

Omnis Technical Notes



#85: Omnis 5 Top 20

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This note answers the most commonly asked question about Omnis 5.

1) How do I bring a window to the top that is already open?

There are a couple of methods available. The first is to give all windows the 'Allow clicks behind' attribute so that a user can bring a window forward by clicking on it.

The other method is to re-issue the 'Open window' command. Since the window is already open it is important to realize the window initialization procedure will not be re-run when you re-open it.

2) In OMNIS 3 Plus I could have default values displayed when I'm inserting data. The field attributes seem to indicate that I can no longer have defaults.

First you have to realize that you have gained much more than you have lost: it is just the technique that has changed. If you require a full screen of default information then calculate the fields in a procedure and redraw the screen.

```

Prepare for Insert
  .
  .
<Calculate default values>
  .
  .
Redraw Windows
Enter Data
  
```

Another technique is to make use of field procedures. All field procedures are activated when you enter and when you leave a field. Depending on any variety of conditions, you can display an appropriate default when you tab into a field. This makes things more flexible than previous versions. An example of using a field procedure to calculate a default value is:

```

If #BEFORE1
  <Calculate default value(s)>
  <Redraw affected fields>
  SNA stay on current field
End if
  
```

- If you are entering the field for the 1st time

3) In a procedure I have issued an SNA command to go to a certain field but I've noticed that it doesn't always do what I expect. How can I get it to go to the field I want during enter data mode?

There is a hierarchy of priority involved with control procedures:

1. Field procedures
2. Window control procedures

3. Application control procedures

If you issue an SNA command in a field procedure, the result will not be realized until control has passed through any remaining control procedures. By the time the control loop has completed, another SNA command may have been issued (thus cancelling the previous one because you cannot nest SNA commands) or another procedure may be called taking you somewhere else.

In order for control commands to be activated immediately, a 'Quit to enter data' command can be issued. This command skips the remaining lower levels of the control loop and place you at the beginning of the control procedure loop.

4) I have created a user defined Next button and when I activate it, nothing happens. What am I doing wrong?

Unlike OMNIS 3, whenever you send a Next, Previous, or Find command, the screen is not automatically refreshed to reflect changes in the current record buffer. Therefore it is necessary to issue a redraw command which gives you the flexibility of redrawing all or just part of the screen. You will notice that the built-in Next, Previous, and Find pushbuttons automatically redraw the window.

5) I have a single user OMNIS 5 version and I intend to create multi-user applications. Are there any special considerations for multi-user programming that I should look out for?

YES!!! Depending on how you set up insert and edit modes for data entry, you could notice different results between SU and MU. In MU mode if you issue a Prepare for Insert or Edit command, a re-read from disk takes place but not so in SU mode. In MU mode the re-read is necessary because information could have changed since you last displayed the CRB. In SU mode this isn't the case because you have complete control over the CRB.

You will also have to take record-locking into consideration. All read/write files are re-read and locked when you go into a Prepare for Update mode. You should set the file modes of other files that you are NOT going to change (view only) to Read only. This will also eliminate unnecessary network traffic by not re-reading the Read only files.

Please refer to the Multi-user Applications chapter (chapter14) of the Application Designers Handbook for more information.

6) How can I truncate the fields on a report so that they don't push the other fields off to the right?

Because you can now have different fonts for every field on any line in a report, the area that the field takes up on the layout does not necessarily correspond to a given number of characters ie. you can fit more characters in the same space using Times 9 than if you used Monaco 12. To achieve a truncation after a specific number of characters, one must make use of the JST() function and a no-name field.

The following example truncates the ADDRESS field to 10 characters.

Name: <input type="text"/>	<input type="checkbox"/> Picture field	<input type="checkbox"/> Duplicates blank	<input type="checkbox"/> Skip section if empty
<input type="checkbox"/> Floating field	<input type="checkbox"/> Invisible	<input type="checkbox"/> No line if empty	<input type="checkbox"/> Zero shown empty
Extra spacing (points): <input type="text" value="0"/>	<input type="checkbox"/> Totaled	<input type="checkbox"/> Auto find	<input type="checkbox"/> Shown like (123.4)
Horizontal posn. (ins): <input type="text" value="2.14"/>	<input type="checkbox"/> Calculated	<input type="checkbox"/> Shown like 1,234.5	
Lookup table (for example: Unknown/M=Male/F=Female/): [jst<ADDRESS, ' 10x' >]			

You may also use the MID() function to just display certain parts of the field.

7) Why does it sometimes take two or more OK's or Cancels to get out of Enter Data mode?

You have discovered the ability to 'nest' enter data's. Each time you issue an enter data command you will require a corresponding OK or Cancel. The ability to nest enter data commands is important when working with multiple open windows but it forces you, the designer, to keep track of them.

8) Sometimes when I am editing or inserting and I select OK it returns the message that I'm not in Prepare for Update mode. Why?

You have, since issuing the Prepare for ... command, issued one or more of the following:

Set main file, Clear commands (where main file is cleared), Next, Previous, Find, Delete, Print, Build list from file, and Update files.

In general, any command which changes the state of the Current Record Buffer will knock you out of Update mode.

9) What does the extending justification attribute in reports do?

This allows long character fields to extend vertically beyond it's boundaries if required. The extending field must take up at least two report lines for this to work and a positioning section should be placed after the extending field so that overlapping of following fields does not occur.

10) In Omnis 5, why doesn't a Repeat...Prepare for Insert loop re-position the cursor to the 1st field in the window?

Among the features of Omnis 5 is the ability to be in Enter Data mode for every window that you have open. While allowing greater flexibility and less coding to handle multiple data entry windows, this feature also has its drawbacks.

An easy work-around is to use a window control procedure and a 'flag' to re-position your cursor:

```
1 Enter Data Loop
```

```
-----
```

```
Set Window Control Procedure 2 {Control}
```

```
Repeat
```

```
  Prepare for Insert
```

```
  Calculate #1 as 1
```

• #1 sets the flag that you just started a new loop

```

Enter Data
Update files if flag set
Until Flag False

```

```

2 Control
-----

```

```

If #1=1
  SNA set current field 1      • position the cursor on the 1st field
  Calculate #1 as 0
End if

```

11) I had arrays in Omnis 3, now Omnis 5 uses lists. What's the difference?

The array in Omnis 3 is a pre-fabricated element of the program. Insofar as the array exists as pre-defined memory. The array automatically houses five string variables, ten number variables, as well as twelve slots for sequence numbers and associated records. In order to access this pre-defined element one need only open the array window and designate values and fields for the various slots. The array has an "umbilical cord" to the file itself. It derives meaning from wherever the main file is set when the array is built. This creates some problems when manipulating data within the array insofar as the main file must always be set AWAY from the array. There is no quick and easy way, for example, to edit the array while in prepare for edit mode since loading the array would cancel prepare for edit mode, and the main file must be set away from the array. The array, existing as a pre-defined block of memory, takes somewhat longer to load than does the list. The array exists as a single entity within Omnis 3, though the array can be partitioned.

The list, in contrast, is dependent upon the user for definition. There are 20 slots available within the list for record fields which may be defined in whatever fashion the user chooses. Since the list does not depend on the current file for its definition, it may be built from main, connected, and unconnected files. Indeed, a list can be built from windows, reports, menus, even other lists. Since the block of memory the list occupies is not pre-determined, but is defined by the user in its own buffer, it may be as long or short as the user deems fit. This aspect of the list positively addresses issues of speed and versatility. Editing the list can take place while in the "prepare for update" mode. Up to eight lists can be current at a given time and those lists may be defined at the users whim. There is then infinite potential and variety for lists within a single application. (If the list is relatively small and is not going to be changed very often, save the list as a text file. One should use the "one field per line" format. This circumvents the 8 list current list limit.) In short, while there is some re-coding and relearning associated with the shift from Omnis 3 arrays to Omnis 5 lists, the gain is immense power now available to the Omnis 5 user through lists.

12) How are data-files converted from Omnis 3 into Omnis 5?

Upon converting an Omnis 3 library (Tech Note #82) the next step to a complete Omnis 5 application is the data-file itself. Unlike the conversion of the library, there is no pushbutton or menu item that specifically converts Omnis 3 data-files. Pull down on the "Design" menu, choose "Change Data Files", pick your Omnis 3 data-file. Omnis 5 will return the message:

"These data-files need converting to Omnis 5 format. After conversion they will not be compatible with Quartz."

This is a reminder that Omnis 3 data-files are portable across platforms to Blyth's DOS/Windows product, "Quartz". Unless continued use of this feature is a necessity, there is no reason not to continue. Press "OK".

In about the time it takes to read this sentence, the data-file has been converted. The speed of the operation has caused some consternation, particularly if the data-file is massive, and since the library conversion took comparatively longer. The reason for the swiftness of the process is that the data-file has been assigned a new type. The data itself has not been touched.

When looking at the datafile after conversion, flags will be set specifying that some or all of the files may need reorganization. This flag lets you know that a reorganization is necessary to take advantage of Omnis 5's new variable length storing format.

13) Where are the semaphores maintained in Omnis 5?

There is no equivalent of the "Work999" file within Omnis 5. Should the occasion occur where an "Omnis 5 is busy or missing" message is displayed, simply reboot the file-server in order to reset the network semaphore table. Semaphores no longer exist in Omnis 5 applications since multi-user development is not allowed. Any semaphore clearing is the function of the server, network and system.

14) Why does my copy of multi-user Omnis 5 only allow one user access?

In order to be multi-user, the shared and cache bits should be set. This happens automatically in multi-user Omnis 5. If no more than one user is able to access Omnis 5 the following should be checked:

No users ought to be using a single user version.

No user should boot the application in one-user mode (opt-s).

One-user Omnis 5 should not be installed on the file-server in the same volume as the application.

If there is a problem of locked semaphores, reboot the file server.

In order to avoid the problem completely, consider hiding the Omnis 5 program when in multi-user environment, allowing access only to the application, which will automatically open as multi-user.

15) What is "Printing to port" in Omnis 5?

Beyond the obvious applications, such as transferral of data via modem, there are other uses for this command. Those who are familiar with "textstream" from Omnis 3 will appreciate that the equivalent in Omnis 5 is "printing to port." When using a direct-connect printer the user is able to make low-level calls designating the port as the report destination. This means that you can send textstream reports to your serial printer without having to rename your printer driver to 'textstream' or 'serialwriter'. Control characters may then be sent via the "transmit text to port" command. "Transmit text to port" may also be used when printing bar-codes.

16) How can I print labels in Omnis 5?

Printing labels in Omnis 5 is easy and fast. When creating your report, select "Label format" as one of the parameters. This option allows the user to set the number of labels across page as well as the label length. If the user is taking advantage of the port destination, as would be appropriate with direct-connect Imagewriters, the page length parameter may be set from procedures. When printing to net-worked printers the user may wish to consider a DA that can extend the options available in the printer chooser document. In either case, page length can then be adjusted according to label size.

If you are using the printer driver and printing with fonts, use the record section attributes to set the vertical spacing of each record. This can be done by using the 'Start nn inches from Top of previous section' option in the record section.

17) How come the fields in my list don't line up correctly?

Use a non-proportional font such as monaco or courier within the list itself. Then define the elements of the list using a combination of "con" and "jst" functions.

18) If "build list" cancels "prepare for update" mode, how can I make use of pop-up lists or otherwise have active lists when editing?

It is true that building a list will cancel "prepare for update" mode in the current release of Omnis 5. This problem is easily dealt with by building the list BEFORE invoking "prepare for update". A list in an invisible field can then be made visible during "enter data", or else opened as a separate window.

19) How can Omnis 5 multi-user performance be enhanced?

The more the file server is accessed the slower the network traffic becomes. Therefore it is to the user's advantage to host as much on the nodes as is possible. The best configuration is distributing the application, Omnis program, the application, and Omnis 5 information file. The file-server would then host the data-file alone, thus network traffic only occurs during data access. Omnis 5 will operate on any network package that is AFP compatible, so it is up to the individual user to determine the best package for their needs. There are other hardware options as well which will boost transfer time of data from server to node. It is wise to bear in mind that even with such enhancements, the first bit of data will always arrive at the same time. Such hardware options compress the actual transfer of data so that once access begins data arrives 3 to 10 times faster according to the network configuration.

20) Does Omnis 5 support LQ printers?

Yes. If printing to printer simply choose the LQ icon from the chooser. If printing to port set baud to 19200, set hardware handshake, 8 data-bits, no parity. If for any reason garbage characters appear, set the "translate for Imagewriter."