
 3 PRMUSE Key=20030305
 3 PRMUSE Key=20030306
 3 PRMUSE Key=20030307
 3 PRMUSE Key=20030308
 3 PRMUSE Key=20030309
 3 PRMUSE Key=20030310
 3 PRMUSE Key=20030311
F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel
```

Modify data by overtyping the green fields. Press **Enter** and the data is immediately written to the database. Changes can be cancelled to the previous checkpoint.

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The editor is positioned to the top of the database, that is, to the first root segment. Of course, in the editor, you can modify data by overtyping data in the green fields. If you make a change and press Enter, the change is immediately written to the database. However, your changes can be cancelled back to the most recent checkpoint.

Use the Find command to locate data



The screenshot shows the IBM File Manager interface with a Find command entered. The command is 'f joan', where 'f' is circled in red. An 'Enter' key icon is shown next to the command. The search results show the following data:

Cmd	Level	Segment	#2	#3	#4
			AN 1:10	AN 11:10	AN 21:30
1		CUSTADDR	2111111111	8233249846	JOAN SMITH
2		TOTUSE	Key=200303		
3		PRMUSE	Key=20030301		
3		PRMUSE	Key=20030302		
3		PRMUSE	Key=20030303		
3		PRMUSE	Key=20030304		
3		PRMUSE	Key=20030305		
3		PRMUSE	Key=20030306		
3		PRMUSE	Key=20030307		
3		PRMUSE	Key=20030308		
3		PRMUSE	Key=20030309		
3		PRMUSE	Key=20030310		
3		PRMUSE	Key=20030311		

Annotations in the screenshot include:

- A yellow box labeled 'Enter' pointing to the command line.
- A yellow box labeled 'F5' pointing to the F5 key in the function key list.
- A callout box pointing to the 'JOAN SMITH' result with the text: "The next occurrence of the data is found".
- A callout box pointing to the F5 key with the text: "F5 is Repeat Find".

At the bottom of the screen, the page number '6' is displayed on the left, and the text 'IBM File Manager for z/OS IMS Feature - Mentor Workshop' and 'W00 © 2010 IBM Corporation' is displayed on the right.

Here is a Find command. F space and a search string is entered. Segments are searched starting with the current segment. The next occurrence of the data is found, and the cursor is positioned on the data. Notice that F5 is repeat find. F5 is pressed.

F5 (repeat find) locates the next occurrence of the data



```

Process  Options  Help
-----  -
FM/IMS                               Edit : IMS Database USRSCN   Chars 'joan' found
Command ==>                          Scroll CSR
                                     CHKPID FM000001 Autosave ON  SHOW SUP ON  Scope DB  Format TABL
                                     SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
                                     AN 1:10 AN 11:10 AN 21:30
                                     <-+-----> <-+-----> <-+----->
___ 1  CUSTADDR 3333333333 7233439938 JOAN SMITH
___ 2  TOTUSE   Key=200303
___ 3  PRMUSE   Key=20030301
___ 3  OFFUSE   Key=20030301
___ 4  OFFDTL   Key=00:00:00
___ 4  OFFDTL   Key=18:32:05
___ 2  BALDUE   Key=200303
___ 3  BALHIST  Key=200302
___ 3  BALHIST  Key=200303
___ 1  CUSTADDR 4444444444 6123439966 BOB JONES
___ 2  TOTUSE   Key=
___ 2  TOTUSE   Key=200303
___ 3  PRMUSE   Key=20030301
F1=Help   F2=Format  F3=Exit   F4=CRetriev F5=RFind   F6=RChange
F7=Up     F8=Down    F9=Swap   F10=Left   F11=Right  F12=Cancel
    
```

And the search continues through the data base, stopping at the next occurrence.

Find command

IBM

```
Command ==> f rd #5 Enter

FM/IMS Edit : IMS Database USRSCN Chars 'rd' found
Command ==> CHKPID FM000001 Autosave ON SHOW SUP ON Scope DB Scroll CSR
SEGA-CUSTOMER-ADDRESS Format TABL

Cmd Level Segment #5
AN 51:40
<-----1-----2-----3----->
**** Top of window ****
1 CUSTADDR 666 PRAR RD WY 323423-123456
2 TOTUSE Key=200303
3 PRMUSE Key=20030301
3 PRMUSE Key=20030302
3 PRMUSE Key=20030303
3 PRMUSE Key=20030305
3 PRMUSE Key=20030306
3 PRMUSE Key=20030307
3 PRMUSE Key=20030308
3 PRMUSE Key=20030309
3 PRMUSE Key=20030310
3 PRMUSE Key=20030311

F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel
```

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There are optional parameters on the Find command. You can limit the scope of a Find command to only a particular field or column, with the syntax, F space search string space # column reference number. Notice that every field is given a column reference number. In this example, only column number 5, which is the SEGA-CUSTOMER-ADDRESS field is searched.

Root First command



```
Command ==> root first Enter
```

```
FM/IMS Edit : IMS Database USRSCN
Command ==>
CHKPID FM000001 Autosave ON SHOW SUP ON Scope DB Format CSR
SEGA-CUSTOMER-ADDRESS
Cmd Level Segment #5
AN 51:40
<-----1-----2-----3----->
**** Top of window ****
1 CUSTADDR 666 PRARIERD, WY 323423-123456
2 TOTUSE Key=200303
3 PRMUSE Key=20030301
3 PRMUSE Key=20030302
3 PRMUSE Key=20030303
3 PRMUSE Key=20030305
3 PRMUSE Key=20030306
3 PRMUSE Key=20030307
3 PRMUSE Key=20030308
3 PRMUSE Key=20030309
3 PRMUSE Key=20030310
3 PRMUSE Key=20030311
F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel
```

The **ROOT FIRST** command repositions to the top of the database

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Find commands change the database position to the segment where the data was found. Here is an easy way to get back to the top of the data base, to the first root segment, the command ROOT FIRST. Enter.

Change command



```
Command ==> c somewhere NOWHERE #5 Enter
```

FM/IMS Edit : IMS Database USRSCN 1/1 changed
Command ==> CHKPID FM000003 Autosave ON SHOW SUP ON Scope DB Scroll CSR
SEGA-CUSTOMER-ADDRESS Format TABL

Cmd	Level	Segment	#5
			AN 51:40
			<-----1-----+-----2-----+-----3----->
___	1	CUSTADDR	565 MAIN ST. NOWHERE KS 123456-123456
___	2	TOTUSE	Key=200303
___	3	PRMUSE	Key=20030301
___	3	PRMUSE	Key=20030302
___	3	PRMUSE	Key=20030303
___	3	PRMUSE	Key=20030304
___	3	PRMUSE	Key=20030305
___	3	PRMUSE	Key=20030306
___	3	PRMUSE	Key=20030307
___	3	PRMUSE	Key=20030308
___	3	PRMUSE	Key=20030309
___	3	PRMUSE	Key=20030310
___	3	PRMUSE	Key=20030311

F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel

The database was scanned, starting from the current position, until a match was found, and the data changed

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That repositioned to the first root segment in the data base. You can use a change command to search for and change data in segments. In this example, the command Change somewhere nowhere #5 is entered on the command line. The next occurrence of the string somewhere was found in field number 5, and changed to nowhere.

Change extended command



FM/IMS
Command ==> CX

Enter

FM/IMS Edit : IMS Database USRSCN
Command ==> cx Scroll CSR
t TABL

Extended Command Entry

C Complete typing the CHANGE command and press Enter.

CHANGE ==> 'Some large string in the database I want to change
==> e' 'A much shorter string'

F1=Help F2=Split F3=Exit F9=Swap F12=Cancel

3 PRMUSE Key=20030307
3 PRMUSE Key=20030308
3 PRMUSE Key=20030309
3 PRMUSE Key=20030310
3 PRMUSE Key=20030311

F1=Help F2=Format F3=Exit
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel

Use the **CX** command to change large strings that are too big to fit on the command line

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Have you ever been in a situation where the text string you were searching for was too long, and would not fit on your command line? This special command is designed to handle just that situation. The CX command opens a pop-up window where you have the equivalent of an expanded command line. First type CX on the command line and press Enter. Then you can enter the from and to strings in the pop-up window.

Be aware that there is also an FX command that does the same thing for Find commands.

Find Fields in Error command



```
Command ==> fe all Enter
```

```
FM/IMS Edit : IMS Database USRSCN 3 error(s) found
Command ==> Scroll CSR
CHKPID FM000006 Autosave ON SHOW SUP ON Scope DB Format TABL
Usage Year USAGE-MONTH ACCOUNT-TOTAL-USAGE
Cmd Level Segment #3 #4 #6
AN 1:4 AN 5:2 PD 8:6
<--> <> <-----1-->
**** Top of window ****
1 CUSTADDR Key=0003874923
2 TOTUSE 2003 03 *****
3 PRMUSE Key=20030301
3 PRMUSE Key=20030302
3 PRMUSE
3 PRMUSE
3 PRMUSE
3 PRMUSE
3 PRMUSE
3 PRMUSE
F1=Help F2=
F7=Up F8=D
```

The FE command searches numeric fields for bad data.
Examples:

FE #6	search field #5
FE ALL	search all records and display a count
FE NX	search not-excluded records
FE PREV	search previous records

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Here is a special Find command that is designed to search the database for bad numeric data. The FE command. For example, the command FE space #6 will search field number six for the next occurrence of bad data. This assumes, that field six is a numeric field. In this case, the command FE ALL was entered. All fields defined as numeric fields were searched in the entire data base, and a count of fields with bad numeric data is displayed. Notice the message that states there were three errors found. The FE command places the cursor on the bad data.

Overtyping error field with correct data



Command ==> **HEX ON** **Enter**

```
FM/IMS Edit : IMS Database USRSCN Scroll CSR
Command ==>
CHKPID FM000001 Autosave ON SHOW SUP ON Scope DB Format TABL
Usage-Year Usage-Month Account-Inv-Seq Account-Total-Usage
Cmd Level Segment #3 #4 #5 #6
AN 1:4 AN 5:2 AN 7:1 PD 8:6
<--> <> - <---+---1-->
  2 TOTUSE 2003 03 T 3.00*****
  FFFF FF E 000000
  2003 03 3 000000
  3 PRMUSE Key=20030301
  3 OFFUSE Key=20030301
  4 OFFDTL Key=00:00:00
F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RC
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Ca Enter
```

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A "hex on" command was entered to display the data in hexadecimal format, and the bad data can be seen. In this example, the bad number is fixed by overtyping the field with the correct value. Enter is pressed.

Bad data has been corrected



Command ==> **HEX OFF** **Enter**

```
FM/IMS Edit : IMS Database USRSCN
Command ==>
CHKPID FM000002 Autosave ON SHOW SUP ON Scope DB Format TABL
USAGE-YEAR USAGE-MONTH ACCOUNT-INV-SEQ ACCOUNT-TOTAL-USAGE
Cmd Level Segment #3 #4 #5 #6
AN 1:4 AN 5:2 AN 7:1 PD 8:6
<--> <> - <-----1-->
2 TOTUSE 2003 03 T 3.00
3 PRMUSE Key=20030301
9 OFFUSE Key=20030301
```

CE command can be used to change numeric data in error to the value specified

Examples:

- CE 0 #5** Change field #5
- CE 0 ALL** Change all records and display count
- CE 0 NX** Change not-excluded records
- CE 0 PREV** Change previous records

0.00
629.00

F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel

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And the bad data in the numeric field was fixed.

Another helpful command for fixing bad data in numeric fields is the CE command. The CE command combines an FE (find error) command with a change. It automatically finds and changes bad numeric data. For example, the command CE space zero space #5 searches for bad data in field number five, and when found, changes the value of the field to zero.

Find and change commands: Entering strings



- Entering strings in FIND and CHANGE:
 - FIND abc or CHANGE abc xyz
 - not case sensitive
 - FIND 'abc' or CHANGE 'abc' 'xyz'
 - not case sensitive
 - can contain spaces, or be a null value
 - FIND C'aBc' or CHANGE C'aBc' C'XyZ'
 - case sensitive
 - can contain spaces, or be a null value
 - FIND X'C1' or CHANGE X'E7' X'5F'
 - can contain any hex values

Here is a review of find and change commands. The first example shows simple Find and Change commands. It will search for data starting at the current position in the data base. Data values can be typed without quotation marks, as in the first example, or with quotation marks, as in the second. Quotation marks are needed if the data contains spaces.

In the first two examples, the searches are not case sensitive. To make your search case sensitive, type it as in the third example. Also, you can enter hexadecimal data strings as shown in the fourth example.

Find and Change commands: Limiting fields or columns searched

- FIND abc 50 85 or CHANGE abc xyz 50 85
 - Search only between positions 50 through 85
- FIND abc #5 or CHANGE abc xyz #5
 - Search only in one field
 - Uses column reference number in TABL and SNGL formats
- FIND abc (#5 #12 #3) or CHANGE abc xyz (#5 #12 #3)
 - Search multiple fields
 - Separate field numbers with either commas or spaces
- FIND abc #2-#9 or CHANGE abc #2-#9
 - Search multiple fields within a range
- FIND abc #15(2) or CHANGE abc xyz #15(2)
 - Search an array field

There are other optional parameters that affect find and change commands. In the first example, only the data in segments between columns 50 through 80 are searched. In the second example, only data in field number 5 are searched. You can also limit the search to a list of fields, as shown in the third example, by listing the column reference numbers within parentheses. The fourth example shows how you can search for data in a range of columns by specifying two field numbers with a dash character between them. The last example pertains only to fields that are defined as arrays. For example, a field defined in a COBOL copybook with an OCCURS clause is an array. For array fields, you can specify the array subscript in parentheses after the column reference number.

Find and Change commands: Changing the scope



- FIND ALL abc or CHANGE ALL abc xyz
- FIND ALL abc #5 or CHANGE ALL abc xyz #5
 - Search for all occurrences
- Other parameters that affect scope:
 - FIRST, NEXT, ALL
 - GET(n) limit the number of segments searched
 - SEG(name) search only a specific segment type
 - DB search the entire database
 - REC search within the current database record
 - DEP search only dependent segments

And there are other parameters that affect the scope of Find and Change commands. Use a Find All or Change All command to search the entire data base. These can be used to get a count of how many times data is found, or to automatically change every occurrence of data in an entire database.

Use a FIRST parameter to begin the search at the beginning of the data base, starting at the first root segment. The NEXT parameter is the default, and makes the search start from the current position. The GET parameter is helpful when you are working with a very large data base. Since search commands scan the data base until a match is found, if you have a data base with millions and millions of segments, the search can possibly take a long time. The GET operand tells File Manager to stop searching after a certain number of segments have been read, to avoid those run away searches.

The SEG parameter can be used to limit the search to only one segment type. The DB parameter specifies that the entire data base is within scope. The REC parameter limits the search to only the current data base record, which is defined as the current root segment and all of its dependents. Finally, the DEP parameter limits searches to only the current segment and it's dependents.

Locate command



Command ==> **l address** **Enter**

FM/IMS Edit : IMS Database USRSCN

Command ==> **l address** **Enter**

CHKPID FM000012 Autosave ON SHOW SUP ON Scope DB Scroll CSR
Format TABL

SEGA-CUSTOMER-ADDRESS

Cmd	Level	Segment	Field	Value
		#5	AN	51:40
			<-----1-----2-----3----->	
			**** Top of window ****	
---	1	CUSTADDR	666	PRARIERD, WY 323423-123456
---	2	TOTUSE	Key=	200303
---	3	PRMUSE	Key=	20030301
---	3	PRMUSE	Key=	20030302
---	3	PRMUSE	Key=	20030303
---	3	PRMUSE	Key=	20030305
---	3	PRMUSE	Key=	20030306
---	3	PRMUSE	Key=	20030307
---	3	PRMUSE	Key=	20030308
---	3	PRMUSE	Key=	20030309
---	3	PRMUSE	Key=	20030310
---	3	PRMUSE	Key=	20030311

F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel

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Find and change commands work with data in data bases. But the Locate command is used to work with metadata, or data about data. Here is an example. The command LOCATE ADDRESS was entered. That located a field name that contained the character string ADDRESS. Use locate to find a field name.

Locate command



Command ==> L #2 Enter

```
FM/IMS Edit : IMS Database USRSCN
Command ==>
CHKPID FM000012 Autosave ON SHOW SUP ON Scope DB Format TABL
SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
AN 1:10 AN 11:10 AN 21:30
<-----> <-----> <-----1----->
**** Top of window ****
 1 CUSTADDR 0003874923 3279325564 BILL BUFFALO JR
 2 TOTUSE Key=200303
 3 PRMUSE Key=20030301
 3 PRMUSE Key=20030302
 3 PRMUSE Key=20030303
 3 PRMUSE Key=20030305
 3 PRMUSE Key=20030306
 3 PRMUSE Key=20030307
 3 PRMUSE Key=20030308
 3 PRMUSE Key=20030309
 3 PRMUSE Key=20030310
 3 PRMUSE Key=20030311
F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel
```

Use the **Locate** to find a column reference number

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You can also locate a field by it's reference number. Here, the command LOCATE #2 was used to reposition the display to field number 2.

Locate command



- LOCATE price or LOCATE FLD price
 - Position to a field containing 'price' in the name
- LOCATE #15
 - Position to a field reference number
- LOCATE #12(6)
 - Position to an occurrence in an array
- LOCATE #12(8,5)
 - Position in a multi-dimensional array

Use the Locate command to reposition the display to find a field. You can specify any part of the field name as an operand, as shown in the first example. The second example shows how the field reference number can be used. In the third and fourth examples, the locate command is used to reposition to specific array occurrences of a field.

Changing the scope



- There are parameters on the **Find** and **Change** commands that affect the scope. For example:
 - F abc REC
 - C abc xyz SEG(SUBURB)
- Scope can be limited with these commands:
 - **Show**
 - **Scope**
 - **Zoom**

There are different ways to affect the scope of Find and Change commands. You have seen that there are parameters on the commands that limit scope. For example, the REC parameter limits the scope to only the current data base record, and the SEG parameter limits the scope to only a particular segment type.

However, you can also effect the scope by using the SHOW, SCOPE, and ZOOM commands, as you will see next.

Show command



- The SHOW command controls whether “suppressed” segments are:
 - Displayed or hidden
 - In or out of scope
- Definition: “Suppressed segment”:
 - A segment not of the currently formatted segment type
- With the setting: **SHOW SUP OFF**
 - Suppressed segments are not displayed and are out of scope
- With the setting: **SHOW SUP ON**
 - Keys of suppressed segments are displayed, and suppressed segments are in scope

The SHOW command controls whether suppressed segments are displayed or not. It also controls whether suppressed segments are in scope or out of scope. A suppressed segment is any segment that is not of the currently formatted segment type. Remember that only one segment type is displayed at a time in table or single formats. Any segment types that are not of the current type are suppressed.

The command: SHOW SUP OFF specifies that suppressed segments are not to be displayed, and that they are out of scope.

The opposite command: SHOW SUP ON specifies that suppressed segments should be displayed, and that they are in scope.

Find command with SHOW SUP OFF setting



The screenshot shows the IBM File Manager interface. At the top, the command 'F CURR' is entered and highlighted with a red circle, with an 'Enter' key icon next to it. The status bar indicates 'Edit : IMS Database USRSCN' and 'Chars 'curr' found'. Below the command line, the setting 'SHOW SUP OFF' is displayed and circled in blue. The main display area shows a list of segments with the following details:

Cmd	Level	Segment	#5
		CUSTADDR	565 CURR ST. NOWHERE, KS 123456-123456
		TOTUSE	Key=200303
		PRMUSE	30 segments
		OFFUSE	Key=20030301
		OFFDTL	3 segments
		OFFUSE	Key=20030302
		OFFDTL	1 segment
		OFFUSE	Key=20030303
		OFFDTL	2 segments
		OFFUSE	Key=20030304
		OFFDTL	1 segment
		OFFUSE	Key=20030305
		OFFDTL	1 segment

Two callout boxes provide additional information:

- A box pointing to the 'SHOW SUP OFF' setting states: "Notice the SHOW SUP setting is always displayed".
- A box pointing to the 'CUSTADDR' segment states: "With SHOW SUP OFF, only the current segment type is 'in scope'".

At the bottom of the screen, the page number '23' is displayed on the left, and the text 'IBM File Manager for z/OS IMS Feature - Mentor Workshop' and 'W00 © 2010 IBM Corporation' is displayed on the right.

Here is an example of using SHOW commands. First, notice that the SHOW setting is always displayed just under the command line. In this case, the SHOW SUP OFF setting is in effect. With SHOW SUP OFF, only the current segment type is in scope. A FIND command is entered. Notice that the data was found in the segment in the top of the display, which is a CUSTADDR root segment. The data string was also found in another segment of the same type further down. But the other segment types were not searched.

Issue SHOW SUP ON command



```
Process  Options  Help
FM/IMS                               Edit : IMS Database USRSCN   Chars 'curr' found
Command ==> show sup on              CHKPID FM000016 Autosave ON SHOW SUP OFF Scope DB Scroll CSR
                                       SEGA-CUSTOMER-ADDRESS          Format TABL

Cmd Level Segment #5
AN 51:40
<-----+-----1-----+-----2-----+-----3----->
___ 1  CUSTADDR 565 CURR ST. NOWHERE, KS 123456-123456
___ 2  TOTUSE   Key=200303
___ 3  PRMUSE   30 segments
___ 3  OFFUSE   Key=20030301
___ 4  OFFDTL   3 segments
___ 3  OFFUSE   Key=20030302
___ 4  OFFDTL   1 segment
___ 3  OFFUSE   Key=20030303
___ 4  OFFDTL   2 segments
___ 3  OFFUSE   Key=20030304
___ 4  OFFDTL   1 segment
___ 3  OFFUSE   Key=20030305
___ 4  OFFDTL   1 segment

F1=Help      F2=Format    F3=Exit      F4=CRetrieve  F5=RFind     F6=RC
F7=Up        F8=Down      F9=Swap      F10=Left     F11=Right    F12=Ca

Enter
```

SHOW SUP ON will show keys for suppressed segments and set them in scope

Notice that the PRMUSE segments are not the current segment type. Twin PRMUSE segments are collapsed on the display, and only segment counts are shown. Now the SHOW SUP ON command is entered.

Results of the SHOW SUP ON command



```
Process  Options  Help
-----  -
FM/IMS                               Edit : IMS Database USRSCN
Command ==> █                       Scroll  CSR
                                   CHKPID FM000016 Autosave ON SHOW SUP ON Scope DB Format TABL
                                   SEGA-CUSTOMER-ADDRESS
Cmd Level Segment #5
                                   AN 51:40
                                   <-----1-----2-----3----->
___ 1  CUSTADDR 565 CURR ST. NOWHERE, KS 123456-123456
___ 2  TOTUSE   Key=200303
___ 3  PRMUSE   Key=20030301
___ 3  PRMUSE   Key=20030302
___ 3  PRMUSE   Key=20030303
___ 3  PRMUSE   Key=20030304
___ 3  PRMUSE   Key=20030305
___ 3  PRMUSE   Key=20030306
___ 3  PRMUSE   Key=20030307
___ 3  PRMUSE   Key=20030308
___ 3  PRMUSE   Key=20030309
___ 3  PRMUSE   Key=20030310
___ 3  PRMUSE   Key=20030311
F1=Help   F2=Format   F3=Exit   F4=CRetriev F5=RFind   F6=RChange
F7=Up     F8=Down     F9=Swap   F10=Left   F11=Right  F12=Cancel
```

Key value for each suppressed segment is displayed
These segments are now considered "in scope"

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Notice that the SHOW SUP ON setting is active now. Instead of collapsing twin segments, key values are shown for suppressed segments, and they are also in scope.

Find command with SHOW SUP ON setting



Command ==> **F CURR** **Enter**

```
FM/IMS Edit : IMS Database USRSCN Chars 'curr' found
Command ==> CHKPID FM000016 Autosave ON SHOW SUP ON Scope DB Format TABL
                SEGY-CURR-PERIOD SEGY-TYPE-IND1 SEGY-CURR-BILL
Cmd Level Segment #2 #3 #4
                AN 1:6 AN 7:4 BI 11:8
                <---+> <---> <-----1-----2-->
--- 3 BALHIST 200303 CURR 146.21
--- 1 CUSTADDR Key=0342323422
--- 1 CUSTADDR Key=1111111111
--- 2 TOTUSE Key=200303
--- 3 PRMUSE Key=20030301
--- 3 OFFUSE Key=20030301
--- 4 OFFDTL Key=00:00:00
--- 4 OFFDTL Key=18:32:05
--- 2 BALDUE Key=200303
--- 3 BALHIST Key=200302
--- 3 BALHIST 200303 CURR 124.21
--- 1 CUSTADDR Key=2111111111
--- 2 TOTUSE Key=200303
F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel
```

With SHOW SUP ON , all segments are searched

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Now the same FIND command is entered as before, but this time it found the data in a segment that was not the current segment type. With the SHOW SUP ON setting, all segment types are in scope and searched.

The Scope command



- The Scope command controls the scope
 - It works in conjunction with the SHOW setting
- With the setting: **Scope DB**
 - The entire database is in scope
- With the setting: **Scope REC**
 - Only the current database record is in scope
- Definition: "Database record":
 - A single root segment and all of its dependents

There is another setting you can use to control the scope. The SCOPE command. It can be used by itself, or in conjunction with the SHOW command. The setting SCOPE DB makes the entire data base in scope. This is the default. The setting SCOPE REC makes only the current data base record in scope. A database record is a single root segment and all of it's dependent segments.

The Scope Rec command



Command ==> **scope rec** **Enter**

```
FM/IMS Edit : IMS Database USRSCN Chars 'curr' found
Command ==> Scope REC Format TABL
          CHKPID FM000016 Autosave ON SHOW SUP ON SEGY-CURR-BILL
          SEGY-CURR-PERIOD SEGY-TYPE-IND1
Cmd Level Segment #2 #3 #4
          AN 1:6 AN 7:4
          <---+> <-->
  1 CUSTADDR Key=1111111111
  2 TOTUSE Key=200303
  3 PRMUSE Key=20030301
  3 OFFUSE Key=20030301
  4 OFFDTL Key=00:00:00
  4 OFFDTL Key=18:32:05
  2 BALDUE Key=200303
  3 BALHIST Key=200302
  3 BALHIST 200303
          **** End of data ****

F1=Help F2=Format F3=Exit F4=Find F5=Change F6=Delete
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel
```

Notice the Scope setting is always displayed

Scope Rec changes the scope to only the current database record.

Only **one root segment** is displayed. Find and change commands are limited to the single root and the dependent segments.

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Here is an example of using the SCOPE command. In this example, the SCOPE REC command is entered. Notice that the SCOPE setting is displayed under the command line. Only the current root segment and its dependents are displayed. Find and change commands will only search the current data base record.

Find all with SHOW SUP ON and SCOPE REC



Command ==> f curr all

Enter

FM/IMS Edit : IMS Database USRSCN Chars 'curr' found

Command ==> Scroll CSR

CHKPID FM000002 Autosave ON
SHOW SUP ON
Scope REC
Format
TABL

SEGY-CURR-PERIOD SEGY-TYPE-IND1 SEGY-CURR-BILL

Cmd	Level	Segment	#2	#3	#4
			AN 1:6	AN 7:4	BI 11:8
			<---+>	<-->	<-----1-----2->
---	1	CUSTADDR	Key=1111111111		
---	2	TOTUSE	Key=200303		
---	3	PRMUSE	Key=20030301		
---	3	OFFUSE	Key=20030301		
---	4	OFFDTL	Key=00:00:00		
---	4	OFFDTL	Key=18:32:05		
---	2	BALDUE	Key=200303		
---	3	BALHIST	Key=200302		
---	3	BALHIST	200303	CURR	124.21

**** End of database record ****

Only one string was found.
With SCOPE DB, "curr" was found eight times.

F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RChange

F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel

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Here is a FIND ALL command. Only segments in the current database record are searched.

Avoid the Clock!

- Limit File Manager IMS find and change command Scope
 - Scope DB/REC
 - Find/Change REC
 - Find/Change GET(n)
 - Search on fields with SSA

- A find or change command with scope of DB could take an extremely long time
 - Use one of the suggested options to avoid excessive time



When you are working with very large data bases, find and change commands can take a long time. Avoid run away searches by limiting the scope. You have seen a lot of ways to do that. You can use the SCOPE REC command or the REC parameter on Find and Change commands to search only segments in the current database record. Use the GET parameter on Find and Change commands to stop the search after the specified number of segments have been read. Finally, if you limit your search specifically only to fields that are defined in the data base with SSAs, File Manager will use IMS keys and indexes to make the search more efficient.

File Manager IMS tutorial



- **Creating templates**
 - About templates and views
 - Create or update a template
- **Browsing or editing an IMS database with a template**
 - Starting the editor
 - The display formats and zoom
 - Display different segment types
 - Find, change, scope, and locate data
 - **Insert, repeat, repeat all, and delete segments**
 - Print from the editor
 - End, quit, save, undo, and cancel



In the next topic, you will see how you can insert, repeat, and delete segments.

I (insert) line command



```
Process  Options  Help
-----  -
FM/IMS                               Edit : IMS Database USRSCN
Command ===>                          Scroll  CSR
                                     CHKPID FM000002 Autosave ON  SHOW SUP ON  Scope DB  Format TABL
                                     SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
                                     AN 1:10 AN 11:10 AN 21:30
                                     <-----> <-----> <-----1----->
                                     **** Top of window ****
 1 CUSTADDR 0003874923 3273325564 BILL BUFFALO JR
 2 TOTUSE Key=200303
 2 TOTUSE Key=200305
 1 CUSTADDR 0342323422 8233234466 Mr. Bigfoot
 1 CUSTA JOHN SMITH
 2 TOTUS
 1 CUSTA JOAN SMITH
 2 TOTUSE Key=200303
 1 CUSTADDR 2121111111 3445556666 MATTY MONROE
 2 TOTUSE Key=200303
 1 CUSTADDR 2121111112 3445556666 HUMPHRY BOGART
 2 TOTUSE Key=200303
F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RC Enter
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Ca
```

Use the **I** line command next to the segment type to insert.

In the editor, you can use an I (for Insert) line command. I is typed in the prefix area next to a segment. Notice that the I command was entered next to a TOTUSE segment. Enter is pressed.

Enter data for the new segment Scroll down to access other entry fields



Process Options Help

FM/IMS Insert Segment

Command ==> _____ Scroll CSR

Database USRSCN Segment TOTUSE Insert Format SNGL

Parent Keys Line 1 of 2

Lvl	Segment	Key field name	Type	Key value	Occur
1	CUSTADDR				
#2	2	SEGA-ACCOUNT-NUMBER	AN	<u>0003874923</u>	

Data Top Field is 1 of 11

Field	Typ	Start	Len	Data
1 SEGB-TOTAL-USAGE	AN	1	80	
2 USAGE-PERIOD	AN	1	6 K	
3 USAGE-YEAR	AN	1	4 K	2009
3 USAGE-MONTH	AN	5	2 K	05
2 ACCOUNT-INV-SEQ	AN	7	1	1

F1=Help F3=Exit F4=CRetrieve F5=RFind F6=RChange F7=Up F8

F8=Down F9=Swap F12=Cancel

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The Insert Segment panel is displayed. Since the I command was entered next to a TOTUSE segment, a new TOTUSE segment will be inserted. Modify the data values as required. Key data must be specified according to the rules of the database being edited. You can scroll down with F8 to see more fields in the segment.

Enter data for the new segment



```
Process  Options  Help
-----
FM/IMS                               Insert Segment
Command ==>
Database USRSCN  Segment  TOTUSE                               Scroll CSR
                                         Insert Format  SNGL
-----
Parent Keys                               Line 1 of 2
Lvl Segment  Key field name          Type  Key value                               Occur
 1  CUSTADDR
  #2         2  SEGA-ACCOUNT-NUMBER  AN    0003874923
-----
Data                                         Top
Field          Typ  Start  Len  Data
2 ACCOUNT-TOTAL-USAGE  PD      8    6  0.00
2 CURRENT-PERIOD-AMT-DUE PD     14    5  0.00
2 COMPLAINTS          AN     19   62  Happy Customer
F1=Help  F3=Exit  F4=CRetrie  F5=RFind  F6=RChange  F7=Up
F8=Down  F9=Swap  F12=Cancel

```

Data defaults:
numeric: zero
char: blanks

F3

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Overtyping fields with the correct data values. When ready, press F3 to save the new segment.

The new segment has been inserted



```
Process Options Help
FM/IMS Edit : IMS Database USRSCN INSERT completed
Command ==> insert Scroll CSR
CHKPID FM000003 Autosave ON SHOW SUP ON Scope DB Format TABL
SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #2 #4 +
AN 1:10
<---+---->
--- 1 CUSTADDR 0003874923
--- 2 TOTUSE Key=200303
--- 2 TOTUSE Key=200305
--- 2 TOTUSE Key=200905
--- 1 CUSTADDR 0342323422 8233234466 Mr. Bigfoot
--- 1 CUSTADDR 1111111111 7233439938 JOHN SMITH
--- 2 TOTUSE Key=200303
--- 1 CUSTADDR 2111111111 8233249846 JOAN SMITH
--- 2 TOTUSE Key=200303
--- 1 CUSTADDR 2121111111 3445556666 MATTY MONROE
--- 2 TOTUSE Key=200303
--- 1 CUSTADDR 2121111112 3445556666 HUMPHRY BOGART
--- 2 TOTUSE Key=200303
F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RC F7=Up F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Ca Enter
```

The **insert** primary command can also be used to insert a segment

The new segment was inserted. You can also use an INSERT primary command. INSERT is typed on the command line, and Enter is pressed.

Insert primary command displays all segments



```
Process  Options  Help
-----
FM/IMS          Insert : Segment Selection
Command ==>>> _____ Scroll CSR

Cmd  Level      Segment  Description
s  1          CUSTADDR
-    2          TOTUSE
-    3          PRMUSE
-    3          OFFUSE
-    4          OFFDTL
-    2          BALDUE
-    3          BALHIST
**** End of data ****

F1=Help      F2=Split    F3=Exit     F4=CRetriev  F7=Backward  F8=Fo
F9=Swap      F10=Action  F12=Cancel
```

Select the segment type to be inserted



When you use an INSERT primary command, you can select any segment type to be inserted. Here, the CUSTADDR segment type is selected.

CUSTADDR segment is displayed



```
Process  Options  Help
-----
FM/IMS                               Insert Root Segment
Command ==>
Database USRSCN  Segment  CUSTADDR                               Scroll CSR
                                                Insert Format SNGL
-----
Data                                     Top Field is 1   of 10
Field  Typ Start  Len  Data
1 SEGA-CUSTOMER-ACCOUNT
  AN    1    90
2 SEGA-ACCOUNT-NUMBER
  AN    1    10 K 0342334225
2 SEGA-CUSTOMER-PHONE-NB
  AN   11    10  8133234466
2 SEGA-CUSTOMER-NAME
  AN   21    30  Ms Bigfoot
2 SEGA-CUSTOMER-ADDRESS
  AN   51    40  Yosemite National Park
*** End of record ***

F1=Help    F3=Exit    F4=CRetriev  F5=RFind    F6=RChange  F7=Up
F8=Down    F9=Swap    F12=Cancel

F3
```

On this panel, you can type in key and data values as required. Then press F3.

New segment has been added



Process	Options	Help
<div style="display: flex; justify-content: space-between;"> FM/IMS Edit : IMS Database USRSCN INSERT completed </div>		
<div style="display: flex; justify-content: space-between;"> Command ==> CHKPID FM000006 Autosave ON SHOW SUP ON Scope DB Format TABL Scroll CSR </div>		
Cmd Level Segment	#2	#3 #4 +
	AN 1:10	AN 11:10 AN 21:30
	<----->	<-----> <-----1----->
___ 1	CUSTADDR 0003874923	3273325564 BILL BUFFALO JR
___ 2	TOTUSE Key=200303	
___ 2	TOTUSE Key=200305	
___ 2	TOTUSE Key=200905	
___ 1	CUSTADDR 0342323422	8233234466 Mr. Bigfoot
___ 1	CUSTADDR 0342334225	8133234466 Ms Bigfoot
___ 1	CUSTADDR 1111111111	7233439938 JOHN SMITH
___ 2	TOTUSE Key=200303	
___ 1	CUSTADDR 2111111111	8233249846 JOAN SMITH
___ 2	TOTUSE Key=200303	
___ 1	CUSTADDR 2121111111	3445556666 MATTY MONROE
___ 2	TOTUSE Key=200303	
___ 1	CUSTADDR 2121111112	3445556666 HUMPHRY BOGART
<div style="display: flex; justify-content: space-between; font-size: small;"> F1=Help F7=Up F2=Format F8=Down F3=Exit F9=Swap F4=CRetriev F10=Left F5=RFind F11=Right F6=RChange F12=Cancel </div>		

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And the new segment has been inserted into the database.

The R (repeat) line command



```
Process Options Help
FM/IMS Edit : IMS Database USRSCN
Command ==>
CHKPID FM000001 Autosave ON SHOW SUP ON Scope DB Format TABL
Cmd Level Segment #2 #3 #4 +
AN 1:10 AN 11:10 AN 21:30
<-----> <-----> <-----1----->
r 4 OFFDTL Key=00:00:00
  3 OFFUSE Key=20030305
  4 OFFDTL Key=00:00:00
  3 OFFUSE Key=20030306
  4 OFFDTL Key=00:00:00
  3 OFFUSE Key=20030307
  4 OFFDTL Key=00:00:00
  3 OFFUSE Key=20030308
  4 OFFDTL Key=00:00:00
  3 OFFUSE Key=20030309
  4 OFFDTL Key=00:00:00
  3 OFFUSE Key=20030310
  4 OFFDTL Key=00:00:00
F1=Help F2=Format F3=Exit F4=CRetrieve F5=RFind F6=RC
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Ca Enter
```

Repeat primary command will repeat the segment at the top of the display

To repeat an existing segment, you can either use a REPEAT primary command or an R line command. Here, an R line command is typed next to an OFFDTL segment.

The segment was repeated, update data in the repeated segment



Process	Options	Help
FM/IMS Insert Segment		
Command ==>		Scroll <u>CSR</u>
Database	USRSCN Segment OFFDTL	Insert Format <u>SNGL</u>

Parent Keys		Line 1 of 9
Lvl	Segment Key field name Type Key value	Occur
1	CUSTADDR	
#2	2 SEGA-ACCOUNT-NUMBER AN 0003874923	
2	TOTUSE	
#2	2 USAGE-PERIOD AN	
#3	3 USAGE-YEAR AN 2003	
#4	3 USAGE-MONTH AN 03	

Data		Top Field is 1 of 12
Field	Typ Start Len Data	
1 SEGE-OFF-PRIME-DETAIL	AN 1 80	
2 SEGE-TIME-START	AN 1 8 K 04:40:40	
2 SEGE-TIME-END	AN 9 8 06:00:00	
2 SEGE-OFF-PRIME-USED		
F1=Help	F3=Exit	F4=CRetrieiv F5=RFind F6=RChange F7=Up
F8=Down	F9=Swap	F12=Cancel

Change the data

F3

The Insert segment panel is displayed, pre-populated with data from the segment that is to be repeated. Modify the key and data values as needed, and press F3 to continue.

The new segment was inserted



```
Process  Options  Help
-----
FM/IMS                               Edit : IMS Database USRSCN  REPEAT completed
Command ===>                         Scroll CSR
CHKPID FM000002 Autosave ON  SHOW SUP ON  Scope DB  Format TABL
SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
Field              Typ Start Len  Data
---
 4 OFFDTL          Key=00:00:00
 4 OFFDTL          Key=04:40:40
 3 OFFUSE          Key=20030305
 4 OFFDTL          Key=00:00:00
 3 OFFUSE          Key=20030306
 4 OFFDTL          Key=00:00:00
 3 OFFUSE          Key=20030307
 4 OFFDTL          Key=00:00:00
 3 OFFUSE          Key=20030308
 4 OFFDTL          Key=00:00:00
 3 OFFUSE          Key=20030309
 4 OFFDTL          Key=00:00:00
 3 OFFUSE          Key=20030310
F1=Help  F2=Format  F3=Exit  F4=CRetriev  F5=RFind  F6=RChange
F7=Up    F8=Down    F9=Swap  F10=Left    F11=Right  F12=Cancel
```

The segment was repeated with the changes.

The RA (repeat all) line command



```
Process  Options  Help
-----  -
FM/IMS                               Edit : IMS Database USRSCN
Command ==>                          Scroll  CSR
                                     CHKPID FM000002 Autosave ON SHOW SUP ON Scope DB Format TABL
                                     SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
                                     AN 1:10 AN 11:10 AN 21:30
                                     <-----> <-----> <-----1----->
                                     **** Top of window ****
ra_ 1 CUSTADDR 0003874923 3273325564 BILL BUFFALO JR
  2 TOTUSE Key=200303
  3 PRMUSE Key=20030301
  3 PRMUSE Key=20030302
  3 PRMUSE Key=20030303
  3 PRMUSE Key=20030303
  3 PRMUSE Key=20030303
  3 PRMUSE Key=20030303
  3 PRMUSE Key=20030303
  3 PRMUSE Key=20030303
  3 PRMUSE Key=20030311
F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RC F7=Up F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Ca
```

An RA (repeat all) line command will repeat a segment and all of its dependents.

Enter

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Instead of repeating just a single segment, you can optionally repeat an entire segment structure with a single command. The RA (for repeat all) line command repeats not only the selected segment, but also makes copies of all of its dependent segments. Here, RA is typed next to a CUSTADDR root segment, and Enter is pressed.

New root segment is displayed



```
Process  Options  Help
-----
FM/IMS                               Insert Root Segment
Command ==>
Database USRSCN  Segment  CUSTADDR                               Scroll  CSR
                                                Insert Format  SNGL
-----
Data                                     Top Field is 1  of 10
Field  Typ Start  Len  Data
1 SEGA-CUSTOMER-ACCOUNT
  AN    1    90
2 SEGA-ACCOUNT-NUMBER 0003875432
  AN    1    10 K
2 SEGA-CUSTOMER-PHONE-NB
  AN   11   10 3273325564
2 SEGA-CUSTOMER-NAME
  AN   21   30 BILL BUFFALO JR
2 SEGA-CUSTOMER-ADDRESS
  AN   51   40 666 PRARIERD, WY 323423-123456
*** End of record ***

F1=Help      F3=Exit      F4=CRetrieve  F5=RFind      F6=RChange    F7=Up
F8=Down      F9=Swap      F12=Cancel

F3
```

Enter new root segment information

The Insert segment panel is displayed, where you can make changes to the key and data values. Press F3 to continue.

New segment and all dependents were inserted



```
Process  Options  Help
-----  -
FM/IMS                               Edit : IMS Database USR  Repeat All completed
Command ==>                           Scroll CSR

CHKPID FM000003 Autosave ON  SHOW SUP ON  Scope DB  Format TABL
SEGA-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
AN 1:10 AN 11:10 AN 21:30
<-----> <-----> <-----1----->
___ 1 CUSTADDR 0003874923 3273325564 BILL BUFFALO JR
___ 2 TOTUSE Key=200303
___ 3 PRMUSE Key=20030301
___ 3 PRMUSE Key=20030302
___ 3 PRMUSE Key=20030303
___ 3 PRMUSE Key=20030305
___ 3 PRMUSE Key=20030306
___ 3 PRMUSE Key=20030307
___ 3 PRMUSE Key=20030308
___ 3 PRMUSE Key=20030309
___ 3 PRMUSE Key=20030310
___ 3 PRMUSE Key=20030311
___ 3 PRMUSE Key=20030312
F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RChange
F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Cancel
```

The Repeat All completed. The root, with the changes, and all of it's dependents were copied.

Delete line command



```
Process  Options  Help
-----  -
FM/IMS                               Edit : IMS Database USRSCN
Command ==>>>                        Scroll CSR
CHKP10 FM000003 Autosave ON SHOW SUP ON Scope DB Format TABL
Seq-ACCOUNT-NUMBER SEGA-CUSTOMER-PHONE-NB SEGA-CUSTOMER-N
Cmd Level Segment #2 #3 #4 +
AN 1:10 AN 11:10 AN 21:30
<-----> <-----> <-----1----->
**** Top of window
d_ 1 CUSTADDR 0003875432
  2 TOTUSE Key=2003003
  3 PRMUSE Key=20030301
  3 PRMUSE Key=20030302
  3 PRMUSE Key=20030303
  3 PRMUSE Key=20030305
  3 PRMUSE Key=20030306
  3 PRMUSE Key=20030307
  3 PRMUSE Key=20030308
  3 PRMUSE Key=20030309
  3 PRMUSE Key=20030310
  3 PRMUSE Key=20030311
F1=Help F2=Format F3=Exit F4=CRetriev F5=RFind F6=RC F7=Up F8=Down F9=Swap F10=Left F11=Right F12=Ca
```

Delete primary command will delete the segment at the top of the display
The CUSTADDR root and all dependent segments will be deleted

Enter

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You can delete segments with a DELETE primary command or with a D line command. A D line command is typed next to a CUSTADDR segment. When Enter is pressed, the selected segment and all of its dependents are deleted.

That is the end of part two of using browse or edit with a template and view. You can continue with part three.

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This is the tutorial for the IMS feature of IBM's File Manager for z/OS, one of the IBM zSeries problem determination tools.



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