## Editing TurboIMAGE Datasets

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Editing a database with Dbedit

- Dbedit uses simple commands to perform these editing operations:
  - listing entries
  - adding an entry
  - modifying an entry
  - deleting an entry
  - applying global changes to entries

- It can work on chains of entries or related entries

- It can modify key items
How can Dbedit help me with my work?

- Dbedit is useful in many ways
  - Debugging programs
  - Fixing bad data
  - Building prototype databases
Accessing Dbedit

- Step 1: Run Suprtool

- Step 2: Use the BASE command to open a database

- Step 3: Use the EDIT command to start Dbedit

:run suprtool.pub.robelle
>base store.pub
>edit
# {Dbedit prompt}
Dbedit is built into Suprtool

- Dbedit is a Suprtool component that functions independently

- Dbedit commands:
  
  #form sets
  #list m-customer
  #modify d-sales;updatekey
  #add d-inventory
  #delete
  #change m-product
  #exit
Finding an entry with a known key

- Use LIST setname and specify a key value at the prompt

```
#list m-customer
List in File: M-CUSTOMER
CUST-ACCOUNT >10020
CITY = Surrey CREDIT-RATING = 200000
CUST-ACCOUNT = 10020 CUST-STATUS = 20
NAME-FIRST = Walley NAME-LAST = Nisbet
STATE-CODE = BC
STREET-ADDRESS = 8877-149th Street
(2)
POSTAL-CODE = V3T4W2
```

List in File: M-CUSTOMER
CUST-ACCOUNT >______Prompts for next value______
Finding a chain of entries

- Use LIST setname to specify a chain of entries

```plaintext
#list d-sales
List in File: D-SALES
    CUST-ACCOUNT >10020
    PRODUCT-NO >
CUST-ACCOUNT = 10020  DELIV-DATE = 19971004
PRODUCT-NO = 50511501  PRODUCT-PRICE = 9831
PURCH-DATE = 19971000  SALES-QTY = 2
SALES-TAX = 2753  SALES-TOTAL = 22415

CUST-ACCOUNT = 10020  DELIV-DATE = 19971028
PRODUCT-NO = 50512501  PRODUCT-PRICE = 14660
PURCH-DATE = 19971028  SALES-QTY = 1
SALES-TAX = 2052  SALES-TOTAL = 16712

List in File: D-SALES
    CUST-ACCOUNT >
CUST-ACCOUNT = 10020  DELIV-DATE = ____________________
PRODUCT-NO = 50511501  PRODUCT-PRICE = ____________________
PURCH-DATE = 19971000  SALES-QTY = 2
SALES-TAX = 2753  SALES-TOTAL = ____________________
```

How can I change the search key?

- Use the KEY option to specify a different key and alter the search path

```
#list d-sales;key = product-no
```

List in File: D-SALES

<table>
<thead>
<tr>
<th>CUST-ACCOUNT</th>
<th>PRODUCT-NO</th>
<th>DELIV-DATE</th>
<th>PRODUCT-PRICE</th>
<th>SALES-QTY</th>
<th>SALES-TAX</th>
<th>SALES-TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>10003</td>
<td>50512501</td>
<td>19971016</td>
<td>14562</td>
<td>1</td>
<td>2039</td>
<td>16601</td>
</tr>
<tr>
<td>10020</td>
<td>50512501</td>
<td>19971028</td>
<td>14660</td>
<td>1</td>
<td>2052</td>
<td>16712</td>
</tr>
</tbody>
</table>

List in File: D-SALES

<table>
<thead>
<tr>
<th>PRODUCT-NO</th>
<th>&gt;50512501</th>
</tr>
</thead>
</table>

{enter value or press return}
What if I don't know the key value?

- Use the ALL option to sequentially display all the entries in a dataset

```
#list m-customer;all
List ALL records in File: M-CUSTOMER
CITY            = Vancouver      CREDIT-RATING   = 200000
CUST-ACCOUNT    = 10010          CUST-STATUS     = 20
NAME-FIRST      = Wayne          NAME-LAST       = Humphreys
STATE-CODE      = BC
STREET-ADDRESS  = #403-1075 Comox (2)
POSTAL-CODE     = V5T1H6

CITY            = Coquitlam      CREDIT-RATING   = 200000
CUST-ACCOUNT    = 10014          CUST-STATUS     = 20
NAME-FIRST      = Elizabeth      NAME-LAST       = Welton
STATE-CODE      = BC
STREET-ADDRESS  = 2788 Oxtoby Place
.....etc....
```
**Listing related entries from other datasets**

The RELATED option with the LIST command searches for entries in the selected dataset and in related datasets

- If a **master** dataset is specified, Dbedit retrieves a master entry and then goes through the paths to detail sets
  
  #list m-customer;related

- If a **detail** dataset is specified, Dbedit retrieves a detail chain, then goes through the paths from master sets
  
  #list d-sales;related
Changing a noncritical field

- Use the MODIFY command to change the values of noncritical fields in a record

```
modify d-inventory : unit-cost
```
Modify within File: D-INVENTORY

SUPPLIER-NAME  > STD Ribbons
PRODUCT-NO     > 105391

Enter new values (or <Return> to leave as is):
SUPPLIER-NAME = STD Ribbons
PRODUCT-NO    = 105391
UNIT-COST      = 500

_____ {enter new unit cost}
How can I modify a critical field?

- Use the UPDATEKEY option to modify critical items

```cpp
modify d-inventory;updatekey
```

Modify within File: d-inventory

```
SUPPLIER-NAME > * {no new value}
PRODUCT-NO > {press Return to omit}
```

Enter new values (or <Return> to leave as is):
```
SUPPLIER-NAME = STD Ribbons
STD Ribbon {new key value}
```
Can I make a global change to a field?

- If you need to change a field value in the entire dataset, use the CHANGE command

```
#change m-supplier
Enter existing key value to find:
  SUPPLIER-NAME > ACME
Enter new key value to replace with:
  SUPPLIER-NAME > ACME SUPPLY
SUPPLIER-NAME = ACME  CITY    = Los Angeles
STATE-CODE    = CA  STREET(1) = 100 Main
STREET(2)     = ZIP-CODE = 91201
OK to change this entry[no]: Y
```
Subcommands in Dbedit

In response to the Dbedit prompt for a field value, you can use the following subcommands:

* No new value

? Display the TurboIMAGE format or field

// Quit the command

\ Quit the command

Ctrl-Y Quit the command

[ Treat rest of line as data, not as subcommand

' Set this field to all blanks (batch use)

= Execute a calculator command
Moving around in a field list

- Try these subcommands to move to other entries in a field list:

  >> Go to the end of the field list

  << Go to the beginning of the list

  >3 Go three fields forward in the list

  <3 Go three fields back in the list

  @fieldname Go to the fieldname
Adding new entries to a dataset

Use the ADD command to insert a new record into a dataset

```
#add m-supplier
Add to File: M-SUPPLIER

SUPPLIER-NAME > ACME
CITY > Los Angeles
STATE-CODE > CA
STREET(1) > 100 Main
STREET(2) > ________ {press Return to omit}
ZIP-CODE > 91201
```
How can I delete an entry?

- It's easy to remove an entry using the DELETE command

```bash
#delete m-supplier
Delete from File: M-SUPPLIER
SUPPLIER-NAME >ACME
SUPPLIER-NAME = ACME   CITY       = Los Angeles
STATE-CODE      = CA   STREET(1) = 100 Main
STREET(2)       =     ZIP-CODE = 91201

Is this the entry to delete[no]: Y
```
MPE/iX Critical Item Update (CIU)

- CIU allows programs to modify critical search and sort fields in detail datasets using DBUPDATE

- By default, IMAGE databases have CIU disabled

- Dbedit requires CIU for the CHANGE command and the UPDATEKEY option with the MODIFY command

- Two ways to enable CIU
  1. `set basename ciupdate = on`
  2. `set basename ciupdate = allowed`
General guidelines

- Dbedit works best on single entries or chains of entries
- Dbedit uses keyed access, but serial access can be specified with the LIST ALL command
- All Dbedit commands support the asterisk (*) subcommand
- All commands support a restrictive field list
- A semicolon (;) separates a command from its options
Summary

- Like a text editor for dataset entries
- ADD, CHANGE, DELETE, LIST, MODIFY
- Updating key values